CARDIFF UNIVERSITY

The Forgotten Beasts in Medieval Britain:
a study of extinct fauna in medieval sources

PhD thesis

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A dissertation submitted in part fulfilment of the requirements for the degree of
Doctor of Philosophy at Cardiff University

Contents

Declarations

DECLARATION

This work has not been submitted in substance for any other degree or award at this or any other university or place of learning, nor is being submitted concurrently in candidature for any degree or other award.

Signed …………Lee Raye…….…… (candidate)   Date …………21/7/16………

STATEMENT 1

This thesis is being submitted in partial fulfilment of the requirements for the degree of PhD.

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STATEMENT 2

This thesis is the result of my own independent work/investigation, except where otherwise stated.
Other sources are acknowledged by explicit references. The views expressed are my own.

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Summary

This thesis identifies and discusses historical and literary sources describing four species in the process of reintroduction: lynx (*Lynx lynx*), large whale (esp. *Eubalena glacialis*), beaver (*Castor fiber*) and crane (*Grus grus*). The scope includes medieval and early modern texts in English, Latin, and Welsh written in Britain before the species went extinct. The aims for each species are: (i) to reconstruct the medieval cultural memory; (ii) to contribute a cohesive extinction narrative; and (iii) to catalogue and provide an eco-sensitive reading of the main historical and literary references. Each chapter focuses on a different species:

1. The chapter on lynxes examines some new early references to the lynx and argues that the species became extinct in south Britain c.900 AD. Some hard-to-reconcile seventeenth century Scottish accounts are also explored.

2. The chapter on whales attributes the beginning of whale hunting to the ninth century in Britain, corresponding with the fish event horizon; but suggests a professional whaling industry only existed from the late medieval period.

3. The chapter on beavers identifies extinction dates based on the increasingly confused literary references to the beaver after c.1300 in south Britain and after c.1600 in Scotland, and the increase in fur importation.

4. The chapter on cranes emphasises the mixed perception of the crane throughout the medieval and early modern period. Cranes were simultaneously depicted as courtly falconers' birds, greedy gluttons, and vigilant soldiers.

Summary

More generally, the thesis considers the levels of reliability between eyewitness accounts and animal metaphors. It examines the process of 'redelimitation' which is triggered by population decline, whereby nomenclature and concepts attached to one species become transferred to another. Finally, it emphasises geographical determinism: species generally become extinct in south Britain centuries before Scotland.

Chapter 1 – Introduction

There are a number of animal species that colonised Britain after the last Glacial Period and existed for thousands of years, only to become extinct in historic times.[1] Because they disappeared so recently, and because human actions have caused so many important changes to the landscape over the last 2,000 years, the extinctions have usually been associated with human agency ('anthropogenic'), whether direct (e.g. over-exploitation) or indirect (e.g. habitat destruction). In order to better understand extinction, a clearer understanding of historical human-animal relationships is required. The aim of this thesis is to use medieval textual evidence to reconstruct how people perceived these species before and during the process of their extinction. How were they depicted? Are there any clues about why they went extinct? Can knowledge about the ecology of these sp, ecies help us to interpret difficult medieval texts? Can knowledge about the history of these species help us predict their behaviour if reintroduced?

Narratives about extinct animals exist at an academic and popular level, and although this thesis concentrates on the former, the latter are also relevant. In order to get an initial sense of the public's awareness and knowledge of extinct British animals, in 2012-13 I conducted a small-scale survey in five cities across Britain (Appendix 1). Results showed that perceptions varied, with the former existence in Britain of high-profile species such as wolves (*Canis lupus*) and wild boar (*Sus scrofa*) being well known, indicating that these animals still have a relevance in Britain's

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[1] Yalden, D. (1999) *The History of British Mammals* (Poyser Natural History, London); Yalden D. & Arabella, U. (2009) *The History of British Birds* (Oxford University Press).

twenty-first century cultural memory.[2] Other species such as the lynx, were only considered to have been native by a small minority.

Investigating human representations of some of the least well known extinct animals (lynx, whale, beaver and crane) will give this study its main impetus, but of course they represent only a small proportion of Britain's lost beasts. The following table summarises each animal's status in Britain:

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[2] Cultural memory implies a continuously agreed-upon reconstruction of the past, not a communicated memory or genetic memory. See further Hetherington, D. 'The lynx in Britain's past, present and future', pp.67-74, in: *ECOS* 27 (2006).

Forgotten Beasts considered

Common Name (*Latin name*)	IUCN 3.1 World-wide rarity	Date Extirpated from Britain	British Re-introduction status	Survey Result
Lynx (*Lynx lynx*)	Least Concern	After the 5th or 6th century. [3]	Introductions are proposed for several areas across England and Scotland.[4]	19%
Crane (*Grus grus*)	Least Concern	16th century.[5]	Re-introduced to Somerset Levels	43%
Beaver (*Castor fiber*)	Endangered	12th century south Britain but possible 16th century Scottish survivals near Loch Ness.[6]	Legally re-introduced to Argyll, Scotland, under observation in Devon, England, and illegally introduced elsewhere in Scotland and England.	64%
Whale (esp. North Atlantic right whale, *Eubalaena glacialis*)	Critically endangered	End of 16th century too rare to hunt in English channel.[7]	The grey and right whale were probably extirpated from British waters before 1900. Britain does still see occasional killer, blue and pilot whales, fin, blue and sei whales migrating, as well as many porpoises and dolphins.[8]	66%

Although the scope of the current study is limited, Natural England's authoritative

report on English biodiversity, *Lost Life,* lists only nine other species known to have

been lost from Britain between the first century A.D. and 1800.[9] Although the report

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[3] Hetherington et al. (2005) 'New evidence'.

[4] See: Lynx UK Trust & Clifford Chance (2015) *Lynx UK Trust's Proposal for a Trial Reintroduction* (Lynx UK Trust).

[5] Yalden (1999) *The History of British Mammals*, p.145.

[6] Raye, L. (2014) 'The Early Extinction of the Beaver (Castor fiber) in Britain', pp.1-13, in: *Historical Biology*, vol. 27.

[7] Aguilar, A. (1986) *A review of Old Basque Whaling and its Effect on the Right Whales* (Eubalaena Glacialis) of the north Atlantic', pp.191-9, in: Best, P.B. & J.H. Prescott, *Right Whales, Past and Present Status* (International Whaling Commission, Cambridge), p.192; 196.

[8] Macdonald, D. & Burnham, D. (2012) *The State of Britain's Mammals*, *2011* (WildCRU, Oxford), p.8; Natural England (2010) *Lost Life: England's Lost and Threatened Species* (address: http://publications.naturalengland.org.uk/publication/32023, accessed: 16/3/16), pp.21-2.

[9] Natural England (2010) *Lost Life,* p.18. Other species are the wolf, brown bear, ptarmigan, capercaillie, white-tailed eagle, moor and pool frogs, agile frog and two mining beetles. The report neglected to mention the common crane.

neglects to mention the crane, my sample of four animals still represents 25% of the total species on the list, and therefore findings which link these species may be generalizable to the others.

But why does it matter that these animals are forgotten? Apart from improving our knowledge of the past, there are three main points to consider, two of which I have already alluded to in passing.

First, the poor understanding of Britain's 'forgotten beasts' has led to scholars working in the medieval period mistranslating and misunderstanding references to such creatures. Even specialist medievalists can get references wrong. For example, the possibility that the Welsh term *llewyn* in the early poem 'Peis Dinogad' might refer to the lynx was ignored by every scholar until Loth.[10] The suggestion that the same term in 'Dadolwch yr Arglwydd Rhys' might refer to the lynx has not been made until the current study (see chapter 2 on the lynx). For these reasons the most authoritative dictionary of Welsh, *Geiriadur Prifysgol Cymru* still explains *llewyn* only as a variant of *llewyrn* (foxes). Nor is it just references to the low-profile lynx that are mistranslated and misunderstood. Roberts's *The Legal Triads of Medieval Wales* translates both *crychyd* and *garan* as 'heron'. As a result, scholars might be justified in believing that the crane (*G. grus*) does not appear in the legal triads at all, whereas in fact the more usual meaning of the term *garan* in Middle Welsh is 'crane'.[11] Such misinterpretations lead to a cycle of neglect: when animals have a low profile in the cultural memory,

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The first two of these and the white-tailed eagle are well known and the last six are not frequently mentioned in the literature, meaning they would not make good subjects for an investigation of the textual evidence.

[10] Loth, J. (1930) 'Notes etymologiques et lexigraphiques', p.167. in: *Revue Celtique,* vol. 47.

[11] See *Geiriadur Prifysgol Cymru* and chapter 5.

scholars are less likely to find or discuss them in the context of medieval texts, and this in turn helps perpetuate their low profile.

Secondly, in line with European Union regulation,[12] many of Britain's extinct or very rare animals are candidates for re-introduction to Britain. A recent overview study by the Cairngorms National Park of all of the area's lost vertebrate species concluded that the crane, beaver and lynx were the best candidates for reintroduction, likely to bring the most social, economic and ecological value with the best likelihood of success.[13] Apart from the whale, the 'forgotten beasts' I have nominated as the subjects of this study above are flagship species in this regard. Conservationists aim to raise awareness of flagship species in order to increase sympathy for British re-introduction studies in general. It is hoped that my work uncovering the complex relationships which these creatures had with the earlier inhabitants of Britain will also help raise their profile in the present day so that one day they will be as well-known as the wolf and wild boar. A recent survey by Wyver has shown that for the lynx, people's knowledge level is positively correlated to how positive they feel towards reintroduction.[14] It is not clear whether this correlation holds true of all species, or whether it is a peculiarity of people's initially erroneous ideas of the lynx as a dangerous big cat. However, increased awareness of our forgotten animals can only help the British public and politicians to come to an informed decision about whether or not to reintroduce.

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[12] Under the *Habitats Directive* (92/43/EEC). Article 22a.

[13] Hetherington, D. (2013) *Assessing the potential for the restoration of vertebrate species to the Cairngorms National Park: a background review* (Internal Report).

[14] Wyver, J. (2014) *The Lynx Effect* (MSc thesis, University College London), pp.18-23.

The IUCN (International Union for the Conservation of Nature) is the regulatory body in charge of classifying the rarity of endangered animals from extinct to least concern. They have compiled a set of *Guidelines for Re-Introduction* that are now the international standard and have been used in a number of British re-introductions, as outlined below.[15] It is hoped that this project can offer a useful contribution to discussion of the animals' respective worthiness for reintroduction. Under the IUCN re-introduction guidelines, for a re-introduction to be successful it is vital that there be a multi-disciplinary approach (Section 3). More than this, the study needs to be sure of the species' former range (Section 4.a.iii) and to be certain of the previous reasons for decline (Section 4a.iv). Even after the species has been re-established, continuing public relations activities are vital to ensure that the species is not re-extirpated (Section 6). The present study aims to answer some of these questions by reference to medieval literature. These questions have often formed the starting point for British re-introduction studies, as for example the lynx, the red kite and the white-tailed eagle.[16]

Thirdly, a study of rare animals in the medieval period will be of assistance to zooarchaeologists, conservationists and scholars of natural history as well as to medievalists. This topic is one where the above fields overlap, but also one which is so inter-disciplinary that it might be considered 'outside of the scope' of those same fields. This project aims to produce findings that will be of interest to many interest groups, including those with an interest in contemporary ecology, as well as other medievalists. The main part of this study will involve an empirical re-interpretation of

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[15] IUCN (1998), *Guidelines for Re-introductions* (IUCN/SSC, Cambridge).

[16] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland.* Chapter 2 especially p.23; Lovegrove, R. (1990) *The Kite's Tale: The story of the Red Kite in Wales* (RSPB, Sandy), pp.1-72; Love, J. (1983) *The Return of the Sea Eagle* (Cambridge University Press), pp.1-46.

the medieval evidence. Each reference to the species mentioned above will be translated, examined and analysed both using the latest historical research, and, from an eco-sensitive point of view, with attention to the ecology of the animals actually being discussed. Ultimately this study will be of use to anyone who needs an authoritative and exhaustive but clear account of where the four species appear in the medieval corpus, and what this tells us about their history in Britain.

Primary Evidence

The scope of this study is the island of Great Britain as a whole. Such a focus is both wider and narrower than that of historians and archaeologists who tend to focus on more regional or continental trends. Likewise, scholars of medieval languages tend to focus on the literature of a single language, or a number of closely related ones. But the reason for my focus is simple: from an ecologist's perspective Britain forms both a single cohesive whole, clearly separated even from nearby Ireland.[17] Medieval terminology, however, does not always reflect this simple geographical entity in a simple way. In the medieval period the term *Britain* (Welsh: *Ynys Prydein*, Latin: *Britannia*) was frequently used to describe the island of Britain, but this term did not necessarily include Scotland. Likewise, until the early modern period, the term *Briton* or *British* usually referred to the Welsh and Cornish and excluded the English and Scottish.[18]

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[17] Ireland lacks polecats and beavers for example, although it is often considered alongside Britain in ecological works. Compare Macdonald et al. (2010) 'The State of Britain's Mammals: Invasive' and Yalden (1999) *The History of British Mammals.*

[18] The influential texts on this subject are Pocock, J. (1975) 'British History: A plea for a new subject', pp.601-21, in*: The Journal of Modern History,* vol. 47; Davies, R. (1994) 'Presidential Address: The Peoples of Britain and Ireland 1100-1400 1. Identities', pp.1-20, in: *Transactions of the Royal Historical Society,* vol. 4.

Scotland's relationship with rest of Britain is complicated both politically and ecologically. Before the Acts of Union in 1707, Great Britain was not a political entity and the Scots were not considered to be Britons. Ecologically, Scotland may well have retained lynxes and beavers (as we shall see) longer than the rest of Britain. However, Scotland's otherness has been exaggerated in the past. Life in the twelfth-century Scottish burghs was just as cosmopolitan as life in England's eleventh-century *burha*, and international merchants traded with Scotland as well as England.[19] Scotland was not an untamed wilderness any more than parts of England and Wales were. But my use of the term Britain should not be interpreted as implying ecological or cultural uniformity—it is intended only to have only a geographical meaning corresponding to the island of Great Britain.

The textual evidence considered in this thesis is almost exclusively in the medieval and early modern Welsh, English, Scots or Latin languages. The literary tradition of each of these languages is different and it can be difficult to pinpoint differences without making sweeping, misleading statements. The following description is based in the main on extant edited material, which may give a biased view as even now not all works from this period have received significant scholarly attention.

Extant medieval Welsh literature that is not adapted or translated from Latin or French is primarily secular. Most of the important early manuscripts are thirteenth and fourteenth century in date (with no extant manuscripts earlier than c. 1250), although they may include material of an earlier provenance.[20] There is a corpus that includes

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[19] For a short introduction see Hall, D. (2002) *Burgess, Merchant and Priest* (Birlinn Ltd with Historic Scotland, Edinburgh).

[20] Huws, D. (2000) *Medieval Welsh Manuscripts* (University of Wales Press, Cardiff).

apparently early (possibly tenth-century or earlier) heroic and saga poetry, a series of

translations from Latin and French and a number of vernacular tales that are unique to

the Welsh language. There is also a large quantity of elegies and eulogies to secular

patrons as well as satirical and prophetic verses, all written by a professional class of

poets.[21] The only Welsh historical (rather than literary) records important for this study

are the Welsh lawbooks.[22] It would appear that Welsh literature more frequently uses

animals for comparison and metaphor than the other languages.[23] The Welsh material

has historically received the least attention and is often less well-known to scholars

who do not read medieval or modern Welsh. It has therefore has furnished a great

deal of previously unseen material. The edited literature is the basis for the *Geiriadur*

Prifysgol Cymru dictionary project that can now be easily searched online.[24]

By contrast, many British Latin texts are earlier than the earliest securely dated

Welsh texts, and Latin sources are also more likely to have a directly clerical origin than

is the case for texts in Welsh.[25] Latin was the language of the church, and the scholarly

literati, but was also extensively used at court. Animals in Latin texts can therefore

range from symbolic references to lambs and lions, to monstrous dragons and whales,

and to scientific descriptions and manuals.[26] The Bestiary tradition which provided a

pan-European encyclopaedia of real and imagined animals was originally in Greek.[27]

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[21] For specifics see Jarman A. & Hughes, G. (eds. 1976) *A Guide to Welsh Literature*, vol. 2 (University of Wales Press, Cardiff), revised by Johnston (1992).

[22] Jenkins, D. (ed.1986) *The Law of Hywel Dda* (Gomer Press, Llandysul).

[23] Edel, D. (1983) 'Geoffrey's so-called animal symbolism', pp.96-110, in: *Studia Celtica,* vol. 18-19; Although see contra: Harrison, S. (2003) 'Meta-imagery: Some self-reflexive similes in Latin Epic', pp.9-16, in: Basson, A. & Dominik, W. (eds.) *Literature, Art, History* (Peter Lang, Frankfurt am Main).

[24] www.geiriadur.ac.uk.

[25] See: Lapidge, M. (1993) *Anglo-Latin Literature, vol. 2* (Hambledon Press, London).

[26] See: Rigg, A. (1992) *A History of Anglo-Latin Literature, 1066-1422* (Cambridge University Press).

[27] See: White, T. (trans. 1960) *The Book of Beasts* (Dover Publications, New York).

The edited literature is the basis of the *Dictionary of Medieval Latin from British Sources*.

English and Scots are two other main vernacular languages used in Britain, and these languages provide more material than Welsh. Most early modern Scottish sources are in Latin, but those in the vernacular possess a strong tradition of describing animals.[28] The bilingual *Acts of the Parliament of Scotland* is a key source for understanding the country's medieval environmental resources. These texts have not received sufficient attention in discussions of the history of the environment, but Scots literature has been well indexed in the *Dictionary of the Scots Language.* English literature produces some or our earliest non-religious texts, and these help highlight early medieval attitudes towards the medieval environment.[29] Later medieval and early modern English literature furnishes sermons, homilies and court documents that are in part a result of a move away from Latin towards the vernacular.[30] Several early modern English hunting manuals and naturalists' accounts survive.[31] English literature is the best indexed and the most accessible corpus to modern English speakers, but because of this most of the references to our target species have been examined before. The edited middle and modern English literature is the basis of the *Oxford English Dictionary* and the *Middle English Dictionary.* Old English literature has been indexed to a certain extent by the *Dictionary of Old English*, although this is not yet complete.

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[28] See: Mann, J. (2009) *From Aesop to Reynard - Beast Literature in Medieval Britain* (Oxford University Press).
[29] See: Fulk, R. & Cain, C. (2003) *A History of Old English Literature* (2013 ed. John Wiley & Sons, Chichester).
[30] See: Fulk, R. (2012) *An Introduction to Middle English* (Broadview Press, Claremont).
[31] See: Rooney, A. (1993) *Hunting in Middle English Literature* (Boydell & Brewer, Cambridge).

A list of the most important texts consulted together with their date and importance is included at the beginning of each of the major case-study chapters. Editions and translations of the key texts are provided in the Appendices, separated by species and ordered by date. Some Gaelic, Norman, French and Norse material is also considered, but this literature is treated only peripherally to the English, Scots, Latin and Welsh material.

This study is especially focused on textual evidence for the forgotten beasts. However ecological and archaeological evidence also has its place in the study. Individual texts can often be understood based on current scientific information about animal behaviour as well as in the context of medieval bestiaries and folkloric motifs, for instance. Zooarchaeological analyses of wild assemblages and papers providing the latest radiocarbon dates provide a lens by which we can view our textual evidence, and even in some cases a *terminus post quem* extirpation date. Each main chapter begins by providing the latest scientific data concerning the animals and archaeological and ecological evidence is used throughout to facilitate eco-sensitive interpretation of the texts.

Secondary Evidence and Literature Review

As I explained earlier, the main subjects of this study, 'the forgotten beasts', have not been frequently discussed by scholars. The grouping I have made of these animals is also a modern and—inevitably—an artificial one. Most modern in-depth studies have looked at the animals individually.[32] We will engage with those studies in each relevant

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[32] For example: Szabo, V. (2008) *Monstrous Fishes and the Mead-Dark Sea* (Brill, Boston).

chapter, but before we start it is worth looking at studies that consider groups of wild animals. Some archaeological site reports comment on the faunal remains, and some literary studies comment on the animals found in the texts, but wild animals in archaeological reports are often obscured by domestic stock, and depictions of wild animals in literary texts are often figurative or symbolic. The following table shows the main studies that have made considerable original contributions to the histories of the target species.

Select Publications on the History of Extinct British Animals	
Source	**Description**
Shrubb, 2013, *Feasting, Fowling and Feathers*	Historical study. Examines all exploited birds in the historical period. Organised by type (e.g. wading bird).
Various, 2010: *Extinctions and Invasions*	Archaeological and ecological studies. Examines all main extinct and introduced species in Britain. Organised by species account (each account written by different author). Whales not mentioned.
Yalden & Albarella 2009: *The History of British Birds*	Archaeological and historical study. Examines all British birds, not just extinct ones. Organised by period rather than species.
Yalden, 1999: *The History of British Mammals*	Archaeological and historical study. Examines all British terrestrial mammals, not just extinct ones. Organised by period rather than species.
Dent, 1974: *The Lost Beasts of Britain*	Historical and literary study and the direct inspiration of this project, looked at Britain's extinct mammals one by one. Includes wolf, wild boar, wildcat, beaver.
Matheson, 1941: *Changes in the Fauna of Wales within Historic Times*	Historical and literary study, looks at all Welsh species influenced by humans. Study derives most information from Harting and Ritchie (see below). Organised by species. Lynx and whale not mentioned.
Gurney, 1921: *Early Annals of Ornithology*	Historical and ecological study, looks at all bird species mentioned in historical texts. Organised by period, but with special sections devoted to each late extinction.
Ritchie, 1920: *The Influence of Man on Animal Life in Scotland*	Historical and ecological study, looks at all Scottish species influenced by humans, not just extinct ones. Attempts a hybrid structure organising by date then by species. Lynx is mentioned but dismissed.

Harting, 1880: *British Animals Extinct within Historic Times*	The first historical study of Britain's extinct fauna, looked at Britain's extinct mammals one by one. Includes wolf, wild boar, bear, beaver, reindeer and white cattle.

One of the first things the above table shows is how formulaic previous studies have been. Harting first made a historical study of Britain's extinct mammals organised by species. His basic structure—a small number of target species and conclusions—are closely followed by Dent almost a century later. In fact one of Dent's biggest innovations (namely including the wildcat instead of the reindeer and bear) drew censure from one critic who pointed out that Harting's claim that the wildcat was doomed was premature and reflected his preconception with south Britain over Scotland.[33] In the time between these two publications, scholars have found new evidence and speculated about its meaning, but for the most part nothing was found that undermined Harting's conclusions about the reasons, dates and manner of the extinctions. Although it looks at different species, this project will use the same case-study style methodology as Harting and Dent to reflect the small number of subjects and limited timeframe.

Ritchie's study looks at the history of all Scottish wildlife influenced by humans, not just extinct mammals. He is one of the most original of our authors; although Ritchie submits to Harting's earlier ideas in some respects, at other times he uses his superior knowledge of archaeology and Scottish history to suggest alternate extinction dates and approaches that Harting missed. Due to his wider scope, Ritchie organises his material differently, sorting by date rather than species. The passage of time has vindicated many of his ideas. His theory of kites and ravens scavenging in cities,

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[33] Fitter, R. (1987) 'Lost Beasts of Britain by Anthony Dent', p.87, in: *Oryx*, vol. 13.

together with his theory that the lynx may have survived into the historic period, have both been proved correct. In that respect his book has better stood the test of time than Dent's, even though the latter wrote more than 50 years later. The same cannot be said for Matheson's work which follows him. Although looking at the Welsh fauna rather than the Scottish, Matheson otherwise follows either Ritchie or Harting in every detail. But both books defer to Harting's view, and although in comparison to Matheson, Ritchie's work is original and independent, his research would still not have been possible without Harting's framework.

Gurney achieves a greater level of independence from Harting than any of the other writers. *Early Annals of Ornithology* uses the same structure as Ritchie but looks at birds rather than mammals. But even Gurney cites Harting extensively,[34] in this case from another book: the *Handbook of British Birds* of 1901 (which does not dedicate much space to extinct fauna and therefore need not concern us here).

It is important to emphasise the level of indebtedness the twentieth century scholars had to Harting and his nineteenth century colleagues. In a recent survey of the evidence for beavers discussed in modern scholarship 1819-2006 I found 24 total sources used.[35] Ten sources were first discussed by two scholars writing beaver-specific journal articles in the mid-nineteenth century; Harting discovered a further five in 1880; and then Ritchie and Dent between them discovered four more over the next century. Matheson's study did not discover any new sources on beavers. Part of the explanation for this is that the twentieth-century authors were all interested in

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[34] I have counted 58 references over the 240 pages.
[35] Raye, L. (2014) 'The Early Extinction'.

wildlife first and history second, and their books were also intended for a lay audience rather than a specialist one.

This trend has been overturned over the last twenty years by the rise of zooarchaeology, a discipline dedicated to interpreting archaeological faunal remains, which has allowed scholars to re-examine the historical landscape from a different perspective. Coles' focused zooarchaeological study of beavers alone (the last column on the following chart) has found almost as many new sources for beavers as had been found by a century of scholarship.[36]

New Historical Sources Discovered for Beavers

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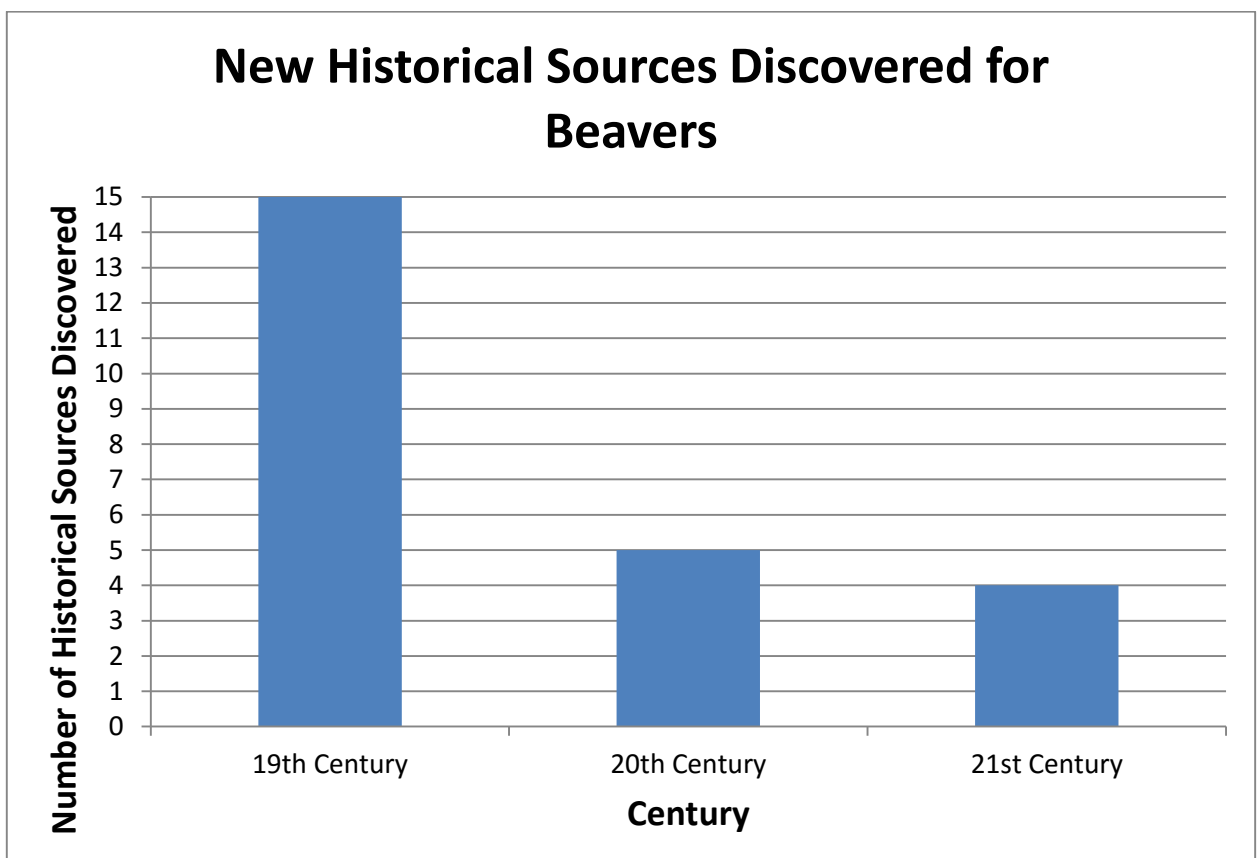
[36] Coles, B. (2006) *Beavers in Britain's Past* (Oxbow Books and WARP, Oxford).

Note this is an oversimplistic explanation: (i) Many of the nineteenth century sources were widely known rather than discovered. (ii) In some cases I have counted several records (e.g. place name evidence) into the discovery of a single 'source'. (iii) Coles' volume is a specialised monograph rather than a single chapter or section of a larger volume and therefore the comparison is not entirely fair. I make this point, not to demean the twentieth century scholars but to point out how much of our current understanding can be attributed to early studies.

Derek Yalden (1940-2013), a zoologist, has been the principal modern scholar working on synthesising archaeological information on extinct animals in recent years. Yalden's books use the structure demonstrated by Gurney and Ritchie, based on time periods rather than species. Given the very wide-scope of Yalden's study, a species-by-species account would be less useful.

Although most of the works discussed above have been full-length monographs, the dominant trend in today's scholarship is to publish new ideas in the form of papers, reports and articles rather than books. For example, Hetherington has yet to publish a book on the lynx, but his carbon$_{14}$ date for the lynx and views on reintroduction are currently the standard word on the subject.[37] *Extinctions and Invasions,* the last source on the table above, collects some of the most authoritative papers on the subject and is the first volume to bring together so many specialists in the subject into one volume.

At time of writing the subject is continuing to benefit from the collaborative attention of zooarchaeologists and ecologists. However, the subject has yet to attract attention from specialist historians or medievalists. The problem with this is that archaeologists looking at the species have not always been able to update the textual evidence. This has introduced some inaccuracies to the popular corpus of commonly cited primary texts. The so-called 'Old Welsh' text 'Y Naw Helwriaeth' (The Nine Huntings) is a perfect example. This text is still being used by scholars outside the field of medieval literature as an example of pre-Norman hunting practice.[38] However, it

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[37] Hetherington (2005) 'New evidence'; Hetherington (2006) 'The lynx'.
[38] See for example Sykes, N. (2006) 'The impact of the Normans on hunting practices in England', pp.162-175, in: Woolgar, C. Serjeantson, D. and Waldron T. ed. (2006), *Food in Medieval England* (Oxford University Press), p.162.

has now been eighty years since this text was shown to belong to the sixteenth or

seventeenth century (it is not Old Welsh nor even Middle Welsh).[39] Unfortunately

there is currently no single volume on medieval British animal literature containing a

list of reliable source texts with their most recent generally agreed dates and

significance. It is hoped that the current work can provide a useful step in that

direction, and thus be of interest to scholars from other fields seeking the latest

consensus.

During the preparation of this introduction, Shrubb's 2013 volume *Feasting,*

Fowling and Feathers: A History of the Exploitation of Wild Birds has come from the

press. This goes some way towards presenting a cohesive historical dialogue on the

subject. Historical depictions of cranes are examined in detail although the cranes

section for the most part compiles and analyses records found by previous scholars

without finding any new material. There is still a need for further investigation. Shrubb

looks at the crane as a historical rather than literary subject and therefore does not

present a new perspective on how the crane was perceived, only when it went extinct

and the various ways in which humans exploited it.

As I previously stated, some extinct species are better known than others, and

some idea of why this can be seen by looking at the species typically examined by the

studies above. Although the wild boar and wolf are examined by every study that

considers mammals; the lynx is only briefly discussed in Ritchie and then in Yalden and

by the 2010 authors; the crane is only discussed in Gurney and Yalden; and the large

whale species are only discussed by Ritchie and Yalden. Although the beaver and crane

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[39] Peate, I. (1934) 'Nine Huntings', pp.73-80, in: *Antiquity,* vol.8; See also: Linnard, W. (1984) 'The Nine Huntings: A Re-examination of Y Naw Helwriaeth', pp.119-132, in: *Bulletin of the Board of Celtic Studies,* vol.31.

are described in a great number of studies, both these animals are currently undergoing reintroduction and therefore work on them is urgent. Furthermore, cranes have never been studied from a literary point of view, and the beaver's historical and literary study needs to be updated. This is the reason our target species are called the 'forgotten beasts' rather than the 'lost beasts' (following Dent). Although all the species are extinct, they do not have strong profiles in the British cultural memory. It is hoped that this study will inspire and facilitate dialogue about these species by investigators of the historical past.

I will engage with species-specific scholarship and ecologists' reintroduction studies in more detail in each corresponding chapter.

Problems with Literary-Historical Evidence

Since this study draws on the research and assumptions from different disciplines, it is important to sketch the difficulties of the evidence before drawing any conclusions from it. As I have already explained, this study is confined to the four forgotten beasts mentioned above. The time period under consideration for each species is the medieval period but the end date varies depending on the available evidence and extirpation date of the animal (if early). Very little original work survives from Britain dated prior to the sixth and seventh centuries. The date of texts assigned to the ninth and tenth century is often uncertain. Most of the surviving texts from the first millennium A.D. are only preserved in later manuscripts, and interpolation and revision mean that is it not always easy to recognize the 'original' work. For this reason, medieval texts do not always have a single author. A text may have a known or

believed originator (especially in the case of poetry) but often an individual text may have many redactors, copyists, correctors, modernisers, translators, editors, and so on so that the trail back to the putative original becomes very difficult. A given text may have three different dates, one *terminus post quem* (earliest possible date) for the original 'proto-text' or 'ur-text', based on textual criticism, one linguistic date for when the 'current' version may have been written based on various linguistic features, and one *terminus ante quem* for when the earliest surviving manuscript was compiled or copied.

For example, 'Y Gododdin', the earliest Welsh text I will be considering, may have its origins in the event it seems to describe, the Battle of Catraeth of c. 600 A.D. It is difficult on a linguistic basis to date the version we actually have to any time prior to the ninth century, and the manuscript that contains the poem, The Book of Aneirin, belongs to the late thirteenth century. This means that some elements of the text may date from the sixth century, but it would be very deceptive to call the poem as we have it a sixth century one, since first there is no definite proof that the poem dates back that far, and second, the poem (if there was only one) would have gone through many putative changes to its language and orthography between then and a putative ninth-century written text. We must even be careful calling the text ninth century, since (i) the earliest surviving manuscript is from the thirteenth century, (ii) the text was part of a thirteenth century cultural tradition, and (iii) some parts of the text were probably later interpolations.[40] However it is in some way misleading to call the text a thirteenth-century artefact, since it draws on a far earlier tradition than other Welsh

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[40] See for example: Padel, O. (2013) 'Aneirin and Taliesin: sceptical speculations', pp.115-152, in: Woolf, A. ed. *Beyond the Gododdin: Dark Age Scotland in medieval Wales* (University of St Andrews Press).

texts we know actually originated in the thirteenth century.[41] From the point of view of medieval animal studies, if there are any now-extirpated animals in the text it may at times be the most conservative option to date the text to the sixth century, as otherwise the presence of, for example a lynx in the text might provide anachronistically late evidence for its survival, even if by the thirteenth century no-one understood what the reference actually meant. Nevertheless, it would be unwise to date a whole text based on any single reference.

Of course, even if a text is datable with confidence, its content can be problematic. Sometimes it is very difficult to know what a sentence means, especially when we allow that some key words undergo semantic shift. In addition, medieval literature often does not allow for a clear separation of fiction and fact as some positivistic scholars might wish. Some medieval authors may have set out to use archaic vocabulary,[42] or present fiction as fact.[43] Some medieval authors have been misled themselves and passed the information on. Finally, some medieval authors might not understand what they are explaining, either because they are transliterating or translating mechanically, or because they do not understand the language or terminology being used.

Difficulties with dating have led to few scholars of medieval literature addressing concrete historical concerns like this study's 'forgotten beasts'. The use of

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[41] Koch, J. (1997) *The Gododdin of Aneirin* (University of Wales Press, Cardiff), p.lxvi ff. Jarman, A. (ed. 1990), *Aneirin: The Gododdin* (Gomer Press, Llandysul), p.xiii-xvi. The historical evidence is also fairly strong for a pre-ninth century origin date, see: Charles-Edwards, T. (2013) *Wales and the Britons 350-1064* (Oxford University Press), pp.364-78.

[42] Rodway, S. (2007) 'The Where, Who, When and Why of Medieval Welsh Prose Texts: Some Methodological Considerations', pp.47-90, in: *Studia Celtica*, vol. 41, p.70.

[43] Beal, J. (2004) 'Mapping Identity in Trevisa's Polychronicon', pp.67-82, in: Ormrod, W. ed. *Fourteenth Century England,* vol. 3 (Bodyell Press, Woodbridge), p.75.

medieval literature to illustrate history found its apex of popularity in the mid-twentieth century with books like Jackson's *The Oldest Irish Tradition: A Window on the Iron Age*.[44] Over the decades since then, the early dates of many pieces of medieval literature, especially Celtic (Irish and Welsh) material, have been re-assessed.[45] Medieval Welsh literature in particular has undergone what is to some an embarrassing paradigm shift as a result of this change in attitude. So far, the result is that whilst in the 1960s Kenneth Jackson could talk about a window on the (Irish) Iron Age, now texts are considered early if they can be imagined to have been composed before 1200.[46]

Of course, Celticists and Classicists still use literary texts to elucidate the past. The only difference is they are now seen as more useful to elucidate the time of the author than the time of the setting. However, in English studies the shift has been different. In 1936 Tolkien gave a lecture, also published in the *Proceedings of the British Academy*, in which he argued that scholars should not (just) be looking at medieval texts as historical aids, but engaging in them as literary creations.[47] This was one of the first movements towards New Criticism by a medieval researcher, and English Studies still follows its example.[48] Although some aspects of medieval English texts are still explained from a historical or archaeological standpoint, medieval English scholars do not tend to bring their texts to the attention of historians. This has led to a

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[44] Jackson, K. (1964) *The Oldest Irish Tradition, A Window on the Iron Age* (Cambridge University Press).

[45] See for example: Isaac, G. (1998) 'Gweith Gwen Ystrat and the Northern Heroic Age of the Sixth century', pp.61-70, in: *Cambrian Medieval Celtic Studies,* vol. 36, p.69.

[46] Rodway (2007) 'The Where, Who, When and Why'.

[47] Tolkien, J. (1936) 'The Monsters and the Critics', pp.245-95. in: *Proceedings of the British Academy,* vol. 22.

[48] Gilbank, R. (2010) 'English Studies', pp.450-467, in: Classen, A. ed. *Handbook of Medieval Studies* (Walter de Gruyter, Berlin), pp.459-461.

tendency for purely 'historical evidence' (e.g. court and ecclesiastical records) to be isolated from purely 'literary evidence' (e.g. stories of kings and panegyric poetry).

A central concern of medieval studies is the attempt to bring together historical and literary evidence, and to emphasise the inter-connectedness of medieval writing in different languages.[49] This is the framework of our study. It is hoped that by drawing together different medieval textual traditions this study will make the medieval material on extinct animals accessible to all, and bring our forgotten beasts back into the cultural memory.

The Memory Reconstruction Approach and Ecocriticism

The following quote by Gillian Rudd discusses the importance of considering that depictions of the natural world in texts are potentially both symbolic and actual:

> Green reading poses the question of exactly what such non-iconographic, descriptive elements are being true to: of whose 'real' is operating at any given time and what undercurrents may be at work in those apparently insignificant 'other details'. This is not to say that the figurative use of the non-human world should be set aside as irrelevant to green reading altogether. Human language is riddled with metaphor, simile and analogy, all of which must combine to create an allegorical habit. The challenge must be to read with an awareness of allegory, while also focusing on the actual animals, plants, rocks or seas under debate. For literary critics it is not a case of either-or but of both-and.[50]

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[49] See: Kline D. (ed.2009) *The Medieval British Literature Handbook* (Continuum, Chippenham).
[50] Rudd, G. (2007) *Greenery* (Manchester University Press), p.11.

In medieval studies it is often assumed that, in literary texts at least, animals are present to lend symbolic significance to texts.[51] However, one of the central concerns of ecocriticism is to challenge such modernist views, and to argue that nature is more than just scenery for the text, it can also play a role of its own. For example, when reading 'Owain' (or the earlier-attested French 'Yvain') it is easy to read the lion as simply a foil to Owain, and as a representation of the main character's new-found nobility (especially when the lion is viewed as a replacement for the hero's ring).[52] Undoubtedly this is an important consideration with the story as we have it. However, as I will argue in chapter 2, the lion is also a main character in its own right. The creature is present in more scenes than any other character save the hero of the tale, and in the Welsh version of the text several times it acts precisely against the hero's express wishes.

When we consider literature describing the natural world in particular, readers of texts can have problems ensuring that their own preconceptions do not dispose them to interpret unreliably. For example, in Western culture the concept of 'wilderness' as an untouched natural space is a strong one. Pluskowski has studied the concept of wilderness as the home of wolves, related to the Greek concept of *hyle* (chaos).[53] That is certainly a good description of the wilderness in medieval romances. But to what extent was it true to real life? As Pluskowski goes on to point out, the 'wilderness' does not describe just one type of land but several, most of which were

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[51] For example, the motif of the 'ideal landscape' see: Curtius, E. (1953) *European Literature and the Latin Middle Ages* (2013 ed. University of Princeton Press), pp.183-202.

[52] Penelope B. & Doob, R. (1974) *Nebuchadnezzar's Children: Conventions of Madness in Middle English literature (*Yale University Press), pp.143-153

[53] Pluskowski, A. (2006) *Wolves and the Wilderness in the Middle Ages* (Boydell Press, Woodbridge), pp. 57-66.

subject to exploitation. In fact, very few parts of the British landscape have been free from human exploitation in one way or another in the historical period.

Another concept commonly attributed to the renaissance world-view is that the universe existed in a stable 'great chain of being' (partly based on Aristotle's 'Historia Animalium') with the deity at the top, then angels, then humans, large predators, prey, plants and rocks.[54] Yet on a practical level it is clear that medieval people were challenged to manage their environment just as people are today.[55] Marshland was drained, rivers were diverted and fished and, particularly in the post-Norman era, animals were hunted. Even before that, cattle were often left to roam freely in the summer, whilst feral pigs probably spent the winter in the forests around settlements. Despite claims that almost the entirety of zoological knowledge in medieval times was derived from bestiaries,[56] predators like the wolf and eagle must have been guarded against or hunted when they came into conflict with human interest. A region's predators would probably have been well known to its local inhabitants, although to what extent, for example, the mountains of Scotland and Wales remained a mystery to those living in medieval England is another matter. In the days before wildlife surveys and fast communication, almost anything could probably be thought to live 'beyond the pale', even if the local wildlife was well known.

Ecocriticism has provided a new textual perspective to many scholars looking at environmental and natural literature. The creation of 'place' within an environment, how people view themselves on a cosmological scale and how they see the environment around them are all important considerations when reading literature.

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[54] Jones, R. (2013) *The Medieval Natural World* (Routledge, London), pp.22-3.
[55] Huckle, J. & Martin, A. (2014) *Environments in a Changing World* (Routledge, London), pp.76-8.
[56] Hahn, D. (2003) *The Tower Menagerie* (2004 ed. Pocket Books, London), pp.25-6.

Since the purpose of this study is to examine medieval perceptions of animals, and animals both then and now are very often seen as intrinsically tied to their habitats, the relationship between human and nature is one that shall be addressed throughout the study. However, writing ecocriticism is only a peripheral concern of this project, just as writing any other kind of textual criticism is a secondary concern. The purpose of the project is to synthesise evidence from the literature to determine how animals were perceived since the significance that the forgotten beasts had for medieval Britons is one which they do not maintain today. A major task of this essay is therefore to reconstruct the cultural memory of animals; deconstructing them will have to wait for a future literary critic. It is intended that a constructionist approach to this study will provide the best demonstrable data on medieval perceptions which are useful on an interdisciplinary level. The project therefore has concrete primary concerns such as determining the presence or absence of the forgotten beasts throughout history, how the animals and birds were practically dealt with and exploited, and what they meant to their medieval contemporaries. Obviously these questions are inescapably bound up with the wider questions of how the writers of medieval narratives saw themselves and their relation to their environment, but for the main part, writing ecocritical epistemological theory must fall outside of the scope of this project.

Eco-sensitive Readings and Reader Removal

One of this study's main concerns is to write eco-sensitive interpretations of the primary texts. By that I mean using modern ecological knowledge about each species to help inform interpretation of the medieval texts, based on the ecocritical insight

that our texts describe real as well as imagined animals. A danger of this is that

interpretations of medieval texts cannot ever be completely secure, and citing

ecological studies can result in false authority being given to incorrect interpretations.

For example, Dafydd ap Gwilym, the well-known fourteenth century poet is the author

of a satirical poem featuring an owl that prevented him from sleeping. Bromwich's

1983 interpretation of this poem makes this a long-eared owl (*Asio otus*) based on a

strong similarity between Dafydd's description of the owl's cry and a description in

Witherby's 1938 *Handbook of British Birds*.[57] This reference has seemed so

authoritative that Bromwich's opinion was repeated, without further consideration

into each successive edition of Bromwich's book, but also into the online edition of

Dafydd ap Gwilym's poetry.[58] But it is a questionable conclusion. Long-eared owls do

not produce calls that approximate to 'hw-ddy-hw', or have a double-call like Dafydd's

owl. Rather their call is best interpreted as 'oo oo oo'. The poem is perhaps better

understood as describing the tawny owl (*Strix aluco*) which has also always been more

common.[59] But all interpretations are subjective when it comes to medieval texts

because we are unable ask the author or their medieval audience what they believed.

In our attempts to reconstruct medieval cultural memories of extinct animals we must

not forget how far removed we are from the original animals in question:

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[57] Bromwich, R. (1982) *Dafydd ap Gwilym Poems* (2003 ed. Gomer Press, Llandysul).

[58] Lake, A. (2007) 'Y Dylluan', in: *Gwaith Dafydd ap Gwilym* (address: http://www.dafyddapgwilym.net, accessed: 16/3/16).

[59] Hume, R. (2002) *Complete Birds of Britain and Europe* (DK, London).

Stages of Removal from Medieval Animals

Stages Removed	Example	Common Medieval Example
0 *Animal – us*	\<The actual creature\>	Archaeological remains[60]
1 *Animal - **observer/author** - us*	'I saw a pine marten outside my house'	Traveller's accounts, hunting records, kitchen records, but only if the recorder personally saw the creature.
2 *Animal - **observer** - **author** -us*	'Amy tells me she saw a wildcat there'	Hunting manuals, naturalists' accounts.
At least 3 *Animal - **observer** - **culture** - **author** - us*	'Hercules hunted the Nemean lion'; 'I've heard King Henry owned several lions'	Histories, bestiaries, geographies, romances.
Furthest *Animal - ~~**observer**~~ - **culture** - **author** – us*	'She was as strong as an ox'; 'In his dream he saw two dragons fighting'	Figurative descriptions, dreams and visions, glossaries and dictionaries.

This table should be compared to the modern practice where ecologists may be interested in first-hand accounts of species, but will only officially determine a species to be present in an area with physical evidence (camera trap footage, hair/pellet findings, DNA analysis from scats).[61] Unfortunately it is very rare for historians to find even once-removed testimony.[62] Most texts are at least twice-removed. Twice-removed texts are most commonly used by historians rather than scholars of literature because they are still rooted in the real world. Whenever we find evidence this strong we can be fairly confident asserting the presence of the species indicated—depending

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[60] But note archaeological interpretations are one stage removed since they are commenting on the animals.

[61] Of these only the camera trap footage is 'once removed' evidence.

[62] For a list of all once and twice-removed references (and the reliable three times-removed references) to medium and large mammals in medieval Britain see: Raye (2014) 'The Early Extinction of the Beaver'.

of course of the genre of the text in question. Even modern naturalist's handbooks are usually twice-removed from the original animal.

Legal definitions do not distinguish beyond second-hand evidence which is called 'hearsay' and inadmissible, but we can profitably make two further distinctions after 'twice-removed'.[63] The term 'three times-removed' is difficult, because we cannot usually be sure how many intermediary steps there are between observer and author. Fictional sources tend to be written in the third person and thus fit into the 'three-times-removed' category. We cannot trust that the event in a three times-removed text actually necessarily happened, or even that the observer ever existed. For this reason, some previous studies of species history have explicitly ignored this kind of source.[64] Certainly, implausible things do take place in sources which are three times removed from an observation; there are stories of kings and saints fighting monsters and stories of places and people that never existed. However, there may be an internal realism even to fantasy stories.[65] If a hero is going to fight a monster, audiences can suspend disbelief about one unreliable creature because that is what is required for the story to work. However usually they expect the other details to be plausible. If the story has a British setting, the monster can run into a pine wood or a deciduous wood, but it is unlikely to run into a grove of palm trees because those are so rare in Britain. Usually the geography of a setting, including the animals found there

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[63] Black, H. (1891) *Black's Law Dictionary* (1910 second ed. West Publishing Company, St. Paul), p.447. Although note there is a slight distinction between first hand evidence and evidence once removed.

[64] Raye (2014) 'The Early Extinction of the Beaver'. Turvey, S., Crees, J. & Di Fonzo M. (2015) 'Historical data as a baseline for conservation', pp.1-9, in: *Proceedings Royal Society B.* vol. 282.

[65] Lewis points out that even in Dafydd ap Gwilym's most artificial love messenger scenarios, the descriptions of the species are still naturalistic: Lewis (2008) 'Bardd Natur yn Darllen Bardd y Ddinas?', p.1.
I discuss the distance between primary and secondary fantasy worlds further with regards to modern fantasy in: Raye, L. (2016) '"Blue skies, green grass", is the *Redemption of Althalus* a reliable biological record?'. *Fafnir*, vol. 3. Forthcoming.

are protected by the realism and consistency of a story. This is called verisimilitude of setting. [66] If an author abuses verisimilitude the audience will give up their suspension of disbelief and the story is likely to fail. If an author describes an animal as present in a place in their world we can usually expect it to be really found in the real-world version of the place. It should be noted though that some medieval stories are more realistic than others in this respect. It may be possible to tell how important verisimilitude is to a text by making a list of all the animals it names.

The category which I call 'furthest-removed' from reality is separated from the previous category in that verisimilitude no longer governs the world, because the 'observer', whether they were real or imaginary, is no longer really observing it. Audiences accept that unnatural things can happen in dreams and that metaphors do not rely on reality. The animals in this category are not seen by an observer, they are plucked from culture. Culture furnishes any number of animals and monsters not really living in the country. This category describes dreams and visions, but also poetic metaphors which are chosen by the author, not dictated by what the hero has seen. [67] Glossaries and dictionaries also fit into this category because the animals in glossaries have not necessarily been seen by anyone, they have come straight from culture to the author. The presence of animals like this in the text just implies that they are known by a culture, not necessarily that they were thought to be a native.

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[66] See: Buchanan, I. (2010) *The Oxford Dictionary of Critical Theory* (Oxford University Press), pp.481-2.

[67] Auerbach's (1946) book *Mimesis* has a more reserved approach to realism and finds in particular romances like 'Yvain' to be entirely separated from reality after the fashion of the *Odyssey*. See: Auerbach, E. (1953) *Mimesis* (2003 ed. Princeton University Press). esp. pp.139-41. Obviously some genres and periods of literature had more or less realistic trends of literature, but as verisimilitude holds true across almost all of them and therefore I have used several sources as historical evidence which are usually dismissed as entirely literary (i.e. fictional).

Animal Nomenclature and the Concept of Redelimitation

It seems a frequent occurrence for the name of a lost species to be transferred to another loosely similar one when they are no longer both around to be distinguished.[68]

Before we finish this introduction it is important to briefly explain the concept of redelimitation. Simply put, the species-name used most commonly for any given animal often changes over time. Of our animals above for example, the use even of the English terms I have chosen is controversial. There are multiple types of beaver, lynx and crane in the world, all of which are delimitated simply by these general names. Obviously, given the context, my readers are unlikely to believe I am intending (for example) the Canadian beaver rather than the Eurasian beaver. However, there is a further difficulty. The meaning of all of these (already ambiguous) terms changes over time according to the process of semantic-shift. For example, whilst I call *Sus scrofa* 'wild boar', many people in the past might take the term 'boar' to implicate only the male of the species.[69] This difficulty is why it has been the practice since Linnaeus (1735) to give the 'scientific name' of an animal when it is first mentioned, and wherever there may be opportunity for confusion afterwards.

Whilst the use of the scientific term prevents confusion by modern readers the system was not in place in the medieval or early modern periods when many animal

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[68] Yalden & Albarella (2009) *The History of British Birds*.

[69] Yalden even feels it necessary to explain why he is not using the term swine in his study: Yalden (1999) *The History of British Mammals*, pp.165-6.

names underwent 'redelimitation' (a change in meaning). This has led to great

confusion. Foster Evans provides an example from a poem by Dafydd ap Gwilym about

a roe buck (*iwrch* or *cariwrch*).[70] Because roe deer are so rare in Wales, this poem has

usually been edited under the rather more generic title 'Y Carw' (the deer). This in turn

has led to misinterpretation because in the medieval period, the term 'carw' referred

explicitly to the high-status red deer (*Cervus elaphus*) and was not used to describe the

lower status roe deer (*Capreolus capreolus*). The difference in perception of the two

animals is made clear in a proverb from the <u>Red Book of Hergest</u> (c. 1400): 'Gwell bot

yn benn ar yr iyrch noc yn lloscwrn ar yr hydot' ('better to be [at] the roe deer's head

than [at] the harts' tail').[71] The idea of this animal being a noble one would only be

supported if we were talking about a hart rather than a roebuck.

The term 'redelimitation' also covers a second kind of animal re-branding.

Sometimes when an animal becomes extinct, another species is given its perceived

nature as well as or instead of its name. This redelimitation is especially common when

we are considering animals that become extirpated (locally made extinct), perhaps

since their names begin to be used more rarely. The process has been understood for a

long time, although rarely explained explicitly. In 1974, Dent pointed out that fox-

hunters sometimes describe foxes as being unable to move their heads from side-to-

side as they run, a characteristic borrowed straight from the medieval bestiary lore of

the wolf.[72] Rackham has independently pointed out that descriptions of animals as

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[70] Foster Evans, D. (2006) ''Cyngor y Bioden': Ecoleg a Llenyddiaeth Gymraeg', pp. 41-80, in: *Llenyddiaeth mewn theori,* vol 1, pp.54-7.

[71] Roberts, R. (2013) *Diarhebion Llyfr Coch Hergest* (Cambrian Medieval Celtic Studies, Aberystwyth), p. 111. Interestingly another version of the same proverb in the same manuscript has reversed the animals' names in error, see p. 17.

[72] Dent, A. (1974) *Lost Beasts of Britain* (Harrap, London), pp.24-5.

they are becoming extinct can be unreliable because the animal starts to be forgotten and confused with others.[73] I have previously presented my opinion that the folklore of the chough in modern-day Cornwall has only comparatively recently been re-delimitated from the raven.[74] Even today, British children will tell you that a worm cut in half becomes two worms, a piece of folklore which was original to medieval bestiary descriptions of *wyrms*; snakes and dragons.[75]

Understanding what our animal terminology means in any given period is vital to the success of any medieval study of animals, and especially any study of the forgotten beasts. The following table provides a very rough summary of the state of nomenclature redelimitation in different periods for our sample:

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[73] Rackham (1986) *The History of the Countryside*, p.33.

[74] Ramsay, L. (2012) 'Was Arthur once a Raven? 'The Legend of 'Arthur as a Chough'', pp.19-27, in: *Old Cornwall*, vol. 14.

[75] White (1960) *The Book of Beasts*, p.189.

Table of Redelimitation – Forgotten Beast nomenclature in medieval Latin, English and Welsh literature.			
Animal nomenclature	**Early medieval delimitation**	**Late medieval delimitation**	**Modern delimitation**
Terms used to describe the lion and lynx – Latin			
'Leo'	Any cat larger than the domestic? In particular drawings of Mark's evangelist symbol.	The lion (*Panthera leo; P. l. persica*)	Any one of several large cats.
'Linx'	The lynx (*Lynx lynx*) (not used)	The lynx	Any kind of lynx
Terms used to describe the lion and lynx – English			
'Leo', 'leon', 'lion'	Any cat larger than the domestic	The lion	The lion or certain other large cats (cave lion, mountain lion)
'Lox'	The lynx, word very rare.	Word lost	Word lost
'Linx', 'lynx'	Word not yet coined	The lynx	The lynx
Terms used to describe the lion and lynx – Welsh			
'Lleu', 'llew', 'llewon'	Any cat larger than the domestic	The lion	The lion or certain other large cats.
'Linx', 'lincs'	Word not yet coined	The lynx	The lynx
Terms used to describe the whale – Latin			
'Cetus'	A large marine animal	A large whale often mistaken for an island and which can breathe out perfume	A toothed whale
'Balena', 'balaena'	A large marine animal	A whale or large fish	A baleen whale
Terms used to describe the whale – English			
'Hwælh', 'wal'. 'whal', 'whale'	Any large marine mammal (walrus, whale)	Any large marine mammal (leviathan, whale)	Any cetacean (whale, dolphin or porpoise)

Hron, hran	A large marine animal with fins	Word lost (becomes seal/dolphin/porpoise in Medieval Welsh)	Word lost (modern Welsh and Gaelic have word meaning seal)
Terms used to describe the whale – Welsh			
'Moruil', 'morfil'	No evidence	Whale	Any whale
'Moruarch', 'morfarch'	No evidence	Whale, leviathan	Word lost
Terms used to describe the beaver – Latin			
'Castor'	Beaver (*Castor fiber*)	Beaver	Any kind of beaver (inc. *Castor canadensis*)
'Fiber' / 'Feber'	Beaver	Beaver	The Eurasian beaver
Terms used to describe the beaver – English			
'Beofer', 'befer', 'bever' 'beaver'	Beaver	Beaver	Beaver; otter (rarely).
Terms used to describe the beaver – Welsh			
'Afanc'	Monstrous water creature	Monstrous water creature	Beaver
'Llostlydan'	Beaver	Word lost	Word lost
Term used to describe the crane – Latin			
Grus	Crane (*Grus grus*)	Crane	Any crane (esp. *Grus grus*)
Term used to describe the crane – English			
Cran(e)	Crane	Crane	Crane or heron
Term used to describe the crane – Welsh			
Garan	Crane	Crane?	Crane or heron
Creyr	Heron	Heron or crane	Heron

The lengthy table of delimitation given above contains the kernel of the arguments I will be making in the succeeding chapters. Some of the entries are better evidenced that others but it is hoped that placing all of the nomenclature on a single, easy-to-consult table will be to the reader's advantage.

Having now introduced the justification, subjects, primary and secondary sources, methodology and difficulties anticipated with this project, we can now begin looking at our first case study. Chapter 2 will examine portrayals of lynxes in medieval British literature.

Chapter 2- Lynxes

Introduction

To understand the lynx's place in the fauna of Britain and Ireland we must begin

15,000 years ago, when the retreat of the last glacial period (the Devensian) started.

During the following six thousand years, Europe's glaciers and colder weather slowly

retreated back north, and a climate like today's began to re-assert itself. The retreating

glaciers were followed, slowly, by the northward spread of animals adapted to warmer

weather, as happens in each interglacial period. However, as previously, there was a

time limit to faunal advance into Britain. The island was surrounded by low land, and

as the glaciers began to melt and the climate became warmer, these low lands began

to be reclaimed by seas. There is evidence to suggest that the land-bridge may have

been flooded earlier than in previous interglacial periods because the archaeological

evidence indicates that Britain's Holocene fauna is impoverished compared to the

faunas of previous interglacial periods.[1] However, both of the cats that colonised

northern Europe in the Holocene managed to cross to Britain. These were the Eurasian

lynx (*Lynx lynx*) and the wild cat (*Felis silvestris)*.[2]

Over the years since then the wildcat has been the more successful of the two.

The lynx was probably always rarer. Britain's lynx carrying capacity would have always

been smaller than its wildcat carrying capacity, since the former is a much larger

territorial predator requiring a larger territory. The archaeological evidence for lynxes

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[1] Stuart, A. (1995) 'Insularity and Quaternary vertebrate faunas in Britain and Ireland', pp.111-125 in: *Geological Society, London, Special Publications*, vol. 96.
[2] Yalden (1999) *The History of British Mammals,* p.70.

in Britain has been reviewed in Hetherington's 2006 survey and will not be repeated here; twenty-five archaeological specimens of lynx remains have been uncovered, of which six have been radiocarbon dated.[3] Of these, three specimens are dated from the first half of the first millennium A.D. (1550±24; 1770±80; and 1842±35 years BP[4]). These dated remains are not statistically likely to represent the last lynxes living on the island, especially given their geographical scatter (two from separate sites in North Yorkshire and one from Sutherland). Rather they probably represent individuals from healthy populations and this strongly suggests that the lynx was also present in Britain, at least at the beginning of the medieval period. For the creature to have survived 10,000 years after the last glacial period, only to die out in the medieval period suggests that human action was the main factor in its extinction.

This early extinction scenario is not typical of the rest of northern Europe, but it is similar to the scenario throughout the rest of the continent. As Kratochvil has explained, although southern, central and eastern Europe has a greater potential for population restocking and migration, by 1800 in central, western and southern Europe lynxes could only be found in the biggest wilderness areas: the Pyrenees, Massif Central, the Alps, the Bavarian and Bohemian mountains, and the Carpathians.[5] This is in contrast to northern Europe: lynxes were widespread in the boreal forests of Russia and Scandinavia. The nineteenth century is characterised Europe-wide as a century of unsustainable environmental exploitation and by 1950 the lynx could only be found in

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[3] Hetherington et al. (2005) 'New Evidence', p.4.

[4] Carbon14 dates are usually given in a range of years B.P. Confusingly, P[resent] is defined to be 1950, so the latest of our dates, 1550±24B.P. means a date 376-424 A.D. However, upon calibration this gave a 95.4% probability that the lynx lived between the years 425 and 600 A.D. (see notes, ibid, p.4.).

[5] Kratochvil, J. et al. (1968) 'History of the distribution of the lynx in Europe', pp.1-50, in: *Acta Scientiarum Naturalium Academiae Scientiarum Bohemoslovacae* vol. 4; Breitenmoser, U. (1998) 'Large predators in the Alps: the fall and rise of man's competitors', pp.279-89, in: *Biological Conservation,* vol. 83.

Scandinavia and eastern Europe. It became functionally extinct in its last stronghold of the Italian and French Alps c.1930, and in most of the rest of southern Europe centuries earlier. Some claim that relict populations may have survived in the Pyrenees or the western Alps but if so these populations were probably not viable. The Iberian lynx (*Lynx pardinus*) survived better and an autochthonous population survives to the present day on the Iberian Peninsula. Over the course of the twentieth century the lynx recolonised and was reintroduced to much of its final 1800 territory.[6]

The details of the lynx's disappearance and return to Europe are interesting because they suggest a probable extinction model for the animal. Unlike the wolf and bear, which survived best in southern Europe but were lost from much of northern Europe, the lynx was lost first from southern Europe and found its stronghold in northern Europe. Lynxes are ambush hunters and require woodland cover to hunt. They do not attack humans, will not scavenge and do not migrate. Lynxes therefore survived the longest in the thickly forested north. Since they are solitary, do not target cattle, are territorial and exist at low concentrations they were not as contentious to their Scandinavian and Russian neighbours as wolves and therefore were less hunted. Wolves in contrast do not rely on forest habitat to the same degree and are not ambush hunters. They more usually live in packs and will scavenge carrion and take cattle. Wolves were able to survive longer in Latin Europe because they were not so affected by the deforestation and settlements there were more often walled and therefore protected.[7] It is clear that the lynx was lost from Britain earlier than the wolf, and this may be partly due to the fact that Britain's environment in the medieval

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[6] Ibid.
[7] Ibid. p.283.

period developed with more in common with southern Europe's early, severe

deforestation than northern Europe's fast movement from deforestation to woodland

management.[8] A parallel model may exist for wild boar that rely heavily on a woodland

habitat to survive in the wild. The only countries which have indigenous populations of

wild boar today are those with more than 20% forest cover. Most of Britain's counties

had less than this by the end of the Saxon period, and Britain's wild boar after this

point were probably all under human management.[9]

As well as the lynx and wildcat, at least two other types of cat were important

for the inhabitants of early medieval Britain. First, the house cat (*Felis catus*), which is

ultimately descended from the African wildcat, was imported throughout the medieval

period. In Britain, the earliest extant remains are from the Late Iron Age, and other

remains have been dated sporadically all the way through to the modern day.[10] These

remains can occasionally be confused with those of wildcats, but are less relevant for

our interest in larger cats. Second, the lion (*Panthera leo*) acquired a very early fame in

Britain. Lions and other large carnivores were imported for the entertainment of the

wealthy in Roman Britain, often to fight with criminals and gladiators.[11] Many Roman

legends contain lions, as for example the Nemean lion against which Hercules fought.

Lions were also often featured in artwork, one famous example being the lion with

flame markings in the Hoxne hoard. Although the Roman period falls outside of the

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[8] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, pp.33-4.

[9] Rackham (1986) *The History of the Countryside*, p.37.

[10] Yalden (1999) *The History of British Mammals*, p.125.

[11] See for example the excavated human remains from 6 Driffield Terrace, York. One of the skeletons there from the third century was bitten by a large carnivore, most likely a lion, tiger or bear (York Archaeological Trust (2011) *Gladiators* (page: http://www.yorkarchaeology.co.uk/headless-romans/gladiators.html, accessed: 16/3/16). See also Wysocki's in depth comments on the bone evidence on: Channel 4 (2010) *Gladiators: Back from the Dead* (documentary).

remit of our survey, this early fame is important since it explains why lions appear alongside native animals in artwork and literature in the early medieval period.

By the seventh century, further evidence for Britain's preoccupation with large cats is found in illuminated manuscript art. Britain's 'insular art' tradition was dominated by zoomorphic shapes and animal miniatures.[12] Of these, the lion was one of the most commonly depicted creatures. This is partly due to the importance of the 'Evangelist Portraits' in Gospel manuscripts. In medieval manuscripts, each illuminated gospel tends to begin with a portrait of the evangelist who wrote it.[13] In the early Christian artwork these evangelist portraits began to be accompanied by the 'evangelist symbols'. John was accompanied by an eagle, Luke by a calf, Matthew by a man, and Mark by a lion. However, in the British gospels from the second half of the first millennium A.D., these symbols came to be more often used than images of the evangelists themselves, and evangelist portraits often *only* depict the evangelist symbols.[14] Even illiterate people looking at Bibles could be inspired by large portraits of lions and eagles.

As I have explained elsewhere, Mark's evangelist symbol, the lion, was called the *imago leonis*, and depictions of this symbol were so heavily traditional and influential that most Insular depictions of lions came to share certain characteristics.[15] They are usually depicted without an evangelist, oriented *to sinister* (i.e. with their tails pointing to the right), and are without a background illustration. They are usually red, although can be gold, are depicted with strange protruding tongues, and have long

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[12] Pächt, O. (trans. 1986) *Book Illumination in the Middle Ages* (Oxford University Press), pp.51-4.

[13] See: Friend, A. (1927) 'The Portraits of the Evangelists in Greek and Latin Manuscripts', pp. 115-47, in: *Art Studies,* vol. 5.

[14] See: Raye, L. (2013) 'Lions in Insular British Artwork: 650-1000 A.D.', pp. 72-89, in: *Journal for Late Antique Religion and Culture,* vol.7.

[15] Ibid.

tails and talons. They are also usually depicted in a unique British 'stretched' attitude, half way between the heraldic *salient* (leaping) and *courant* (running) positions. Finally, British lions in artwork usually have very thin silhouettes with only hair rather than manes. Good examples are the lions in the Echternach Gospels, Lichfield Gospels and in the (fragmentary) Otho-Corpus Gospel. The original model for these lions was probably classical.

Artistic representations of lions are not limited to the *imago leonis*, and lions, as well as cats can also be seen in miniature in illuminated manuscripts, on Pictish stones and in relief on crosses and on escutcheon termini from the second half of the first millennium A.D. Almost all of these artistic depictions can be made out to be lions from the long tails, manes and muscular bodies (making clear they are not based on lynxes or cats). Ultimately, despite being the only one of the four cats not commonly seen in Britain in the early medieval period, lions were probably the most popular of all of them.

Linguistically the Roman preoccupation with the *leo* provided the modern words *lion* and *llew* in English and Welsh respectively. (Welsh *llew* must come from the unattested British Vulgar Latin **leuo*).[16] The word was also borrowed into numerous Germanic languages.[17] In its oblique stem the Latin word *leo* has forms in *–n-* such as *leonis*, the genitive singular. In some cases, this *–n-* was retained, for instance in Old English oblique forms, and also in the Middle English form *leoun, liun* etc., which were borrowed from the Anglo-Norman *liun*. The oblique form may also be important in Welsh, as we shall see. Conversely, the native words in Latin and Old English used to

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[16] See *Geiriadur Prifysgol Cymru*.
[17] See *Oxford English Dictionary*.

describe the lynx (*linx, lox*) are very infrequently used in Britain. In the early medieval period the Latin word (*linx*) is only used in documents written elsewhere and the Old English word (*lox*) is used only to gloss Latin texts. The word *lox* is lost by the Middle English period. But it may be that the words normally translated today as 'lion' were sometimes also used to describe a native large cat living wild in Britain which was hunted by humans.[18] Throughout the remainder of this chapter I have translated the word *leo* where it is ambiguous as 'large cat', a word intended to refer generically to both lions and lynxes (although the latter are not technically 'big cats' in the modern sense).

In 2005, David Hetherington submitted his PhD thesis on *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*.[19] Most of this thesis is made up of a detailed feasibility survey, which by use of various statistical models and programs argues that the Scottish Highlands (including the North West Highlands, Grampians, and ideally the Southern Uplands if linked with a green corridor) would provide suitable habitat for the reintroduced lynx (chapters 3-4). This habitat, he argued, could support a viable population of 400 lynxes (450 with the Southern Uplands) within a network of interconnecting woodland (chapter 5). It is also argued that a reintroduced population would have a 95% chance of long-term survival, so long as at least 12-32 individuals were initially released (chapter 6). These would ideally consist of wild specimens from Finland, Estonia and Latvia (chapter 7).

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[18] A parallel for this situation may be found in early American English where pumas, when first discovered were often called 'lions' (e.g. Royster, P. (ed. 2014) *A Brief and True Report of the New Found Land of Virginia, by Thomas Hariot* (Digital Commons, University of Nebraska-Lincoln). Undated (>2014) edition of original 1588 text, http://digitalcommons.unl.edu/etas/20/), p.28.

[19] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland.*

Hetherington also explored literary, toponymic, archaeological and artistic evidence for the lynx in Britain in order to establish when and why the lynx was extirpated (part of chapter 2). His findings, and those of other scholars, will be of use in the main part of this chapter, and as we shall see, some of his evidence, as for example his new radiocarbon dates and reference to 'Pais Dinogad', are of fundamental importance to our current study. However, his interpretation of some sources may be questioned.

For example, he argues strongly that the Kildonan Pictish Cross from Eigg provides a first-hand witness to the lynx.[20] This claim, however, is untenable. As noted above, depictions of animals in medieval artwork are generally drawn according to culturally prescribed patterns, not from nature.[21] Lions are common in Pictish artwork, found for example on the Meigle #3 and Glamis Manse (Glamis #2) stones as well as on the St Andrew's Sarcophagus. All of these lions are depicted with long or medium tails, and are very comparable with the lions found in early Illuminated Gospel art. The lion on the Kildonan Cross is especially similar to the Cross Page lion in the St Trier Gospels (an early eighth-century gospel book probably created at Echternach by the English or Irish monks who settled there). The only thing preventing the Kildonan Pictish Cross lion from being categorically a lion is that part of the stone is weathered away around the animal's hindquarters. It is significant that no tail is evident curling over the animal's back since this is the normal position for a lion's tail in artwork. However, this is by no means unique. The lion on the St Andrew's Sarcophagus and many Gospel lions do not have tails like this; their tails sweep back behind them. The 'mottled fur'

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[20] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, p.31.
[21] See for example: Etheridge K. (2007) 'Loathsome Beasts: Images of Reptiles and Amphibians in Art and Science', pp.63-88, in: French, S. & Etheridge, K. eds. *Origins of scientific learning* (Edwin Mellen Press, Lewiston, NY); Raye (2013) 'Lions in Insular British Artwork'.

which Hetherington sees as lynx-like is actually a fairly typical representation of a mane for an Insular British lion (see again the St Trier Cross Page lion and the St Andrew's Sarcophagus lion), hence why the patterning stops at the edge of the neck. The lion on the Kildonan Pictish Cross does not have ear tufts, nor does it appear to have the definitive long cheek fur hanging down past its jaw.[22]

Some of Hetherington's other conclusions may also be challenged. To summarise, the following table presents his evidence in chronology:

TABLE: Previously Known Evidence for the lynx in Britain (from Hetherington)		
Date	**Evidence**	**Conclusion**
425-600 A.D.	Radiocarbon dates proving the existence of the lynx in Britain	Definitive, these provide nearly indisputable evidence that the lynx was native up until this point.
6-13th century	'Pais Dinogad' – a huntsman chases a *llewyn* in northern Britain	Possibly a lynx, accepted since by many translators.
6-12th century	The place name 'Lostford'	Probable - this name may well contain the word *lox* ('lynx').
8th-11th century	Kildonan Pictish Cross, a felid is depicted being hunted	No marks distinguish it from the common Pictish depiction of the lion.
9th century	Old Irish Language – existence of word *lug* in Old Irish, including in descriptive compounds	Debunked, this word is no longer interpreted as 'lynx'.
1587	Holinshed's *Chronicles* discuss a lion which formerly lived in Scotland	Improbable—why does Harrison specifically mention the long mane of his 'lion'?

But before Hetherington the evidence was even more restricted. Considering this, it is easy to see why Matheson in 1932, for example, complains that:

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[22] See photograph at: Royal Comission on the Ancient and Historical Monuments of Scotland (2015) 'Eigg, Kildonnan', *Canmore* (page: http://canmore.rcahms.gov.uk/en/site/22158/details/eigg+kildonnan/, accessed: 16/3/16).

There are one or two mammals, e.g. *Lynx lynx* Linnaeus, the European Lynx, which it is suggested possibly survived into the historic period in Great Britain, particularly in the north. Of these it can only be said that in Wales there are neither osteological nor literary indications of their survival.[23]

Overall, Hetherington does not produce one acceptable piece of evidence from art, literature or archaeology which puts the lynx's probable extirpation later than the poem 'Pais Dinogad' (whose own dating is a matter for debate). However, his radiocarbon date does at least securely establish the creature's presence in Britain in the historic period, and a more complete search through the textual evidence can produce stronger evidence that the creature did linger for some time after the sixth century. Here is the main evidence I explore:

TABLE: Evidence considered for large cats in early medieval Britain	
Date A.D.	**Source**
425-600 *(*Cal. C$_{14}$)	Hetherington's latest carbon date for lynx remains in Britain. Up until this time and probably for a while afterwards there was a native, breeding population of lynxes in Britain.
TPQ – 598 Language date - 9th-11th century TAQ - c.1275	'Y Gododdin' – the Brittonic language of the text is datable to the ninth century but it may have been based on a sixth or seventh century North British text in an early form of Welsh/Cumbrian. Contains multiple references to *lleu* being fierce, and also contains 'Pais Dinogad' an interpolation which describes a man hunting *llewyn* alongside boar and deer.
5th century – 1121	Loscafort (later more commonly Loskesford) named. Probably named centuries before earliest reference in 1121. Name most probably contains reference to a lynx (OE: *lox*).
650-1000	Lions depicted in religious Insular British art (most notably Illuminated Gospels and Pictish Stones), always with long tails and usually with certain other features. May be based on classical prototypes. Examples include the <u>Meigle 3</u> stone, <u>Glamis Manse </u>and <u>Kildonan (Eigg) Stone</u>.
c.705x720	'Vita Sancti Cuthberti metrice'. Latin text by Bede warns shepherds to be vigilant against dusky large cats.

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[23] Matheson (1932) *Changes in the Fauna of Wales*, p.48 footnote.

Late 7th -8th century	'Liber Monstrorum' in Latin describes a variety of large cats as exotic beasts.
735-804	Alcuin of York's unnamed Latin poem finds a lion a threat to travellers, but since it also mentions tigers the evidence is dubious.
8th century	Aldhelm's 'Enigmatica' describes the lion as a bloodthirsty beast which does not fear wild boar.
C850-1100	'Pa Gur' – the language is datable to the Old Welsh period and contains a reference to Cath Balug, associated with a *lleuon*.
11th century	Aelfric's English glosses Latin *linx* as 'gemenged hund and wulf' (between dog and wolf), and this is directly translated into Cornish by the 'Vocabularium Cornicum' glossary, but a later Old English glossary uses a rare direct translation (lox).
11th century	The Old English translation of the (5th century) 'Medicina de Quadrupedibus' prescribes lion flesh and lion fat for aches, pains and hallucinations.
12th century	Earliest known British menagerie collections made by King Henry I at Woodstock and by King John in the tower of London. Both contain lions; Woodstock had lynxes which Latin William of Malmesbury text attests 'England does not produce'.
c.1189-95	Date of the Welsh 'Awdl Ddadolwch yr Arglwydd Rhys' which might suggest that Lord Rhys made *llewyn* happy (by providing battlefield carrion)
13th-14th century	Welsh and English borrow the Latin word 'lynx'. By this point the words *llew* and *leon* must refer specifically to lions. English, Latin and Welsh by this point have a strong bestiary tradition giving in-depth information about the lion.
Early c.15	The *Livre de Chasse* and *Master of Game* refer to the hunting of lynxes, but the first text was written in France and the second is only a translation
15-16th century	Imported lynx skins called *lozarde* or *loup cervier* and collected by rulers.
1602-7	Gessner, one of the earliest naturalists includes a note about lynxes from Scotland and Sweden which are the most beautiful. The note is translated in English without comment by Topsell.

The early Welsh Evidence

'Y Gododdin'

As Hetherington emphasised, the earliest and perhaps the best textual evidence for the lynx in Britain can be found in a poem called 'Pais Dinogad'.[24] This is a single, probably interpolatory, stanza that forms part of a composition called 'Y Gododdin' in the manuscript known as the <u>Book of Aneirin</u> (*c.*1275). It was the most convincing source used by Hetherington to help corroborate his argument for a late survival of the lynx, and it remains the most convincing source today.

'Y Gododdin' is a lengthy heroic poem or collection of poems seemingly based (at least to some extent) on a battle at a location called 'Catraeth'. Despite not being evidenced in any historical sources, linguistically *Catraeth* seems to derive from the name of the town known to Bede as *vicus Cataracta*, which may be identified with the modern town of Catterick in Yorkshire. For a battle to have taken place there involving the kingdom of Gododdin (which was based around Edinburgh) then a date around the year 600 or a few decades earlier seems most likely. A rubric in the <u>Book of Aneirin</u> ascribes the composition of the 'Gododdin' to Aneirin; the manuscript also contains three *gorchanau* 'songs, poems' on similar themes attributed to Aneirin and his fellow poet Taliesin. The earliest evidence we have of Aneirin's existence is a mention in the Latin pseudo-history *Historia Brittonum* (written around 830) which suggests that he and Taliesin flourished around the middle of the sixth century.[25] The earliest extant

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[24] Hetherington (2005) 'New evidence', pp.5-6; Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, p.30-1.

[25] Charles-Edwards, T. (1991) 'The Arthur of History', pp.15-33, in: Bromwich, R. and Jarman, A. & Roberts, B. eds. *The Arthur of the Welsh* (University of Wales Press, Cardiff), p.15.

version of 'y Gododdin' is significantly later than this, of course; the poem makes up

the main part of the <u>Book of Aneirin</u>, written in the second half of the thirteenth

century (probably around 1275).[26] The poem contains two (or possibly) three versions

of the text written in two hands, known as A and B (with B sometimes subdivided into

B1 and B2). 'Pais Dinogad' occurs towards the end of the A version. The B version or

versions show significant traces of an older orthography than the more modernized A

version, and although some stanzas appear in both A and B, that is not true of 'Pais

Dinogad'.

There is no scholarly consensus about the date of 'Pais Dinogad'. John Koch has

suggested a date in the second half of the sixth century or the early seventh century.

Others point out that there is little that can definitely be traced to the Old Welsh

period (pre c. 1150).[27] We know that texts were modernised, and indeed much if not

most of the text (A and B.I, *not* B.2) is in the orthography of the thirteenth-century

manuscript.[28]

From a lynx-ecologist's point of view, if the text does refer to a lynx it would be

most conservative to accept an early date for the text rather than accept a later one,

as a late textual date would push forward the extirpation of the lynx forward centuries.

But before we go on to look in more detail at the large cats in the text I should put the

references in their context of animal nomenclature in 'Y Gododdin':

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[26] Huws, D. (2000) *Medieval Welsh Manuscripts* (University of Wales Press, Cardiff), p.74.

[27] See for example: Padel, O. (1998) 'A new study of the Gododdin', pp.45-56, in: *Cambrian Medieval Celtic Studies,* vol. 35. Isaac (1998) 'Gweith Gwen Ystrat'.

[28] Charles-Edwards (1978) 'The Authenticity of the Gododdin', pp.50-1; Simon Evans, D. 'Iaith y Gododdin', pp.72-88, in: Bromwich, R. and Roberts, B. J. (ed. 1978) *Astudiaethau ar yr Hengerdd: Studies in Old Welsh Poetry* (University of Wales, Cardiff).

TABLE: Animals in 'Y Gododdin' and the 'Gorchanau'	
Welsh term used (in modern orthography). Frequency in subtitle (e.g. $_1$ = one reference in text)	**Usage and whether metaphorical or 'real'. (i.e. whether imagined to be physically present in battle or just used as metaphor.)**
adar (birds) $_3$ - sglyfon (birds of prey)$_1$	Singular not attested. Always natural animals that eat corpses (henceforth 'beasts of battle')
alaf (cattle herd) $_2$ - biw (cattle)$_1$	Real animals found in the 'east-lands'.
alan (deer)$_1$	Real animal hunted by heroes.
arth (bear) $_3$	Metaphor for heroes, fierce, does not retreat.
balaod (martens)$_1$	Singular not attested. Real hunted animal.
blaidd (wolf) $_5$ - Bleiddiad (personal name: 'wolfish one')$_1$ - canaon (cubs)$_1$	Usually metaphor for heroes, sometimes real beast of battle. Also a real animal that is dangerous to touch except with a spear (l.452).
brân (raven)$_6$	Always real beast of battle
bwch (buck)$_1$	Real animal eaten as food.
cellëig (stag) $_1$	Metaphor for a hero (or a dear one?)
cŵn (hounds)$_2$ - aergwn (war-hounds) $_1$ - catgi (battle-hound) $_1$ - gwyddgwn (battle-hounds, wolves)$_1$	Singular *ci* not attested. Both attestations of *cŵn* are real animals taken to war or hunting. *gwyddgwn* are real beasts of battle. *aergwn* and *catgi* = heroes.
eleirch (swans)$_2$	Singular not attested. Metaphor for colour, name of a place.
eryr (eagle)$_7$	Sometimes real beast of battle, sometimes metaphor for hero, sometimes metaphor for way of moving.
gorwydd (horse) $_3$	Real animals ridden by heroes, once a metaphor for way of moving (speed?).
hydd (stag)$_1$	Real hunted animal.
iwrch (roe buck)$_1$	Real hunted animal.

llew [3]
 	
    - llewyn [1]
 	
    - celew (?) [1]
	Metaphor for fisherman, metaphor for fierceness and fury. *llewyn* is a real hunted animal, *celew* metaphor for a hero.[29]

llwynain (fox)[1]	Real hunted animal.
llywiwg (creature, ?prey?[1]	Real hunted animal.

meirch (horses) [17]
 	
    - marchog (horseman) [8]
 	
    - cadfarchog (battle horseman)[1]
 	
    - cafall (horse) [1]
 	
    - mythfeirch (swift horses)[1]
 	
    - eddystrawr (horses)[1]
 	
    - gweilwion (grey horses) [1]
 	
    - meiniell (slender bay horse)[1]
 	
    - meinllwyd (slender grey horse)[1]
	Singular not attested. Almost exclusively real animals possessed by heroes and taken (sometimes explicitly ridden) into battle. One exception, (l.830), indication of speed.

sarff (serpent or dragon)[3] - neidr (snake)[2]	Poisonous, ensnaring (but positive) metaphor for heroes. Both example of *neidr* are in 'Gorchan Tudfwlch' and are used as a metaphor (they have a lair which their eyes shine out of).
tarw (bull)[6]	Metaphor for heroes.

twrch (boar) [2]
 	
    - gwythwch (wild boar) [2]
 	
    - baedd (boar) [1]
 	
    - baedd coed (wild boar) [1]
	Usually metaphor for hero, once metaphor for fury (l.882), twice real hunted animal.

As will be seen from this list, most of the animals in 'Y Gododdin' and the attached

'Gorchanau' are used only as metaphors. These especially include bear (*Ursos arctos*),

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[29] 'Celew', 'celeo' in the manuscript, is ambiguous: see Jarman (1990 ed) *Y Gododdin*, p.104.

wolves (*Canis lupus*), eagles (*Haliaeetus albicilla; Aquila chrysaetos*), snakes (*Vipera berus?* or mythological), bulls (*Bos taurus*) and boar (*Sus scrofa*). Lions (*Panthera leo*) are rare but become more and more frequently used in metaphor in later Welsh elegiac poetry. However, as Rapallo points out, these are distinct from the smaller number of animals which are not being used as metaphors and are actually 'real', or physically present in the world of the text rather than just present for the purposes of comparison.[30] As I argued in the introduction, in medieval texts, animals will usually be consistent with the world of the individual who is the subject of praise. This is not the case for metaphorical references that reference anything in the author and audience's culture (hence the references here to lions and possibly bears). In our case, it is clear that the actual animals seen in the text by the characters are consistent with a list of species found in medieval Britain, so the author is aiming for verisimilitude. These include primarily horses (*Equus ferus caballus)*, dogs (*Canis lupus familiaris*) and cattle which are possessed by humans, but also deer (*Capreolus Cervus elaphus*), martens (*Martes martes)*, wolves (*Canis lupus*), roe buck (*Capreolus capreolus)*, wild boar (*Sus scrofa*), a fox (*Vulpes vulpes)* and a *llewyn*.

'Pais Dinogad'

Almost all of the 'real' hunted creatures in 'Y Gododdin' can be found in the single *awdl* (verse) called 'Pais Dinogad' (numbered A.88 in modern editions, see appendices). This stanza contains two possible large cat references. The first of these is not a real creature at all, but an animal used figuratively: 'ef lledi bysc yng corwc. mal

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[30] Rapallo, U. (1989) *Metafore animali e mondo eroico nel "Cantare di Aneirin"* (Giardini, Pisa), pp.19, 23.

ban llad llew llywywc' – 'he would kill a fish in a coracle, like when a lion kills [its]

prey).[31] We need not assume that lions lived in Britain from this. It is a figurative

description and therefore only helps demonstrate the strong profile lions had in the

cultural conscience of the time. However, the text goes on to give a list of all the

animals the father brings back. The actual animals are hunted by the father of the

story, and then brought back where the narrator sees them.[32] Since the narrator

(usually assumed to be the mother) actually witnesses these animals, this text

therefore purports to provide eye-witness testimony to the animals it describes,

although only the father actually saw the animals when they were alive, and of course

all the characters may be poetic personas rather than actual persons.

Looking at the animal fauna of 'Pais Dinogad' helps confirm the text's

naturalistic tendencies. The animals on this list are those really present in Britain at the

time. The father hunts fish, roe deer, wild pig, stags, speckled grouse, and also the

mysterious *llewyn* and *llwynein*. Both of these animals are presumably distinct from

each other but also from the *llew* (lion) earlier in the poem. The exact origin of these

terms have provoked a series of theories which are the main focus of our attention.

The most easily refuted theory is that *llewyn* just *llew* (lion) with the singular –

yn/-en suffix.[33] This suffix is commonly used in Welsh to make a noun which normally

has a plural meaning into a singular. For example, in modern Welsh *coed* is a wood,

whereas *coeden* is a tree. *Llew* and *llewyn* cannot have this relationship because *llew* is

not a plural.

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[31] Jarman (1990 ed) *Y Gododdin*, p.69.

[32] The term 'pen' usually refers to the head, but it might be a synecdoche usage like 'head of cattle' for a cow.

[33] Hetherington, D. (2008) 'The history of the Eurasian Lynx in Britain and the potential for its introduction', pp.77-86, in: *British Wildlife* vol. 20, p.79.

The suffix –*yn* is also a diminutive, so a translation as 'little lion' is also possible. Prior to the new carbon dates being supplied for the lynx, scholars often confessed confusion at this line.[34] That did not however, prevent Loth from arguing that the word might actually be a native one and refer to the lynx in particular.[35] With the latest scientific evidence the presence of a lynx in this text need not surprise us. If Derwennydd Falls can be identified as the Falls of Lodore in Rheged as Gruffydd argued,[36] it is only 80km distant from Kinsey cave, the site which has produced the most recent (cal. 425-600 AD) carbon dated bone fragment, as Hetherington has pointed out.[37]

A third theory was provided by Ifor Williams. He suggested that that *llewyn* was instead simply missing an <r> and thus a scribal error for *llewyrn*. This word he took to be a regular result of British **louerni*, which also gives, for instance, modern Cornish *lowarn* (pl. *lewern*).[38] However, there are a few problems with this translation. First of all, as I said earlier, there are two strange words on the same line: *llewyn* but also *llwyuein*. The scholarly consensus, from Loth onwards is that *llwyuein* (read *llwynein*) should be taken as a plural of rare *llwynan* (fox, or little fox-like animal).[39] It seems unlikely that the author used two words for the same animal on the same line, when they have found such a range of animals prior to that point. Second, the term 'llewyrn'

[34] Jarman, A. (1981*) The Cynfeirdd* (University of Wales Press, Cardiff), p.60. For a discussion of the transition in translation consensus see: John Koch Quoted in: Devine, D. (2005) 'Was Welsh poet right about lynx legend', *Western Mail*, *Oct. 12.*

[35] Loth, J. (1930) 'Notes etymologiques et lexigraphiques', p.167. 'le lynx, rare en France, est un bel animal commun dans les pays du Nord'. Since Loth lived in France, a country that lost the lynx much later and regained it much sooner than Britain, this argument may have been more natural to him than it was for contemporary native Britons who had probably lived a millennium without lynxes.

[36] Gruffydd, R. (1990) 'Where was Rhaeadr Derwennydd (Canu Aneirin, Line 1114)?', pp.261-266, in: Matonis, A. (ed) *Celtic Language, Celtic Culture* (Ford & Bailie, Van Nuys).

[37] Hetherington et al. (2005) 'New Evidence', p.4.

[38] Williams, I. (ed. 1938) *Canu Aneirin* (William Lewis, Cardiff), p.324.

[39] Loth, J. (1930) 'Notes etymologiques et lexigraphiques', p.168.

is unusual in Welsh,[40] these two points made Kenneth Jackson abstain from commenting on the matter.[41] Gwyn Thomas, the most recent translator attempts to address this problem by taking *llewyn* as 'foxes' and *llwyuein* as 'creatures in bushes', seeing the root word *llwyn* (a bush).[42] Koch finds a different way to get around the problem and translates: 'foxes from the Wood of Llwyfain'.[43] *Llwyfain* as a place name does exist (modern Welsh *llwyfen* = elm tree) but the explanation is less satisfactory as the line requires a further emendation to give a possible meaning.

Scholars are divided about which translation is preferable as the table below shows:[44]

Scholarly translations of *llewyn*	
Citation	**Translation of *llewyn***
Loth, 1930	Lynx
Williams, 1938	Foxes
Jackson, 1968	Foxes
Jarman, 1990	Lynx
Short, 1994	-
Koch, 1997	Foxes
Clancy, 1998	Lynx
Thomas, 2012	Foxes

However, scholars have not considered all other relevant examples. As we shall see, there are two further texts which provide possible evidence.

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[40] See: Raye, L. & Foster Evans, D. 'Llewon, llewyn'. In review: *Journal of Celtic Linguistics*.

[41] He translates: "foxes or ..." in: Jackson, K. (1968) *The Gododdin, The Oldest Scottish Poem* (Edinburgh University Press), p.151.

[42] Thomas, G. (2012), *The Gododdin, The Earliest British Literature* (Gomer, Llandysul), pp.116-7.

[43] Koch (1997) *The Gododdin*, pp.126-9.

[44] Jarman (1990) *The Gododdin*, p.68; Clancy, T. (2008) *The Triumph Tree: Scotland's Earliest Poetry A.D. 550-1350* (Canongate, London), p.98.

'Pa Gur'

The first of the other texts that mention the word is one of the episodes in which the 'Cath Balug' (Palug's cat) plays a part. The Welsh texts which mention this beast have been edited by Rachel Bromwich in her *Trioedd Ynys Prydein.* She has found the earliest reference to this animal in Welsh in the 'Pa Gur' poem, and her edition and translation are given in the Appendices. This seems to be an Old Welsh rather than Middle Welsh text, and can probably be dated to the tenth or eleventh century.

The Cath Palug or Balug[45] is a monstrous cat that appears in medieval literature. This first reference to the animal tells us only that the cat killed and ate 180 warriors, before it was fought by Cei on Anglesey until his shield was shattered. In later medieval Welsh literature, the Cath Balug also appears in a triad (*Trioedd Ynys Prydein* #26), which has the creature born from Henwen, an old sow who gives birth to many good and many bad things across Wales (bees, wolves, etc.). The creature is cast into the sea and later saved and brought up by the sons of Palug on Anglesey, but the creature later turns on them and becomes known as one of Anglesey's oppressors.[46] This might help explain the reference to Môn (Anglesey) in the translation above. Twelfth- and thirteenth-century French Arthurian romances also refer to Cath Palug ('le capalu'), and some relate that this animal killed—or was killed by—Arthur, and this too may have been part of an earlier Welsh legend. A prophecy in the Book of Taliesin refers to a 'speckled cat' which Sims-Williams suggests may be the same legend. He also points out that mynud (here: 'a fragment') could equally mean 'polished' and refer

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[45] Cath Balug according to modern Welsh orthography.
[46] Bromwich (2014) *Trioedd Ynys Prydein*, pp.50-2.

to a legend preserved from the fifteenth century of Arthur tricking wildcats into attacking their own reflections.[47]

Although Cath Palug is obviously called a cat (*cath*), and these legends are therefore only of peripheral interest to us, it is significant that 'Pa gur' appears to equate it with *lleuon:*

Kei win a aeth von	Kei the fair went to Anglesey
y dilein lleuon	to destroy *llewon*.
y iscuid oet mynud	His shield was polished [?]
erbin cath paluc	against Cath Palug.

Bromwich originally translated *lleuon* tentatively (with a question mark) as 'monster', but in the most recent edition of *Trioedd Ynys Prydein* she suggests 'lions' as a possible translation. In this she is perhaps following Sims-Williams who translates the word as 'lions' but suggests that it may actually have referred to 'wild cats'. Coe and Young also recognise *llew* as the root-word.[48]

It appears that there are no other examples of *lleuon* (Modern Welsh **llewon*) as plural: *llewod* is the attested form. Linguistically, however, a plural Latin form such as *leones* could have given a Welsh plural *lleuon* (see further below).[49] In the text under consideration, however, it is unclear to what such a plural would refer. Should we imagine an army of smaller cats following Cath Palug like the army of smaller wild boar following the Twrch Trwyd in 'Culhwch ac Olwen'? There is no reason to suggest more than a single cat.

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[47] Ibid. p.473-6. Sims-Williams, P. 'The Early Welsh Arthurian Poems', pp.33-71, in: Bromwich, R. Jarman, A. Roberts B. (ed.1991), *The Arthur of the Welsh* (University of Wales Press, Cardiff), p.45-6.

[48] Ibid. p.474; Coe J. & S. Young (1995), *The Celtic Sources for the Arthurian Legend* (Llanerch, Felinfach), pp.132-3; Sims-Williams 'The Early Welsh Arthurian Poems'. p.45.

[49] This example is treated as plural in GMW 32.

It can also be argued that *lleuon* is in fact a singular form. In considering this possibility, it is instructive to compare other Latin borrowings such as *draig* and *dragon*. There are two words for a dragon in Middle Welsh, just as there are in Middle English. First, there is Welsh *draig* produced from Latin *draco* via a British form **draci* (showing the change from a long *o* to a long *i* in the final syllable). These forms may be compared with Old and Middle English *draca*, modern English *drake*. Secondly there is the Welsh *dragon*, probably a borrowing from an oblique case in Latin (e.g. *draconem*, the dative) or the plural *dracones*. The Welsh *dragon* is comparable with the Middle English *dragun* and modern English *dragon*. Both Welsh *draig* and *dragon* can be singulars, but *dragon* can also have a plural meaning (as would be expected if borrowed from the Latin plural *dracones*).[50]

Following this model, *llew* and **llewon* could have been borrowed separately exactly like *draig* and *dragon*. The standard Classical Latin declension of *leo* runs as follows:

	Singular	**Plural**
Nom.	Leo	Leones
Voc.	Leo	Leones
Acc.	Leonem	Leones
Gen.	Leonis	Leonum
Dat.	Leoni	Leonibus
Abl.	Leone	Leonibus

Llew, the Welsh word for the lion, must have been borrowed from a spoken form **leuo*. It could only have been borrowed from the nominative/vocative singular **leuo*,

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[50] On these forms see *Geiriadur Prifysgol Cymru*.

since a borrowing from any of the other from (in *leuon-*) would have given *llewon*.

Old English also borrowed both the nominative and oblique stems of *leo* from Latin,

but since Old English had a comparable case system, the two stems did not become

separate words, and the oblique stems were just used for rarer cases.[51] There may also

have been parallel forms in Breton and Cornish ending in *-on* (Breton *leon*, Cornish

lŷon) but these are probably late variants influenced by English and French. According

to the *Geriadur Istorel ar Brezhoneg*, *leon* is attested in Breton from the sixteenth

century, but the *Dictionary of Old Breton* notes an earlier Old Breton form **leu*,

attested in *banleu* (lioness) and *leu-hemel* (name: 'lion-like').[52] The 'Vocabularium

Cornicum' of the twelfth century also gives *leu* as a translation of Latin and Old English

leo (see appendix 2), suggesting that the *-n* form was probably a later borrowing in

these languages.[53] However, in Welsh both forms of the word are attested at an early

date, suggesting the word there was not a later borrowing. A possible scenario might

be that **llewon* was borrowed at the same time as *llew.*

A putative **llewon* might be plural or singular form, for as previously stated,

dragon in Welsh could be singular or plural. Forms which are both singular and plural

can prove unstable, and therefore new form may be created by analogy. One of the

most frequent ways to make a plural in Welsh is by changing the internal vowels (e.g.

corn > cyrn; *esgob > esgyb*; *pont > pynt*).[54] Therefore **llewon* could have formed a

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[51] *Oxford English Dictionary.*

[52] Evans, C. (1959-1979) *Geriadur Istorel ar Brezhoneg* (Preder, Kerzu); Fleuriot, L (1985) *A Dictionary of Old Breton, Historical and comparative, in two parts* (Prepcorp, Toronto).

[53] Graves, E. (1962) *The Old Cornish Vocabulary* (Unpublished PhD Thesis, Columbia University), p.242, entry 560. The manuscript of the 'Vocabularium Cornicum' can now be found online: British Library (2016) 'Cotton MS Vespasian A xiv', *Digitised Manuscripts*. (address: http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Cotton_MS_Vespasian_A_XIV, accessed: 10/7/16).

[54] Evans, S. (1964) *The Grammar of Middle Welsh* (Dublin Institute for Advanced Studies), p.27.

plural **llewyn* (big cats).[55] However, the existence of *–yn* as a singular ending may have prevented such a formularisation.

'Dadolwch yr Arglwydd Rhys'

The term *llewyn* is also used by Cynddelw Brydydd Mawr in a poem composed to his patron the Lord Rhys (c.1189-95).[56] Cynddelw praises Rhys by means of a set of metaphors (my translation of the text may be found in the appendices). The first part of the section under consideration is based on comparisons of Rhys with dragons (he is fierce, a champion at the forefront of all he does)—all of these lines end in *-yn*. The second part describes how wild Rhys is in battle (his fearless violence is glorified) and these lines move from all beginning with *br-* to once again all ending in *-yn*. Finally, the concluding part of the poem starts with a group of lines beginning 'am …' (/for …/) which summarize Lord Rhys's main qualities, before returning once again to the *-yn* rhyme.

The word *llewyn* occurs near the middle of our extract in the Appendices: 'Llys eorth, llyw adorth llewyn' ('a lively court, its ruler the support of *llewyn*'). It was initially taken by Ifor Williams to be plural of *llawen* ('happy [ones]').[57] This would be a perfectly regular form of the word, and even makes some sense in the context of a lively court: Cynddelw is referring to the Lord Rhys's 'llys eorth' ('lively court'), and suggesting it is the home of *llewyn*. The most recent editors of the poem reject this translation, and suggest that the word is probably a variant form of *llewyrn* (foxes),

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[55] See forthcoming: Raye & Foster Evans (2016) 'Llewon, Llewyn'.
[56] Jones, N. & Owen, A. (1995) *Gwaith Cynddelw Brydydd Mawr, vol 2* (University of Wales Press, Cardiff), pp.184-5.
[57] Ibid. p.206; Williams (1922) *Canu Aneirin*, p.97.

which is the way Ifor Williams translated the same word in 'Pais Dinogad'.[58] They suggest the line should be considered to describe Rhys as the 'supporter of foxes' just like he is the *brein borthyat* ('supporter of crows', line 118); the poem also contains a reference to wolves feeding on fallen warriors as a result of Rhys's successes (line 217). This is the 'beasts of battle' *topos,* common in medieval English and Welsh literature.[59] I would suggest that this interpretation is unlikely as foxes are never elsewhere found as beasts of battle in Welsh or English literature.[60]

A third interpretation is possible: *llewyn* (with no emendation) may be understood as a reference to 'a large cat *or* cats' like the *llewyn* 'Pais Dinogad', possibly as reference to the men of the court, not beasts of battle. I mentioned earlier that especially brave heroes were frequently compared with lions in the 'Gododdin' so that we find phrases like (l.945): 'Tri gwaeth ffrawdd ffrawddus llew' (Three times fiercer than a savage lion).[61] From this perspective, a reference to Rhys's court warriors as *llewyn* (large cats) would be more appropriate than referring to them as 'merry people': he is a dragon and they are his *llewyn* (lynxes/lions). But as noted above, there are difficulties in accepting *llewyn* as a putative plural form.

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[58] Ibid. p.324. Ifor Williams believed that 'llewyn' was a mistake for 'llewyrn' but the rhyme scheme makes that impossible here.

[59] See: Klausner, D. (1993) 'The Topos of the Beasts of Battle in Early Welsh Poetry', pp.247-263, in: Taylor, R.A et al. (1993) *The Centre and its Compass* (Western Michigan University, Kalamazoo).

[60] Another unlikely alternative is to have the word refer to the Lord Rhys' coat of arms, 'its ruler the support of a small-lion'. A coat of arms is present on the effigy of Lord Rhys in St David's Cathedral which features a lion rampant. However this probably represents the political posturing of the Talbot family a century and a half later. Coats of Arms only became popular among the Barons of England around 1200, and the first reference to them in Wales does not occur until much later (see: Turvey, R. (1998) 'The death and burial of an excommunicate prince', *Journal of the Pembrokeshire Historical Society,* vol. 8, pp.17-19. Siddons agrees, explaining that based on his study of arms on shields on monuments, 1282-1350, three-quarters use a lion device, but these mainly function as conventional decoration. True, inherited coats-of-arms are rare in Wales until the late fourteenth and fifteenth century. Siddons, M. (1991) *The Development of Welsh Heraldry* (National Library of Wales, Aberystwyth), pp.192ff.

[61] Jarman (1990 ed*) Y Gododdin*, pp.62-3.

Of course, it is worth pointing out that neither 'Dadolwch yr Arglwydd Rhys' nor 'Pa Gur' describe natural lynxes: the term is apparently used metaphorically in the former and describes a legendary or supernatural creature in the latter. The word *llewyn* seems to have been rare, an impression furthered by the way that the word is rendered *llywelyn* in 'Dadolwch yr Arglwydd Rhys' (the personal name Llywelyn) in the Red Book of Hergest (c. 1400), despite the fact that this breaks the metre and makes little sense.

Further evidence of the form's existence occurs in NLW Peniarth MS 55 (c.1500), a manuscript that was probably written in or close to the lordship of Brecon in the south-eastern marches.[62] The text has been described as an 'old vocabulary' and contains examples and explanations of obscure words.[63] Amongst these is 'llewyn yw llwynoc' (*llewyn* is fox); providing an additional example of *llewyn*, even though it is listed in *Geiriadur Prifysgol Cymru* once more as an error for *llewyrn*.[64] It is difficult to ascertain the source for this word in the text and it may have been originally taken from 'Pais Dinogad'. However, other words in the list do not come from the Book of Aneirin so without further evidence it seems safest to assume that the word comes from another source. The entry previous to *llewyn*, for instance, is 'eteth yw llwynogess' (*eteth* is vixen). The word *eteth* is otherwise unknown, suggesting it has been taken from a now lost source, either oral or written. It is difficult to judge whether the compiler based their gloss on previous knowledge or on an educated

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[62] Daniel Huws, *Cynnull y Farddoniaeth* (Aberystwyth, 2004), pp. 9-10. The relevant part of the text is on p. 199 of the manuscript. A digital image is available here: http://digidol.llgc.org.uk/METS/DAF00019/frames?div=200&subdiv=0&locale=cy&mode=reference, accessed: 16/3/16.

[63] The text is given in J. Gwenogvryn Evans, *Report on Manuscripts in the Welsh Language*, vol. 1 (London, 1898), p.424.

[64] This is incorrectly given in *Geiriadur Prifysgol Cymru* s.n. *llewyrn* as 'llewyn [sic] yr llwynoc'. It is clear however that the second word is the copula *yw*.

guess based on knowledge of the form *llewyrn* or on the similarity of *llewyn* to *llwynog* (and the rare variant form *llewynog*).[65] Of course, by c.1500 lynxes had long since disappeared from Wales, and if *llewyn* was a term used for them in the past, perhaps the closely similar term for the fox, and the similarities between the two species may have affected a redelimitation of sorts. The name 'llewyn' for the fox did not catch on. In 1617, a century after NLW Peniarth MS 55 was written John Minsheu also found the term used. He or his collaborators seem to have made their own guess that it was a diminutive of lion (*llew-yn*) and produces the word under 'Lions whelp' along with several other terms for this animal (*cubbe, leoncino, leunculus*).[66]

The early Latin evidence

As well as a possible *llewon* in Welsh, we find the terms *lynx*/*linx* in Latin and *lox* in Old English referring to the lynx. Neither term is frequently used. For the lynx, apart from William of Malmesbury's declaration that they are not native to Britain, there are references in the 'Topographia Hibernica' of Gerald of Wales and in Sutton's version of Aristotle's 'De Generatione et Corruptione'. In fact, there is only one important Latin text describing the lynx, which is called 'Liber Monstrorum'.

'Liber Monstrorum' (The Book of Monsters) was most probably written by a monastic contemporary of Aldhelm in late seventh- or eighth-century Malmesbury Abbey, Wessex.[67] The text is full of other monsters, some humanoid, some literary and

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[65] On this variant see *Geiriadur Prifysgol Cymru.*

[66] Minsheu, J. (1617) *The Gvide into Tongues* (John Browne, London), p.278.a. This is an etymological dictionary which produces the words in eleven foreign languages for a dictionary length number of English words.

[67] Lapidge, M. (1996) 'Beowulf, Aldhelm, the Liber Monstrorum and Wessex', pp.271-312, in: *Anglo-Latin Literature, 600-899* (Cambridge University Press), p.296.

some natural in shape. The most famous is probably a giant human, 'Higlacus, rex Getarum', who has been identified with Higlac, the main character's lord in 'Beowulf'. In this literary context it need not surprise us that the cats in the 'Liber Monstrorum' appear to be neither generic big cats nor native creatures: they are of all kinds and they are all exotic monsters to the English writer. I have provided an extract from the text in the Appendices.

There are six different large cats described. Of these *leonem*, *tigris* and *lyncem* provide no difficulty to the translator. The difficulty comes when we turn to the *leopardi*, *pardi* and *pantheras*. Normally these would be translated into English as 'leopards', 'panthers' and 'panthers' but these translations do not seem to be intended here. In normal modern British English usage, the panther is a melanistic pure-black leopard (*Panthera pardus*). In America the term can be used to describe a black jaguar (*Panthera onca*), but we may ignore this fact since these creatures were rarely caught and kept in captivity until the twentieth century. Ecologically speaking therefore, we are left with three animals separately described in the above text, *leopardi*, *pardi* and *pantheras*, which are technically all the same ecological species. To complicate matters, it is clear that the panthers of the text are not actually the melanistic black panthers known today. The text clearly describes the *pardus* at least as being spotted like a leopard, and leopards are said to be produced when lions mate with panthers. The following table sums up the difficulties:

Types of Leopard in the 'Liber Monstrorum'			
Original Latin term used	*Pardus*	*Panthera*	*Leopardus*

Medieval Description	Violent spotted species of large cat living in India.	Horrible or gentle creatures from Thracia (Bulgaria) which felt sorry for Orpheus.	Disgusting hybrids of lions and panthers or animals living in the Near East.
Usual Modern Translation of term	Panther (black big cat)		Leopard (spotted big cat)
Modern ecological meaning	Leopard (*Panthera pardus*). Historic range covers most of South Asia, and Africa except desert regions.		

It should be clear from the above that the three last cats of the text do not fit with either modern ecological knowledge of real species, or Modern English cat terminology. Given the intention of the scribe of the text to write a 'Liber Monstrorum' (Book of Monsters), the most likely interpretation is that the account is intended to describe three legendary creatures known from stories, rather than preserve any natural knowledge of the leopard. In fact, these three species are also distinguished in the Bestiary tradition when it appears, centuries later.[68]

The *Pandher* (panther) is also, interestingly, found in the Old English proto-bestiary tradition of the 'Physiologus' where it is said to be a 'æghwam freond… butan dracan anum' ('friend to all except the dragon alone') with a shining multicoloured coat ('þæs deores hiw / blæc brigda gehwæs / beorhtra and scynra' – 'this creature's hue gleamed with every bright and shining colour'). The panther also has the peculiar ability to breathe out a sweet smelling scent after lying hibernating and almost-dead for three days ('þurh þæs wildres muð / æfter þære stefne / stenc ut cymeð / of þam wongstede / wynsumra steam' – 'through this creature's mouth / after the strain [of music] / a smell comes out / from the place / a lovely steam…').[69] The panther

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[68] White (1954) *Book of Beasts*, pp.13-14.
[69] Edition of text used: Cook, A. (1921) *The Old English Physiologus* (Oxford University Press), pp.1-11.

continues to be known for this ability during the later heraldic tradition and any lion like creature breathing vapour tends to be called a panther.

The leopard had a similar although less striking characteristic: In medieval France any lion-like creature depicted *passant* (walking) was seen as a leopard whereas all lions were supposed to be *rampant* (fighting on back legs)*.* These defining characteristic may not have held true in medieval England since the medieval Royal Arms of England show three lions *passant.* However, the gift of three leopards rather than three lions from Emperor Frederick II to Henry III which began the Royal Menagerie in England suggests that his arms were seen as leopards by at least one other royal family by 1235.[70]

However, if the *leopardus* could be plucked from legend into a real life zoological collection, the same cannot be said for the spotted pardus or gentle vapour-breathing panther which did not exist. Considering this, and the confusion which seems to have existed between these species it seems probable that to most people the three species were just legends from stories. Considering how poorly these terms mesh with our modern ecological ideas of mammals, it is clear that the words are intended to have a mythological rather than scientific resonance. To the medieval mind the leopard was clearly a cross between the lion and the panther because it was called the *leo-pard* (lion-panther).[71] The panther of 'Physiologus' is physically described almost exactly like both the leopard and the pard of 'Liber Monstrorum', but it had a reputation for being gentle, breathing vapour and hating dragons. Interestingly the lions' bestiary entry also puts it as the enemy of the dragon, and also has it sleeping for

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[70] Hahn (2003) *The Tower Menagerie*, pp.8-10.
[71] When borrowed into Welsh this distinction was translated alongside so that the leopard is the 'llew-part'.

three days when it is first born before rising from death. Perhaps most authors upon seeing a large cat would call it *leo* and leave it at that.

But the most important conclusion we can draw from the above text is that in Wessex around 700 A.D. people did *not* ever meet large cats. All of the cats, including the lynx and the lion are described as exotic and foreign rather than familiar. The author of this text explicitly gives the ranges of these animals and none of them are thought to live in Britain. As we shall see, this does not necessarily indicate that the lynx was completely extinct throughout the island by this point, but it does suggest that it was rarely seen and unknown to at least one well-read author. Whether the Eurasian lynx would have been called *lynca* or *leo* by these authors is irrelevant because the animal was by this point locally extinct. As we have seen, the Welsh language may retain its word for the lynx for a while longer, but this book is indicative of the end of natural lynx in Britain.

The Old English evidence

The Old English term *lox* is just as rarely used as the Latin *linx*. It appears, as we shall see, in the 'Antwerp London Glossary', and also to gloss the word *linx* in the Old English translation of Boethius' 'De Consolatione Philosophiae'. However, there is one possible reference to the term *lox* which might indicate some native knowledge of the actual animal, and that is found in a place name.

There are many place names in Britain which apparently contain the term *lox*, but as Hetherington has previously argued, most of these probably just come from the

genitive of the personal name Locc (Locc's).[72] Lostford in Shropshire, however, as he

points out, is an exception. The English Place-name Society has produced the

authoritative volumes on the place-names for a large percentage of England's

counties. Shropshire is one of these, and the relevant volume which includes a

discussion of Lostford was published a year after Hetherington submitted his thesis.[73]

The earliest form of that names is *Loscafort* (1121), but Gelling, found *Loskesford* (from

1138) and *Lokesford* (from 1204) to be more common versions of the name. The <s>

which precedes the <k> in two of these three names suggests that this place-name is

not just another variant of Locc's-ford. At the same time, two of the three names also

retain an <es> as the second syllable. This looks very much like a genitive; *Loxes-ford*

would explain the <s> in the first syllable. Simply put, /ks/ would give /sk/ more easily

than /kk/ would. Various other suggestions like *loca-ford* and *lost-ford* are also less

likely than *loxes-ford*, the first two for the same reason as *locces-ford*, and the last

because the form *lost-ford* is not attested until significantly later.

The theory that Lostford is named after a large carnivore rather than a man

named Locc is appealing but also problematic for three reasons. Firstly, it is unusual to

find a place name element preserved in only one name. Secondly, animal place-name

studies are complicated by the fact that people are sometimes named after animals,

and places are often named after people.[74] In the early medieval period it is not

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[72] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, p.29.

[73] Gelling, M. (2006) *Place Names of Shropshire,* Part 5 (English Place-name society (vol. Lxxxii), Nottingham), p.153.

Sykes and Carden's claim that the place name discovery preceded the AMS date is unfounded, but see:

Sykes, N. and Carden, R. (2011) 'Were Fallow Deer Spotted (OE *pohha/*pocca in Anglo-Saxon England? Reviewing the Evidence for *Dama dama dama* in Early Medieval Europe', pp.139-162, in: *Medieval Archaeology,* vol. 55, p.142.

[74] See discussion in: Aybes C. and Yalden, D. (1995) 'Place-name evidence for the former distribution and status of Wolves and Beavers in Britain', pp.201-227, in: *Mammal Review*, vol. 25, pp.202-3.

unusual to find people called, for example, *Arne* (eagle) or *Wulf* (wolf). There is no obvious reason why *lox* should be an exception. Thirdly and most importantly, there is also some danger of circular argument. Gelling states explicitly that the theory is much stronger from the knowledge that the lynx inhabited Britain.[75] She indirectly references Hetherington for this reference, presumably without being aware that he had previously quoted her work on the place-name as evidence that the lynx inhabited Britain later than its last carbon-date. There is a danger of incipient legend-making here: the lynx was present in historic Britain, and therefore, following their line of reasoning, the animal must have left historic traces that need only be sought out. At present the scholarly consensus is that 'Lostford' was named after a *lox* (or *Lox*), but it is not sufficient by itself to suggest the presence of lynx in the area beyond its last carbon date.

Another ambiguous reference to the lynx is found in Aelfric's 'Glossary', a kind of Latin-Old English dictionary, albeit one organised by subject rather than alphabetically. The author, Aelfric was an English archbishop living in the late tenth and early eleventh century and he wrote this dictionary along with his 'Grammar' and exemplar 'Colloquy' to teach students Latin. The related 'Antwerp-London' glossary is the work of an unnamed scribe from later in the eleventh century. The 'Antwerp-London Glossary' is immediately based on 'Aelfric's Glossary', but also draws on Aelfric's sources which are a group of Latin glossaries, most notably Isidore of Seville's 'Etymologiae'.[76] These glossaries both contain sections on subjects as diverse as animals, clothing, study tools and landscapes. The natural animals of our study are

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[75] Gelling (2006) *Place Names of Shropshire,* vol. 5, p.153.

[76] Gillingham, R. (1981) *An Edition of Abbot Aelfric's Old English-Latin Glossary with Commentary* (Unpublished PhD thesis, Ohio State University), pp.54-6; Porter, D. (1999) 'On the Antwerp-London Glossaries', pp.170-192, in: *The Journal of English and Germanic Philology,* vol. 98, pp.189-90.

divided between sections on 'animals', 'small animals' (insects, rodents, amphibians and reptiles), 'birds' and 'marine mammals'. The 'Glossary' is fairly exhaustive, and covers not just domestic and wild British animals but also classical mythological animals and exotic creatures. Presumably the list was compiled as a result of a search through Latin literature, as some of the Old English nomenclature looks suspiciously like it was made up on the spot (e.g. 'an-hyrned deor' for 'unicorn' and 'wilde-assa' for 'onegar'). It should be borne in mind that an appearance on the list does not demonstrate that the nomenclature was frequently used or that the animal was well known in Britain, as Hetherington points out.[77] Both glossaries also gloss *linx*. A compilation of the words found in these glossaries can be found in Appendix 2.

The more interesting of the two is Aelfric's 'Glossary'. The 'Antwerp-London' glossary offers just a simple translation ('linx=lox'), but Aelfric glosses the word *linx* as 'gemenged hund and wulf' (between dog and wolf).[78] The ambiguity of this latter reference has suggested to one expert in extirpated animals, Alfred Dent, that Aelfric was not aware of what a lynx was, and this, alongside the scant number of references to the *lox*, suggested to him that lynxes were probably not present in Britain at the time.[79] This gloss is also translated literally in the 'Vocabularium Cornicum' (c.1150), suggesting that the author of that text could think of no better way of translating the term than Aelfric could before him.[80] Thornbury agrees that Aelfric is confused about lynxes and suggests that Aelfric misunderstood the word *linx* to be a reference to the

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[77] Note when Hetherington describes 'Aelfric's Glossary' he means the 'Antwerp-London Glossary'. The two were confused in Wright's (1857) *Volume of Vocabularies*. See: Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, pp.28-29.

[78] Wright, T. (ed. 1857) *A Volume of Vocabularies* (Library of National Antiquities, London), p.22; p.77.

[79] Dent (1974) *Lost Beasts of Britain*, p.84.

[80] This reference is especially significant because it shows that at least parts of the 'Vocabularium Cornicum' were translated into Cornish with reference to Aelfric's Old English, over the Latin. See: Blom, A. (2009) 'Welsh Glosses in Vocabularium Cornicum', pp.23-40, *Cambrian Medieval Celtic Studies*, vol. 57.

lycisca (or a more similar variant like *lincisca* or *licisca*). The word *lycisca* is glossed elsewhere as 'canis ex lupa et cane natus' (a dog born of a she-wolf and a dog). For Aelfric to make a mistake like this might suggest that he was not very aware of the lynx.[81]

This is an ingenious explanation, but it ignores the relative rarity of the word *lox*. A search of the *Bosworth-Toller Anglo Saxon Dictionary* turned up two additional references to a *lox*, both of which were used to gloss the Latin word *linx*. There is another example in King Alfred's translation of 'Boethius de Consolatione Philosophiae' (glossing Aristotle's 'lynx penetrans'). The word's use in the later Antwerp-Glossary is no surprise, since the contributors to that text especially enjoyed rare, abstruse, and classical borrowed words.[82] A search through the corpus of the *Dictionary of Old English* does not offer any additional references, although the phrase 'on loxan' 'to Loxley' is very common as are various place-names containing the element *lox* (only one of these is currently accepted to have originally contained the element *lox* (lynx) and that is Lostford, mentioned earlier). Shortly around the turn of the eleventh century the term *lox* was lost, suggesting that the animal was probably lost from England. Intriguingly the English language's present word (*lynx*) was borrowed from Latin only couple of centuries later. If the 'native' term had stayed in currency only a few hundred years later, then the English language would probably still have the word today, as most of the other Germanic languages still do.

The late medieval and early modern century hunting manuals and naturalists accounts which we will look at in the next section suggest that there was confusion

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[81] Thornbury, E. (2009) 'Strange Hybrids: Aelfric, Vergil and the Lynx in Anglo-Saxon England', pp.163-6, in: *Notes & Queries*, vol. 56.
[82] Porter (1999) 'On the Antwerp-London Glossaries', p.184.

between the dog-wolf and the lynx in later times. Edward Duke of York following

Gaston Phoebus de Foix differentiates *lous cerviers* (cerviers) and *chatz lous* (cat-

wolves) from lynxes, but Gessner explains that the *lupus-cervarius* is actually a type of

lynx. The *Dictionary of Latin from British Sources* provides only one reference to this

term from British Latin, and that is within a copy of the Italian 'Antidotarium Nicolai'

(in the 'Alphita') and an exact reiteration of Pliny's comments about lynx urine turning

to stone. However, the term does have some currency in Scots. The *Dictionary of the*

Scots Language gives eight references from the early modern period to the use of lynx

for fur, (esp. under words like: *lucerve*, *lucerd*). It also gives four sixteenth-century

references drawn from the *Exchequer Rolls of Scotland* to money provided for the

keeping of lions, tigers and *lucerves* in captivity, so it's clear the term was being used

for real animals as well as furs. This later evidence suggests Aelfric's 'Glossary' might

actually be following the received wisdom of the time. Even the bestiaries describe the

lynx as something like a wolf.[83] Contrary to Dent's interpretation, the evidence from

the glossaries actually supports the continued cultural profile of the lynx in Britain.

Lynxes in Disguise as Lions

The lack of attestations of Old English *lox* and Latin *lynx*, can actually be interpreted in

another way. In her study of 'Geoffrey's so called animal symbolism' in 'Prophetiae

Merlini' Doris Edel was not aware of the evidence for the existence of the term

llewon.[84] However she suggests that in some cases the ordinary terms used for lion in

the languages of the British languages might refer to the lynx. She compared examples

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[83] White (1954) *Book of Beasts*, p.22.
[84] Raye & Foster Evans (2016) 'Llewon, llewyn'.

of animal symbolism in Latin, Welsh and Irish contexts and points out that that Irish

heroes are occasionally referred to as *lug* (plural *loga*), which she interprets as lynxes.

She suggests that the Irish word *lug* is probably cognate with Welsh word *llew* and thus

that Old Welsh portrayals of heroes as 'llew[ot]' may well 'conceal the meaning

'lynx'[es]'.[85] I am, however, inclined to doubt whether the lynx survived into the

historic period in Ireland at all. There is no archaeological evidence suggesting the

lynx's survival in Ireland, and the only securely dated find from after the end of the last

Glacial Period of which I am aware is the Kilgreany Cave femur from the Mesolithic

period, dated to 8875 B.P.[86]

Further, the idea that the term *lug* ever refers to the lynx has been debated,

and is no longer commonly accepted or included in the most recent edition of the

Dictionary of the Irish Language.[87] Hetherington is especially interested in the term

lugléimnech which was previously translated as lynx-leaping. However native Irish

heroes were renowned for their leaping ability, most famously the *ich n-erred* (salmon

[leap] feat).[88] The term *lugléimnech* could therefore simply be 'leaping like a warrior'.

Even if the term 'leaping like a lynx' was what was meant, the use of this term would

not necessarily imply that the animal described was native, or still present in Ireland

(and still less Britain). Looking back to the table used in the Ecology section of the

Introduction, this is not a first, second, or even a third-hand observation, this is a

metaphor furnished from culture. Comparable situations are the earlier discussed

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[85] Edel (1983) 'Geoffrey's so-called animal symbolism', p.103.

[86] Yalden (1999) *The History of British Mammals*, pp.217-218.

[87] See 'lug' in: *Electronic Dictionary of the Irish Language*, www.dil.ie; Chadwick, N. (1935) 'Lug Scéith Scál Find – Elegy on Labraid Loingseach', pp.1-5, in: *Scottish Gaelic Studies* 4; Bhreathnach, E. (2005) *The kingship and landscape of Tara* (Four Courts Press, Dublin), p.41, footnote 41.

[88] Sayers, W. (1983) 'Martial Feats in the Old Irish Ulster Cycle', pp.45-80 in: *The Canadian Journal of Irish Studies*, vol. 9. esp. pp.53-4.

glossing of exotic animal names found in 'Aelfric's Glossary', or comparable situation

might include the various Middle Welsh metaphors which grant heroes the tenacity

and bravery of bears, by that point extinct for centuries.[89]

However, Edel's suggestion that descriptions of lions might hide references to

native large cats is better supported by the Latin evidence. For example, Bede's poetic

'Vita Sancti Cuthberti', written c.705 and redrafted before 720 A.D., contains a

reference to 'lions'.[90] Our extract comes from Chapter IV. As Cuthbert (*c.*635–687) is

staying up to pray one night, he sees a vision of St. Aidan being translated into heaven

by angels. He ends his speech by exhorting the other shepherds that they too should

stay awake at night:

Discite, pastores, vigili tutamine mandris	Learn, shepherds, through vigilant guard by the sheep-folds
Insidias noctis furvosque cavere leones[91]	To guard against nocturnal ambush and dusky lions

To some extent Cuthbert is probably talking metaphorically. All holy shepherds

(priests) should look after their flocks, and the first line of this poem was borrowed for

this purpose by later writers.[92] However, in the context of the story Cuthbert is talking

to real shepherds who have a duty of care over actual sheep, not figurative ones.

Although wildcats are too small to do any serious damage to a sheep, especially a

horned sheep like an early medieval individual, modern European lynxes do commonly

pose a danger to sheep, and are still an object of annoyance for shepherds today. Bede

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[89] E.g. in 'Ymddiddan Arthur a'r Eryr', a fourteenth century text. Coe & Young. *The Celtic Sources*, p.105.

[90] Kerridge, R. (2001) 'Eyes shining in the dark: Mystery Cats of Devon and Cornwall by Chris Moiser', p.36 in: *The Spectator*, 11th August 2001; Lapidge, M. (1989) 'Bede's Metrical Vita S. Cuthberti', pp.77-93 in: *St. Cuthbert, His Cult and His Community to AD 1200* (Boydell & Brewer), p.78, 85. There is no reference to a 'leo' in Bede's Prose Life or in his source, the Anonymous Life of Cuthbert.

[91] Jaager, W. (1935) *Bedas Metrische Vita Sancti Cuthberti* (Mayer & Müller, Leipzig), p.68.

[92] Orchard, A. (2000) 'Wish You Were Here', pp.21-44. in: Jones, S. Marks, R. & Minnis, A. eds. *Courts and Regions in Medieval Europe* (York Medieval Press), pp.23-6.

himself was from Northumbria, just north of present day North Yorkshire, where we know there were certainly lynxes only a couple of hundred years earlier. So this passage may have been based on knowledge of the existence of lynxes in the recent past. But this is not strong evidence, and could be ascribed purely to poetic licence on the part of Bede. No actual cats appear in the story, only a vague warning against 'lions'.

Additional evidence of big cats can be found in the Old English versions of 'Medicina de Quadrupedibus', which prescribes the medicinal use of *leonflæsc* (lion-flesh) and *leon gelynðe* (lion-fat)[93] to banish hallucinations, relieve sores, earaches and knee joints. For the last of these symptoms, *leon gelynðe* is not enough, and it must be mixed with *heortes mearg* (hart's marrow). These are very common symptoms to be relieved by the flesh of an exotic creature, and this might suggest that the word *leo* should be taken to refer to an animal found in Britain like the lynx. However, since this text is an Old English translation, the references to lions are easily explained as simply artefacts of the text's original, fifth-century Latin source supposedly by Sextus Placitus. It is difficult to be sure who Placitus was, where he lived and what kind of animal he imagined his lion-flesh came from, although his editors tend to agree that he was the invention of an anonymous author.[94] If Placitus was well travelled, or if he lived in a southern Roman city then perhaps real African lions could have been the animals referred to. We also have no way of knowing how an Old English or monastic Latin readership would have understood the reference. All three eleventh-century

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[93] Cockayne, O. (ed. 1864) *Leechdoms, Wortcunning and Starcraft of Early England* (Longman &al, London), pp.363-7. This text is from Cotton Vitellius C.iii, written between the eleventh and twelfth centuries.

[94] De Vriend, H. (ed. 1984) *The Old English Herbarium and Medicina de Quadrupedibus* (Oxford University Press, London), pp.lxiii-vii; 266-7.

manuscripts containing the text have a common ancestor; the first Old English

translation, which was probably made in the eighth century, although the language

was modernised over the years.[95] Readers of the original translation, or readers of a

Latin version before that point might have understood the word *leo* to refer to their

native (perhaps already extinct) lynxes but they may equally have understood it as a

reference to the exotic, but still high-profile lion.

There is another Latin reference to a *leo* in a list of dangerous animals in one of

Alcuin of York's (c.735-804) unnamed poems.[96] His poem is valedictory, wishing his

listener will not meet any dangerous wild beast, starting with a *leo*. However since he

also references tigers, this warning is probably meant against monsters in general

rather than anything a traveller might actually meet.[97] In any case, the lynx is too small

to pose a serious threat to an adult human, and lynxes have historically been

considered less of a pest than other large predators.[98] On the other hand the story of

Percy Cresacre's duel to the death with a wildcat has circulated for at least two

hundred years, and sometimes an animal's reputation may be more important than its

actual capabilities.[99]

One final lion is described very naturalistically in Aldhelm's eighth century

'Enigmata', which I have also presented in the Appendices. The fauna described in this

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[95] Ibid. p.xliii.

[96] Duemmler, E. (1881) *Poetae latini aevi Carolini, vol. 1* (Berolini, Weidmannos), p.265.

[97] This is also how we should interpret the mid thirteenth century poem on the "Translation of Salisbury Cathedral' by European cleric Henry of Avranches 'Non ibi dama timet ursum cervusve leonem, non linx serpentem capreolusve lupum' (nor there do fallow deer fear the bear, nor red deer the lion, nor lynx the snake nor roe deer the wolf). Trask, W. (trans. 1953) *Ernst Robert Curtius: European Literature and the Latin Middle Ages* (Princeton University Press), p.184; Russel, J. & J. Heironimus (1935) *The Shorter Latin Poems of Master Henry of Avranches Relating to England* (The Medieval Academy of America), p.114. Lynxes and bears were as exotic as lions to thirteenth century Britain; Henry's poem is hyperbolic but drawing on the Alcuin tradition.

[98] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, pp.38-9.

[99] See: Burke, J. (1836), *A Genealogical and Heraldic History of the Commoners of Great Britain and Ireland, vol. 3* (Published for Henry Colburn, London), p.452.

riddle (*Sus scrofa, Cervus sp., Ursus arctos, Canis lupus*) is more north-European than

Mediterranean in origin, and it may therefore be more likely to preserve a local

memory of the lynx than a Mediterranean bestiary-inspired memory of the lion. In my

opinion though, this is unlikely. The animal described here is truly the king of the

beasts, and competes for food with wild boar, bears and wolves, whereas the lynx is a

solitary ambush hunter which specialises in roe deer (*Capreolus capreolus*). Lynxes are

unlikely to take even fully grown red deer (*Cervus elephans*), and flee from wolves and

bears. Like the other Anglo-Latin descriptions, this text is most likely to be describing a

lion, albeit from a northern-European perspective.

Later Medieval Lions

Once we come to the second millennium A.D., it is clear that literature from Britain

comes very quickly into possession of the bestiary tradition, perhaps through the

'Etymologiae' of Isidore of Seville. The beast fable and beast saga genres in particular

reach England in the twelfth and thirteenth centuries. They became so popular that

Chaucer in his 'Wife of Bath's Prologue' can directly reference one with his "Who

peynted the leon, tel me who?" (l.692), and an illustrated fable can be seen on the

Bayeux Tapestry, without either needing to explain the context of their references.[100]

Similarly, the increasing popularity of zoological collections and animal

entertainment must have brought new knowledge of the natural world to the

inhabitants of Britain. The twelfth century saw a start of this phase in Britain with King

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[100] Salter, D. (2001) *Holy and Noble Beasts* (D.S. Brewer, Cambridge), pp.1; Chefneux, H. (1934) 'Les fables dans la tapisserie de Bayeux', pp.1-35; 153-94, in: *Romania,* vol.65.

Henry I beginning a collection of animals at Woodstock which included both lions and

lynxes. Later in the century his successor, King John started the infamous collection at

the Tower of London which also included lions.[101] Likewise human exploitation of the

wilderness rose from a sustainable low level to a controlling high. The forest laws and

hunting cultures in England and later Wales meant that the wilderness was carefully

managed and kept for the use of an elite minority. The level of hunting rose across

Britain and some records of the vast court feasts which relied heavily on hunted meat

still survive. These records often list hundreds of individual animals consumed in a

single feast, with the venery animals and water-birds topping the list. This growing

knowledge of the extent of the natural world (at least among the elite) and growing

exploitation of the environment led to animal terminology becoming more developed.

From around this point on every single reference to a 'lion' actually refers to *Panthera*

leo, as has been pointed out,[102] and the languages of Britain borrow a new term for the

lynx when it becomes widely known again in the twelfth century.

By the twelfth century William of Malmesbury was able to state with

confidence that the lynx was not native to Britain, but only kept at the Royal

Menagerie in Woodstock.[103] This is actually the second earliest reference to a 'lynx' in

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[101]This is attested by William of Malmesbury (Giles, J. (ed. 1895) *William of Malmesbury's Chronicle of the Kings of England* (George Bell &Son, London). p.443.) and also Harrison in the sixteenth century (The Holinshed Project, 2008-13), *Chronicles of England, Scotland and Ireland, 1577 ed. vol. 1.* (Oxford University, www.cems.ox.ac.uk/holinshed/), p.225.) Harrison claims that King Henry hunted the animals in his menagerie.

[102] Loth, J. (1930) 'Notes etymologiques et lexigraphiques', p.167. 'llewyn anciennement, aurait pu avoir le sens de lynx, sens oublié au xiiᵉ siecle'.

[103] Giles (1895) *William of Malmesbury's Chronicle.* p.443. This is supported by the comments of Gerald of Wales that Britain, unlike the orient does not produce lions, panthers, tigers or bears (Forester, T. & Wright, T. (2000), *Giraldus Cambrensis: The Topography of Ireland* (Medieval Latin Series, Cambridge, Ontario), p.31.). Only exotic animals were ever kept at the menagerie. Even wolves, were only kept there in the sixteenth century when they went extinct in England. Thomas Platter, writing in 1599, explaining that there is a wolf at the Tower of London despite wolves still being found in Scotland feels the need to excuse the fact with the statement 'which kingdom is only distinct, and separated from England by a river' . Lynxes must therefore have been seen as exotic in order to be kept there, and if they were still around in Scotland at the time, or even still remembered as natives in England, the discrepancy would probably have been mentioned. At the very least it would have made lynxes less desirable and

British Latin,[104] the only older form being found in the 'Liber Monstrorum' which we looked at previously. Considering the early glossary confusion,[105] and the lack of any other references from prior to the twelfth century, it seems quite probable that the specific species level names only became popularly known in the late medieval period. Shortly afterwards the lynx is once again depicted in a text from Britain, this time on the Hereford 'Mappa Mundi'. This lynx is situated by the Black Sea, once again exotifying the species.[106]

The awareness of bestiary and continental lion motifs starts earlier in English and Latin literature than in Welsh. For example, the 'Ormulum' is an early Middle English text written in a unique orthography. For our purposes it covers the basic bestiary information starting with the common belief that lion cubs are born dead, and only awaken on the third day (ll.5838-43 'Forr leness whellp þær þær itt iss / Whellpedd, tær liþ itt stille / þe þridde daðð itt iss /Waccnedd off slæp ¬ reððsedd'; retold ll.6027f.). This idea is original to Isidore of Seville, but it becomes common in later bestiaries.[107]

In Middle Welsh literature we start to see a continental influence on the literature later, perhaps in the thirteenth and fourteenth centuries. In 'Ystorya Bown de Hamtwn' (a close translation from the French *Boeuve de Haumton*) lions refuse to eat, or even to harm a character that is of royal blood.[108] In the fourteenth century

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popular animals in the menagerie, which does not seem to have been the case.Hahn (2003*) The Tower Menagerie,* pp.74; 110.

[104] According to the *Dictionary of Medieval Latin from British Sources.*

[105] See the Appendices.

[106] The 'Mappa Mundi' generally draws on classical rather than medieval sources but I am not aware of any classical sources which place the lynx by Constantinople so this may reflect contemporary knowledge. See: French, R. (2010) 'Putting animals on the map: The natural history of the Mappa Mundi', pp.289-308, in: *Archives of Natural History,* vol. 21.

[107] White (1954) *Book of Beasts*, p.8; Barney et al. (2006) *Etymologies of Isidore,* p.251, XII.2.

[108] Poppe, E. & Reck, R. (2009) *Selections from Ystorya Bown o Hamtwn* (University of Wales Press, Cardiff), p.17.

Welsh translation of the French 'Bestiaire d'Amour', some basic bestiary information is given about the lion including that it will attack men that look at it when it eats, but not men who keep their face straight ahead, even if they pass by six times.[109] The translation also contained a passage on the tiger. The idea that lions were royal and holy animals, and thus would not hurt royal or holy people, might have come to Britain through some of the popular hagiographical topoi of this time in which saints command meek lions and wolves, or simply from the story of Daniel in the Bible.[110] However, the rise of the secular prose tale, and the rise in popularity of the lion allows a few final Insular depictions of the lion to occur side by side with more continental lion formulas.[111] Even when the lions are certainly lions rather than lynxes, they sometimes have elements which may be borrowed from folk-descriptions of lynxes. I have argued that the depiction of the lion in the thirteenth/fourteenth century Welsh text 'Owein' appears to have been adapted from the version preserved in the French 'Yvain' to be more animalistic and less courtly, as based on the Welsh tradition of animals like the Cath Palug and the lynx of 'Pais Dinogad'.[112]

Another Welsh text, the late fifteenth century 'Anogaeth i Rys ap Rhydderch o'r Tywyn' by Dafydd Nanmor, describes in a series of aphorisms how 'yr hydd' (the stag) and the 'llew brych' (speckled lion) are eager for the highest path in the summer.[113] It is tempting to suggest that this text preserves a cultural memory of the lynx following

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[109] Thomas, G. (ed. 1988) *A Welsh Bestiary of Love* (Dublin Institute for Advanced Studies), p.6.

[110] In the Bible the story is in *Daniel* 6, in medieval literature it is found for example in Bartholomeus Anglicus' 'De proprietatibus rerum', vol. 2 and in a large quantity of medieval artwork; see also Salter, D. (2001) *Holy and Noble Beasts* (D.S. Brewer, Cambridge), pp.11-21.

[111] i.e. those depictions influenced by native traditions of large cats as monsters influenced by texts like 'Pa Gur'.

[112] Ramsay, L. (2012) 'The amazing colour-changing big cat in 'Owain' and 'Yvain'' paper presented to the International Arthurian Society: British Branch, 3rd September 2012.

[113] Rowlands, E. (1976), *Poems of the Cywyddwyr* (Dublin Institute for Advanced Studies). p.49.

its prey species up to higher altitudes in the summer, although this theory suffers from

a recent study showing that in Norway, lynxes do not migrate to follow their prey.[114]

Male lynxes do roam more widely during the mating season, and male and female

lynxes call to each other from conspicuous landmarks, but the mating season occurs in

spring (January-April) rather than summer.[115] The date of the poem is very late for

memory of the lynx to be a likely explanation.

Hunters and Naturalists

Is it safe to state that is the lynx had disappeared from all of Britain by the late middle

ages? There are occasional hints that small populations may either have remained in

isolated areas, or were remembered to have been present. Hetherington points out a

dubious reference in Holinshed's *Chronicles of England, Scotland and Ireland* which

were first published in 1577.[116] This is actually a composite text. The comment about

the lions comes in volume 1, book 3, which was written by William Harrison, and the

comment is only added in the second, 1587 edition. Here Harrison devotes a chapter

to 'Sauage Beasts and Vermines'. He starts by confiding to the reader that whilst

England is secure from wild beasts, in Scotland there are 'greeuous woolfes and cruell

foxes'. After going over the oft-repeated myth that wolves were extirpated from

England by the efforts of King Edgar's wolf tax on the Welsh, he explains that:

> Lions we haue had verie manie in the north parts of Scotland, and those with
> manes of no lesse force than they of Mauritania were sometimes reported to

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[114] Schmidt, K. (1999) 'Variation in daily activity of the free-living Eurasian lynx (Lynx lynx) in Bialowieza Primeval Forest, Poland', pp.417-25, in: *Journal of Zoology,* vol. 249.

[115] Sunquist, M. & Sunquist L. (2002) *Wild Cats of the World* (University of Chicago Press), p.171.

[116] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, p.32. He also gives a brief note in: Hetherington et al. (2005) 'New Evidence', p.4.

be; but how and when they were destroied as yet I doo not read ... But both these sauage cretures [lions and wild bulls] are now not heard of, or at the least wise the later scarselie known in the south parts.[117]

From the start, the fact that Harrison mentions the long manes of the lions of Scotland makes this evidence hard to trust. He is also talking in the past tense which suggests he does not believe that his account is true of contemporary Scotland. Harrison's source is popular culture, not any particular witness and therefore his evidence is highly unreliable.

However at the same time, it's worth noting that many animals survived for centuries in Scotland after they were extirpated in England and Wales. The beaver for example, which we shall return to later appears to have become extirpated in the twelfth century in Wales according to Gerald of Wales, but may have lingered until the fourteenth or fifteenth in Scotland as attested by the customs laws and Camden's *Britannia*.[118] It is possible that the lynx survived longer in Scotland than in south Britain. In the 1587 edition Holinshed adds a personal remark which is much more likely to be about the lynx:

> As for his deceits and crafts, he [Martine the pope's money collector] hath more varietie of them, than the cat of the mounteine hath spots in his skin, or the pecocke hath eies in his taile.[119]

There two reasons to suspect that the animal described here might be a lynx rather than a cat. First, our reference is to a spotted creature. This would suit the lynx, but the wildcat is a striped rather than spotted creature. Second, the term 'cat of the

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[117] *Chronicles of England, Scotland and Ireland, 1577 ed. vol. 1*, p.225.
[118] Raye (2014) 'The Early Extinction of the Beaver'.
[119] *Chronicles of England, Scotland and Ireland, 1587 ed. vol. 6*, p.232.

mountain' is sometimes (although not exclusively) used for animals larger than the wildcat. The *Oxford English Dictionary* only has one reference to this term, but collects several later versions under *catamount*, which was a term later often used to describe the mountain lion, *Felis concolor* in America. The *Middle English Dictionary* collects five records to the 'cat of the mountain' from the fifteenth century. Three of them seem to be hunting manuals and are not otherwise edited. Two of these (<u>MS Arms. 58</u> and <u>Brogyntyn 2.1</u>) gloss the term as *bad* (a wildcat) but the term is also glossed twice in the 'Polychronicon' as *pardus* (a leopard).

There is a surprising amount of collaborating material for this opinion. For example, Edward, Second Duke of York, mentions lynxes in the wild cat section of his hunting manual. However, this section is an almost direct translation of his French source, Gaston Phoebus' *Livre de Chasse*. The only original section from our extract is the final paragraph which concerns only wildcats and not lynxes at all. Although Edward is clearly capable of altering his material, and also inserts pine martens and polecats into his text, the fact that he did not alter this material is no guarantee that the material was relevant to him. Since this material is directly translated it cannot prove the existence of lynxes in Britain at this point. Likewise, the fifteenth century Scots 'Buke of the Order of Knychthede' celebrates knights hunting the 'herte and hynde [Cervus elephans], daa and raa [Capreolus capreolus], bere and baare [Ursus arctos; Sus scrofa], loup [Canis lupus] and lyoun [?]'.[120] This last word might at first appear to be significant, but the text is just a translation of the Catalan 'Llibre de l'orde

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[120] Iotfield, B. (ed. 1847) *The Buke of the Order of Knyghthood* (Alen, Laurie & Co., Edinburgh), p.19.

de cavalleria'[121] which gives *lleons*[122] (*Panthera leo*), meaning we need not see any lynxes here either, especially since the quotation above also mentions the bear which is almost certainly absent from Scotland by this period.

One of Britain's earliest naturalists, John Caius, writing in 1570 also describes the lynx in 'De rariorum animalium atque stirpium historia'. This account was also later added to Gessner's description of the lynx in his 1603 ed. of *Historiae Animalivm*.[123] The description is dedicated to Caius' observations of a lynx in the Tower of London. The description of this captive animal is too lengthy to be collected here and for the most part is described like the very strange and exotic creature it must have been to most people who went to see it. One detail does stand out though. Near the end Caius describes how other viewers see the animal:

Caius' description of the lynx in the Tower of London	
Caius, J. (1570), 'De rariorum animalium atque stirpium historia' Latin original	**Topsell, (1607), *History of Four-Footed Beasts.* English translation (via Gessner, 1603 ed.)**
Luzarne nostri vocant, leunciamne an lyncem ex vocum symphona dicturi ambiguum est. Pellis in usu est magnatum, & pretiis venditur amplioribus.[124]	Our Country men call it Luzarne, it is doubtfull whether we shoulde call it Leunce, or Lynx, in the affinity of the words. His skinne is vsed by Noble-men, and is sold for a great price. [125]

[121] Steveson, K. (2007) 'Review: The Prose Works of Sir Gilbert Hay, vol. 2', pp.333-4, in: *The Scottish Historical Review*, vol. 86 (222).

[122] Ferdández González, M. (1980 facs. ed.) *Ramon Llull, Llibre de l'orde de cavalleria* (C. Verdaguer, Barcelona), p.50.

[123] Gessner, C. (1603 ed.) *Historiae Animalivm, vol. 1* (Bibliopolio Cambieriano), p.683.

[124] Venn, J. (ed. 1912) *The Works of John Caius* (Cambridge University Press), pp.30-31. Note page numbers are not continuous.

[125] Arbor, A. (2008) *The History of Four-Footed Beasts and Serpents* (facsimile digitalised human checked edition available of 1658 original, University of Michigan, Early English Books Online, http://quod.lib.umich.edu/e/eebo/A42668.0001.001?), p.490.

The term *luzarne* is used throughout the sixteenth and seventeenth centuries,[126] and seems to have had a high value as an imported good.[127] As noted when examining the dubious evidence from Ireland, the fact that an animal has a name in a country only means that it has a profile in the cultural conscious, not that it is present physically as a wild creature. In fact the existence of the name could be entirely explained by the next sentence, that the skin is sold at great price. However this information may take on a new light when we consider the words of another one of Gesner's informants, Baron Bonar of Balice. I have given Bonar's letter to Gesner in full in the Appendices. He talks about different kinds of lynx. The *lox* of Germany, is 'our *lupus cervarius'* which 'rarely reaches the size of a mediocre wolf'. This lynx can be found in Muscovy, Lithuania, Russia, Poland, Hungary and Germany and does not have speckles on its back, only circular spots on its front. It is not as big as the lynx Pliny describes of Constantinople. A third kind of lynx is the one sent as furs from Sweden and also, interestingly, Scotland. These ones have speckles in the shape of clover-leaves on their back as well as their front. A letter from Erik Fernow to Linnaeus in the eighteenth century suggested there were considered to be two populations of lynxes in Sweden by this point which differed in coat-colour,[128] but today all Scandinavian lynxes make a single genetic population.[129]

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[126] The *Oxford English Dictionary* collects 13 references to the 'lucern' from the sixteenth to late seventeenth century. All the references refer to the skin, and suggest it had a high value and status.

[127] See my analysis of the English sumptuary laws in the Beavers chapter. Note that lynxes might have been easily obtainable from France until the thirteenth century: Veale, E. (2003) *The English Fur Trade* (London Record Society), p.57.

[128] Fernow, E. (1766) pers. correspondence with Carl Linnaeus, #L3819, (page: http://linnaeus.c18.net/Letters/display_sum.php?id_letter=L3819&person_from=Erik%20Fernow&person_to=Carl%20Linnaeus&date=27%20November%201766, accessed: 16/3/16).

[129] Helborg, L. et al. (2002) 'Differentiation and levels of genetic variation in northern European lynx (Lynx lynx) populations revealed by microsatellites and mitochondrial DNA analysis', pp.97-111. In: *Conservation Genetics*, vol. 3.

This evidence is difficult to explain without accepting a late survival of the lynx in Scotland. Bonar is clear that the lynx can be found in *Scotia,*[130] and he (and Gesner) were the leading naturalists of the day, unlikely to be confused by wildcats (which are described separately). Their evidence is awkward to interpret. All Eurasian Lynxes have white undersides, no matter what the pattern of their flanks is. Futher, generally lynxes from northern countries tend to have fewer spots than lynxes from southern countries.[131] However this does not mean that Bonar's information is not trustworthy. If we observe carefully it is also true that a lynx's spots are most visible under its face, especially along the front of its fore-limbs. Sometimes spots can be seen here even if none are immediately visible elsewhere on its body.

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[130] Buffon adds a similar sounding colophon to his description of the lynx stating that: 'les plus belles peaux de loup-cervier viennent de la Sibérie' Buffon, G. (1749) *Histoire Naturelle. Vol. 9* (Royal Press, Paris), p.238. The similarity in phrasing at first suggested to me that Gessner may have confused Scotia with Siberia, but Gessner is writing first, and Buffon's sources, Paolo Giovio and Aldrovandi do not use this phrase. Perhaps Gessner's phrasing influenced Buffon's.

[131] Sunquist, M & Sunquist, F. (2002) *Wild Cats of the World* (University of Chicago Press), p.165.
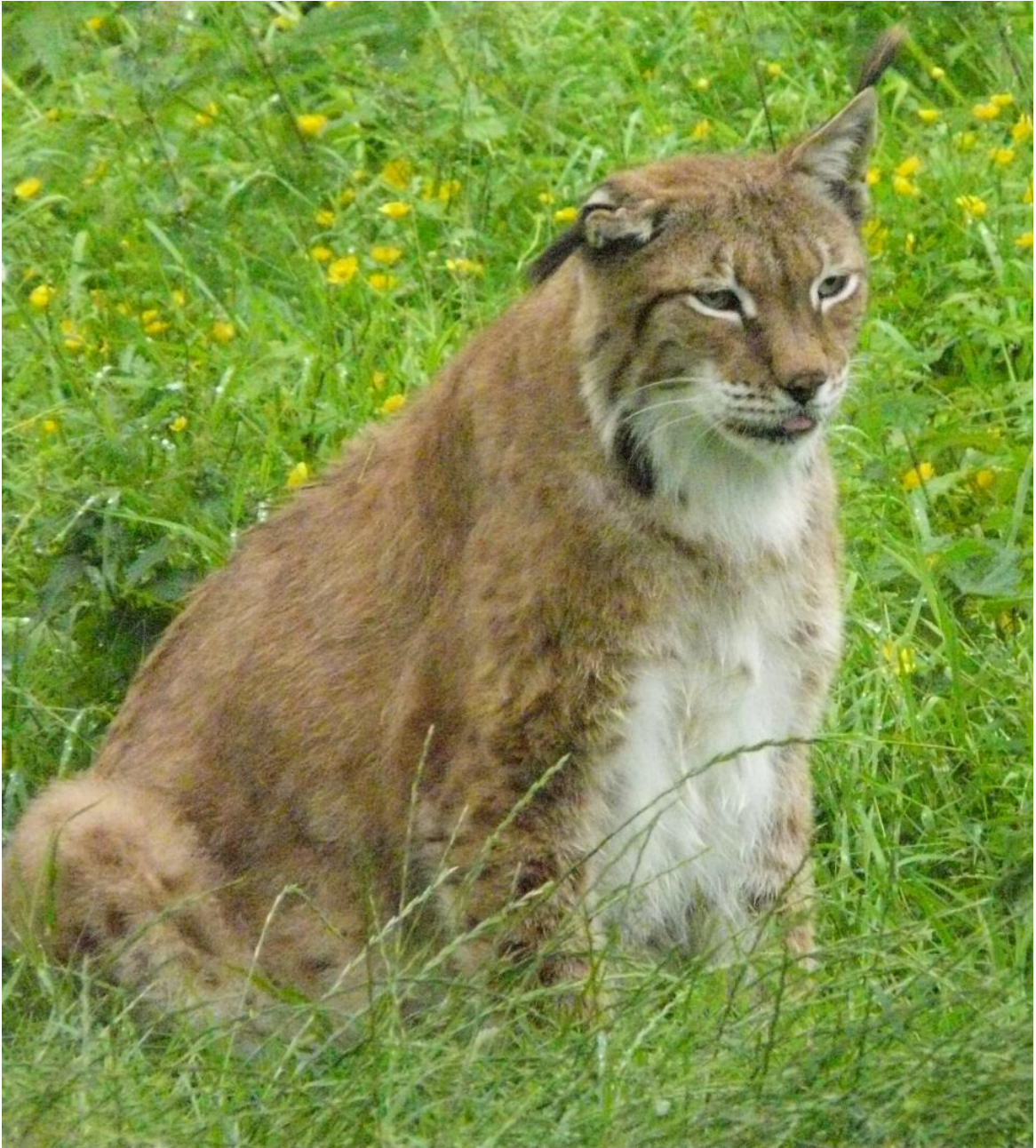
[Eurasian Lynx at the Camperdown Wildlife Centre in Dundee, Scotland, picture courtesy Martin Allen.]

In any case the extract is clear that the writer believed that lynxes were still to be found in Scotland around 1603 and that they were commercially exploited and prized like the lynxes of Sweden and presumably the rest of Scandinavia.

This reference comes many centuries after our next earliest evidence and it is difficult to be sure quite how much trust we can place in the source. Places like

Inverness were fur trade centres in the medieval period, and often furs were imported to Scotland only to be later exported elsewhere.[132] It is possible that Bonar is remembering only a manufacturing centre rather than a live population. Alternatively, this could be a case of Scotland's reputation outliving its output. Other medieval local specialities like Totnes cloth and Cordovan leather were so fashionable that a person might well say that the best shoes are made of leather from Cordoba, long after the Cordovan method of manufacture was replicated by 'Cordwainers' all across Europe. On the other hand, perhaps the idea that the lynx survived so long in Britain need not, *a priori*, appear strange to us. Certainly animals do often survive in Scotland longer than on the rest of the island, and appear to have done in the medieval period as well as the modern.[133] The evidence is by no means certain, but it is possible that Hetherington may yet be vindicated in his position that the lynx survived into the latter half of the second millennium in Scotland.[134]

Bonar's view is given some support by its inclusion by Edward Topsell in his 1607 translation into English of Gesner, 'The History of Four-Footed Beasts' (extract given in the Appendices). Topsell mistranslates the passage and seems to have been confused by the meaning of Gesner's title 'De Lynce Indica vel Africana' but he does at least repeat the information that lynxes can be found in Scotland.[135]

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[132] See: Chapter IV: Beavers, section on Scottish Law.

[133] Beavers seem to have survived three centuries longer in Scotland than south Britain in the medieval period, and the red squirrel, pine marten and capercaille are all now only common in Scotland. See: Raye (2014) 'The Early Extinction of the Beaver'.

[134] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland.*

[135] Robert Sibbald in his natural history of Scotland (1684), within *Scotia Illustrata* (III:5, p.11) also appears to refer to a third British felid, separate from the house cat and wildcat; 'felis Syriaca' (usually =*Felis silvestris* syriaca; Syrian wild cat, see: Aldrovadus, III:10). However, in the absence of definitive characteristics (cheek pads, a short tail) I take this as just an anomalous part of his description of types of cat. It may refer to the feral cat. I have included a version in the appendices.

The evidence produced in this section comes centuries after the medieval evidence which is our focus, but it suggests that lynxes may have lingered in Scotland until the seventeenth century, long after they were lost from south Britain. However the evidence is not strong, and until further archaeological or textual evidence can be found, the case for the continued existence of the lynx in Scotland remains tentative.

Conclusions

The convincing evidence found in this chapter can be summarised like this:

TABLE: List of probable lynxes in historic Britain	
Date A.D.	**Text**
425-600 *(Cal. C$_{14}$)*	Hetherington's latest carbon date for lynx remains in Britain. Up until this time and probably for a while afterwards there was a native, breeding population of lynxes in Britain. This includes three known historical individual animals, two in Craven, North Yorkshire and one in Sutherland.
c.600 (language dated 9th-11th century, manuscript 13th)	'Y Gododdin' – the language of the text is datable to the ninth century but it may have been based on a sixth or seventh century North British text in an ancient form of Welsh. Contains multiple references to 'lleu' being fierce, and also contains 'Pais Dinogad' an interpolation which describes a man hunting llewyn alongside boar and deer at Derwennydd. This is most probably a reference to Lodore Falls.
5th century – 1121	Loscafort (later more commonly 'Loskesford', not 'Lostford') named. Probably named centuries before earliest reference in 1121. Fifth century TPQ from earliest possible language date. Name most probably contains reference to a lynx.
c.705-720	'Vita Sancti Cuthberti metrice'. Latin text by Bede warns shepherds to be vigilant against dusky large cats in the fields on the mainland near Lindisfarne.
1602-7	Gessner, the earliest naturalist includes a note about lynxes from Scotland and Sweden which are the most beautiful. The note is translated in English without comment by Topsell.

The map following the table above shows the date and locations of each of the most

convincing pieces of evidence for the lynx in Britain. The evidence tends towards the

highlands of Britain (with the exception of the place-name Lostford), and naturally has

a tendency towards areas with better survival of medieval evidence (i.e. not Scotland

where little early medieval evidence can be firmly situated). Unfortunately the

problems with literary evidence which I explained in the introduction all apply here.

Some of these lynxes probably only ever existed in the minds of their author, even

though they were all supposed to be realistically portrayed. However, taken together

the evidence does support the existence of a lynx population in south Britain the

second half of the first millennium A.D. The evidence we have suggests that the lynx

survived at least until the eighth or possibly even the ninth century (suggested by the 'Vita Sancti Cuthberti metrice' and 'Pais Dinogad'). This last text offers the least realistic portrayal and it may be that by this point the animal was already only a memory. The evidence from literature therefore suggests that the lynx became extinct by the end of what archaeologists call the 'mid-Saxon period'. This supports the southern European early extinction model where the lynx is lost early on and before the wolf. The animal's extinction was probably primarily due to deforestation. As its woodland hunting ground shrunk, the species would probably have turned to attacking livestock (sheep and fowl) to survive, and this would have been intolerable to rural communities.

Later intriguing entries from the first naturalists and hunters of the fifteenth to the seventeenth centuries are harder to accept. If reliable they would suggest the continued existence of populations of lynxes until at least the seventeenth century in Scotland, although perhaps not in south Britain. There is of course reliable evidence attesting to the existence of populations of wildcats across the whole of Britain throughout this period,[136] and it is possible that attestations to lynxes lie hidden within references to lions or wildcats.[137] Future researchers could profitably search Gaelic and Norse literature for further references to corroborate this possibility. It is striking that the last references from modern-day England are stretched across the Scottish border. There is less clear textual evidence from this period north of the border, and Scotland is also less well-excavated than England and Wales.

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[136] Raye (2014) 'The Early Extinction of the Beaver'.

[137] My study of the British literature (ibid) found a number of reliable references to 'cattes'. If lynxes were seen as a type of cat, which the late hunting and naturalist material suggests they might have been, lynxes may have lingered in Britain for much longer than previously believed.

That the lynx certainly did not survive to this late a date in south Britain is attested by various pieces of evidence. The 'Liber Monstrorum' (c.700) attests that there are no lynxes in England, William of Malmesbury explicitly tells us the lynx is not found in Britain in the early twelfth century. The terms used for the lynx in English are lost by 1100 A.D., the Welsh term *llewyn* is used by Cynddelw Brydydd Mawr c.1189-95, but the reference, if it does refer to a lynx, is archaic and generic. The Latin term *linx/lynx* is not often used until the late medieval period and the term *leo*, which might originally have been used generically refers only to the lion by the second millennium A.D.

In the final centuries of the lynx in south Britain, the animal was probably confined to wooded upland areas, just like it is throughout the rest of Europe today.[138] Generally speaking, these areas are confined to the north and west 'Celtic Fringe' of Britain (see map on following page, red areas are highland). The majority of the people living in these areas alongside the last lynxes, c.600-900, would originally have spoken a language closely related to Old Welsh. It is true that by the end of this period, the British speaking kingdoms of Devon & Cornwall,[139] Elmet (capital: Leeds), Rheged (capital probably Carlisle) and Gododdin (capital: Edinburgh) had all been conquered by non-Brittonic speaking elites, but up until and for a while after their conquest, ordinary people in these areas would have spoken British languages. By the time English was the established language in these areas, lynxes must have been very rare or entirely extirpated. Some of these increasingly irrelevant native myths must have been lost in the cultural and political transformation of these areas. For example, if the

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[138] See: Breitenmoser, U. , 'Large predators in the Alps: the fall and rise of man's competitors', pp.279-89, in: *Biological Conservation, vol. 83* (1998).

[139] Note that the majority of upland in South West Britain is moorland, which probably would not provide sufficient cover for lynxes.

Welsh word *llewon,* meaning a large cat, was used in the other British languages, by this point ordinary people may have been uncertain about what the word actually meant. This is suggested by the references in 'Pa Gur' and 'Dadolwch yr Arglwydd Rhys'. With the change in language, as Hetherington argues, traditional stories and folklore knowledge about the hazy and suddenly less relevant animals must have been lost, or redelimitated to other more concrete animals where it was remembered at all.[140] Wales is the only British area which developed a written tradition early enough for these stories to be recorded. The creature's longer physical survival in the uplands of Britain ensured that it would be remembered longest by literate cultures living in these areas.

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[140] Hetherington, D. (2008) 'The history of the Eurasian Lynx in Britain and the potential for its introduction', pp.77-86, in: *British Wildlife* vol. 20, p.79.
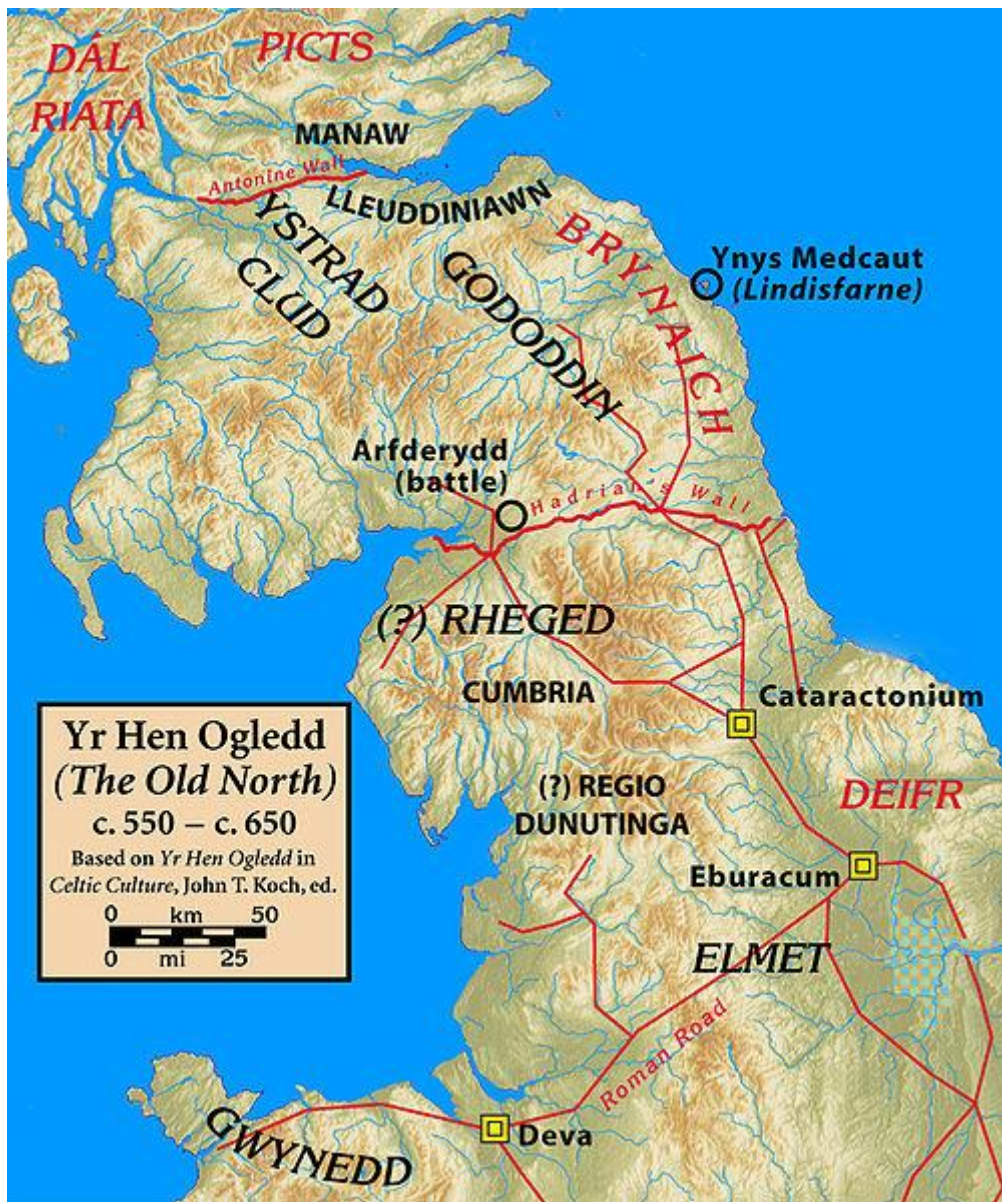
[Map with black text showing the areas of northern England and southern Scotland which spoke a language like Old Welsh c.600 A.D.][141]

Map showing highland zones of Britain, coinciding with the last documentary evidence

of the lynx from Britain] [142]

Chapter 3 – Whales

Introduction

The history of whaling has been extensively studied from archaeological, literary and biological standpoints. Most scholars, following the nineteenth- and early twentieth-century categorisation system, will split whaling into a number of distinct periods, covering exploitation by the Basques, Dutch, Americans and Norwegians.[1] The Basques began whaling in the tenth century, and the industry supposedly spread across Europe from there. Tallying with these records, it is clear from Anglo-Norman records that baleen (the hairy enamel in whales' mouths used to collect plankton) was used to make arms and armour in the thirteenth to fifteenth centuries.[2] Likewise there is good evidence that whaling was taking place from the eleventh century onwards over the Channel in Spain, France and Belgium.[3]

However, as Szabo points out, it has recently become clear that whales also may have been hunted *before* this point.[4] The archaeological record of whales from Britain has been reviewed by Clark, and will not be repeated here; there is evidence of a continuous culture of whale exploitation from the Iron Age up until the medieval

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[1] See for example, Jenkins, T. (1921) *A History of Whale Fisheries* (Witherby, London). Although not a full example the latest edition of the *Handbook of British Mammals* also falls into the trap of setting the origin of whaling in Europe with the Basques, Kraus, S.D. and Evans, P.G.H., in: Harris, S. and Yalden, D. (ed. 2008) *Handbook of British Mammals* (The Mammal Society, Southampton), p.660.

[2] Moffat, R. Spriggs, J. & O'Connor, S. (2008) 'The Use of Baleen for Arms, Armour and Heraldic Crests in Medieval Britain', pp.207-15, in: *The Antiquaries Journal*, vol. 88.

[3] Aguilar (1986) 'A review of Old Basque whaling', p.192; De Smet, W. 'Evidence of Whaling in the North Sea and English Channel during the Middle Ages', pp.301-9, in: *Mammals in the Seas*, vol. 3. (1981), pp.303-5.

[4] Szabo, V. (1997) 'The Use of Whales in Early Medieval Britain', pp.137-157, in: *The Haskins Society Journal,* vol. 9, p.137.

textual evidence which is especially strong in Scotland.[5] It is difficult to say for definite

what percentage of the remains are from hunted whales, and what percentage are

from stranded whales, especially given the well-known archaeological 'invisibility' of

whaling (butchering is usually carried out on the coast line, and remains seldom end up

in kitchen middens).[6] Mulville's recent analysis of all the archaeological evidence for a

whale-product industry has not indicated a species bias, or any harpoons or whaling

tools which might have been expected in a whaling situation. Mulville argued that the

bias towards fused bones might indicate juveniles were targeted by hunters,[7] but

stranding data is often biased towards juveniles.[8] It is hoped that our re-evaluation of

the textual evidence will help ascertain whether the rate of exploitation stayed

consistent or changed during the medieval period.

Most species of whale are represented in the archaeological record and in the

marooning lists.[9] However, it is generally accepted that the most hunted large whale in

Britain would have been the North Atlantic right whale (*Eubalaena glacialis*) before it

was extirpated from the east Atlantic in the medieval period.[10] The right whale has a

comparatively large amount of high-grade baleen and is found in temperate waters,

not in the hard-to-penetrate ice-fields like its close cousin the bowhead whale

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[5] Clark, G. (1947) 'Whales as an Economic Factor in Prehistoric Europe', pp.84-104, in: *Antiquity* vol. 21.82, pp.100-2.

[6] Szabo (1997) 'The Use of Whales in Early Medieval Britain', p.150; Clark (1947) 'Whales as an economic factor', p.98, Gardiner, M. Stewart, J & Bell, G. (1999) 'Anglo-Saxon whale exploitation: some evidence from Dengemarsh, Lydd, Kent', pp.96-101, in: *Medieval Archaeology*, vol. 42.

[7] Mulville, J. (2002) 'The Role of Cetacea in Prehistoric and Historic Atlantic Scotland', pp.34-48, in: *International Journal of Osteoarchaeology,* vol. 12, pp.44-5.

[8] For (attacked) harbour porpoises (*Phocoena phocoena*) see Jepson, D. et al. (ed. 2005) *Cetaceans Stranding Investigation and Co-ordination in the UK* (Natural History Museum, London), pp.36-8; for right whales see: Kraus, S. (1990) 'Rates and Potential Causes of Mortality in North Atlantic Right Whales (Eubalaena Glacialis)', pp.278-291, in: *Marine Mammal Science,* vol. 6, p.286.

[9] Szabo (1997) 'The Use of Whales in Early Medieval Britain', p.156; Clark (1947) 'Whales as an economic factor', p.89.

[10] De Smet (1981) 'Evidence of whaling in the North Sea and the English Channel', pp.306-7; Jenkins (1921) *A History of the Whale Fisheries*, pp.15-17.

(*Balaena mysticetus,* or 'Greenland whale').[11] It was also not aggressive, deep diving,

or fast swimming as, for example, the humpback (*Megaptera novaeangliae*) and blue

whale (*Balaenoptera musculus*).[12] As the right whale population does not recover from

setbacks very quickly, this probably led to the animal diminishing as an exploitable

asset in the seventeenth century and eventually the species' functional extinction in

the East Atlantic, with the industry moving on to hunting the bowhead whale from the

Arctic waters at Spitsbergen, Greenland.[13] Even after this, hunting smaller and faster

species of whale was not commercially viable until the second half of the nineteenth

century saw the development of the explosive harpoon gun.[14] Archaeological analyses

of right whale remains in ninth-century Britain have also produced evidence of

butchering for meat. Since whale remains can decompose within a day if left to the

elements,[15] this suggests that there may have been an established normal practice in

use to quickly exploit stranded whales, especially in frequent stranding-sites.[16]

At least one other whale may have been important.[17] Radiocarbon evidence

has recently come to light proving that the grey whale (*Eschrichtius robustus*) was

present in the Atlantic throughout the medieval period.[18] Like the right whale, the grey

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[11] De Smet (1981) 'Evidence of whaling in the North Sea and the English Channel', pp.306.

[12] Ibid; Clark (1947) 'Whales as an economic factor', pp.85-7.

[13] Aguilar (1986) 'A review of Old Basque whaling', p.198; Jenkins (1921) *A History of the Whale Fisheries*, pp.77-80.

[14] Jenkins (1921) *A History of the Whale Fisheries*, pp.264-5.

[15] Cawthorn, M. 'Meat consumption from stranded whales and marine mammals in New Zealand', in: *Conservation Advisory Science Notes, no. 164.* (Department of Conservation, Wellington).

[16] Gardiner, M. Stewart, J & Bell, G. (1999) 'Anglo-Saxon whale exploitation: some evidence from Dengemarsh, Lydd, Kent', pp.96-101, in: *Medieval Archaeology*, vol. 42.

[17] Clark, has suggested that the humpback may have been targeted but Jenkins disagrees. Either way it could only have been attacked along the shoreline and thus would not have been as important as the right whale. See: Clark, 'Whales as an Economic Factor in Prehistoric Europe', pp.84-104 in: *Antiquity,* vol. 21(82) (1947), p.87; Jenkins, T. (1921), *A History of the Whale Fisheries,* p.50.

[18] Bryant P. (1995) 'Dating Remains of Gray Whales from the Eastern North Atlantic', pp. 857-861, in: *Journal of Mammalogy*, vol. 76.

whale may well have existed in two separate ranges on either side of the Atlantic. The latest radiocarbon date very strongly suggests that grey whales were present off the British coast until at least the fifteenth century. This whale is known for being difficult to kill, although it does approach closer to the shoreline than other whales, and is less flighty, offering more opportunities.[19] Ole Lindquist has gathered together 'an historical outline' of records of grey whales in the literature of the East Atlantic seaboard, and it is his assertion that the grey whale was the animal delimitated by the pan-Scandinavian term *sandlægja* (sand-lier), until the term was redelimitated with the animal's disappearance in the eighteenth century. He has also suggested that the grey whale may have been the creature delimitated by the Old English term *hran* (normally translated generically as 'whale') and called for 'a directed search in, and study of, Old English sources [on this name] from the period c.700-1050'.[20] One of the secondary aims of this chapter is to answer that call, and a detailed discussion of Lindquist's theories can be found in the conclusion. Finally, it is also known that various species of porpoise (*Phocoenidae*) and dolphin (*Delphinidae*) were also exploited. Today these species are called types of whale (cetacean) but in the medieval period, as we shall see, they were considered as fish, with only the largest whales called by terms noted above. These animals were distinguished from whales in the medieval period and I do not discuss references to them here.[21] Medieval references to whales do, however, include references to certain other large marine mammals, most importantly

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[19] De Smet (1981) 'Evidence of whaling in the North Sea and the English Channel', p.308; Jenkins (1921) *A History of the Whale Fisheries*, p.233-4; Lindquist, O. (2000) *The North Atlantic Gray whale* (Universities of St Andrews and Stirling, Scotland), p.13.

[20] Ibid. p.19.

[21] Clark (1947) '*Whales as an economic factor*', p.87.

the Atlantic walrus (*Odobenus rosmarius*). I discuss these species where they are described using one of the generic whale words (*hran, hwæl; cetus, balena; moruil*).

[The pictures above show the skeleton of a grey whale complete with baleen still in mouth, and right whale (with room in mouth for much more baleen) at the Natural

History Museum, London. Both whales are small compared to the life-size blue whale model behind them.]

Thanks to the exhaustive analysis of physical remains carried out by other disciplines this thesis is not required to justify the existence of whales or their exploitation on the coastlines around medieval Britain. Likewise, several detailed studies have described the early modern intense whale fisheries on a worldwide scale. This chapter will therefore focus on local, or regional, examples of whaling from the medieval period. In particular several questions remain unanswered: in early medieval Britain, were whales hunted or just scavenged? Did the level of exploitation change? If so, when? What does animal nomenclature and description suggest about the level of knowledge of cetaceans?

Attempts have been made to answer these questions before. Riddler and De Smet have separately argued that people from Britain did not go whaling until at least the time of the Norman Conquest.[22] On the contrary, Mulville and Szabo separately emphasise continuity of culture from the Iron Age through the early medieval period, and point out ethnographical evidence that people can hunt bowhead and right whales without advanced technology.[23] The argument of this chapter is an attempt to find a compromise between these two approaches. I argue that sporadic whaling may have always occurred off Britain, but that the industry intensified in the ninth or tenth century A.D.; around the same time as it seems to have begun off the coast of

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[22] Riddler, I. (1998) 'Worked Whale Vertebrae', pp.205-215, in: *Archaeologica Cantiana,* vol. 118, pp.209-211; De Smet (1981) 'Evidence of Whaling in the North Sea and English Channel...', pp.301-9.

[23] Mulville (2002) 'The Role of Cetacea', pp.34-48; Szabo (2008) *Monstrous Fishes and the Mead Dark Sea*, p.4, although Mulville's evidence is criticised by Szabo on p.8.

northern France.[24] This coincides with the 'fish event horizon', the time at which intensive marine fisheries began to provide sea-fish for newly urban human populations in Britain.[25]

Szabo has also emphasised that medieval literature maintains apparently contradictory opinions of the whale.[26] Whales are seen by some writers as monstrous beasts but by others as an exploitable resource. It is my contention that for the accounts in Britain, the first kind of depiction is more common before the ninth century and the second kind of description is more common after the tenth century. Finally, I argue that although medieval Latin, Old English and Welsh all had two pieces of nomenclature for the whale (*cetus*, *balena*; *hran*, *hwæl*; 'moruil', 'moruarch'), each pair of words was usually synonymous, and these names should not be taken as distinct specialist terms denoting species or even differing types of whale.[27]

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[24] De Smet (1981) 'Evidence of Whaling in the North Sea and English Channel'.

[25] Barrett, J.H., Locker, A.M. Roberts, C.M. (2004) 'The origins of intensive marine fishing in medieval Europe: the English evidence', pp.2417-2421, in: *Proceedings of the Royal Society B,* vol. 271.

[26] Szabo, V. (2005) '"Bad to the bone"? The Unnatural History of Monstrous Medieval Whales', pp.1-18, in: *The Heroic Age,* vol. 8.

[27] Contra Lindquist, O. (2000) *The North Atlantic Gray Whale* (Universities of St Andrews and Stirling, Scotland).

Table: Evidence considered for whales in early medieval Britain	
Date A.D.	**Source**
End of 7th century	'Vita Sancti Columbae' (the Life of Saint Columba) preserves an account of a dangerous whale which nearly sinks a ship. Its behaviour is anticipated by the saint.
c.700	The Franks Casket, an artefact made of whale's bone. It bears an Old English runic inscription describing how it was made from a stranded *hron* whale.
c.680-750	Beowulf in the eponymous Old English saga fights with and kills a group of 'hronfixas' (whale-fishes) whilst swimming in a contest of endurance.
c.731	Bede's Latin 'Ecclesiastical History of the English People' attests that people in Britain catch fish, dolphins, seals and whales.
Ninth century	This is the date of the Vatican Palatine 68 manuscript. This manuscript is an Irish copy of an earlier Northumbrian Old English text which has a gloss explaining that the *hron* is smaller than the *hwæl*.
850-899	The Old English 'Voyage of Ohthere' describes Ohthere's voyage around the headland of northern Norway. Ohthere discusses whaling as a Norwegian industry and walruses are called *horshwalas* (horse-whales)
Mid 10th century	The Old English 'Physiologus', an early Old English Bestiary found in the Exeter Codex describes the *hwæl* (whale) as a kind of spectre probably because the creature was thought to disguise itself as an island.
c.1000	Aelfric's Latin 'Colloquy', which was glossed in Old English suggests that some English people went whaling at this point. The Latin terms *balena* and *cetus* are used synonymously, although glossed separately as *hron* and *hwæl* respectively.
Eleventh century	Date of various Old English glossaries. Most important are 'Aelfric's Glossary' which glosses *cetus* as *hwæl* and *balena* as *hron* and the Antwerp-London bilingual class glossary which glosses both *cetus* and *balena* as *hwæl*.
Twelfth century	Date of the Middle Gaelic/Irish poem 'Columba's Island Paradise' which mentions whales as one of the quintessential sights of Iona.
1200-1250	Date of 'Breuddwyd Rhonabwy'. In this Welsh text the main character dreams he has gone back in time into the heroic age of the Arthurian period. There, whale-made ('moruil', 'moruarch') artefacts are found in use by high-status figures, but many of these actually seem to be walrus-ivory tools rather than any material we would identify as made of 'whale' today, and other Welsh texts of a similar date ('Owain' and 'Maxen Wledig') agree.
Late 12th century	Gerald of Wales describes in Latin a disappearing island off Ireland which some people thought was a *balena*, proving that the belief that whales pretended to be island was still common and that the folklore could implicate the *balena* as well as the *cetus*.

Marvellous Beasts

'Vita Sancti Columbae' is the first, and perhaps earliest, reference to whales from medieval Britain, although the monastery which produced it (Iona) in many ways is better seen as part of a pan-Gaelic cultural milieu. It was written by Adomnán when he was abbot of Iona (679-704), and it describes the life and holy deeds of Saint Columba who died in 597.[28] Although unreliable as a guide to the saint's life, it does provide a very useful idea of how people of the seventh century may have imagined whales. Its lengthy account of Columba's foresight regarding a whale offers a number of useful details.

The most striking thing about the description of the animals in the text (see the appendices) is that the whale(s) are to be feared rather than welcomed. The text attests to a very real danger that the creature could destroy or overturn a ship and kill people in the open sea between Iona and Tiree. The animal is *prodigio* (a prodigy, a prodigious creature) *mirae* (marvellous, or mythical) and is twice called *bellua* (a monster, beast).

This perspective of the whale is very different from the perspective customarily held in whale-hunting countries when whales were sighted. In tenth century Basque country for example, whales were eagerly watched for in lookout towers. When spotted they were the cause of celebration since they could bring great wealth to a local community.[29] The whale in 'Vita Sancti Columbae', in contrast, is seen only as a potential danger. The text gives no suggestion that such a creature could ever be

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[28] Sharpe, R. (trans. 1995) *Adomnan of Iona: Life of St. Columba* (Penguin Classics, London).
[29] Aguilar (1986) '*A review of Old Basque whaling*', p.192.

hunted or attacked, and only the power of God is sufficient to stop the whale at the end of the narrative.

There may have been good reasons for this. First, the greater the enemy, the greater the victory: by aggrandising a foe the victorious hero is glorified. The whale in our text is only mentioned once without an attendant adjective commenting on the size of the creature. Every other time it is mentioned its size is emphasised. There is certainly no hint that the species was a habitually exploited one.

The question is, should we infer from this awe-struck depiction a lack of practical familiarity with the species as an exploitable asset or just the effects of Latin rhetoric? Either reading is possible from this text alone. Certainly the roughly contemporary Franks Casket attests that stranded whales were seen as an exploitable resource in more southerly Britain. But there is no evidence of actual hunting until 'Aelfric's Colloquy' of c.1000 A.D., and therefore it is quite conceivable that whales were still seen as marvellous, untouchable beasts at this period.

The animal's naturalistic attitude is also interesting. The animal's bared teeth and breaching directly in front of a ship are clearly supposed to be seen as aggressive behaviours and the creature's intent at least could be considered malevolent. As Szabo has pointed out, the Latin whale in the 'Physiologus' is therefore an obvious parallel,[30] but there is a difference. Canine-like tooth-baring aside, none of the behaviours of this particular whale are necessarily unnatural, and even the excessive size of the whale could be explained if it were an especially big species. Further, if the whale was seen as a form of devil like it is described in the 'Physiologus' it almost certainly would not

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[30] Szabo (1997) 'The Use of Whales in Early Medieval Britain', p.145.

have been blessed. In fact, diving and breaching over a ship are fairly typical behaviours for (stressed) whales and could have been observed by the earliest authors of the above text. It may be, therefore, that this text has more in common with the straightforwardly natural descriptions of whales in 'Ohthere' and 'Aelfric's Colloquy'.

That whales might have been common around the Western Isles is also suggested in the twelfth-century Gaelic poem known as 'Columba's Island Paradise' (see the extract in the appendices).[31] This poem is one of homesickness for Iona, and I have provided the first and fifth stanzas. The author imagines sitting atop a rock and seeing the sights of the place once again. Each of the stanzas 2–5 start with 'go bhfaicinn' ([would] that I could see…). The narrator goes through the strange things they wish they could see looking around them, most especially the sound and sight of the waves and seabirds.[32] In stanza five, the last of these stanzas the author again mentions the island's splendid flocks of birds but lastly also mentions the 'whales, greatest of all marvels', suggesting that whales (*míola mára* – lit: 'great beasts') are also a part of the fabric of what makes Iona unique and special. This poem might be taken alongside the account in 'Vita Columbae' so suggest that sightings of whales in this area were not uncommon.[33]

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[31] Date provided by Clancy (1998) *The Triumph Tree*, p.188.

[32] Seagulls are still seen as 'genius loci' figures to this day in Scottish Gaelic folklore. People might claim to miss 'faoileagan a' chladaich againn fhèin' (the seagulls of our own shore), which refers to other natives of the same town, but is also tied to the idea that 'is olc a' chread a threigeas a h-eoìn fhèin' (it's a sad rock which even its own seagulls forsake'), see: Nicolson, A. (1881*) Gaelic Proverbs* (1951 ed. Weskey Ltd, Falmouth).

[33] It is supported by a further reference in John of Fordun's 'Chronicle of Scotland' (c.1360). John describes Uist as abounding in 'whales and other sea monsters'. (Skene, W. (1872) *John of Fordun's Chronicle of the Scottish Nation* (Edmonston and Douglas, Edinburgh), p.40, II:10) Today one of the Whale and Dolphin Conservation (WDC)'s most important observatories is on Lewis, the northernmost of the outer-Hebrides, so perhaps these authors were reporting real natural biodiversity. On the other hand, John's report may not have been intended to be complimentary. Monsters only live in wildernesses far from civilisations. The presence of monsters might have been intended to have the effect of casting Uist as a kind of exotic otherworld.

The terminology used for the whale in 'Vita Sancti Columbae' is of interest. *Cetus* is used twice in the text and *balena* is absent. Another piece of nomenclature, *cetus magnus*, might suggests a species name. Could the animal described in this text have been a perfectly natural, if rare, sperm whale? These animals are large, aggressive when threatened, travel alone and often sank wooden ships.[34] Unfortunately, as we shall see below, it is almost impossible to pinpoint a species of whale in a medieval text without any other evidence, and the details of this whale could have sprung from the imagination.

The whale(s) of 'Vita Sancti Columbae' may be made a creation of the imagination rather than substance, in contrast to those of 'Columba's Island Paradise'. Intriguingly though, in both texts they break our expectations. In the saint's life, whales are depicted as shadowy, uncontrollable monsters, and yet at the end of the extract, one of the saint's followers is able to control a whale through God's blessing. In 'Columba's Island Paradise', whales are wild animals whose behaviour can, to some extent, be predicted. The poet knows they can be seen from Iona because that is part of their natural habitat. A Christian audience might therefore expect that they would therefore be under the dominion of humans like other wild and tame animals according to God's command of *Genesis* 1:26. However in the text, whales are admired as marvels, and their presence by the island is an indicator that Iona is a magical and perhaps a particularly holy place. This combination of acceptance and awe can also be seen from the <u>Franks Casket</u>.

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[34] Clark (1947) 'Whales as an economic factor', p.87.

The <u>Franks Casket</u>, named after the collector A.W. Franks, is a long, shallow container ornately carved from cetacean bone, most probably the mandible of a sperm whale.[35] It has been dated to around 700 A.D and part of its significance is that its carvings depict a wide range of stories from Christian, Roman and Norse sources. Legends of Wayland the Smith are heavily featured on the casket but the Adoration the Magi and the upbringing of Romulus and Remus are also present.[36]

For our purposes, the main point of interest of the cask is in one of the inscriptions, which seems to be a note by the artist about his materials. When transcribed out of runes it runs thus:

> 'Fisc flodu / ahof on fergenberig / warþ gasric grorn þaer he greut giswom / hronaes ban'
> (The flood raised a fish onto a mountain, the mighty animal was sad where he swam [on] shingle: Whale's bone).[37]

This inscription is probably intended as a riddle like those in the 'Enigmata' of Aldhelm, and the answer to the riddle, 'whale's bone' is given to the side of the text and perhaps not supposed to be read aloud to riddle-guessing listeners. Although the riddle is not expressed in the first person as for example the Exeter Book riddles are, the language used in the text is intentionally cryptic so as to avoid using certain key terms. The text states that the *gasric* (mighty animal) washed ashore on the *fergenberig* (mountain) rather than more explicitly that a *hron* or *hwæl* (whale) washed ashore on the *yðlaf* (shore, beach).

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[35] Szabo (1997) 'The Use of Whales in Early Medieval Britain', p.153; I use the term cetacean's bone instead of whale bone throughout this chapter to avoid confusion with baleen and ivory.

[36] Beckwith, J. (1972) *Ivory Carvings in Early Medieval England* (Harvey Miller & Mecalf, London), p.117.

[37] For editions and other translations see Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, pp.55-6; and Page, R. (1973) *An Introduction to English Runes* (Methuen &Co., London), pp.176-7.

The Franks Casket is very significant for our purposes because the text and bone together provide evidence of the state of the whaling industry in Britain around 700 A.D. The text suggests that the bone used to make the casket came from a stranded whale. This means that the bone did not come from a hunted whale. We cannot conclusively deduce from this that hunting did not take place off British coasts at all, and indeed it has been noted in the past that often the whales that do end up beaching themselves have been previously injured by whale-hunters.[38] However it does suggest that whale hunting was not the usual source of cetacean bone. If whales were the objects of a commercial fishery at this point, it is hard to explain why the only cetacean bone artefact that exists from before the tenth century is explicitly taken from a marooned whale. This is an *argumentum ex silentio* and should not be pressed too far: It could be that the lack of evidence just reflects a poor survival rate, or that whale hunters were interested in meat or oil more than bone. But it might be seen as corroborating the—also slight—evidence from the 'Vita Sancti Columbae' discussed above. There is a difference, however. On the Franks Casket, the author writes a romantic description of the 'mighty animal' but the very medium of the text blunts the force of the message. Whales are not just monsters; they can be exploited by ordinary people. Although there is no evidence whales were pursued at this point, the existence of a cetacean-bone high-status artefact might have suggested this course of action to be worth pursuing.[39]

It is also worth noting that the term used for the cetacean's bone that was used to carve this object is 'hronaes ban'. That *hron* is used to describe a large whale instead

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[38] Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, p.94.
[39] Gardiner et al. (1998) 'Anglo-Saxon whale exploitation'.

of *hwæl* is interesting, and will provide useful evidence for comparison of the two terms in this chapter's conclusion.

The final aspect of this text worth mentioning is the emotion ascribed to the whale. It was *grorn* (sad), and the reason why it was sad is hinted at by the irony and contrast of the text. The whale is a *gasric* (ferocious; mighty), but it has come to an ignoble end. It 'greut giswom' (swam [on] grit). The place that this whale comes to its death is not the place where it lived its life, and the animal is so out of its element that its mighty ferociousness has turned to futile powerlessness at its death. As Page has shown, an alternative translation for the first part of the text takes the *fisc* as a subject and *flodu* as an object: '[The] fish beat-up flood(s)'. This would function as both a good description of a beached sea-animal and an intentional act by the author to highlight still further the futility of this creature's great might in its death throws. This would suggest that the author of the Franks Casket at least, and perhaps the text's medieval audience (since it has survived so long), might have had a partially sympathetic and perhaps even reverent attitude towards the animal.[40] But as I have said, the very use of cetacean's bone as a material enforces a different message, and represents here the importance of medium over message.

Another text which highlights the whale as a shadowy monster rather than animal which can be exploited is the 'Physiologus'. 'Physiologus' was famous across Europe. It was originally written in Greek, sometime prior to the start of the fourth century, but was translated into many other languages from the fifth century onwards,

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[40] See Szabo (2008) *Monstrous Fishes and the Mead Dark Sea*, pp.55-6.

including Latin and then Old English.[41] In substance it represents an early example of

the Bestiary genre, with a group of animals being described minutely, and then used to

illustrate points about morality and theology. The Old English text as we have it is

present in the tenth-century Exeter Codex and is only fragmentary.[42] It describes the

panther, whale, and partly describes one bird (probably the partridge).[43] However, it is

probable that medieval scribes were aware of missing parts of the 'Physiologus'. We

saw evidence of this in the previous chapter where the 'Ormulum' described lion cubs

as being born dead before rising on the third day.

The language of the translation is Old English West Saxon verse which can be

difficult to translate clearly and accurately line-for-line, which is why the translation I

have provided in the Appendices translates the poem into English prose paragraphs.

To save space I have also left out the homiletic expositions of the text from our

extract.[44] There is more material, most of which answers the traditional questions of

the 'Physiologus' – what symbolism does the animal have? What lessons did God

intend humans to learn from observing the animal? The remainder of the material is

mainly concerned with interpreting the two main pieces of folklore given above and

condemning the creature and those who do not learn its lesson.

As Mann has pointed out, the Bestiary tradition probably became popular in

Britain in the twelfth century. The British bestiaries were based on the 'Physiologus'

meaning this text had a strong influence on later literature.[45] Irish texts like 'Nauigatio

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[41] Mann (2009) *From Aesop to Reynard*, p.23-5. Squires, A. (1988) *The Old English Physiologus* (Durham Medieval Texts), p.14.

[42] Ibid. pp.1-3, 16.

[43] See: Letson, D. (1979) 'The Old English Physiologus and the Homiletic Tradition', pp.15-41, in: *Florilegium,* vol. 1; Squires (1988) *Physiologus.*

[44] Squires (1988) *Physiologus*, p.25.

[45] Mann (2009) *From Aesop to Reynard*, p.24.

Brendani' (the Voyage of Brendan) as well as later British texts like Gerald of Wales' 'Topographia Hibernica' which we shall consider later took on the idea of the whale as an island. The idea of the whale as a tempter seems less influential, but later Old English glossaries abound with glosses of *cetus* and *balena* as *diabolus* (examples in the conclusion).

Perhaps the most interesting aspect of the Old English Physiologus is the kind of animal that the whale is depicted as being. The animal is only called *hwael* once, and at all other times other titles are used to describe the creature. These are mainly negative. We find the by-now familiar idea that the whale is a type of *fisc* when the text talks about 'ōþre sǣfisca cynn' (others of sea-fish kind). Likewise we also see the whale described first as a *gast* (normally translated guest but potentially ghost, ghast)[46] and then also as *scinna* (sceptre), *dēofla* (devil), *āglǣcan* (accursed one). The idea of the whale as a creature of evil with agency (i.e. free will and malign intelligence) is a striking one, and also proved influential to later writers. Perhaps most importantly, the whale is given the name 'Fastitocalan', which appears to be an Irish variant of its name in the Latin 'Physiologus', 'Aspidochelone' (Asp Turtle).[47] This is unlike the whale in the Latin 'Physiologus' whose evil agency is less obvious.[48]

As Letson has pointed out,[49] it is also striking that the animal is usually met with *unwillum* – unwillingly. This wording suggests that often the people finding whales are not looking for them. The idea of whale-hunting is not mentioned at all, tentatively supporting the idea that hunting these swimming 'devils' was still not common around

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[46] Squires (1988) *Physiologus.*p.81.
[47] Szabo (2008) *Monstrous Fishes and the Mead Dark Sea.*pp.47-9. Squires (1988) *Physiologus*, pp.71-2.
[48] Ibid. p.25.
[49] Letson (1979) 'The Old English Physiologus', p.25.

Britain, although since the text is a translation of a classical original, and since it does not say the animal is *only* ever met with unwillingly we cannot be sure of this.

The medieval Bestiary tradition popularised the whale as a sentient, evil tempter, who dragged down sailors to the depths of the ocean. The Bestiary accounts mainly repeat the message of the 'Physiologus', while drawing parallels between the whale and the devil,[50] and I do not intend to discuss them in depth here. However we can find an indication of the importance of the Bestiary tradition by looking at the 'Topographia Hibernica' by Gerald of Wales. It was written in the late twelfth century. Among descriptions of many animals and natural wonders of Ireland it describes a certain island. I have provided a long extract in the Appendices.

The text does not add much of value to what we already know of the idea of whale as island but it is very interesting that the spectral, illusory nature of this island is emphasised. This suggests a reason why the whale in the 'Physiologus' was called a phantom – just like the island the whale there was deceptive and could appear to provide land before fading away like a mirage. 'Phantastica', the island in this text was not a whale, despite what the locals thought. The fact that the whale explanation was logical at the time suggests that the idea of whales as illusory and spectral creatures was not unique to the 'Physiologus'. It also shows that we cannot trust too much in the *unwillum* evidence of the 'Physiologus'. It would be just as hard to imagine anyone hunting the spectral whale of Gerald of Wales, and yet by the time he wrote in the twelfth century there is evidence of a whale-product industry. To some extent the

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[50] Szabo (2008) *Monstrous Fishes and the Mead Dark Sea*, p.50 suggests that the 'Physiologus' depiction of a whale could be based on natural breaching and feeding observations but I do not think this view is tenable considering the creature's description. See also: Mann (2009) *From Aesop to Reynard*, p.24.

Bestiary genre cannot be trusted to give reliable evidence of historical issues, and perhaps we are just looking for evidence in the wrong places.

Finally the term 'balaenum, vel aliam marinam belluam monstruosam' (whale, or another monstrous marine beast) is interesting for two reasons. First of all it shows that the folklore that a whale could pretend to be an island was not limited to the *cetus* but could also be claimed for the *balena*. Secondly it suggests that whales were considered to be monstrous beasts. The term finds a direct parallel in the earlier description in 'Vita Sancti Columbae' which used exactly the same adjective.

There is another text which describes whales as monsters. 'Beowulf' is probably the most famous Old English text and needs little introduction here. As a heroic poem it was probably an oral composition, and therefore its date is very difficult to establish. Its only manuscript is the Nowell Codex, which can be dated to around the first decade of the second millennium A.D. (c.1000), but 'Beowulf' could have been composed long before this point. Over the last fifty years, modern scholarly opinion has vacillated. Before 1980 there was a consensus of a single date of composition between the mid-late seventh and early ninth century.[51] This has been succeeded by the idea that the text should be seen as the collaborative effort of more than one author, each inheriting and transmitting their own version of the text for centuries up until the extant version was compiled in the tenth century.[52] The scholarly consensus shows

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[51] See: Pope, J. (1997) 'On the date of composition of Beowulf', pp.187-95; Chase, C. (1997) 'Opinions on the date of Beowulf: 1815-1980', pp.3-8, both in: Chase, C. (1997) *The Dating of Beowulf* (University of Toronto Press).

[52] Whitelock, D. (1951) *The Audience of Beowulf* (Clarendon Press, Oxford), p.86; Kiernan, K. 'The Eleventh-century origin of Beowulf and the Beowulf Manuscript', pp.9-22, in: Chase, C. ed. *The Dating of Beowulf* (1997 ed. University of Toronto Press); Klaeber, F. (ed, trans. 1950) *Beowulf and the Fight at Finnsburg* (2008 ed. University of Toronto Press, London), p.7, 38, 54.

signs of shifting again. The most recent compilation of essays has assigned Beowulf a date c.680-750, most probably in Mercia.[53]

The part of the poem we are interested in comes as Beowulf is answering Unferth, who has just told an unflattering tale of how Beowulf once lost a swimming contest against his friend Brecan. Beowulf's answer is very much in the style of a grand boast, about how he only lost the contest because he was attacked by whale-like sea monsters, and how he killed several of them after they dragged him underwater. The text provides some context for Beowulf's later demonstrated superhuman abilities to fight underwater. The boast can be found in the Appendices. The lines purport to be Beowulf's exact words being preserved for us, about his encounter with nine whales. Readers may have believed that whales could be fought, or they may have taken these words as simply a boast from a character in the heroic age a long time ago. In this case, the text's genre does not require a naturalistic depiction.

For a medieval animal specialist, perhaps the most interesting thing demonstrated by this text is the considerable linguistic flexibility of Old English whale nomenclature. Beowulf calls the sea creatures that he fought by three different names in this text. They are *hronfixas* (whale-fishes) *merefixa* (sea-fishes) and *niceras* (evil sea-monsters).

For all this flexibility though, the animals in the text are never called *hwæl(as)*, which is the Old English ancestor of the word 'whale'. This is interesting, as this word has always been the most commonly used name for the whale and is used in the 'Voyage of Ohthere' so was clearly an appropriate word in some circumstances. The

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[53] Neidorf, L. (ed. 2014) *The Dating of Beowulf: A Reassessment* (D.S. Brewer, Cambridge). Most importantly see: Fulk, R. (2014) 'Beowulf and Language History', pp.19-37 in this volume.

fact it was not used in this text may have some bearing on the theory that *hwæl* and *hran* have completely different meanings. These animals are small in comparison to previous descriptions we have seen of the *hwælas*. They hunt in packs, drag their prey to the bottom of the sea and are small enough to be confronted with a sword. The suffix *-fiscas* added to *hron* (variant of *hran*) may suggest that the author was describing a creature on the small end of the spectrum of animals that *hran* can describe. Since these animals are not monstrous, or fought off by prayers like the whales of 'Vita Sancti Columbae', Szabo has taken them to be naturalistic depictions.[54] This opinion underestimates the differences in style between epic sagas like 'Beowulf' and hagiographies like 'Vita Sancti Columbae'. Today we might imagine these creatures like sharks in Hollywood movies. Technically, several large sharks can be found in the marine ecosystems of northern Europe (e.g. *Prionace glauca; Lamna nasus;* as well as the 'killer whale' *Orcinus orca*) but the idea of sharks commonly attacking humans is a cultural myth: there have been only 49 shark attacks in Europe since 1847 (2 in the United Kingdom), and no reported deaths in Europe since 1974.[55] Although the animals are not openly diabolical or magical, this does not make them naturalistic.

Parallel evidence for this notable use of the term *hran* is provided by at least one other text from the Old English period. This is a gloss in the ninth-century Latin MS. Palatine 68. The language of the gloss is Northumbrian Old English, but the most recent version of the gloss is written in an Irish hand and Irish glosses are also present,

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[54] Szabo (2008) *Monstrous Fishes and the Mead Dark Sea*, p.55.

[55] Florida Museum of Natural History (2014) '1847-2013 Map of Europe's Confirmed Unprovoked Shark Attacks (N=49)' *International Shark Attack File*, University of Florida (address: http://www.flmnh.ufl.edu/fish/sharks/statistics/gattack/MapEurope.htm, accessed: 16/3/16).

suggesting that the extant manuscript version is an Irish copy of an older Northumbrian text.[56] The gloss can be found in the Appendices.

The text comes in two parts. The first part, up to *ut* (as) is in Latin whilst the second part is in Old English and seems to be giving a popular phrase to illustrate the truth of the general statement in Latin before it. If the second part of the gloss is a popular English phrase and not a translation from a piece of lost Latin it seems to suggest at least that the *hron* was supposed by the author to be smaller than the *hwæl* and thus adds legitimacy to the idea in 'Beowulf' that the animals there might not be full-sized *hwælas*. I will discuss this idea in more detail in the conclusion.

Finally, it is important to point out that, just like in 'Physiologus', the whales described in Beowulf possess some degree of agency. Although they do not possess the cunning stratagems of the 'Physiologus' whale, the description of the animals waiting for a meal on the sea-bed accords them agency to at least some degree. This view is contrary to the more sympathetic view of the <u>Franks Casket</u> but also to the objective exploitative view taken towards whales in the later period, as we shall see.

The First Whale Hunters

There is actually one piece of evidence that suggests sporadic whaling may have been occurring early on in Britain's history. Bede's 'Ecclesiastical History of the English People', which can be dated to 731 A.D. [57] attests that whales were sometimes taken

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[56] Stokes, W. (1892) 'The Glosses in Palatine 68', pp.232-236, in: *Zeitschrift für vergleichende Sprachforschung,* vol. 31.

[57] Colgrave, R., McClure, J. & Collins, R. (ed. 1969) *The Ecclesiastical History of the English People* (Oxford University Press), p.xvii.

along with fish and dolphins (an extract can be found in the Appendices). Bede's account makes it very clear that whales are hunted. They are not just present like salmon and eels and potentially the shellfish, they are actually *capiuntur* (captured) like seals and dolphins. Unfortunately the text is too short to give us any indication of how common or regional whaling was, or the different methods used.

Further evidence comes from an element of this text which separates it from other references to whale hunting. The term 'nec non et', which Colgrave translates as 'even', has connotations of surprise.[58] It is a phrase used to introduce the final and most exciting item on a list. This suggests that whale catching might be something exciting which is not taken for granted, unlike catching fish, seals and dolphins. Most likely this sense of surprise stems from the contradictory notion that whales are at the same time an exploitable asset but are also, as we have explored, monstrous beasts.[59]

But this sense of wonder when considering whaling is not present in the later, more naturalistic texts. The 'Voyage of Ohthere' is an Old English prose text from the late ninth century. It was inserted into the Old English translation of Orosius's 'Historiarum Adversum Paganos Libri Septem', and it is written as the account of a journey undertaken by Ohthere, who is also the narrator. Ohthere explains how he travelled around the northern peninsula of Scandinavia by ship, and describes what he saw on his voyage.[60] This narrative is usually taken to be an accurate account of a real voyage by scholars. This has had some important implications.

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[58] The Lewis & Short *Latin Dictionary* calls it a term of emphatic affirmation.
[59] See: Szabo (2005) 'Bad to the bone'.
[60] Bately, J, 'Ohthere and Wulfstan in the Old English Orosius', pp.18-39, in: Bately, J. and Englert, A. (2007) *Ohthere's Voyages* (Viking Ship Museum, Roskilde), p.26.

Although the text is in Old English, there may have been a degree of mutual-intelligibility between Old English and the Old Norse that Ohthere would have spoken as his native language. For this reason, language has been one of the most important considerations of the text. Additionally, 'Ohthere' is one of a pair of texts interpolated into the 'Historiae', and differences in language choice between 'The Voyage of Ohthere' and 'The Voyage of Wulfstan' (the other interpolation) have been understood as reflecting each speaker's language and idiolect.[61] In particular, 'false friends', words which have similar forms but different meanings in Old English and Norse languages have been the source of frustration for translators of the text. For example, it is uncertain whether Ohthere was referring to mountains (the meaning of the word in Old English) or moors (the meaning in Ohthere's Old Norse) when he used the word *mons*.[62]

Likewise, scholars have also commented on the exactness of Ohthere's account. The narrative flow jumps from point to point, as if the speaker is giving detailed answers to a set of questions posed by a textually invisible interviewer.[63] On this internal evidence the text is usually read as a scribe's notes from an interview with Ohthere, a real visitor to Aelfred's court from Norway in the ninth century.[64] Whilst this unsceptical reading of the text lacks external evidence, there is at least no evidence that we should not take 'Ohthere' at face value; the text's language and

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[61] Bately, J. (1980) *The Old English Orosius* (Early English Text Society, London), p.xxii.

[62] Bately, J. & Englert, A. (2007) *Ohthere's Voyages* (Viking Ship Museum, Roskilde), pp.36-7.

[63] Englert, A. (2007) 'Ohthere's voyages seen from a nautical angle', pp. 117-129, in: Bately, J. and Englert, A. eds. *Ohthere's Voyages* (Viking Ship Museum, Roskilde), pp.117-8.

[64] Bately (1980) *The Old English Orosius*, p.lxxxviii.

manuscript tradition do support a ninth century date.[65] An extensive extract from the text can be found in the Appendices.

For our purposes the most interesting aspects of the 'Voyage of Ohthere' are the various mentions of *hwaelas* in the text. The word *hwæl* occurs twice by itself, once in a compound *hwælhuntan* (whale-hunters), once in *horshwælum*, (walrus) and *hwæles hyde* (whale's hide) is mentioned three times. Further, *hwales bane* (walrus ivory) is mentioned twice in that form, and once as *teð* (teeth). And yet a modern English audience may be forgiven for failing to note the whales in the text. The difference in perspective occurs because in the Old English of 'Ohthere' the Atlantic walrus (*Odobenus rosmarus rosmarus*) is very clearly perceived as a type of whale. It is called the *horshwælum* (horse-whale), which is presumably a borrowing on the Old Norse *rosmhvalr*. The scribe first hearing the Norse word *rosmhvalr* may well have interpreted its constituent elements to be *ros-hval(r)* and invented an Old English parallel form in *hors-hwæl.*

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[65] Bately (2007) '*Ohthere and Wulfstan*', pp.18-21.

It certainly makes some sense for the walrus to be interpreted as a type of whale.

Walruses can grow to over three metres long, and therefore dwarf most humans. The

picture above shows the 130 year old Horniman Museum walrus which is famously

overstuffed and larger than most living specimens, but the similarity to a whale is

obvious from length and flippers alone. Walruses, just like whales, were exploited for

their blubber (*oyl*) throughout the medieval period.[66] The generic *hwæles hyd*

mentioned twice late in the text is probably also the hide of the walrus, which is

especially praised in the text as being good for making ship-ropes.[67] Likewise the

hwales bane and *teð* should probably also be translated as walrus ivory (morse) rather

than anything else. Although Bately suggests this could refer to either baleen (often

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[66] Storli, I. (2007) 'Ohthere and his world – a contemporary perspective', pp.76-100. in: Bately, J. and Englert, A. eds. *Ohthere's Voyages* (Viking Ship Museum, Roskilde), p.91; Jenkins (1921) *A History of the Whale Fisheries*, p.266.

[67] In 'The Description of Pembrokeshire' (1603 A.D.), seal hide is praised as being especially good for the canvass of tents as it is immune to lightning, which might perhaps help explain the special significance of walrus hide six centuries earlier. See: Miles, D. (ed. 1994) *The Description of Pembrokeshire* (Gomer Press, Llandysul), pp.128-9.

called whalebone) or the actual bones of a cetacean,[68] the latter is unlikely. A cautionary tale against taking medieval descriptions of materials too literally can be taken from the descriptions of carved narwhal horns as unicorn horns.[69] To some extent medieval artists used whatever materials they had to hand, but rarer materials must have created higher status and more expensive artwork. Cetacean bones are less likely to have had a high status because the actual bones of a cetacean are only as useful and frequently used as any other animal's bones, whilst ivory was an exotic and expensive import.[70] Our understanding of the walrus as a type of whale and the conception of ivory as 'whale bone' will be found repeatedly elsewhere as we look through other texts, even in the Middle Welsh tradition in texts like 'Breuddwyd Rhonabwy'.

The Ivory Trade

Before we can fully understand the significance of Ohthere's depiction of whale and walrus hunters we need to understand the history of the ivory trade in Britain. John Beckwith's study *Ivory Carvings in Early Medieval England* exhaustively catalogued all the ivory from early medieval England.[71] I am not aware of any comparable source for Wales or Scotland.[72] By examining this collection it is possible to get an idea of the

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[68] Bately (1980) *The Old English Orosius*, p.191.

[69] Williamson, P. (2010) *Medieval Ivory Carvings: Early Christian to Romanesque* (V&A Publishing, London), pp.383-4.

[70] See the 'Cetacean bone' index entry in: MacGregor, A. (1985) *Bone, Antler, Ivory and Horn* (Bookchase, Reading), pp.239.

[71] Beckwith (1972).

[72] Paul Williamson in his *Medieval Ivory Carvings* (2010, V&A Publishing), catalogues the South Kensington Victoria and Albert Museum ivories. He provides radiocarbon dates, and exact identifications of material used (antler, morse, cetacean's bone) but this collection misses some of the most important British ivories and may not be representative of the period.

relative proportion of walrus and non-walrus ivory in use during different centuries within the early medieval period. The Victoria and Albert Museum held an exhibition of most of these carvings in 1974[73] and as well as Beckwith's book on ivory carvings I have used the catalogue of this exhibition to complete the table below, since the catalogue lists a few pieces of carved ivory discovered too late to be included in Beckwith's research (e.g. the Larling Plaque and the twelfth century bobbin).

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[73] Arts Council of Great Britain (1974) *Ivory Carvings in Early Medieval England*, 700-1200 (Arts Council of Great Britain, London).

Ivory Carvings by date and material		
Century	**Artefacts included (titles from Beckwith)**	**Material used**
8th	(10 items) Franks Casket, Gandersheim Casket, Larling Plaque, Genoels-Elderen Diptych, The Last Judgement, The Baptism and the Ascension, Diptych, Christ in Majesty, Decorative Panel, The Ascension,	Whale's Bone (1 - 10%), Other Bone (2 – 20%), 'Ivory' (7 – 70%)
10th	(17 items) Fragment of a spoon, Circular Disk, Writing Tablet, Bone Pin, The Baptism of Christ, Virgin and Child enthroned, Two Angels, The Crucifixion, The Last Judgement, A Crucifix Reliquary, the Transfiguration, The Ascension, Traditio Legis, The Virgin and Child enthroned, The Virgin and St John the Evangelist, The Nativity, Godwine's seal	'Ivory' (5 - 29%), Walrus ivory (9 - 53%), Whale's Bone (2 - 12%), Other Bone (1 - 6%)
11th	(35 items) A Miracle of St Lawrence, Christ in Majesty with Agnus Dei with Evangelist Symbols of John and Luke, Four Symbols of the Evangelists, Alcester Tau-Cross, Cross of St Heribert, Christ in Majesty (3), Crucifixion (6), Christ on the Cross, The Virgin and Child, The Virgin and Child Enthroned, Lady Gunhild's Cross, St John of Beverley Crozier, Pen-case, Liturgical comb, Pierced panel from a casket, A Complex of Beasts (2), Handle, Dragon's Head, Lions, Two Griffons Confronted, Head of a Tau-Cross (2), Part of a Pierced Panel, Fragment of a Tau-Cross, A Sainted Bishop, Adoration of the Magi, Draughtsman	Walrus ivory (27 - 77%), Bone (6 - 17%), 'Ivory' (1 - 3%), Whale's bone (1 - 3%),
12th	(105 items) Pectoral Cross, Liturgical Cross, Flabellum Handle, Adoration of the Magi, Oval Box, Liturgical Comb (2), Daniel in the Lions Den, A King or Prophet (2), A Knight, Two Magi, Christ in Majesty between two Royal Martyrs, A Martyr, The Last Supper, The Washing of the Feet, Scenes from the life of Christ, Seal, Deposition, Cross Base, Seal of St Albans, Bobbin, Portable Alter, Ceremonial Staff, The Virgin and Child, A Magus, Christ treading the beasts, St Michael trampling Satan, Crucifix of Sibylla, Two Pierced Reliefs, Casket, Head of a Tau-Cross (3), An Arm from a Stool, Head of a Crozier (2), Part of a Flabellum Handle, St Nicholas Crozier, The Ascension, The Rest on the Flight into Egypt, Naked men and Salamanders, Scenes of Biblical Sacrifice and Offering, Fragment of a Crucifix (2), A Cross,	Walrus Ivory (84 - 80%), Ivory (14 - 13%), Whale's bone (2 - 2%), Narwhal horn (1 - 1%), Bone (4 – 4%) *or without playing pieces: 57%, 29%, 4%, 2%, 8%*

	Aaron's Rod, The Stoning of Stephen, Reliquary Cross, Draughtsman[74] (52!), Chessman (3), Lewis Chessmen
Summary 8th-12th	167 items total, ten from 8th century, none from 9th, seventeen from 10th, 35 from the 11th and 105 items from the 12th Whale's bone (6 - 4%), Narwhal horn (1 - 1%), Bone (13 - 8%), 'Ivory' (27 - 16%), Walrus Ivory (120 – 72%) *Or, without playing pieces – 5%, 1%, 12%, 24%, 38%*

Since the influx of (only walrus) ivory playing pieces in the twelfth century makes up 33% of our assemblage it biases our understanding of the relative usage of the various materials. In the analysis to follow therefore, the figures given do not take into account any of the twelfth-century playing pieces.

First of all, considering the baseline average percentage of ivory (mostly elephant 24%) and walrus ivory (38%) throughout the period, it is easy to see a rising trend in the use of walrus ivory compared to any other type from the eighth to the eleventh century. In the eighth century, although the extant material is obviously limited, we find no walrus ivory whilst normal ivory makes up 70% of the assemblage. One possible way of explaining this would be that no walrus ivory was available at this early a period. Neither of my sources could securely date any British carved ivory artefacts to the ninth century, but in the tenth century a large amount of walrus ivory was clearly available for use and the relative percentages of the total assemblage have changed to 29% ivory - 53% walrus ivory. This suggests a rapid changeover. In the eleventh century the percentages are 3% - 77%, suggesting that by this point walrus ivory has almost entirely replaced all other types. However, in the twelfth century there seems to be a reversal in the popularity of walrus ivory, which coincides with an

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[74] As Williamson (2010) has indicated, these pieces were probably used to play tables (a medieval variant of backgammon) rather than draughts.

increase in either popularity or survival of non-walrus ivory. In this final century the

relative proportions are 29%-57%, a figure very close to that of the tenth century when

ivory was first becoming popular. At this point, although walrus ivory was still the main

type of ivory used, other varieties of ivory were becoming either more popular or more

available than previously.
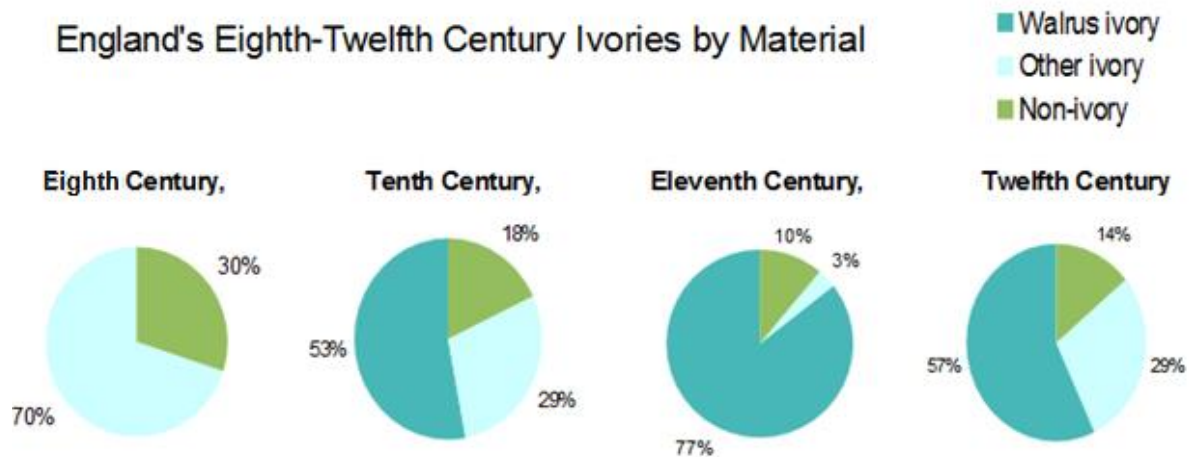
Looking at this assemblage in graphical form, there are three main discrepancies which

need to be explained. (i) Why did walrus ivory replace non-walrus ivory in the tenth

and eleventh centuries? (ii) Why did non-walrus ivory gain in importance in the twelfth

century? And, finally, (iii) why was there no walrus ivory until the tenth century? John

Beckwith has interpreted the figures in the following way. He suggests that with the

collapse of the Roman Empire, trade routes became closed and sources of elephant

ivory became harder to come by.[75] Presumably Beckwith was referring to the

withdrawal from Britain and 'fall' of the Western Roman Empire in the fifth century.

Clearly though, it is ridiculous to suggest that Britain had enough ivory stockpiled up in

the fifth century to last through to the eighth. To make sense of the data we are

therefore obliged to accept the so-called Pirenne hypothesis of trade after the Roman

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[75] Beckwith, J. (1972) *Ivory Carvings in Early Medieval England*, p.116.

Empire. Henri Pirenne believed that the loss of the bureaucracy and regnal authority of the emperors of Rome did not have a catastrophic effect on the established 'Roman empire'. The loss of these things did not precede a descent into barbarism and anarchy but rather simply a continuation of 'Roman' culture for centuries afterwards. Pirenne produced a large amount of archaeological evidence, especially from Merovingian Gaul and Lombard Italy. Although ivory is not well represented in his evidence he does point out the continued importation of carved ivories from Alexandria (Egypt) which inspired western copies in the centuries after the 'collapse' of Rome.[76] In fact, Europe's international trade ties with Asia and Africa were not severed until the Muslim conquest of Egypt and Syria, and the increased hostility between Christian west Europe and Muslim north Africa and west Asia in the seventh century.[77] But whilst the Pirenne hypothesis does explain why there was no problem sourcing ivory up until the seventh century, it does not explain why even in the eighth century a fair amount of elephant ivory made its way to Britain. To explain this we have to embrace a modified form of the clear-cut Pirenne hypothesis. According to Abulafia, 'Trade between the edge of the Latin world and the edges of the Islamic world did not cease, but most commercial centres experienced serious decline by the ninth century'. Trans-continental trade was continued, most notably by the Radhanite Jews, but it remained rare until after the tenth century.[78] A 'serious decline' is exactly what our ivory data suggests, and this theory explains why the eighth century has both far less carved-ivory artefacts than

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[76] Pirenne, H. (1939) *Mohammed and Charlemagne* (2001 ed. Dover, London), pp.87-9; 131-2.

[77] Ibid. pp.164-8, p.250.

[78] Abulafia, D. (2008) 'Asia, Africa and the Trade of Medieval Europe', pp.402-72, in: Miller, E. ed. *The Cambridge Economic History of Europe from the Decline of the Roman Empire* (Cambridge University Press), pp.415-6; pp.420-1.

any other period with data and also why a greater proportion of its 'ivories' are carved on bone or whale bone rather than ivory (shown in green on the pie charts).

Roesdahl has also commented on this early shortage, and agrees that although elephant ivory was very hard to come by, there were few alternatives since until the exploitation and settlement of Greenland c.985 when walrus ivory would have become widely available.[79] Roesdahl's theory thus explains both why there is less non-walrus ivory in the tenth century than in the eighth, and more importantly why carved walrus ivory is first seen in English assemblages in the tenth century. Further, in the eleventh century, which is the point at which the walrus ivory trade from Greenland must have been at its zenith, walrus ivory has almost entirely supplanted any other variety of ivory. This does not necessarily mean that it was considered superior, but it must have been much easier to acquire.

Finally, in the twelfth century there is a sudden influx of non-walrus ivory. Beckwith's explanation is that elephant ivory was again available via the new kingdom of Sicily, from which point forwards almost none of the ivory made in Britain is made of walrus tusk. Other possible explanatory trade links include the increased trans-continental spice, drug and dye trade, or the increased sub-Saharan slave and gold trade, both of which were via Egypt.[80] Any or all of these explanations seem plausible. I have not presented data from beyond the twelfth century above but after this elephant ivory is used almost exclusively. There is a lull in production at the start of the thirteenth century and the 'Gothic period' proper begins around 1260. Williamson has

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[79] Roesdahl, E. (2007) 'Walrus Ivory', pp.92-3 in: Bately, J. and Englert, A. (2007) *Ohthere's Voyages* (Viking Ship Museum, Roskilde), p.92.

[80] Abulafia (2008) '*Asia, Africa and Trade...*', pp.415-6; 421; 465-6.

suggested that the lull and shift in medium may be linked. It is probable that walrus

stocks were becoming depleted, but there is also a conscious shift in fashion: in the

thirteenth century objects were no longer commissioned by large monasteries but

instead by wealthy individuals for solitary devotion.[81] It is important to emphasise that

this is a late thirteenth-century trend rather than a twelfth-century one, however. In

the twelfth century walrus ivory is still the most common type, despite the relative

growth in the use of elephant ivory. Further, since *all* of the ivory playing pieces

attested in the twelfth century (not included in our figures here) were made of walrus

ivory, the walrus ivory industry must have been still very important at the time. Our

data from the end of the period demonstrates that the walrus-ivory industry did not

simply cease the moment that the elephant-product trade route re-opened; the

change was more gradual. Unfortunately I have not been able to find a source which

offers a comprehensive list of Gothic (thirteenth–fifteenth century) ivories and their

material but the period is characterised by the use of elephant ivory alone, so the

reader should imagine walrus ivory slumping and elephant ivory rising in use once

again around this time.

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[81] Williamson (1982) *Medieval Ivory Carvings*, pp.17-18.
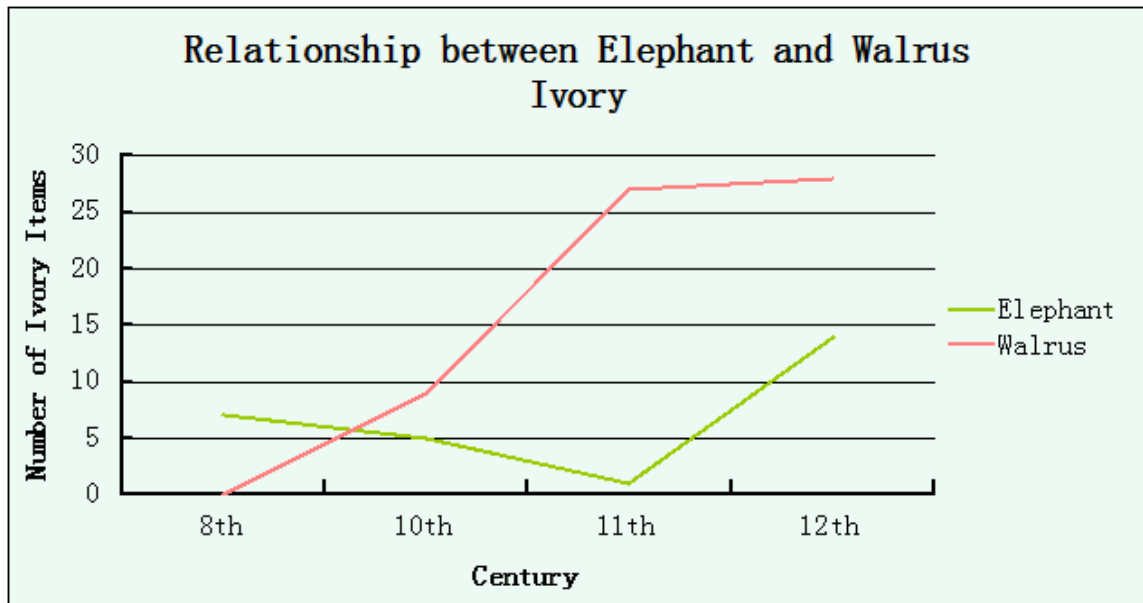
From the above chart it should be clear that although elephant ivory was becoming more important in the twelfth century, it had still not overtaken the walrus ivory industry, nor had the walrus ivory industry completely ceased. By the fifteenth century the Gothic period was nearly at its end and the entire industry slumped, this time not to rise again until the end of the seventeenth century.[82]

Ohthere and Ivory

The history of the walrus ivory trade in Britain is important because it correlates so well with our text, and informs discussions about when other 'whales' were first exploited from the island. The 'Voyage of Ohthere' is set at the very end of the ninth century, just before the earliest attested use of walrus ivory in medieval Britain. Since it is explicitly stated that Ohthere brought walrus ivory as a gift for King Alfred, the importance of Ohthere's ivory may have lent his story additional significance, as

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[82] Ibid. pp.17-19.

Roesdahl has suggested.[83] In fact, the meeting may even represent a historic moment

in Britain's history, ushering in a new medium ('whale bone') which dominated the

ivory industry for three hundred years.

Because 'Ohthere' is so dominated by walruses, by today's definition we are left

with only a small amount of information about cetaceans in the text. Szabo has

suggested that this evidence is sufficient to argue that whaling had begun in Britain,

but this is not the case, and most of the evidence is mainly relevant to Scandinavia.[84]

However, this evidence is still very interesting. For example, the early reference in the

text to a point 'swa feor norþ swa þa hwælhuntan firrest faraþ' (as far north as the

whale-hunters fare [at] farthest) vindicates our starting assumption that bowhead

whales would not be the frequent targets of attack from medieval hunters, since they

are confined in range to the ice-fields further north than the Scandinavian peninsula.

The remainder of information is all contained in the single paragraph

comparing whales to walruses. The measurements in ells in particular have caused

much consternation amongst translators of this text—the walrus is said to be not more

than seven ells long with the largest whales 50 ells in length. The trouble is that there

are several different accepted lengths of ell. The Old English and Norse ells were

different, and even in the same country, the measure of the ell seems to have been

different at different times. But even using the most generous length of an ell fails to

make a whale large enough to be described as *betsta* (best) and *mæstan* (biggest).

Different scholars have addressed the difficulty in different ways. Bately has

suggested that the measurements given are for the biggest whales Ohthere himself

[83] Ibid. p.93.

[84] Szabo (1997) 'The Use of Whales in Early Medieval Britain', p.138.

has ever hunted, and should be considered entirely separately from the *besta* whales which Othere only mentioned in passing. He suggests the whales Ohthere may have hunted could be pilot whales (*Globicephala melas, Globicephala macrorhynchus*).[85] These are species approximately the same size as the walrus, and still hunted by Norwegians today. An alternative explanation comes from Lindquist, who suggests that when using ells to measure whales, the usual practice was to only measure from eye to trunk, or other body parts, and that some measurements were in 'whale ells' where each ell is five times as long.[86]

As I have hinted, the reliability of Lindquist and Bately's interpretations can be tested using internal evidence, if we accept the ell as an arbitrary unit of measurement and ignore other historically attested lengths, we can simply compare the various measurements used within the text. If the internal logic of 'Ohthere' can be trusted, the 'largest' whales talked about are seven times larger than the walruses which Ohthere was hunting (48-50 ells versus 7 ells). Assuming two things: first that Ohthere is being factual rather than boasting of his hunting expertise, and second that the 3.6m usual maximum male length of the modern Atlantic walrus held true in Ohthere's own day,[87] the whales he was talking about would have been 24.7-25.7 metres (81-84.3 feet) long. This argues against Bately's theory that the measurement should be understood as a whale which Ohthere often hunted.[88] It is the exact size of the average North Atlantic subspecies of the blue whale (*Balaenoptera musculus musculus*,

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[85] Bately, J. (2007) 'Translation Notes', pp.51-59, in: Bately, J. and Englert, A. eds. *Ohthere's Voyages* (Viking Ship Museum, Roskilde), p.57.

[86] Lindquist, O. (2000) *The North Atlantic Gray Whale* (Universities of St Andrews and Stirling, Scotland), pp.38-9

[87] Hall, A. (2008) 'Walrus' in: Harris, S. and Yalden, D. (ed. 2008), *Handbook of British Mammals* (The Mammal Society, Southampton), p.550.

[88] Bately (2007) 'Translation Notes', p.57.

male 24m, female 26m), although in the Southern Hemisphere blue whales grow to much larger sizes.[89] It is also considerably larger than the 18m long right whale, the most common object of hunting in the medieval period.

Could this figure of around 25m be accurate? It is based mainly on internal textual evidence, and the comparative figures given for the sizes of the walrus and the biggest whales. It corroborates Ohthere's story that this size exactly fits with the very largest whales seen in the North Atlantic today. However, it seems highly unlikely that Ohthere could have pursued blue whales. These animals were generally not hunted before the invention of steam and the exploding harpoon at the end of the nineteenth century, since they can swim very fast, stick to open waters and are so large and powerful that they can easily destroy whaling boats.[90] They could conceivably have been killed only rarely and at great risk, but it seems unlikely that there would be many opportunities to do so. It is also dependant on Ohthere's account being realistic. This is hard to believe considering his boast that he once killed 60 whales with six men. It is probably safest to follow Lindquist in distinguishing the largest whales Ohthere knew from the whales he hunted.

This detail that he could kill 60 whales with six men in one trip gives us a clue as to the whales he actually hunted. It would have been possible to meet this quota when right whales were more common if his men ran into one or more large whale 'surface-action-groups' (usually 'SAG' – a mating ritual which have been observed to contain

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[89] Evans, P. (2008) 'Blue Whale', in: Harris, S. and Yalden, D.W. (ed. 2008), *Handbook of British Mammals* (The Mammal Society, Southampton), p.676.

[90] Jenkins (1921) *A History of the Whale Fisheries*, pp.263-5.

upwards of 20 whales[91]), or if calves were targeted to induce the older whales to stay and protect their offspring. However, in the light of early historic records of whaling which suggest only 7-8 large whales per season the figure seems highly suspicious.[92]

Alternatively, that the Faroe islanders in the medieval period certainly practised the 'grind' drive, trapping whole pods of small whales in bays and inlets where they could be slaughtered at will.[93] Ohthere could easily have met his quota like this. Killing sixty of these smaller whales in two days would not be difficult. This explanation does not perfectly fit the linguistic evidence, which seems to explicitly be talking about *þara* big whales rather than anything smaller when it discusses his hunting. It also does not fit with the evidence from other texts (e.g. Aelfric's 'Colloquy') that dolphins were seen as fish, and were not large enough to be considered whales.

From this point of view, there are two more cynical interpretations. Perhaps the text is better interpreted in light of the Beowulf extract where our main character boasts that he himself once killed nine great sea-monsters and has never heard of a greater deed. Finally, if we accept the 'Voyage of Ohthere' as an initially oral, but recorded account, it is possible Ohthere's words were not accurately recorded by the scribe.

Apart from the whale hunting, the main character's connection with the Finnas is also interesting because it parallels what we have seen in 'Beowulf'. This country is probably the land of the Finns (i.e. northern Norway = Lapland) rather than Finland in general, and it is a place which seems to be associated with the wildest species of

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[91] Hamilton, P. (2011) 'Who They Are: Getting to know the Right whale' (Talk as part of New England Aquarium Lecture Series).

[92] Aguilar (1986) '*A review of Old Basque whaling*', pp.197-8.

[93] Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, pp.100-1.

animals and whales in general. In modern Europe, whales are still thought of as northern creatures, partly due to the success of the Spitzbergen fishery. Norway is one of the only whaling countries which did not sign the moratorium against the industry in 1982, and other Scandinavian countries like the Faroe Isles and Iceland are also among the few that still take whales today. This is in part because the North Atlantic and Arctic provide some of the best cetacean habitat in the world, but there may also have been some cultural association between 'the north' and abundant wildlife which we also see exemplified in some of the texts about beavers we will read later.

The first evidence that Ohthere's whale-hunting occupation was being undertaken in Britain comes from the 'Colloquy on the Occupations'. This was originally a Latin text written by Abbot Aelfric (later Aelfric of Eynsham) around 1000 A.D. to help his students learn Latin.[94] A colloquy consists of a list of questions and answers to be memorised and recited by a teacher and student, with the aim of improving vocabulary, grammar and pronunciation. Aelfric had already written a grammar and vocabulary list (which matches closely with the 'Colloquy') suggesting that this teaching resource was planned to be part of the set. Shortly after it was written it was also glossed into Old English to help students understand it.[95] Early on in the text the teacher questions a fisher who usually fishes in rivers about why he does not go to fish in the sea. (The text is included in the appendices).

Because the text is bilingual, not only can we use the text as first-hand evidence about how whaling was viewed around the term of the eleventh century but we can also assess the whaling terminology used in the text and be fairly sure of the exact

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[94] Alexander, M. (2002) *A History of Old English Literature* (Broadview Press, Ontario), pp.237-45.
[95] Garmonsway, G. (1939) *Aelfric's Colloquy* (Methuen's Old English Library, London), pp.1-5.

meaning of words which might otherwise be ambiguous because of semantic shift. For example, the term *cetus* in post-medieval scholarly Latin referred to a very large aquatic animal which was distinguished from a *balena* because the latter had 'baleen'. At a different point the word also gave us modern English 'cetacean' (any dolphin, whale or porpoise). So what exactly was the word's range of meanings c.1000 A.D.? The use of the specific English gloss *hwælas* suggests that, when the gloss was written, the Latin term could not be used to describe dolphins or porpoises, and although the English term might also indicate walruses, the Latin term does not, so this range of meanings is unlikely to be the one intended by the text. The suggestion that the term has a range of meanings here very similar to the non-scientific modern English term 'whale' is confirmed when we see dolphins listed separately as something which the fisher is prepared to hunt.

It has been suggested that the fisher's fear in this text of hunting whales reflects some general English fear of ever going whaling, but this is unconvincing.[96] The final words of our extract suggest that it is either cowardly or ignorant for a fisher to not hunt whales. It may have been too risky a proposition for many fishers to hunt whales, but similar risks are described in the 'Colloquy' for merchants freighting goods around the globe, and even for shepherds guarding their flocks against wolves. As Szabo has argued, this text strongly suggests that some Britons did go whaling.[97] At its core, Aelfric's 'Colloquy' suggests that whaling existed as an industry but not a profession in Britain around 1000 A.D. Previous authors have avoided this

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[96] Garmonsway (1991) *Ælfric's Colloquy*, p.30; Riddler (1998) 'Worked Whale Vertebrae', pp.209; Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, p.58.
[97] Ibid.

interpretation citing the poor evidence for whaling in the Saxon period,[98] but taken together with texts like 'Ohthere' it may reflect a late development.

The 'Colloquy' also provides information about the how whales were exploited off Britain around the turn of the eleventh century, as has previously been pointed out.[99] The text testifies that whales are caught often by fishers (rather than specialised whalers) in 'many ships' ('multis nauibus'; 'manegum scypum') at sea off the English coasts. Hunting whales like this is dangerous because whales can sink ships and kill men, but it also brings great rewards to those who escape the danger. This text clearly demonstrates that the British whaling 'industry' (although not the profession) had started by 1000 A.D. If the circumstantial negative evidence in 'Vita Sancti Columbae' and the Franks Casket can be accepted perhaps this suggests that a British whaling industry intensified at some point in the ninth and tenth century. The attitude of the texts towards whales from this period does seem to be more commercially-minded.

The exact terminology used can give us even more information. Whales are described as being caught with the same verb as the one used for catching fishes (*capio; gefon*). However, in addition to being 'caught', whales can also be 'hunted' (*uenatio; huntung*). This distinguishes them from normal fishes. Interestingly, whilst whales are considered to be a type of fish in the Old English, this is not so clear in the Latin narrative. The distinction is demonstrated especially in the third paragraph from the end where the text discusses the difference between hunting fish in rivers and whales in the sea. The Latin text compares a normal *piscis* with *ille* (a fish with this [whale]) whilst the Old English text is quite happy to give *fisc* and *fisc* (a fish and a fish

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[98] Riddler (1998) 'Worked Whale Vertebrae', pp.209-211.

[99] Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, pp.56-9.

[whale]). It is unclear how significant this contrast is for British Latin, especially since in other places we do find Latin *piscis* used for a whale, as we shall see in our extract from Albertus Magnus.

The relationship between the words *cetus* and *balena* and *hwæl* and *hron* in this text is very interesting. The Old English translator always glosses *cetus* as *hwæl*, but *hran* is given as a translation instead for the only example of *balena*. This has led Lindquist to argue that there was a distinction between these two pairs of words.[100] However, whilst the use of *hran* to gloss *balena* probably was an intentional choice by the translator, this does not necessitate any difference in meaning between the words. The new English word could have been introduced just to mirror the new Latin word being used, and this possibility is corroborated by the fact that the use of the word *ballenae/hranes* in context refers back to the dangers of hunting a single *cetum/hwæl*. The two pairs of words are being used to describe the same animal so cannot indicate different species.

Later evidence relates to records of strandings in medieval England. The monarch's customary privileges were enshrined in a law called 'Prerogativa Regis', enacted by Edward I or II in the fourteenth century and a single clause of this law from the period made all large, stranded and caught fish the property of the monarch, unless the monarch had granted the rights to a local landowner, or the animal was stranded on monastic land.[101] In England and Wales today, the monarch's privileges have mostly been stripped away, and this is one of the only clauses of the law which

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[100] Lindquist (2000) *North Atlantic Gray Whale*, pp.17-18.
[101] McGlynn, M. (2003) *The Royal Prerogative and the Learning of the Inns of Court* (Cambridge University Press), pp.1-2.

has not been repealed.[102] This has led to 'Prerogativa Regis' being known as the 'Royal

Fish Law', although it is only fair to add that since 1913 stranded whales have been

passed to the Natural History Museum.[103]

The protection or granting of the right to take stranded whales was recorded in

several documents, fourteenth-patent rolls[104] and 'quo warranto' proceedings,[105] and

an undated section of legal queries in the *Black Book of the Admiralty*.[106] That the

ownership of 'large fish' was a customary privilege of the king before being enshrined

in law is shown by Henry III's rulings on the subject.[107] Other references to stranded

animals abound. Gurney points to the 200 pieces of whale bought for a Palm Sunday

feast for the Countess of Leicester and 'King of the Romans' in 1265 and also to the

Lent provisions of Henry III in 1246.[108] Whale and porpoise meat would have been

valuable for Lent because although eating meat was banned, eating fish was still

permitted. To this we may add the references from thirteenth-century hundred rolls:

not including the dolphins and porpoises mentions, there are records of seven *balenas*,

five from Lincolnshire (Fleet, Spalding, Sutton), one from Colchester and one from

Bristol.[109] It is not clear whether this bias represents the places whales are most likely

to strand or just the places most likely to report stranded whales.

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[102] 16 of the 18 clauses were repealed between 1863 and 1969, according to: National Archives (2015) 'Prerogativa Regis. Of the King's Prerogative (temp. incert.) (1322)', *Legislation.gov.uk* (address: http://www.legislation.gov.uk/aep/Edw2cc1317/15/13, accessed: 16/3/16). A similar law exists in Scotland.

[103] Crown Estate Review Working Group (2006) *The Crown Estate in Scotland*. (address: http://www.orkney.gov.uk/Files/Council/Publications/2007/CERWG07MAR22.pdf, accessed: 16/3/16), pp.131-138,

[104] Isaacson, R. (1895) *Calendar of the Patent Rolls: Edward III, 1334-1338* (Her Majesty's Stationary Office, London). p.287.

[105] Record Commission (1818) *Placita de Quo Warranto, Edward I, II, & III* (Public Records Office), p.698.

[106] Twiss, T. (1871) *Black Book of the Admiralty, vol*. 1. (Longman & Co. London), p.224.

[107] Stamp, A. et al. (1931) *Close Rolls of Henry III, 1254-6* (His Majesty's Stationary Office, London), p.3; Stamp. A. et al. (1934) *Close Rolls of Henry III, 1259-61* (His Majesty's Stationary Office, London), pp.459, 461.

[108] Gurney (1921) *Early Annals of Ornithology*, p.56.

[109] Illingworth, W. (ed. 1812) *Rotulorum Hundredorum Temp. Hen. III & Edw. I.* vol. 1. (2011 ed. TannerRitchie, University of St Andrews, Ontario), pp.139a, 178b, 271b, 373b, 384a.

In the Middle-English period, perhaps because the royal prerogative was jealously guarded, the literature I have checked becomes quieter regarding the hunting of whales off the coasts of Britain. The 'Lay of Havelok the Dane' from the last quarter of the thirteenth century speaks of the titular hero catching whales along with a long list of other animals, but this is only a passing reference.[110] Various texts use the whale as a size and colour comparative but these do not really give any new or useful information either. The Late Medieval Latin and Middle Welsh language material is similarly silent. I shall consider the reason for this in the conclusion, but for now it is important to note that there is at least some evidence that there was a whaling industry in Wales, even if it was not frequently mentioned in the literature.

The following discussion of just one text, 'The Dream of Rhonabwy', in its literary and linguistic context, will illustrate the late-medieval promulgation of whale-made products and the Welsh enthusiasm for the exploitation of the creature.

'The Dream of Rhonabwy' and the Late Medieval Welsh Evidence

'The Dream of Rhonabwy' is a text we previously examined in the Lynxes chapter, as it heralds the arrival in Welsh literature of Bestiary and beast literature. It gives an account of a man (Rhonabwy) who is transported in a dream into the heroic Arthurian age of Welsh literature. He finds the place populated by knights who lament his feebleness as their successor defending Britain. Arthur himself comments: 'truanet

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[110] See 'Lay of Havelock', l.755.

gennyf vot dynyon ky vawhet a hynny yn gwarchadw yr ynys honn gwedy gwyr kystal

ac a'e gwarchetwis gynt'[111] (I'm saddened that men as pitiful as this are defending this

island after men of the quality of those who formerly defended it). At first everything

in this heroic age seems glorious to Rhonabwy, and just as the storytellers describe it,

but as the story progresses, the plot becomes one of senseless intra-faction conflict

within Arthur's court. This apparently pointless conflict is celebrated within the story

as noble, as when Idawc calls a knight who has just thoughtlessly galloped through a

ford, soaking Arthur, his council and a bishop, 'y gwas ieuanc kymhennaf a doethaf a

wneir yn y teyrnas honn'[112] (the most accomplished and wisest young lad that is

known in this kingdom). Civil war is a topos also found within more traditional

Arthurian literature. The Battle of Camlan for example, is described according to the

Geoffrey of Monmouth tradition where it brings about Arthur's death. However whilst

traditionally this material might be read as tragic and heroic, in Rhonabwy the events

as observed by the clinical, detached Rhonabwy seem at odds with the enthusiastic

commentary of Rhonabwy's guide, Idawc. Ultimately, 'Rhonabwy' is probably most

easily read as a satire or pastiche of medieval Arthurian literature.[113]

The date of this text is a very controversial topic, with a range of possible dates

from the mid-twelfth century, when the frame narrative takes place, to the late

fourteenth century when our existing manuscript version was written. Most scholars

would cautiously accept a date midway between these points.[114] Since our existing

manuscript text seems to have been copied from another source it is unlikely that the

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[111] Richards, M. (1948) *Breuddwyd Rhonabwy* (University of Wales Press, Cardiff), pp.6-7.

[112] Ibid. p.8.

[113] Lloyd-Morgan, C. (1991) 'Breuddwyd Rhonabwy and Later Arthurian Literature', pp.183-208, in: Bromwich R. Et al. *The Arthur of the Welsh* (University of Wales Press, Cardiff).

[114] Rodway (2007) 'The Where, Who, When and Why', pp.60-1.

story was composed in the late fourteenth century. Likewise since the ruler and country-setting of the story is described in the past tense ('Madoc ap Maredud a <u>oed</u> idaw Powys'), the story is unlikely to have been composed during Madog's reign (1132-1160), particularly since Powys was split after his death, although this introduction could have been added later.

From this study's point of view, the main interest in the text comes from its succession of ever more glorious knights. Six of these act as heralds in the second half of the text and are described in very great detail. A manuscript note at the end of the text suggests that these knights were described in so much detail so as to forbid exact recitation of the text without use of a book. The fourth, fifth and sixth of these knights are especially interesting as each has armour styled after or made out of rare animals. Since the description of each knight is so lengthy, full quotation of the section would not be justified, but the table below summarises the description given of each knight, with the-animal styled armour emphasised with italics:

Table: A comparison of Arthur's messengers in 'The Dream of Rhonabwy'

The fourth rider: Blathaon fab Mwrheth

A chimera, bright-red and bright-yellow, dapple horse,
Strange heavy armour
Horse caparison bright-red and bright-sendel
Gold hilted, one edged great sword with bright-green sheath from lattern of Spain
Sword belt of rough/Gaelic black cordovian leather with crosses of gilded gold
Clasp of elephant-bone [ivory; asgwrn elifant] and bright-black tongue
Golden helmet, expensive, valuable stones, and a yellow-red leopard [llewpart] with
scarlet stones in the head
Green, long, heavy spear shaft soaked in scarlet blood and raven feathers.

The fifth rider: Rwawn Pebyr fab Deorthach Wledig

A chimera, pale and bright black horse
Rider dressed in heavy, green armour
Surcoat of yellow, fortified, brocaded silk with green edges
Horse caparison bright-black and bright-yellow
Long, three-socketed sword with red leather sheath
Red buck-skin belt, golden cross pieces
Clasp of whale's bone [ivory; asgwrn morfil] with bright-black tongue
Golden helm with sapphires and yellow-red lion [llew] with flame-red tongue and
crimson-red poisonous eyes
Ash spear shaft with new bloody head and silver rivets

The sixth rider: Hyfeid Unllenn

A chimera bright-black and bright-white, black horse
Rider in speckled-yellow armour, lattern from Spain
Surcoat and caparison bright-black and white with shining purple fringes
Three socketed, gold hilted glowing sword
Yellow-gold cloth sword-belt
Clasp of bright-black whale's eyelash [baleen; amrant morfarch purdu], tongue of
yellow-gold
Yellow-lattern glowing helmet with crystals and gryphon [ederyn egrifft] with virtuous
stones
Round shafted azure-blue ash spear, new bloody head with refined silver plating[115]

In the table above I have described only the fourth, fifth and sixth knight-messengers

of 'Rhonabwy', since these knights possess the majority of the animal-themed armour.

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[115] Richards (1948) *Breuddwyd Rhonabwy*, pp.15-8.

Each knight has a different helmet. Blathaon has a helmet with a leopard on the top, Rwawn Pebyr has helmet with a lion on the top with a protruding tongue whilst Hyfeid has a yellow lattern helmet with a griffin on the top, representing the ace of this lion-themed set. Since, as I said previously, the descriptions of the knights seem to become ever-grander as the story progresses, this may suggest the relative status and perhaps comparative popularity of the three animals described here. All three of the knights also possess belt buckles made of a rare substance. Blathaon has an 'elephant bone' belt buckle, Rwawn Pebyr has a belt buckle made of 'whale's bone' and Hyfeid a buckle of 'whale's eyelash'. Clearly Hyfeid has the highest-status outfit in this respect too, and for that reason the man's nickname 'Unllenn' (one mantle) is probably an oblique joke of some kind about his attire. Perhaps given the expense of his clothing he could only afford one outfit.

Leaving aside the animals depicted on the knights' helmets, this text offers a good opportunity to examine certain Welsh terminology pertaining to the whaling industry. First Blathaon's belt buckle is described as being made of *asgwrn elifant* (elephant's bone). The term is used most commonly within Welsh literature as a metaphor to describe how white something is. Earlier on in the story of Rhonabwy it was used to describe the appearance of one of Arthur's squires 'gyn wynnet y wyneb ac ascwrn yr eliffant'[116] (his face was as white as elephant's bone), which is a common stock phrase. Of course, elephant bone is white, but since the phrase is 'as white as elephant's bone' rather than simply 'as white as bone', the term has usually been taken to refer to elephant ivory in particular rather than any other type of 'bone'.

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[116] Ibid. p.6.

'Rhonabwy' was probably composed in the thirteenth century, the century

when elephant ivory begins once more to dominate the medieval ivory market. But the

setting of the tale is the twelfth century, a time when both types of ivory would have

been in frequent use. The term must have been a more useful one in the twelfth

century than in the thirteenth, so is the term being used anachronistically? Was the

use of walrus ivory technology part of the idea people in the first half of the thirteenth

century had about their old-fashioned twelfth century great-grandparents? This is an

appealing possibility but considering that the distinction is also found in later texts up

until the eighteenth century,[117] and that walrus and elephant ivory are not always easy

to distinguish without a microscope unless in raw form,[118] the two terms are more

likely to have been synonymous in practice.

The fifth rider, Rwawn Pebr had a belt buckle made of *asgwrn* as well, this time

asgwrn morfil (whale's bone). This is unlikely to have the meaning suggested by the

modern English term 'whalebone' (i.e. baleen) because that meaning in English is not

attested until the beginning of the seventeenth century according to the *Oxford*

English Dictionary. It is more likely to refer to walrus ivory, which was still the more

popular type of ivory in twelfth century England, and probably Wales too, and roughly

half of the story's modern translators have rendered it like this.[119] However, just like

ascwrn o eliffant, the term *asgwrn morfil* must also have had a generic usage to

describe ivory in general. This is especially the case from the thirteenth century, when

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[117] *Geiriadur Prifysgol Cymru*.

[118] Edwards, H. et al. (2006) 'Identification of archaeological ivories using the FT-Raman spectroscopy', pp.64-72, in: *Analytica Chimica Acta,* vol. 559.

[119] Jones G. & Jones T. (1949) *The Mabinogion* (1974 ed. J.M. Dent &Sons, London), p.149, T. & Lloyd, J. (1929 trans), *The Mabinogion,* vol. 2 (Clarendon Press, Oxford), p.20; but not : Guest, C. (1906 trans.) *The Mabinogion* (1997 ed. Dover Thrift, London), p.102; Davies, S. (2007 trans), *The Mabinogion* (Oxford World Classics), p.223.

Beckwith attests that elephant ivory entirely replaced walrus ivory.[120] Any uses of the term *asgwrn morfil* after this point must only have been either anachronistic or generic.

Since not all translators have agreed with the translation of whale's bone as ivory,[121] it is worth discussing other uses of the phrase in context. Just like *ascwrn o eliffant*, the term *asgwrn morfil* has good currency in Welsh literature. A *taflfwrdd* set (=throwboard; a board game with twenty-five pieces) of the material is a customary gift from a king to his chief justice and household bard according to the 'Welsh Laws of Court'. That it made a customary gift at all is evidence that the material was not legendary but readily available. However, later in the laws, the possible values of a throwboard set are given.[122] A throwboard set made of *asgwrn morfil* is the most expensive type of throwboard set, valued at 60d., or the value of a full grown, bridle-tame, working horse which draws car and a harrow. Throwboard sets made of any different materials are less valuable. A throwboard set made of antler was only worth 24d., and one made of wood was only worth 4d., implying that *asgwrn morfil* is a much higher status material. It is worth pointing out that in the ivory records I examined earlier, ivory draughtsmen appear suddenly in the twelfth century, and sets of tablemen (backgammon pieces) make up considerably more than half of the ivory artefacts known in the twelfth century (they are not included in the pie charts above). However they are exclusively made of walrus ivory, and throwboard would probably

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[120] Beckwith (1972) *Ivory Carvings*, p.116.

[121] See most recently Davies (2007) *Mabinogion*, p.223.

[122] Jenkins (1986) *The Law of Hywel Dda*, pp.16; 20; 171-2; 192.

have been played with very similar boards and pieces. The laws and art history evidence seem to corroborate each other in this respect.

Moving back to 'Rhonabwy', the sixth rider examined above, Hyfeid Unllenn had a belt-buckle made of *amrant morfarch* (whale's eyelash). This is another difficult phrase, since, although no translator of 'Rhonabwy' has departed from interpreting it as a walrus or whale's eyelash, [123] it is unlikely to denote an ordinary whale's eyelash at all. *Moruarch* can be a simple word for 'whale', but in the medieval period it is also frequently attested as meaning 'leviathan'.[124] It is also a word often used to describe Jonah's voyage in the belly of the large fish of the Old Testament (as for example in the Welsh translation of the 'Ystoryeau Seint Greal').[125] In addition, normal whales do not have eyelashes. Since they are almost constantly underwater there is no reason for them to moisten their eyes, and aquatic mammals tend to be completely bald anyway. This phrase is not found elsewhere in Welsh literature.

The most likely explanation of these *amrant* (eyelashes) can be found by referring to Irish literature.[126] Fergus Kelly has pointed out that the Irish cognate term *abrae* (eyelash) normally refers in this context to baleen, and reflects the appearance of baleen which resembles the human eyelash.[127] The belief that whale's baleen was an eyelash was apparently widespread. It was also reported for example in the 'De Animalibus' of (Saint) Albertus Magnus, an influential thirteenth-century philosopher

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[123] Jones & Jones (1949) *The Mabinogion*, p.150; Ellis & Lloyd (1929*) Mabinogion vol. 2*, p.22; Guest (1906) *Mabinogion*, p.103, Davies (2007) *Mabinogion*, p.224.

[124] See *Geiriadur Prifysgol Cymru*.

[125] Jones, T. (1992) *Ystoryeau Seint Greal, vol 1*. (University of Wales Press), p.58. ; Jones, T. (1940) *Y Bibyl Ynghymraec* (University of Wales Press), p.4.

[126] See Raye, L. (2014) 'Evidence for the use of whale-baleen products in medieval Powys, Wales', *Medieval Animal Data Network* (peer reviewed blog, address: http://mad.hypotheses.org/328, accessed: 16/3/16)

[127] Kelly, F. (1998), *Early Irish Farming* (Dublin Institute for Advanced Studies), pp.284-5.

and theologian. Although Albertus Magnus was a German, and thus his work is mainly outside of the scope of this study it probably drew on older pan-European traditions and is therefore worth a brief discussion.[128] The text can be found in the Appendices. It seems probable that the writer of the thirteenth century 'Rhonabwy' was referring to the same belief.

Resnick has interpreted Albertus Magnus' passage to describe the mouth of the right whale (*Eubalaena glacialis*) which does have 250 baleen plates on each side of its mouth.[129] The mouth of the whale curves downwards at the back, and the eye is set on the side of the skull just above the curve at the same level as the rest of the mouth. A baleen whale with its mouth partly open may well have appeared like it had very large lower eyelashes to those unfamiliar with the function of baleen. This doubtless inspired the legend recorded here,[130] and most probably, also the name for baleen attested in 'Rhonabwy'. It should also be noted in passing that in the Latin of Albertus a whale can be described as a *piscis*, attesting once again to the broader range of meaning that medieval whale nomenclature seems to have had.

A second interesting feature of the 'whale's eyelash' in 'Rhonabwy' is described as *purdu* (pure-black). Most whales, like for example the grey whale have grey or white baleen. Only the so called 'balaenids' (bowhead and right whales), and blue whales have black baleen.[131] The bowhead whale has traditionally been thought to have been

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[128] Szabo (2008) *Monstrous Fishes and the Mead-Dark Sea*, pp.61-2; Flower, W.H. (1866) *Recent Memoirs on the Cetacea* (The Ray Society, London), p.21 There is even an uncertain reference to Whale's baleen and eyelashes as far back as Pliny's 'De Naturalis Historia', Book ix, chapter 88.

[129] Resnick, I. (trans. 1999) *Albertus Magnus, On Animals*, vol. 2 (Johns Hopkins University Press, Baltimore), p.1667.

[130] Ibid.

[131] Rice, D. (2009) 'Baleen', pp.78-80, in: Perrin, W. Wursig, B. & Thewissen, J. eds. *Encyclopedia of Marine Mammals* (Academic Press, London).

confined to the ice-covered far north Atlantic (north of southern-Iceland), where ships rarely penetrated until the seventeenth century.[132] I say traditionally, since this view has been questioned recently, although few would suggest that the bowhead whale was in any way a mainstay of the medieval whale economy.[133] The blue whale meanwhile had substandard baleen, but was far rarer, and was also too quick to be easily caught before steam power was invented.[134] But the baleen described in 'Rhonabwy' could easily be that of the right whale, which is also the species known to have been the most easily hunted whale in the medieval period.[135] The baleen of the right whale may have been more highly valued than the baleen of other smaller whales since each plate is longer, and balaenid baleen can be almost as smooth and finely textured as silk.[136]

The three belts from 'The Dream of Rhonabwy'	
__Middle Welsh version__	__Modern English translation__
A gwaec o asgwrn elifant arnaw, a balawc purdu ar y waec.	And a belt [buckle] of elephant's ivory on him, and a pure-black tongue on the belt.
A gwaec o asgwrn moruil arnaw, a balawc purdu arnaw.	And a belt [buckle] of walrus' ivory on him, and a pure black tongue on it.
A gwaec arnaw o *amrant morfarch* purdu, a balawc o eur melyn ar y waec.	And a belt [buckle] on him of pure-black baleen, and a tongue of yellow gold on the belt.

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[132] Ibid. pp.79-80; De Smet (1981) 'Evidence of whaling in the North Sea and the English Channel', p.306. Also see the remark in the 'Ohthere' section which suggests that whale-hunters in Ohthere's time never went further North than a point three day's sailing south of the northern tip of Scandinavia.

[133] Aguilar (1986) 'A review of Old Basque whaling', p.195.

[134] Jenkins (1921) *A History of the Whale Fisheries*, pp.263-4.

[135] De Smet (1981) 'Evidence of whaling in the North Sea and the English Channel', p.306.

[136] Reeves, R. & Kenney, R. 'Baleen Whales', pp.425-465, in: Feldhamer, G. Thompson, B. & Chapman, J. eds. (2003) *Wild Mammals of North America: Biology, Management and Conservation* (John Hopkins University Press, Baltimore).

The above sentences from 'Rhonabwy' do not discuss whale hunting or industry, but the casual references to whale products contained within may suggest the existence of a market for whale-items within medieval Wales. They contain potentially the earliest reference to a baleen product in Britain,[137] and even a hint that right whale (*Eubalaena glacialis*) baleen may have been the favoured variety.

However, it also seems clear from the relative frequency of references that *asgwrn morfil* or 'walrus' ivory' was the most important artefact connected to whales in Middle Welsh literature. The translation has long been accepted by most scholars, but the importance of the term has escaped attention until now. At risk of stating the obvious, by our current standards, whales do not produce ivory and walruses are not whales. This makes it easy to overlook that the walrus was the most usual bearer of 'whale' products in the twelfth century. This evidence provides another warning against being too literal in translations of medieval texts.

Ultimately it seems clear that whales and walruses were being exploited to the extent that normal people would have been familiar enough with their products to understand references to them in stories. The colloquial names of these materials seem to have been known to everyone, even if not everyone could afford them.

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[137] For the previous oldest see: Moffat et al. (2008) 'The Use of Baleen'.

Conclusions

Geographical Bias

When considering the lynx, I included some discussion of possible attestations to it in early modern historical texts, mainly from Scotland. I will do the same for the beaver and crane. By contrast, we leave the story of the whale considerably earlier. The reason for this is simple: the right and grey whale were not extirpated from the east Atlantic until the intensification of whaling in the modern period, and therefore a discussion of their early modern interaction with humans is not so significant. In addition, because whale products were so important to early modern British society, there is actually considerably more early modern evidence than there is medieval. To attempt to cover it in a brief section at the end would therefore be disingenuous. I leave this subject to a future researcher.

However, even without the story of the extinction, by tracing all the available medieval literature from the early medieval period it has been possible to retrieve a sense of pan-British attitudes to whales in these periods. There actually seems to have been an evolution of sorts in this regard. Early records are romantic and describe the whale as a devilish monster, whereas later records are more prosaic and describe whales mainly in terms of a natural resource.

From a historical point of view, it seems clear that by the time of Aelfric's 'Colloquy' (c.1000) whales were almost certainly being hunted by non-specialised fishers. If knowledge of whaling spread to Britain from Scandinavia this may explain why early English literature is so much more concerned with whales than early Welsh

literature, since English, as a Germanic based language, always had more contact with the Germanic world than Welsh literature. This would fit with the zooarchaeological evidence considered by Barret et al., which has suggested that the establishment of Viking settlements in northern Britain coincided with increased activity in the marine sphere, including the exploitation of sea birds as well as the intensification of the sea-fish industry.[138]

At the same time, the reason why whaling does not become a more important feature in Welsh texts may be partly geographical, just like the Welsh bias towards lynxes in the previous chapter. Although a large number of dolphins and porpoises can be seen off the coasts of Wales, large whales are far more frequently seen nearer what we might call Scandinavian waters: off the east coast of England and the coasts of Scotland. The present day ranges of the most common species of cetacean are supplied in the 4th edition of the *Mammals of the British Isles* handbook:

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[138] Barrett, J., Beukens, R., Nicholson, R.A. (2001) 'Diet and ethnicity during the Viking colonization of Northern Scotland', pp.145-154, in: *Antiquity,* vol. 75; Barrett, Locker & Roberts (2004) 'The origins of intensive marine fishing'.

Present range of cetaceans off Britain's coastlines[139]							
	Modern-day England				Scotland		Wales	
	Far South-West (Atlantic Ocean)	South (English Channel)	South-East (North Sea)	North-East (North Sea)	North (North Sea)	North-West (Atlantic Ocean)	West (Irish Sea)	South-West (Bristol Channel)
Minke Whale	✓	x	x	✓	✓	✓	✓	x
Fin Whale	✓	x	x	X	✓	✓	x	x
Sei Whale	✓	x	x	X	✓	✓	x	x
Sperm Whale	✓	x	x	x	✓	✓	x	x
Northern Bottlenose Whale	✓	x	x	x	✓	✓	x	x
Long-finned Pilot Whale	✓	x	✓	✓	✓	✓	x	x
Killer Whale	✓	x	x	✓	✓	✓	✓	✓
Scores	7	0	1	3	7	7	2	1

The two coastlines surrounding Wales, the Celtic Sea and the Bristol Channel are simply not a good habitat for large whales. The coastline slopes gently outwards so the seas are shallow and also enclosed, meaning that large cetacean communications and sonar can be confused, and feeding is more difficult. The same conditions are true of the south of England, where the English Channel and the south-east North Sea are only

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[139] Maps created by various authors in: Harris & Yalden (2008) *Handbook of British Mammals*, pp.667-747.

rarely used by any cetaceans. The North Sea in general forms a natural stranding trap for some large cetaceans like sperm whales.[140] The coastlines of north-east England provide more acceptable habitat for three of the seven species listed above, and the open Atlantic Ocean to the south-west of Cornwall provides ideal habitat. However, Scottish coastal waters are, in general, far better habitat than the English waters. Most importantly, they are much deeper and more open, particularly to the north-west where the warm Gulf Stream and deep waters of the Atlantic come closer to the shoreline than anywhere else in Britain.

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[140] Smeenk, C. (1997) 'Strandings of sperm whales Physeter macrocephalus in the North Sea: history and patterns, pp.15-28, in: *Bulletin de l'Institut Royal des Sciences Naturelles de Beligique: Biologie,* vol. 67.

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The two most important elements are depth (yellow deeper than red) and openness.

Britain's main large whale habitat is off the south-west of Cornwall, off the north east

of England and all around Scotland.
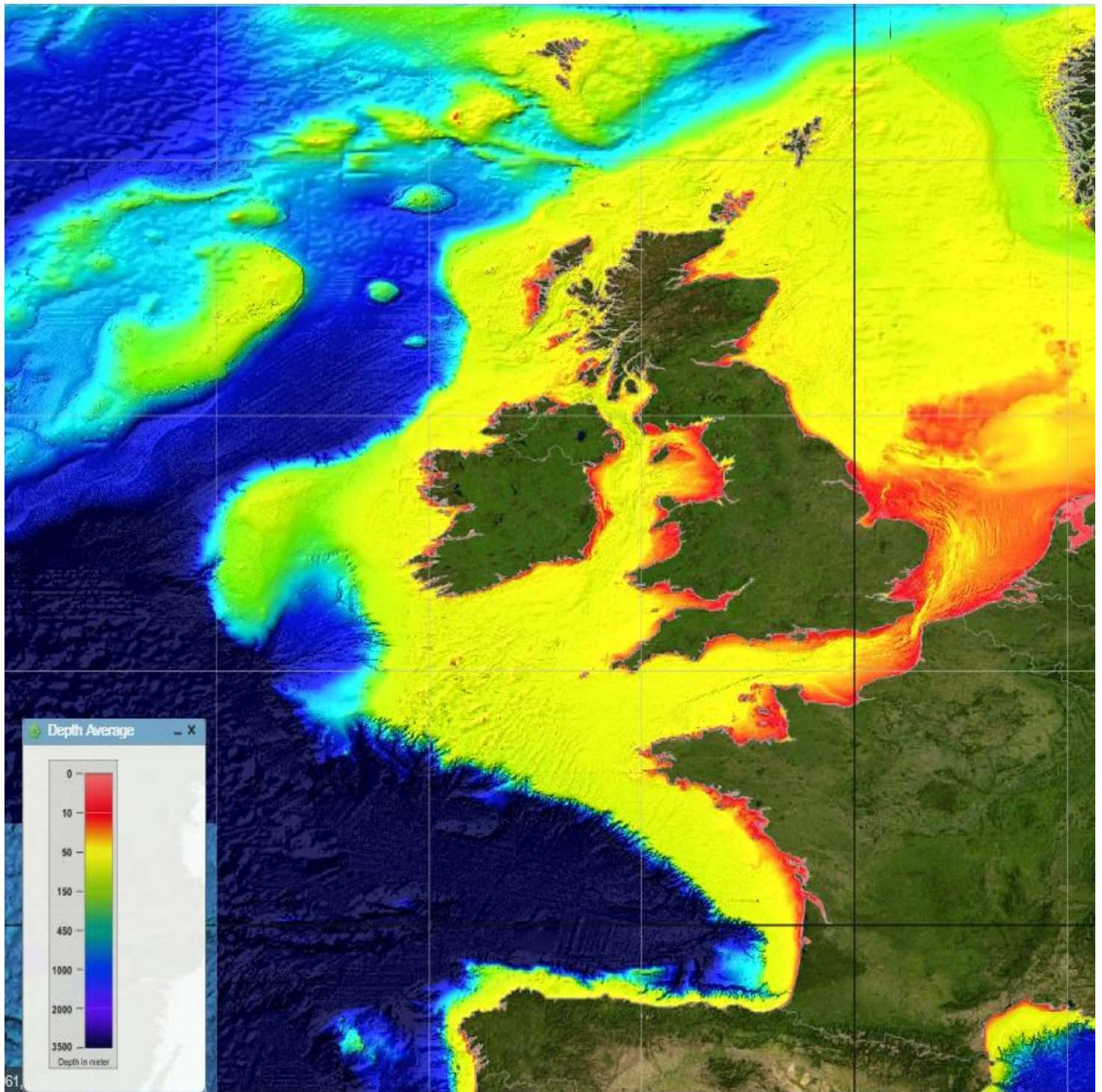
Based on this geographical bias it is not surprising to see that a large proportion of the texts I have examined above are set away from England's coastal waters. 'Ohthere', 'Beowulf', and the 'Topographia Hibernica' are all set in better habitat for whales, and 'Columba's Island Paradise' and 'Vita Sancti Columbae' are set on Iona, within this idyllic Scottish western habitat. The high number of texts from Anglo-Saxon Wessex may represent the superior habitat of the far south-west. To some extent it is clear that, just like survival of lynx folklore was partly dependant on the existence of upland habitat, the survival of whale folklore is partly dependant on the existence of deep ocean habitat. But this does not by itself explain the geographical spread of our texts. Here is a table of textual survival which can be compared to the text above.

Comparative location of where texts composed						
	Wessex	Mercia	Northumbria	East Scotland	West Scotland	Central Wales
Number of Texts	3	1	2	0	2	1

The English enthusiasm for whaling and the whale industry is clearly influenced by other factors than access to deep water. Welsh speakers did not entirely lack good whale habitat. The Atlantic Ocean beyond the Cornish Scilly Isles, off the south-west coast of England also provides good, unenclosed habitat for large whales, and this area was ultimately just as easily reachable by the Welsh as it was by the English. The majority of the stranding records from the *Rotuli Hundredorum* came from Lincolnshire, which in modern times provides a poor habitat for whales. Our table

above shows a disproportionately large number of texts from Northumbria and Mercia and no texts from east Scotland. It is clear from comparing the two tables in depth that, unlike with the case of the lynx, geographical topography was not the deciding factor of the differing survival of folklore, although it must have had some influence. The cultural aspects already mentioned are likely to have had an important impact too.

Whale nomenclature from medieval Britain

Our study has seen a considerable confusion of terminology and animal nomenclature. It is clear that the intense scientific research and the process of industrial whaling have so affected the English language since the seventeenth century that the objectivity of certain types of scholarship has suffered. By this I do not mean to suggest any bias or impugn the research of animal-rights activism groups. To explain what I mean more exactly I present the following list of whaling related terms from the 21st century. When a twenty-first-century English speaker thinks or speaks about whales they may use some or all of the terms following in normal (black) font, but are unlikely to use the other terms in grey.

21st century whale nomenclature	
Calf	(In context) a whale with its 'mother'
Cetacean	See: 'whale'
Dolphin	A well-loved and intelligent marine mammal. Some 21st century informants will explain that it is properly a type of "whale".
Fish	A kind of cold-blooded marine animal.
Ivory	A material from elephants' tusks, completely unrelated to whales.
Monster	A mythical creature, sometimes inspired by the whale
Mother	(In context) the larger whale accompanying a 'calf'.
Shark	An animal similar to the whale but cold blooded. Some 21st century informants will explain that it is *properly* a type of "fish". Similar but unrelated to the whale.
Walrus	A large mammal like a seal, completely unrelated to whales.
Whale	A large, warm-blooded marine mammal with fins, a 'cetacean'
Whale bones	The bones of a cetacean
Whalebone	The baleen plates of a whale

The significance of the preceding list will be immediately obvious when I present the corresponding medieval whale lexicon:

Medieval British whale nomenclature		
Medieval term	**Literal translation**	**Actual meaning**
Old English		
Fisc	Fish	Loosely any marine animal with fins or flippers, including the whale [141]
Horshwælh	Horse-whale	Walrus
Hran, hron	Whale	Any large marine *fisc*.
Hronaes ban	Whale's bone	The bones of a *hron*.
Hwælh	Whale	Large marine animal, especially a whale.
Hwales ban	Whale's bone	Walrus ivory, also possibly cetacean's bone.
Hwales toþ	Whale's tooth	Walrus ivory
Mereswyn	Sea-pig	Dolphin, another type of fisc, (NOT large enough to be a whale)
Nicer-	Sea Monster	Large sea creature
Medieval Welsh		
Amrant morfarch	Whale (sea-horse)'s eyelash	Baleen
Ascwrn moruil	Whale (sea-beast)'s bone	Walrus ivory also possibly elephant ivory.
Early medieval Latin		
Cetus	Whale	Whale or sea monster
Balena	Whale, Baleen-whale	Whale or sea monster; later Latin sometimes smaller fish that accompanies *cetus*[142]

By comparing the two preceding tables it should be immediately obvious that for a modern audience, medieval texts about whales are potentially very misleading. I

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[141] Note even much later on this can be true. In 1539 the Duke of Rutland paid 8d to a servant for providing a 'seale-fysche'. Historical Manuscripts Commission (1905) *Manuscripts of the Duke of Rutland, vol.4.* (His Majesty's Stationary Office, London), p.294. In the 1603 'Description of Pembrokeshire', the seal, porpoise and 'thornpole' (dolphin?) are included in the chapter on fish as 'the three strange nature fishes'. Miles (1994) *Description of Pembrokeshire*, pp.128-9.

[142] Riley, H. (1860) *Liber Custumarum II* (Longman, Green, Longman & Roberts, London), p.785; White (1954) *Book of Beasts*, pp.198-9.

attribute this partially to the influence of the whaling industry and partially because of the influence of scientific thought; our modern terminology has become more specialised and drifted from the earlier medieval meanings, even considering the same word. The modern English term 'whale' refers to all cetaceans but no other marine mammals or fish. The corresponding medieval term *hwæl* can refer to any large marine fish, probably including sharks and walruses, but not dolphins or porpoises which are non-whale fish. Overall, most medieval words have a greater level of flexibility than their literal translations would suggest. Modern words are the opposite, as centuries of industry and scientific research has specialised the terminology of the English language, and this makes translating medieval texts all the more difficult. As far as I am aware, Szabo's study of whales in Norse sources was the first to comment on this issue when she pointed out that whales could at the same time be a scientifically understood and exploited resource as well as a source of mystery and terror.[143] However, Szabo fell prey to this difficulty herself. She speaks only of 'whale bone' in the book, and from the context it is usually clear that she is referring to the bones of the cetacean, but at other times she treats 'baleen' as a synonym for cetacean's bone.[144] This shows there is sufficient confusion in modern English between 'whalebone' (baleen) and 'whale's bone' (cetacean's bone) that even specialist scholars can become confused.

Lindquist, in his *The North Atlantic Grey Whale* has also contributed a great deal to the question of what the different terms for 'whale' mean in different languages. He ambitiously translated and commented on a considerable portion of the literature

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[143] Szabo (2008), *Monstrous Fishes and the Mead-Dark Sea.*

[144] Ibid. pp.138; 90-2. Szabo distinguishes whale bone and baleen on p.278, but also suggests playing pieces made of 'whale bone' although they are more frequently made out of 'hwæles ban' (=walrus ivory).

from the north Atlantic seaboard. It was his contention that the Old English *hran* was imagined to be a smaller animal than the Old English *hwæl*. He also argued that stories of the *hran* may be legends of the now extinct grey whale (*Eschrichtius robustus*), whilst stories of the larger right whale (*Eubalaena glacialis*) can be found in stories of the *hwæl*. Beyond Old English, he believed that the Latin terms *cetus* and *balena* respectively, could be distinguished in the same way.[145] Lindquist's work is thorough, his distinction makes ecological sense and he is to be commended for his attempt at a coherent theory of whale-nomenclature for the North Atlantic seaboard. However, his work also appears to owe more to myth-making than to close scrutiny of the literature. That is, Lindquist seems to have approached the literature with preconceived notions and found them unsurprisingly reflected in the literature. In the case of Britain's literature at least his distinctions are not admissible.

It is incorrect to suggest that the distinction between the medieval Latin terms *cetus* and *balena* is one of species, size or even the possession of baleen like it is in modern scientific thought. In the Bestiary tradition which became popular in Britain in the twelfth and thirteenth centuries the two are distinguished on other grounds. The *cetus* as we have seen is described in the 'Physiologus'. It can exude an enticing smell to lure fish, and pretends to be an island to lure humans. The large *balena* is separated from this creature by its ability to spout water and the fact that it is only ever female.[146] However this distinction is not strict in the first half of the medieval period in Britain. For example, in the 'Topographia Hibernica' of Gerald of Wales a

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[145] Lindquist (2000) *North Atlantic Gray Whale.*

[146] Perhaps based partially on grammatical gender, but see: White (1954) *Book of Beasts*, pp.197-9.

disappearing island was called a *balena*, whilst 'Aelfric's Colloquy' calls the same whale both *cetus* and *balena*. Clearly the terms are not meant to delimitate exact species.

The distinction in meaning between the two Old English terms is not the same as the (non-existent) distinction in meaning in the Latin terms. This is Lindquist's second theory,[147] but his only evidence is that Aelfric's 'Colloquy' and 'Glossary' both gloss *cetus* as *hwæl* and *balena* as *hran*. However it is more likely that the texts alternate their English vocabulary just to reflect the alternating of vocabulary in the Latin original. Elsewhere both Latin terms individually are more normally glossed by *hwæl*.

It is also easy to prove that the Old English terms do not reflect the difference between the grey and right whale or the baleen and toothed whale. In 'The Voyage of Ohthere', walruses were described as *hwæl*. They merited the title *hwæl* even though their diminutive size was sufficient to attract notice. The term *hran* was also not specific to whales as we would call them today, and in Beowulf we find the word describing creatures which can be combated with sword and fought by a human. These animals seem more like sharks than what we would consider whales.

Although wrong about quite what the distinction was, Lindquist is nevertheless correct that the Old English terms *hwæl* and *hran* are *not* synonymous. Of the five main Old English narrative passages translated in this chapter, two use the term *hwæl* but not *hran* or *hron*, two use *hran* or *hron* but not *hwæl* and only one, 'Aelfric's Colloquy' which is following the changing terminology of Latin, uses both.

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[147] Lindquist (2000) *The North Atlantic Gray Whale*. see esp. pp.17-18.

Without the awkward need to fit these two Old English words to the two Latin synonyms, it remains only to attempt to reconstruct the actual meaning of the two terms. The following table will suffice to sum up the data we have about each creature:

Descriptions of whales in Old English Literature	
Text	**Description**
hran or *hron*	
The Franks Casket inscription	Creature called a *hron* which gave its bone was a pitiable but mighty whale (as per bone analysis) which became stranded.
Beowulf	Creatures called *hronfiscas* very violent, travel in packs, possessed of evil intelligence but can be fought with a sword.
Aelfric's Colloquy	Creature called *hran* as described below, but probably only to reflect the change in the Latin from *cetus* to *balena*.
Gloss	Seven smaller *hronas* fill a larger *hual* (*hwæl*).
Old English Glossaries (see appendices)	'Aelfric's Glossary' again glosses *balena* as *hran* but this is probably only to distinguish it from the *cetus*. The 'Antwerp-London' bilingual class glossary glosses both *balena* and *cetus* as *hwæl*. Several other very brief glosses edited in Napier's *Old English Glosses* and reproduced in the *Boswerth-Toller Old English Dictionary* describe the creature as a devil and malevolent.
Hwæl	
Ohthere	The word is used in compound *horshwælum* (walruses) and their ivory and hide but also what appear to be larger 'normal' whales later on as well as whale-hunters.
Physiologus	The word used to translate *cetus*. A huge animal which deceives sailors into thinking it an island and landing upon it. It emits a sweet-smelling odour. An animal with a malevolent intelligence.
Aelfric's Colloquy	The word is used to describe a large natural fish which takes many whales to catch.
Old English Glossaries (see appendices)	The word glosses *cetus* and *balena* in the Antwerp-London bilingual class dictionary but only *cetus* in Aelfric's Glossary.

First it must be noted that the terms are fairly similar in meaning. Both names at times were given both to what we would now consider true whales and to smaller species of aquatic-wildlife (probably at times including dolphins, porpoises, sharks and walruses). 'Beowulf' and the 'Gloss' (although not the 'Glossaries') cited above both seem to suggest that the *hran* is smaller than the *hwæl*. However, since the Franks Casket is explicitly said to be of *hrones ban*, and that is made of the bones of the giant sperm whale,[148] the word *hran* was clearly not restricted to smaller sea animals. Both *hran* and *hwæl* can be evil, intelligent creatures with agency, or just another resource to be exploited. This probably depends on the genre of text more than anything else. Ultimately, the terms may have meant different things to different people depending on time, place, dialect, and idiolect, although the *hron* seems usually to be smaller and fiercer.

Some supporting evidence for this idea can be found in Britain's other languages. The word *hron* must have lost whatever unique currency it may have had shortly after 1000 A.D., as it is unattested in Middle English. Intriguingly although the English language has lost this word, it lives on in the Scottish Gaelic *ròn* and perhaps the Welsh *moelrhon* (*moel*= Eng. 'bald' +*hron>rhon*, if the second element is not related to *rhôn* 'spear').[149] Both of these terms refer to the seal in the modern period. These terms were probably borrowed from Old English and both are attested from the medieval period onwards.[150] The Welsh term at least seems to have sometimes originally referred to dolphins and porpoises as well as seals, but the fact that the term in both

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[148] Szabo (1997) 'The Use of Whales', p.153.

[149] *Geiriadur Prifysgol Cymru*, s.v.

[150] The borrowing was most likely Old English>Celtic languages rather than an evolution from Celtic roots. See: *Geiriadur PrifysgolCymru, Electronic Dictionary of the Irish Language* (http://edil.qub.ac.uk); Lloyd-Jones, J. 'rôn', pp.200-2, in: *Bulletin of Celtic Studies,* vol.15, p.202.

languages now refers independently to a small semi-aquatic mammal suggests this might have been close to its original meaning.

This part of our study has therefore refuted Lindquist's theory. The medieval languages of Britain have a number of pieces of whale terminology, but these are *not* as specific as Lindquist would make them. Terms like *hrones ban* may even have been used generically at times, and indeed, all the terms used to distinguish types of whale are at times interchangeable, particularly in Latin and Welsh. Even the walrus was seen as a type of *hwæl* in Old English, and this lack of scientific, industrial precision in language suggests by itself something about the level of whale exploitation in early medieval Britain. This uncertainty in language is not merely a side effect of the medieval worldview. It provides a pointed contrast to Scandinavia, particularly Norway. In Old Norse, as Lindquist has shown, almost every single species of whale found in the Norwegian Sea was given a separate name.[151] The languages of Britain do not catch up with Old Norse in this respect until the devastating whaling industry of the eighteenth-twentieth centuries, which led to the functional extinction of the north-east Atlantic populations of both the right and the grey whale.

The Date of Whale-Hunting

As I said in the introduction, there is a debate in contemporary scholarship about how early whaling began in Britain. People from France were certainly whaling in the British Channel by the ninth century,[152] and there is archaeological evidence for the

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[151] Lindquist (2000) *North Atlantic Gray Whale*, pp.155-227.
[152] De Smet, W. (1981) 'Evidence of Whaling in the North Sea and English Channel'.

exploitation of whales even in the prehistoric period. However, there is some evidence

that, as an intense industry, whaling did not begin in earnest until the late medieval

period. Eighth century Bede seems surprised by his own comment that people went

whaling, and even in the tenth century being a 'whaler' does not yet seem to be a

profession in Britain if we can believe Aelfric. His whale-catchers are fishers first,

seeking whales only occasionally. Despite occasional whaling, the existence of a whale-

industry, and constant exploitation of stranded whales according to what we have

found in this study, the level of whale exploitation in the medieval period was probably

seasonal and opportunistic. It is therefore not surprising to read that, according to the

most recent evidence, the grey whale, usually thought to have been extirpated from

the east Atlantic in the medieval period was actually not extirpated until the 17th or

early 18th centuries.[153] The right whale is considered 'functionally extinct' in the east

Atlantic, but only became so after a final intense period of exploitation in the first

quarter of the twentieth century.[154]

Our temporal conclusions are less certain than our geographical and linguistic

ones. It is the contention of this chapter that it is possible to pin-point a shift in

attitudes towards the whale in Britain. References to whales, and whale bone artefacts

become increasingly practical and pragmatic from the tenth century onwards: Ohthere

goes whale hunting around Norway, and Aelfric asks a fisherman why he does not go

whaling himself. Welsh texts like 'Beuddwyd Rhonabwy' reflect the continued industry

in the centuries which follow.

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[153] Bryant P. (1995) 'Dating Remains of Gray Whales...', pp.859-60.

[154] Jacobson, K. (2004) 'Two-way trans-Atlantic migration of a north Atlantic right whale (*Eubalaena glacialis*), *Marine Mammal Science*, vol. 20.

This timescale is supported by three pieces of corroborating evidence. As we saw earlier, it exactly reflects the date when walrus ivory began to be imported to Britain. It also precisely fits with when whaling began off the north coast of France.[155] Finally, it also fits with the 'fish event horizon', the date when marine fish stocks began to be more intensively exploited to feed urban populations around Britain.[156]

However the nature of the evidence makes our conclusions about cetaceans less certain. Britain could have obtained all its whale bone products through trade and exploitation of stranded cetaceans. The contrasts in our texts over time could reflect genre rather than date. Our most naturalistic texts (e.g. 'Ohthere', 'Aelfric's Colloquy', 'Columba's Island Paradise') are also those which set out to record interviews rather than tell stories. There is still room to doubt that tenth century people from Britain went whaling. To some extent though, perhaps it does not matter whether the people were whaling themselves or simply using increased amounts of baleen, ivory and cetacean's bone. At a western-European level whaling was common by this point, and this planted the seeds for the unsustainable levels of exploitation reached in the early modern and modern periods.

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[155] De Smet (1981) 'Evidence of Whaling in the North Sea and English Channel'.
[156] Barrett, Locker & Roberts (2004) 'The origins of intensive marine fishing'.

Chapter 4 – Beavers

Introduction

The beaver is taxonomically a rodent, but as a semi-aquatic, dam-constructing animal the size of a dog, it tends to stir public interest more than most mice, rats or voles do. My survey of animal awareness around Britain suggested that 64% of people were aware of the animal's status as a native of Britain. However, the figure was very different in England and Wales compared to Scotland. In Edinburgh 85% of my participants knew about the beaver, whereas in Cardiff and Oxford the figure was 55%. The most obvious explanations for this is that in Argyll, in south-west Scotland, the creature is currently under trial reintroduction. Without a baseline it is impossible to be certain, but it is tempting to suggest that the better awareness of the creature in Scotland is due to this reintroduction.[1] If that is true, the creature may be working as a 'flagship species' (i.e. a creature whose reintroduction improves general awareness of conservation and wildlife).

Campaigns to reintroduce the beaver in Britain have proved unpopular, especially amongst anglers,[2] and at time of writing (2015), the Argyll release is one of only two officially sanctioned ones.[3] This is of interest because Canadian beavers are

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[1] Although beavers of various species and subspecies have been illegally released into the wild elsewhere in Britain, and population estimates of those currently living wild far exceed the number of beavers legally imported to Argyll, the official project's 2 million pound budget (see: http://www.scottishbeavers.org.uk/beaver-facts/beaver-trial-faqs/how-much-will-the-project-cost-and-where-is-the-money-coming-from-2010-10-04/) mean that it will probably have a larger impact on public awareness despite having fewer animals.

[2] See for example: Angling Trust (2009) 'Angling Trust Policy Statement on Beavers', *Angling Trust* (address: http://www.anglingtrust.net/news.asp?section=29&itemid=476, accessed: 16/3/16).

[3] In 2014 Natural England granted Devon Wildlife Trust a license to observe the beavers in the wild on the River Otter and will not remove them. Meanwhile, the Welsh Beaver Project has announced plans to reintroduce beavers to the River Teifi in 2015.

currently being translocated to salmon rivers within the State of Washington expressly to help boost salmon numbers.[4]

The history of the beaver in Britain has often taken centre stage in discussions about its place in Britain, but the history of the species is not yet clear and is still being debated. When the presence of beavers on the River Otter was first discovered by the media, four leading newspapers surveyed provided ten different dates between them as to when the beaver went extinct in Britain.[5] Some of the newspapers gave two different dates over the course of a single article. This is not solely poor journalism. It reflects uncertainty amongst experts in the historical landscape. If we cannot even decide when the beaver went extinct it is hard to provide a convincing scholarly consensus on whether beavers should or should not be reintroduced to local landscapes.

The archaeological evidence for the beaver in Britain has been reviewed by Coles (2006) and will not be repeated here;[6] the evidence is substantial up until what archaeologists call the Late Saxon Period (c. 800-1066).[7] Traditionally, the animal's survival into the second millennium A.D. was thought to be only attested in historical documents, although archaeological evidence from Castle Acre, Wolversley Park and Jarrow on Tyne has suggested a date as late as the twelfth century and possibly the thirteenth or fourteenth century.[8] The documentary evidence of Gerald of Wales (1188) strongly supports the case for the beaver's existence in Wales in the twelfth

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[4] Le, P. (2014) 'Beavers put to work restoring streams', *Huffington Post*, 10/07/2014. (address: http://www.huffingtonpost.com/2014/10/07/beavers-work-restoring-streams_n_5943574.html, accessed: 16/3/16).

[5] *The Daily Mail, i, The Guardian, The Huffington Post.* I presented this research to the Mammal Society's Annual Spring Conference, Saturday the 5th of April 2014.

[6] Coles (2006) *Beavers in Britain's Past.*

[7] E.g. Rackham (1986) *The History of the Countryside*, p.34.

[8] Coles (2006) *Beavers in Britain's Past*, pp.161-5.

century and that of Hector Boece (1526) strongly suggests that beavers were not extirpated from Scotland until the sixteenth century.

The idea that the beaver was lost from England and Wales in the twelfth century and from Scotland in the sixteenth is the traditional consensus on the subject, based on scholarship over a century old.[9] It is also the view taken by most conservationists working on introduction studies.[10] However, Coles' recent 2006 study has argued for an 'invisible' survival of the creature into the eighteenth century in parts of England and Wales, possibly along with Scotland.[11] Coles also introduced a broad range of further evidence from archaeology and physical artwork to historical documents and folklore.

In 2014 I made a directed search through the medieval British corpus for all the reliable references to native terrestrial mammal species larger than the polecat.[12] There were two main findings: (i) The beaver did not have a lower profile than the other comparable mammals before 1307 in south Britain. And (ii), the beaver appeared in only one (anomalous) text between 1308 and 1607 in south Britain whereas all the other animals appeared in an average of nine. That this could be attributable to chance was rejected by a chi-squared test. The beaver is not ordinarily invisible nor was its absence from medieval texts by chance. The conclusion thus suggested is that the beaver became extinct in south Britain by 1300.

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[9] Yalden (1999) *History of British Mammals*; Kitchener, A. & Conroy, J. (1997) 'The history of the Eurasian Beaver, *Castor fiber* in Scotland', pp. 95-109, in: *Mammal Review,* vol. 27.

[10] See for example: Cole. M.: Kitchener, A. & Yalden, D. 'Family Castoridae', pp.72-6, in: Harris, S. and Yalden, D.W. (ed. 2008) *Mammals of the British Isles, Handbook, 4th ed.* (The Mammal Society, Southampton), p.74.

[11] Ibid. p.190-1. Neill, P. (1819), 'Proofs that the beaver was formerly a native of Scotland...', pp.177-187, in: *Edinburgh Philosophical Journal,* vol. 1; Harting, J. (1880) *British animals extinct within historic times* (Ballantyne & Hanson, Edinburgh).

[12] Raye (2014) 'The Early Extinction of the Beaver'.

Most recently, a cautionary footnote was added by the excavation of beaver-gnawed wood from the River Tyne catchment, near Kielder, on the Scotland-England border.[13] The wood was all probably deposited in a single event, and was certainly deposited in the fourteenth century, probably between 1370 and 1390 A.D., although possibly earlier in the century. This is the latest carbon-dated finding by approximately 400 years and implies the presence of beavers in England almost a century later than provided for by literary references. The easiest way to reconcile the evidence is geographical. The site is only approximately 2km from the present Scottish border and perhaps ought to be regarded as part of the geography of Scotland rather than what I term 'south Britain'. Hetherington, for example, considered Kielder Forest as part of the contiguous 'Southern Uplands' region of Scotland for his analysis of lynx carrying capacity.[14] Gerald of Wales, writing at the end of the twelfth century noted that whilst beavers were still found in Wales and Scotland there were none in England 'south of the Humber', thus ignoring the north of England entirely, or maybe even suggesting their presence there.[15] It is notable that beavers are part of the textual history of Scotland for centuries after they were lost from south British texts. Ultimately, although the present chapter attempts a history of beavers in Britain, the picture is probably murkier than the broad strokes of a historical survey can show. This chapter represents the latest word on the subject, but a new scholarly consensus to reconcile this evidence has yet to develop.

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[13] Manning, A. Coles, B. Lunn, A. Halley, D. Ashmole, P. Fallon, S. (2014) 'New evidence of late survival of beaver in Britain', *The Holocene* (online ed.).

[14] Hetherington (2005) *The Feasibility of Reintroducing the Eurasian Lynx, Lynx lynx, to Scotland*, p.96.

[15] Since he mentions the two populations in Scotland and Wales explicitly, he would be likely to have mentioned if he believed beavers could be found in north England. The point is that he does not make much of the political boundary.

Textual Evidence considered for beavers in early medieval Britain	
Date A.D.	**Source**
8th century – c.1150	Various glossaries give names for the beaver. The word beaver has Old English roots. Most importantly The 'Vocabularium Cornicum', a Cornish glossary uses *befer* as a gloss for *beofer*. This word may have been the original Brittonic term, or a borrowing from Old English.
8th century	Aldhelm's 'Enigmatica' describes the beaver in a riddle.
Late 12th century	Gerald of Wales' Latin 'Topographia Hibernica' and 'Itinerary of Wales' both describe beavers as creatures found in only one river in Wales and rarely in Scotland.
1170-1220	'Historia Norwegie' describes beavers very similarly to Gerald.
Various dates from pre-13th century – 14th	The medieval Welsh laws reference beavers. Beaverskins are highly priced and the market value of beaver skins is to be given to the king. Beaver-fur is a proper material for queens to wear.
13th century	The Welsh 'Peredur' features an *afanc* as a prince-killing monster that must be slain by the hero.
Early 14th century	The Early Scots customs law in the Ayer Manuscript put a high premium on beaver fur as does the Newcastle customs list. Beavers removed from law in 1424.
1336-1547	Various English Sumptuary laws make it clear that some furs including beaver are very high status and only for the nobles.
1384-1481	Import records show commercially high numbers of beaverskins were being imported in this time period, suggesting any local supply could not keep up with demand.
Mid-late 15th century	Lewys Glyn Cothi's Welsh poems have three *afanc* creatures present, all of which are treated as monsters not natural beavers.
14th century	The Welsh translation of the 'Bestiary of Love' uses a strange word for the beaver, *kasstrin*, which is probably a borrowing from the French term *castoires* in the original text. That the native word was not used may suggest beavers were extirpated and forgotten in Wales by this point.
1526, translated 1537	Post medieval Scottish historian Hector Boece attests to some beavers remaining in Scotland in the sixteenth century.
1578	There is a possible attestation of beavers being hunted in 'De Origine Moribus et Rebus Gestis Scotorum'
1696	Beavers can no longer be found on the Ness at this point.

Early Medieval Names for the Beaver

The 'Vocabularium Cornicum' is a bilingual glossary, written around 1150 and present in <u>Vespasian A.xiv</u>, a manuscript from south Wales of c.1200 A.D.[16] One reason it is significant is that the source of the original framework of lemmas (headwords) was Aelfric's Latin-Old English 'Glossary', and therefore we can compare the Latin and Old English words from the original source with the Cornish glosses given in the new text (respectively).[17] Longer extracts are given in the appendices together with two earlier glossaries. In this chapter we are concerned only with the gloss of the Latin *fiber* (beaver):

> 'Fiber; Befor';
> 'Fiber; Befer'[18]

This very short glossary entry is nevertheless important for what it suggests about the word for the beaver used by the Celtic languages. As outlined in the introduction, all scholars agree that the beaver could still be found in south Britain around 1100, although it may have been rare locally. Does this mean that the word *befer* was the standard Cornish form of the word? Calvate points out that the modern words for beaver in Breton *avank* and Welsh *afanc* are functionally identical, suggesting that the words were first used in the time of British or Brittonic, before Breton and Welsh separated from each other.[19] However when we look at the words in more detail we find that this cannot have been the case. As Graves points out, the Old Breton *abac/amac*, which became *avanc* in modern Breton did not originally have the sense of

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[16] Blom (2009) 'Welsh Glosses in Vocabularium Cornicum'.

[17] See Appendices for extracts from the glossaries.

[18] Graves, *The Old Cornish Vocabulary*, p.247, entry 574.

[19] Calvete, J. (2005) *The Vocabularium Cornicum* (Cornish Language Board). CD document, pp.217-8.

beaver, but instead referred to a monster or dwarf.[20] The possible Irish cognate *abacc*

possibly had the sole meaning dwarf in the early stages of the language.[21] In modern

Gaelic, the term *abhag* can refer to a terrier dog, and used to refer to a dwarf or

spectre but not a beaver.[22] Likewise the Middle Welsh *afanc/avanc* also referred to

monsters in its earliest extant references. The editors of the *Geiriadur Prifysgol Cymru*

have not separated the references to water monsters and those to beavers, but none

of the medieval examples clearly meant 'beaver' and all could mean monster. John

Davies's dictionary from 1632 is the earliest clear Welsh example of *afanc* meaning

beaver.[23] Taken together these suggest that *afanc* is likely to have come to mean

'beaver' only in the early modern period. It appears that the term was appropriated

from Welsh to Breton in the twentieth century as a 'native Celtic term' after beaver

populations began to recover and linguists wanted a native term to describe the

animal.

There is some evidence for the term *befer* being the original Brittonic one, but

the evidence is not strong. Apart from the use of the word in the 'Vocabularium

Cornicum', there is an attestation of *beβr* in a late Brittonic/Cumbric placename,[24] a

possible gloss in Old Breton,[25] a dubious use of the word by Gerald of Wales and in the

Welsh laws,[26] and the evidence that the term was used in pre-Roman Gaulish.[27] *Befer*

as a word of Brittonic origin is not securely attested in Welsh, and the earliest Welsh

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[20] Ibid; Fleuriot (1985) *Dictionary of Old Breton*, pp.50-51.

[21] See *Dictionary of the Irish Language* (online edition: www.dil.ie).

[22] See Dwelly, E. (1911 ed.) *The Illustrated Gaelic Dictionary* (Self published, Fleet).

[23] See *Geiriadur Prifysgol Cymru.*

[24] Coates, R. (2001-2) 'Beverley: A Beaver's Lodge Place', pp.17-22, in: *The English Place-Name Society*, vol.34.

[25] Fleuriot (1985) *Dictionary of Old Breton*, p.82.

[26] See below. Dubious because Gerald's word adds the English plural '-es' and usually commoner words gloss rarer words, not the other way around.

[27] Dekanarre, X. (2003) *Dictionnaire de la langue Gauloise* (Editions Errance, Paris), pp.69-70.

manuscripts use another word: *llostlydan* is the earliest attested word for the beaver in the Welsh language (thirteenth century). *Llostlydan* also has a parallel in the Scottish Gaelic term *dobhran leas-leathann*, attested from the early twentieth century.[28] it is possible that these terms had a common root, but given the discrepancy in date, this seems unlikely. The names are probably coincidental or analogous, based on the fact that the words in medieval Welsh and modern Gaelic for 'broad-tail' are similar. In Old Irish the term *dobrán* seems to have stood for both beaver and otter.[29]

The most important conclusion we can draw from these different arguments is that whatever the original Brittonic term used for beaver was, it was not *afanc*. There is insufficient evidence to say whether we should prefer *befer*, or *llostlydan.* Although the latter is securely evidenced from the thirteenth century, Padel emphasises that the words in the *Vocabularium Cornicum* deserve to be taken at face value as Cornish.[30] *Afanc* does not seem to have come to mean beaver until the early modern period.

The Old English term is not controversial, and before the *beofer* of 'Aelfric's Glossary', the term *befer* was attested c.1000 A.D. in the 'Antwerp-London Glossary' which I have edited in the Appendices. A similar form is also found in the eighth century 'Corpus Glossary' as *bebr*.[31] This is especially interesting because it helps to

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[28] The place name 'lostock' suggested by James, is far more likely to refer to a spear or to the fox than the beaver. James, A. (2014) *The Brittonic Language in the Old North*, vol.2. (Scottish Place Name Society, address: http://www.spns.org.uk/bliton/blurb.html, accessed: 16/3/16), p.249; The Gaelic dictionary, see: *Dwelly* (1901-11), *dobhran, leas-leathann, dobhran leas-leathann* collected in the nineteenth century.

[29] See the *Dictionary of the Irish Language*.

[30] Padel, O. (2014) 'The nature and date of the Old Cornish Vocabulary', pp.173-200, in: *Zeitschrift für Celtische Philologie* vol. 61.

[31] Sweet, H. (1885) *The Oldest English Texts* (Early English Text Society, London), p.63.

refute the common idea that the beaver might appear with a different name the Old

English Rune Poem of c.800:[32]

An extract from 'The Old English Rune Poem'	
Old English original	**Modern English translation**
[Iar] byþ eafix a and ðeah a bruceþ fodres on foldan; hafaþ feagerne eard waetre beworpen ðaer he wynnum leofaþ.[33]	An *iar* is always a fish, and yet always takes food on land, it has a fair home Encircled by water, there it lives happily.

The Old English rune poem is an eighth or ninth century poem with a verse about the

each of the twenty-five runes of the Old English runic alphabet. Each letter had a name

in the Germanic tradition, and this verse is about *iar,* a rune unique to England and not

found in the ordinary elder futhark.[34]

 If the translation of *iar* as beaver was accepted the poem might be a very early

reference to the tradition later repeated by Gerald of Wales that some religious

communities ate the beaver on meat-abstinence fasting days because they considered

it as fish rather than as animal. We will see more about this in the next section, but for

now it is sufficient to say that this translation given for the *iar* here seems more based

on the description provided by the text than on any linguistic evidence. There is little

evidence that the *iar* should be considered a beaver, especially since the English word

befor is well attested in glossaries. No other animals are known in English with names

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[32] Millar, A. (2006) 'The Old English Rune Poem – Semantics, Structure and Symmetry', pp.419-436, in: *Journal of Indo-European Studies,* vol.34, p.427.

[33] See for example: Jones, F. (1967) *The Old English Rune Poem* (Unpublished PhD dissertation, University of Florida), p.78.

[34] Ibid.

beginning *ia-*, and other scholars have suggested that the description of the *iar* is more likely to have been intended to delimitate the *æl* (eel) or *eft* (newt).[35]

A riddle that does refer to the beaver is found in the eigth-century 'Enigmatica' of Aldhelm of Malmesbury (see the Appendices). As well as giving us the earliest British description of beavers living in burrows and lodges and making dams, this text also seems to suggest (reading between the lines) that beaver castoreum was being used to treat wounds and disease. This may or may not have been the case. As Cameron points out, the use of castoreum to cure wounds or diseases is not elsewhere attested.[36] As we shall see, Gerald of Wales, writing centuries later exoticises the use of castoreum as a product of the east. Many of Aldhelm's riddles are based on knowledge he has acquired from reading rather than practical experience. For example he describes swarms of locusts, salamanders, the ostrich, elephant and camel. Even when he describes animals he might have been able to see in Britain, he tends to rely on Biblical or classical knowledge of them. For example, his description of the asp (serpent) is mainly about its role in the Garden of Eden and his description of the raven is mainly about its role on Noah's Ark. On the other hand, other riddles seem to involve some natural description. For example, the description of the pond skater is entirely naturalistic and I am unaware of any literary sources Aldhelm could have drawn from, just like the description of the leech's bite with its triangle-pattern. Overall the author mentions 34 species, of which ten (29%) are clearly drawn from literature, twelve

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[35] Ibid. p.110-12; Halsall, M. (1981) *The Old English Rune Poem: A critical edition* (The University of Toronto Press), p.157.

[36] Cameron, M. (1993) *Anglo Saxon Medicine* (Cambridge University Press), pp.25-6.

(35%) seem entirely naturalistic and another twelve (35%) are a mixture of natural description and hints from literature.

The portrait of the beaver is a mixed one. It is interesting that Aldhelm did not originally include the idea of the beaver castrating itself (inescapable later on), although the idea was added in multiple glosses.[37] Aldhelm's description of the beaver eating tree-bark (not just timber), living in burrows (not in lodges) seems based on familiarity with the animal, but, as I have said, the description of castoreum seems at least scholarly hyperbole and at most outright fabrication. Ultimately it is unclear whether Aldhelm was (i) aware of beaver populations in Britain or just stories about beavers and (ii) aware of the use of castoreum in Britain or just its use in stories. For the first clear sighting we have to wait for Gerald of Wales' account, centuries later.

Pan-European Beaver Folklore

Gerald of Wales (Giraldus Cambrensis) was one of the most distinguished and prolific scholars of Latin in the twelfth century. His works are well known, and have been made available as *Giraldus Cambrensis Opera* in the Rolls series. Beavers are mentioned in three of these texts: the 'Topographia Hibernica' (Topography of Wales, first written 1188), ' Descriptio Kambriae' (Description of Wales, 1194) and the 'Itinerarium Kambriae' (Journey through Wales, 1191).

Although I have given separate dates for each of the texts, the notes on beavers grew almost independently and were copied from text to text. We take our

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[37] Stork (1990) *Through a gloss darkly*, pp.170.

extract (in the Appendices) from the 'Itinerarium Kambriae' together with a few

isolated comments on the absence of the beaver from Ireland in the 'Topographia

Hibernica'. However, the texts themselves also grew over time, and Gerald added to

the work over his life-time.[38] 'Topographia Hibernica' has four contemporary

recensions as well as later versions, the 'Itinerarium Kambriae' has three recensions

(c.1191, c.1197 and c.1214), 'Descriptio Kambriae' has two recensions, (1194 and

c.1215).[39] The nature of the additions is interesting. Gerald's work is initially

surprisingly naturalistic, based on observation and eye-witness accounts. Over time,

and especially after Gerald retired from court in 1195, he added more work of classical

and religious allegorical significance. This includes in the case of the beaver, the

etymology and the quotations from the classical authors.[40]

Gerald of Wales refers to three separate structures built by beavers in the

passage. There are *munimenta*, which can be translated 'dams' (normally ramparts),

castra, which can be translated 'lodges' (normally castles) and *scrobes*, which can be

translated 'burrows' (normally ditches). Concerning the *castra*, such a clear description

is given of these structures that they can be identified as lodges without much

difficulty. They are hollow, multi-floored, and beavers retreat inside them when

threatened. The structures are woven from various types of wood which includes

willow rods (which then start to grow in place) and other species, perhaps especially

oak. The lodges are completely waterproof and weatherproof, and only humans are

able to get into them. Sometimes the beavers sit on the top of them to observe their

surroundings, camouflaged by the willow trees on the top. The burrows meanwhile

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[38] Bartlett, R. (1982) *Gerald of Wales (1146-1223)* (Clarendon Press, Oxford).
[39] Ibid. Appendix 1.
[40] Ibid. pp.143-4.

seem to be the beaver's favoured living spaces, when they are not hiding in their lodges or building. The dams form a last line of defence to which the beavers retreat when they are threatened.

It is interesting that although Gerald of Wales repeats the folklore from classical sources that the beaver will castrate itself, he does not seem entirely comfortable with the idea.[41] He makes the reservation that this happens in the east, whereas in the west hunters pursue beavers for their furs. Much of this material was not even present in his earlier drafts, as I have mentioned. Gerald exoticises the east,[42] and therefore since he cites the market for beaver testicles there, it is probable that he thought that there was no demand for beaver castoreum in medieval Britain. His evidence that beaver tails are sought by people in Germania seems similarly foreign to him, and he censures the idea that beavers are fish. Gerald is keen to correct what he sees as immoral practices in all of his works, and he probably would have leapt at the opportunity to find a target for his preaching nearer to home.[43] This suggests that beavers were not eaten in Britain in Gerald's time, but perhaps this had recently changed, as Coles has pointed out the strong contemporary evidence that beavers were consumed, and the considerably weaker evidence for a castoreum trade after the Norman invasion.[44]

Coles has commented extensively on Gerald of Wales' description of the beaver, and compliments Gerald on his accuracy in observing several features especially. According to her commentary he is correct about: (i) beaver lodges being

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[41] Ibid.

[42] See for example, in his 'Topography of Ireland' (dist. ii, cap. 26) where he refers to the east as the font of all poisons, a direct contrast with the far-west of the world (Ireland) where no poisons can exist.

[43] As for example in his 'Topography of Ireland' when his target are those people who consume barnacle geese as fish.

[44] Coles, B. (2006) *Beavers in Britain's Past* (Oxbow Books and WARP, Oxford). See for example: pp.88-9, 136-7.

interwoven with withies which take root and begin to grow on the top; (ii) his

description of the physical characteristics of the beaver; (iii) his depiction of burrows as

well as lodges and (iv) his description of beaver lodges with multiple layers.[45] Other

than the lodges the rest of his description is less accurate. Neither beavers nor seals

have only four teeth, but Gerald was right to point out the significance of their teeth,

since it demonstrates that beavers are actually rodents and two pairs of continuously

growing incisors are a characteristic of that order.[46] His idea of seal fur is of course

inaccurate, as is his idea that beavers can breathe underwater (although they can hold

their breaths for extended periods of time, and of course breathe in their lodges). He

also seems confused about beaver tails which he describes both correctly as useful for

swimming and incorrectly as cropped or stubby.

Another very important part of the text is Gerald's attestation at the time of his

tour through Wales (1188) that the beaver was only present in one place in one river in

Wales, had gone from England 'south of the Humber'[47] and was similarly rare in

Scotland. As we shall see, Gerald's testimony appears to have been accurate as the

evidence suggests that beavers were gone from South Britain by around 1300 A.D.

The idea that beavers use each other as slaves is one of Gerald's most peculiar

ideas, but far from Coles' suspicion that Gerald made it up,[48] it actually finds a parallel

in the 'Lapps' section of the anonymous 'Historia Norwegie', a text written most

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[45] Ibid. pp.167-9.
[46] Ibid. p.1; 167-8.
[47] Cf. footnote 385. The force of this statement is that Gerald is emphasising a geographical boundary over the political one. If he believed beavers could still be found in northern England he would almost certainly have mentioned it.
[48] Ibid.

probably between 1170 and 1220.[49] Just like the idea of the whale's eyelashes in Albertus Magnus which we saw paralleled in Welsh literature earlier, the relationship between the texts on beavers could reflect a common source (or oral tradition)[50] or a source-derivative relationship, although the texts are so close in date it is impossible to be certain which influenced which. I have given an extract from the text in the Appendices.

'Historia Norwegiae' shares some claims with 'The Voyage of Ohthere' which we saw in the Whales chapter. For example we see again that the 'Finns' (probably once more the Lapps in this context) are great hunters, are known to have a wide range of wildlife with good quality skins and pay tribute the Norwegians. The main part of the text though is concerned with beavers. First, the 'Historia' repeats the ideas that beavers often use burrows. This is also reported by Gerald of Wales, but since it is true of Eurasian beavers generally, the reports of it could be completely independent. The writer of the 'Historia' also mentions that beavers favour the bark of elm trees, which is not only false, it is not what is reported by Gerald of Wales who talked about willow and oak trees. In these elements the two reports are only tenuously linked.

The report about slaves is much more significant though, and the two accounts are very close indeed, even down to the method which the slaves use. The two accounts, however, do not use the same wording, and this, together with the fact that the rest of the accounts are not the same might suggest that their link is more folkloric and oral than direct and written.

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[49] Kunin, D. and Phelpstead, C. (trans., ed. 2001) *A History of Norway and The Passion and Miracles of the Blessed Óláfr* (Viking Society for Northern Research, University College London), p.xvi.
[50] Ibid. p.80.

The idea that certain beavers are slaves to others is also used as a riddle in the Danish 'Chronicon Lethrense' which was written c.1170.[51] Since the 'Historia Norwegiae' suggests that the fur of these creatures was different, perhaps the idea of the thrall was a commonly known one-that-got-away piece of folklore, invented to explain why some beaver pelts were so much inferior to others. After long use, beaver furs become flattened and hairless like 'beaver felt', the material preferred for hats in the post-medieval period. At the very least it is clear that Gerald of Wales did not invent the strange piece of folklore.

Gerald's text on beavers is one of the most important and influential ever to have been produced in the county, and was certainly the longest treatise on beavers commonly to be read in Britain for centuries to come. We will find as we progress further that as beavers became less common and first-hand experience of the animals became scarce, they are treated more and more like legendary monsters by later authors. For this reason, the idea of the self-castrating beaver is very useful, because whenever it is used or displayed in pictures it becomes a warning sign that we are looking at a literary creation rather than a true observation. At best the author is drawing on some earlier sources without questioning them in terms of their own experiences, or at worst just repeating the idea of the castor -monster from folklore without having ever seen it at all. As we shall see, this trend is at its strongest in the Welsh 'Bestiary of Love' from the fourteenth century, but it is noticeable long before that was written.

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[51] Ibid. p.80.

Welsh Historical Records

The medieval Welsh laws are a useful source for understanding the practical workings of medieval Welsh society. There are extant manuscripts from the thirteenth century up to the suppression of the Welsh laws by the Acts of Union in 1536 and 1542. But the use of these laws is by no means simple. A prologue, recorded at the beginning of many of the surviving manuscripts reports that these laws were codified by King Hywel Dda (the good) sometime between 942 and 950. This led to the title 'Cyfraith Hywel Dda' (the Laws of Hywel the Good) being given to the laws in Welsh, and until recently in Welsh scholarship this attribution was taken to be genuine, and the laws were dated to the middle of the tenth century.[52] This has also been the date given in any discussion of the Welsh laws by environmental historians and archaeologists.[53]

Since more than one redaction agrees about this legend it was probably described in a very early version of the Welsh laws. However, there is very little other evidence that the texts as they stand belong to the tenth century. There are many versions of the laws in Latin and in Welsh, but the oldest extant version can only be attributed to the thirteenth century. Perhaps Hywel Dda really did create a unified law for Wales, but it was not the Welsh laws as we have them. The core of the law as we have it should properly be regarded as a twelfth century creation which codified the legal tradition as it existed orally at that time.[54]

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[52] See: Pryce, H. (1986) 'The prologues to the Welsh lawbooks', pp.151-187, in: *Bulletin of the Board of Celtic Studies*, vol.33.

[53] For example: Coles (2006) *Beavers in Britain's Past*, p.165; Spriggs, J. (1998) 'The British Beaver – Fur, Fact and Fantasy', pp.91-101, in: Cameron, E.ed. *Leather and Fur: Aspects of Early Medieval Trade and Technology* (Archetype Publications for the Archaeological Leather Group, London), p.95.

[54] Charles Edwards, T. (1989) *The Welsh Laws* (University of Wales Press, Cardiff), pp.14-16, 20-1, 73-85, 91-3.

There are many differing medieval manuscripts and compilations of the Welsh Laws,[55] and beavers can be found at various points in more than one of these traditions. The longest reference can be found in the 'Iorwerth' family of lawbooks which dates to the thirteenth century, but the form found in the 'Cyfnerth' family of lawbooks is probably closer to the source, as it is simpler and closer to the variants in 'Blegywryd' and Latin (B), as we shall see. There is also a second law which can be seen in the form of a triad from the thirteenth century in the Welsh 'Cyfnerth' and 'Blegywryd' families of lawbooks as well as in the Latin (A) manuscript. Finally I have also included an alternative fifteenth-century version of this triad, which was probably invented as a late variant.[56]

It might be argued that since the values of these skins are copied from manuscript to manuscript over centuries, beaver-hunting must still have been relevant material to the writers, who were in the process of gradually revising the laws. However, this is not the case. As Owen has pointed out, the prices seem to be legal values, not market values.[57] Every single manuscript version of the law gives exactly the same exceptionally high price for beaverskin. Since these pricelists *were* copied from manuscript to manuscript over the course of centuries, we might expect to see beaverskin change in value like we see for almost every other value on the lists. Between the writing of the common source of 'Latin A' and 'Cyfnerth' and the innovations found in 'Iorwerth', most of the skins go down in value including ox, stag, cow, hind and otter skins. However the price of beaver and marten skin remains the

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[55] See: Ibid. pp.20-1.

[56] Ibid. p.34-5; Jenkins, D. (trans. 1986) *The Law of Hywel Dda* (Gomer Press, Llandysul), p.xxv; Emanuel, H. (1967) *The Latin Texts of the Welsh Laws* (University of Welsh Press, Cardiff), pp.2, 13.

[57] Owen, M. (2009) 'The Animals in the Law of Hywel', pp.5-28, in: *The Carmarthenshire Antinquary,* vol.45, p.6. Although she suggests that the legal value originally *was* a market value.

same. Considering the quantity of furs on the value list that do change their value, this is more likely to reflect stagnancy than perseverance. Considering the beaver's rarity in Wales, the evidence can be best interpreted to suggest that these furs were included for completeness, but their values were never changed in part because by the time the laws were being recorded the animals were already extirpated from the country. The various laws of value probably reflect the very end of the native beaver industry.

I have given several extracts from the medieval Welsh law codes about beavers. As well as the various versions of the value list, there is another law which can be seen in the form of a triad from the thirteenth century in the Welsh 'Cyfnerth' and 'Blegywryd' families of lawbooks and in some Latin versions, as we shall see. This law gives the king the value of a beaver wherever it is slain, which must have discouraged the hunting of beavers for any except those working directly *for* the king. The triad also suggests that beavers were still present to hunt when it was first composed. These laws may well have been composed originally in or around the time Gerald of Wales was writing about beaver hunts in the late twelfth century.

I have also included in the Appendices an alternative fifteenth century version of the triad, which was probably invented as a late variant.[58] The earlier triad seems to represent material common to more than one tradition and therefore may belong to the same context as the law of animal values above, prior to the thirteenth century. The last triad however, since it is present in only one form, and is clearly a variant is most likely to have been composed in the fifteenth century. It is not entirely independent though. The last text I have presented here is a piece of legal

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[58] Ibid. p.34-5, Jenkins (1986) *The Law of Hywel Dda*, p.xxv; Emmanuel (1967) *The Latin Texts of the Welsh Laws*, pp.2, 13.

commentary, which is first found in <u>Peniarth 164</u> (<u>H</u>), a fourteenth or fifteenth century manuscript which corroborates the idea that certain animals belong to the royal court. At first sight these two texts may appear to suggest that the beaver was still present in Wales in the fifteenth century, but given that one repeats the completely false folklore of the animal castrating itself, and that the other is merely an alternate form of the previous triad this seems unlikely.

Three very important things should be immediately obvious when reading these texts (see the Appendices). First, and most basically, since beaver-skin is given a value among a large group of other useful types of pelt, beavers' furs were certainly being exploited in late medieval Wales. Further, 'Iorwerth', 'Cyfnerth', 'Latin' <u>B</u> and 'Blegywryd' all also give the same value for beaver skin, 120 d. or half a pound.[59] Other similarities between the order of the animals listed and the format of the laws suggest that this value comes from an older tradition, perhaps made before the lawbooks separated. If this is accepted, the 'Cyfnerth' lawbook seems to provide the version of the list which is closest to the original. Although 'Iorwerth' has the oldest manuscript tradition, the list there appears more developed by its author.[60] Our findings thus fit into the general pattern for the lawbooks as suggested by previous scholars.[61] The second obvious thing to note from the above extracts is that the beaver was not just found dead or traded but actively hunted or trapped by those seeking its fur. The first

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[59] The old British pound was 240 pennies (d.) or 20 shillings.

[60] This is supported by the fact that 'Latin' <u>B</u> and 'BLEG' both give twelve pence as the proper value of an otter pelt. This agrees with 'Cyfnerth' against 'Iorwerth' suggesting that either 'Cyfnerth' is closer to the source of 'Latin' <u>B</u> and 'Blegywryd' than 'Iorwerth' or 'Cyfnerth' is an intermediate source between 'Iorwerth' and 'Latin' <u>B</u>.

[61] 'Cyfnerth' is generally considered by scholars to be less developed than 'Iorwerth'. Although the 'Iorwerth' lawbook tradition has the oldest manuscripts, it seems to have been heavily edited in Gwynedd in the court of the two Llywelyns in the thirteenth century, whereas Cyfnerth's form was stable from earlier on. see: Stacey, R. (2000) 'King, Queen and Edling in the Laws of Court', pp.29-62, in: Charles-Edwards, T., Owen, M. & Russell, P. eds. *The Welsh King and his Court* (University of Wales Press, Cardiff); Jenkins (1986) *Hywel Dda*, p.xxvii.

triad from the thirteenth century lawbook makes this very clear. Beavers were being hunted in areas under the jurisdiction of Welsh kings.

The name of the animal used here is also striking. The term *llostlydan* (broad-tail) sounds very much like a nickname, yet it is the only term used throughout the Welsh laws, meaning it was probably the standard, most comprehensible term for the time period. As I said in the discussion above, the term *afanc* is not used until much later. And yet the term is not found anywhere else in the corpus of Middle Welsh literature, and only reappears in the 17th century dictionary tradition.[62] *Llostlydan* was probably the term in use before *avanc*, but it is not well attested. I shall return to this point in the conclusion.

It is probable that the beaver was ascribed its value of 120 d. before the first extant lawbook was written, since all the lawbooks agree on this one point. This suggests the animal was being either hunted or trapped before the thirteenth century, and we shall see further evidence of this point later on. This is probably not the case for the fifteenth century. The beaver may have been hunted in the fourteenth century, but if it was the tax suggests it was very rare. The last text included in the above extracts, dated to the fifteenth century is only present in a single text, Latin <u>E</u> and it seems to be directly inspired by the triad I have translated above it. The need for this triad in the fifteenth century suggests that beaver was still a royal fur at this time, but not necessarily that the animal was still hunted in Wales at this point. This roughly corroborates the theory that beavers went extinct by 1300 in south Britain.[63]

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[62]According to *Geiriadur Prifysgol Cymru*.

[63] Raye (2014) 'The Early Extinction of the Beaver'.

The last important thing to emphasise is the remarkably high value (120 d.) of the beaver pelt. One beaver pelt has the value of ten otter pelts, or, to use the values from 'Iorwerth', one beaver pelt is worth one hundred and twenty roebuck skins or sheepskins. 'Iorwerth' seems nearly comprehensive in terms of the list of pelts given, but even there, the average price of an animal's pelt is just less than 7 d (18 times less than the value of the beaver's pelt). In terms of crime, the destruction of a single beaver pelt would be roughly equivalent to the destruction of a flock of 31 live sheep. Without the law of the first triad above, granting the value of the beaver-pelt to the king after each successful hunt, beaver trapping would have been a lucrative industry indeed. Such great incentive may well have inspired some degree of quiet poaching for the reason of tax evasion, especially in smaller communities beyond royal oversight.

Wilson has suggested that the Welsh laws give the same value for the entire carcass of a beaver, and just its fur, implying that castoreum and meat actually had no value.[64] Although this has since been repeated by more recent scholars it is quite incorrect. All of the above values are for the pelts of the creatures only, and not anything else about them. This is not explicitly stated, but none of the lawbooks repeat the cost of the beaver more than once, and it is clear from the context that the pelts are the items being valued. Castoreum may have been valued, as previous scholars have suggested,[65] since it is mentioned in the final fifteenth century law, but considering that this text also states that the beaver castrates itself, it is not a reliable source for real medieval hunting practices, and seems to borrow all its information

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[64] Wilson, C. (1858) 'Notes on the Prior Existence of the Beaver *Castor Fiber* in Scotland', pp.1-40, in: *The Edinburgh new Philosophical Journal (new series),* vol. 8, p.10.

[65] Kitchener & Conroy (1997) 'The history of the Eurasian beaver', p.104.

from another source, perhaps Gerald of Wales' 'Journey through Wales' which continued to be popular for centuries after he wrote it.

The last text is fragmentary but interesting all the same. The beginning of the law is in the form of a triad, and may well be more traditional than the rest of it. The second half is a justification for the triad to explain it to other lawyers, and is the only really original part of the text. In this commentary, the name *llostlydan* is glossed, which suggests that the word was considered an archaic or technical piece of jargon at the time. Interestingly the word that glosses it is *befyr* which is functionally the same as *beuer* which we saw in Old Cornish. This may be the Welsh version of the word, but it's unlikely a rare Welsh word could have been glossed by an even rarer one. It is much more likely to have been a borrowing from English although it does not appear before or afterwards in Welsh literature until 1740 and 1863.

The term *pryf* which I have translated 'game' is a difficult one. More usually it refers to vermin or pest so that in modern Welsh the word usually refers to the earthworm or insects generally, although it sometimes refers to the fox. In the explanation that follows the triad, a form of protection is indicated for these animals – they are for the queen wherever they are slain, which means that commercial hunters could not have obtained any profit from them. In the context of this explanation, *pryf* seems most likely to be a kind of protected status, much like the venery animals in forests of England could not be hunted by common people but only royalty and those with right of chase or hunt over the land.[66]

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[66] The very wide variety of meanings 'pryf' can have has been discussed by Williams, I. (1948) 'Hen Chwedlau', pp.28-58, in: *Transactions of the Honourable Society of Cymmrodorion,* Sessions 1946-7, pp.56-8. Williams gives a wide range of animals that have been described using the phrase from moles and salamanders to badgers and even dragons. See also, Bromwich (2014) *Trioedd Ynys Prydein,* pp.99.

Before finishing I should also make a note about the relative value of beaver

pelts. Speaking simply, the value of any commodity is dependent on supply and

demand. Beaverskin was clearly a very in-demand, yet commonplace commodity.

Beaver fur is waterproof, lacks a 'grain' and can achieve a good lustre. Beaver skin was

the only available option for people to keep their heads dry before the invention of

modern plastics other than tarred or oiled cloth.[67] Given the strong-smelling, heavy

and sticky attributes of these last materials, beaverskin must also have been the

favourite material for hats. Dent attests to the significance of beaverskin in the

centuries following when he suggests that one of the reasons for the discovery of the

New World may have been to find a new source of beaverskin.[68] The two triads at the

end of our text even ascribe beaver skin a royal significance – no king or queen was

fully dressed without it. However, at the same time, the material was not exotic in this

period. The Welsh law tracts explicitly refer to hunting practices, and therefore we

may also suggest that there was a good supply of beavers when the law was created.

I have previously argued that beavers had such a high value initially because of

their low supply and high demand, which might have eventually led to the fur

becoming a "Veblen good" with its high price actually driving its demand.[69] However

Coles has offered a more natural explanation by simply taking into account the relative

sizes of the pelt. She gives the average pelt size of a beaver as around 72x54cm (giving

nearly .39m² of material) whereas the pine marten is on average around 58x12cm (or

nearly 0.07m²) and the average pelt size of the ermine is 34x8cm (or less than

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[67] Dent (1974) *Losts Beasts of Britain*, p.58.

[68] Ibid.

[69] 'Wild Animal Values and Legal Entitlement: Beaverskin Mania in Medieval Britain', paper given at *Celtic Legal Procedure* conference at Jesus College, Oxford University (9th May 2013).

0.03m²).[70] This means that one beaver offers roughly 5.5x the amount of material as one pine marten, and more than 14x the amount an ermine provides.[71] This produces the following results:

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[70] Various authors in: Harris & Yalden (2008) *Handbook of British Mammals*.
[71] Coles (2006) *Beavers in Britain's Past*, p.165.

Animal skin sizes and Welsh legal values			
Fur	**Price in Welsh laws**	**Pelt Size**	**Price per m²**
Ermine	12d.	Less than 0.03m²	1l.10s.1d. (441d.)
Pine marten	24d. (exactly 2x ermine)	Nearly 0.07m² (2.5x ermine)	1l.5s.5d. (345d)
Beaver	120d. (exactly 10x ermine)	Nearly 0.39m² (13x ermine)	1l.3s.9d. (309d.)

The results in the final column (price per m²) does not necessarily indicate that pine marten was less socially prestigious than ermine, since clearly by using bigger pelts a medieval member of the skinner's guild could, in effect, 'buy in bulk'. However, as Coles has argued the larger size of the beaver pelt is almost certainly the explanation as to why beaverskin had such a high value in the law codes, as the relative fur values do seem to directly (if not perfectly) correlate with the relative fur sizes.[72]

English Historical Records

According to the traditional view of the beaver's extinction date in England, the animal disappeared in the twelfth century before the sumptuary laws were written. If correct, this would explain the almost complete absence of the beaver from these laws and tally with Gerald of Wales' assertion that the animal was no longer found in England south of the Humber in the twelfth century. Additional evidence is furnished by customs records from the port of London. The furs described in these reports have been compiled and analysed by Veale in *The English Fur Trade.* She found that in the

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[72] Ibid.

fourteenth-sixteenth centuries there were nine main furs imported into Britain via London.[73] Due to the nature of the customs records she was only able to find full records from seven full years and two half years throughout the period of July 1384- March 1546. Her results can be summarised thus:

The exotic fur trade, 1384-1546, according to Elsbeth Veale's English Fur Trade[74]					
Fur	Average Value per pelt	Main years imported 1384-1547	Average number of imports each year	Price Fluctuation	Notes
Sable	/	1512-1547	373	/	Insufficient data for value analysis. 1512-13 price 120d. 1546-7 price 74d.
Pine marten	/	sporadically	341	/	Insufficient data for value analysis. 1400-1 price 18d., 1438-9 price 7d.
Mink	12d.	1481-1547	1641	12-13d.	
Foynes (stone marten)	8d.	sporadically	643	8-9d.	
Beaver	8d.	1384-1481	1169	8-9d.	
Ermine (winter stoat)	6d.	1384-1481	638	4-7d.	
Budge (lamb-skin from Spain or Africa)	3d.	All	4633	2-3d.	1546-7 price (15d) deemed anomalous and not included in average
Lettice (winter weasel)	2d.	1481-1547	4904	1-3d.	
Squirrel	2d.	All	132546	1-2d.	1546-7 price (24d) deemed anomalous and not included in average

73 Veale (2003) *The English Fur Trade*, pp.158-9.
74 Ibid.

I have arranged the above furs in order of average market value. In general the cost to catch these animals must have been very similar. Members of the weasel family can usually be caught easily,[75] whilst beavers live in communities and therefore multiple individuals might be caught from the same place once located. It is more likely that the differences in market value represent the furs as luxury goods, with profit margins far beyond the cost of production.

There are two special exceptions to this general rule. The price of producing budge must have been significantly less than the other furs, since sheep are domesticated and do not have to be trapped. They could also be bred more intensively than wild animals. The second exception is the squirrel. Squirrels are mainly vegetarian, and are found in higher densities than any of the other species listed with the exception of the lamb. Squirrel populations can sustain a high intensity of hunting before becoming extirpated and are easy to find. This explains why the average number of squirrel furs imported each year was in excess of 130,000.

Although I have not given any indication of the downwards spiral in the number of furs imported each year, Elsbeth Veale is correct to note that the catastrophic collapse of the squirrel import industry is by far the most noticeable feature.[76] Overall there were 391,746 exotic furs imported into London in 1384, but only 21,220 in 1546-7. However, when we exclude the squirrel data the trend is clearer. Veale's data attests to 14,546 non-squirrel skins imported in 1384. This number slumps to 1910 in 1400-1, but it quickly rises again, to 11,620 in 1438-9 and

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[75] For example, pine marten: Balharry, E., Jefferies D. & Birks, J. (2008) 'Genus: Martes', pp.447-55, in: Harris, S. and Yalden, D. eds. *Mammals of the British Isles, Handbook, 4th ed.* (The Mammal Society, Southampton), p.455.
[76] Ibid. p.160.

30,262 in 1502-3. The sixteenth century sees a second slump, to a low of 3220 in 1546, but this is not as low as the 1400-1 figure, and the industry may well have recovered again after this point.

The position of the beaver on this chart is very interesting. Of the frequent exports into Britain the beaver is the third most highly-valued, and is even more highly-valued than ermine. Still, it is not as popular in London as it was in Wales since the demand for pine-marten seems to have driven the price of this animal's fur higher than the price of beaver fur. Actually though, since we do not see fox or cat (for example) on this list, the very importation of the beaver with the pine marten and ermine (winter stoat) strongly suggests that the native supply of these creatures could not keep up with demand, at least from the fourteenth century. This does not necessarily prove that the animals were extinct from England, still less Britain as a whole, but it does suggest that they were significantly more difficult to find in Britain from the fourteenth century onwards.

Beaverskin, along with ermine vanishes from the market in 1481, but the position of these skins is quickly filled by low-cost lettice[77] and high-cost mink. The disappearance of these creatures is very interesting. Numbers imported had been falling since the end of the fourteenth century, and the decrease in numbers probably reflects that the animal was beginning to become rare elsewhere in Europe. Veale, quoting Conrad Gesner, the sixteenth-century naturalist, has suggested that the

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[77] The British subspecies of weasel (*Mustela nivalis vulgaris*) hardly ever acquires a white coat in winter, unlike the Scandinavian subspecies (*Mustela nivalis nivalis*). See: McDonald, R. and King C. 'The Weasel', pp.467-76, in: Harris, S. and Yalden, D.W. (ed. 2008) *Mammals of the British Isles, Handbook, 4th ed.* (The Mammal Society, Southampton), p.468. That it was not imported before suggests that there was no market for lettice in Britain until an ermine replacement was required.

beaver was almost extinct in west Europe by the sixteenth century,[78] and this is the story suggested by her importation data too. On the other hand, it is certain that the beaver was only extirpated from much of Europe in the nineteenth century, and in 1821, Wilson attested it could only be found in small areas 'in the Austrian and Prussian States, Bavaria, Russia, Sweden, Norway, Lapland, France, and perhaps Switzerland'.[79] Perhaps supplies became so low in these countries so as to be no longer commercially viable by the sixteenth century, but they recovered after the relaxing of demand with the start of the American export industry.

The English laws about wild animal hunting are very different from the Welsh and Scottish ones because England in the late medieval period had an aristocratic hunting culture, and rights of chase, trapping and warrening were jealously protected by the aristocratic elite. However, the hunting *par force* seems to have had very little to do with providing fur and meat, and much more to do with providing entertainment and displays of power.[80]

Unfortunately there is very little evidence for the exploitation of the island's wild fur and flesh resources beyond the activity of these aristocrats. The little evidence that exists suggests that local people hunted and trapped animals in land not set aside in the strictly protected *foreste* and that pelts must have then travelled via peddlers and medieval fairs to major cities to be worked by skinners and tawers.[81] It is possible that the late medieval English native hunting and trapping industries, unlike the

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[78] Ibid. p.175.
[79] Wilson (1858) 'The prior existence of Castor Fiber in Scotland', p.26.
[80] Sykes (2006) 'The impact of the Normans on hunting practices in England', p.146.
[81] Veale (2003) *The English Fur Trade*, pp.58-62.

Scottish and Welsh versions, were not as statistically important as furs obtained abroad and imported.

Although there are few English laws on fur-hunting, there are a number of English laws, passed between the fourteenth and sixteenth centuries called the sumptuary laws. These provide perfect parallels to the Welsh triads about fur being proper to the king or queen, except that the English laws not only legislate this, they make it clear that the best furs are *not* suitable to the lowest classes. The laws worked up the social ladder, allowing each class more privilege to dress in a greater range of higher-status materials. Under the most complicated versions of these laws the poorest people would not be allowed to wear any kind of fur, those richer could wear a small range, the gentry could wear almost any native fur, and then the aristocracy alone was allowed to wear ermine (stoat), lettice (weasel) and sable. The intention of these laws was to allow people to tell at a glance how rich other people were, and therefore what privileges should be accorded to them. That the laws were seen as necessary also makes clear two things. (i) Poorer people did dress in expensive furs before the laws were made and (ii) those making the laws believed that furs were so fashionable that they should be restricted to the highest classes.

With this in mind, it is possible to draw some conclusions from England's sumptuary laws. Although no British sumptuary law refers to the beaver specifically until the last in 1532, the laws affected trade in all furs and skins, particularly exotic ones. Beaverskin therefore must have been intended to be controlled by these laws since, as we have seen, beaverskin is one of the nine most frequently imported furs. Although the original laws are rather complicated and lengthy to quote fully, the following table summarises the details of six main pieces of legislation that affected

beaverskin. The original texts can be found in the *Statutes of the Realm* series, volumes

i and iii, as cited in the footnotes.

Summary of medieval sumptuary legislation, relating to fur, 1336-1532		
Statute Date	**Reference in *Statutes of the Realm***	**Beaverskin (native fur) allowed to**
1337	10° Edw. 3. St.3	The royal family, prelates, earls, barons, knights and ladies, ecclesiastics and those who can spend £100 a year, presuming they could obtain native fur.
1363	37°Edw.3. cc-1-19	*Assuming no native fur easily available:* Any knights, the wives and children of rich esquires and clerks with land or rent of £200 a year, and very rich merchants, citizens or burgesses with £1000 of property, plus any richer than them.
1463	3° Edw.IV. c.5	Anyone who spends more than 40 shillings a year. (Most fur imports specifically mentioned and restricted to (richer) yeomen.
1509-10	1° Hen. VIII. c.14	Anyone with £100, or who spends £10 a year, or yeoman grooms and pages of royalty or graduates of the university or gentlemen.
1515	7° Hen. VIII. c.6	Anyone with £100, or who spends £10 a year, or yeoman grooms and pages of royalty or graduates of the university or gentlemen.
1532	24° Hen. VIII c.13	Anyone who spends £40 a year, or heirs to those who spend £100 as well as esquires and knight's heirs. And any clerks at university, or with a Master of Arts of Bachelor of Law degree, or any ecclesiastic.[82]

While the 1336-7 law appears strict, the 1362-3 law made far more stringent

provisions, and, as Hayward has pointed out, was the first to link permitted attire to

income.[83] Those earning less than £200 a year, and those with less than £1000 of

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[82] Baldwin, F. (1923) *Sumptuary Legislation and Personal Regulation* (Doctoral dissertation, John Hopkins University), pp.21; 25; 38-47; Records Commissioners (1811) *The Statutes of the Realm, vol. i.* (The Records Commissioners), pp.280-1; 380-2; Ibid. vol. 3, pp.430-2.

[83] Hayward, M. (2009) *Rich Apparel* (Ashgate Publishing, Farnham), p.18.

property were forbidden from all but the most common furs (lamb, cony, cat and fox).

Those earning or possessing more were allowed any fur except lettice (weasel) and

ermine (stoat). Beaver was not mentioned, suggesting both that it was not a popular

and common fur choice, but that neither was it a high status fur like weasel and stoat –

it would have been permitted generically as a fur for the rich people mentioned in the

law above. However this law was repealed in 1364, and a later attempt to re-enact it in

1378-9 failed.[84] The law which eventually replaced it, Edward IV's 1464 law was much

less stringent, and only made strict restrictions for the most luxurious furs. Perhaps

beaver fur was supposed to be considered with the fur imports, further up the list, but

even allowing this, the law would still be the least stringent on our list.

Looking at the author of the legislation it is clear that apparel appropriate to

class was a particular concern for Henry VIII, just like it had been for Edward III. If the

1509-10 and 1515 laws are more moderate than the 1363 law this is probably because

it had been more than a century since most people had anything to stop them wearing

as much fur as they liked. At the same time the law is considerably stricter than

Edward IV's version. Sable is the only fur mentioned by name in this act, and it is

entirely reserved for the highest classes. Veale has suggested that considering that this

law is stricter that the 1532 version, it is possible that it was mainly ignored, and the

1532 law was to replace it. I do not believe this is the case, as in terms of fur the 1532

law is actually much stricter than its predecessor, so the evidence might instead be

read to suggest that people were obeying the law, and that the 1532 law was just

written to strengthen the previous one. It is perhaps partially because of these laws

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[84] Ibid. pp.39-42; 46; 56.

that in the sixteenth century the fur industry finally failed, and indeed a letter sent out

by the British branch of the Muscovy Company laments this new law and suggests

fewer furs be sent.[85]

At first glance, in the statute of 1532 the beaver seems to still be classed as a

native. In a law of this year, the clergy (except bishops, abbots and priors) were

forbidden from wearing any non-native fur product. After this follows a list of furs

which are permitted to the lower clergy, and beaver is included on this list. However,

this list also contains other animals certainly not native to Britain including *foynes*

(stone martens), *boge* (lambskin from the Mediterranean) and *calaber* (squirrels from

Italy and Central Europe).[86] It seems clear therefore that this list was unrelated to the

previous one, and contains types of fur permitted to those in the lower orders of clergy

and academia despite the previous stricture. I would suggest that the furs were

permitted to these orders because of the long-standing tradition in universities and

cathedrals of wearing ceremonial robes lined with fur.[87]

It is also clear from the above summaries alone that the beaver is not as

important in England as it was in Wales. Beaverskin in England was not proper to

royalty like ermine or genet (civet cat). However, at the same time it is clear that

beaver-skin does have some status. It is even possible that the significance of

Chaucer's merchant with his 'Flaundryssh bevere hat' is that the merchant was

flaunting his wealth. The case for this theory is quite weak, since although the 1363

law would have been effected in Chaucer's lifetime, it was repealed immediately

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[85] Veale (2003) *The English Fur Trade*, pp.142, 145-7, 155.

[86] Baldwin (1923) *Sumptuary Legislation*, pp.206-7.

[87] Veale (2003) *The English Fur Trade*, p.9.

afterwards, but if active at the time, the merchant's beaverskin hat would show off that the character was rich enough to own £1000 of property.[88] Perhaps a safer interpretation is that Chaucer's merchant exemplifies the rebellious trend of the time period towards dressing 'above your station'. This kind of threat to the established chain of being, and the solvency of the country was what prompted the sumptuary laws in the first place.[89]

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[88] Boenig, R. & Taylor, A. (ed. 2013) *The Canterbury Tales* (Broadview Editions, Ontario). General Prologue, l.272. Flanders was a noted centre for furs and wool although it is not certain whether this hat was in the style of Flanders (like Cordovian leather which was made across Europe) or actually a hat from Flanders.

[89] Hayward (2009) *Rich Apparel*, pp.17-19.

[Above pictures are a civet cat (large spotted genet, Genetta tigrina) and a Eurasian Beaver (bleached by taxidermy chemicals) at the Natural History Museum, London]

It is possible to gain a more accurate idea of the status of beaver in Britain by looking at the fur in its context within the list of 1532 furs where it is mentioned. The English sumptuary laws are essentially a cumulative list of privileges acquired by the rich. The higher a person's social class, the more furs they are allowed to wear, so whilst those in the lowest classes could not wear any fur, or just a small number of fur types, those in the highest classes could wear all furs.

The cumulative nature of these laws is very useful because it means that by mapping the furs allowed to different classes in order it is possible to create a hierarchical listing of furs, from lowest to highest status as follows:

The comparative status of furs in the English Sumptuary Laws, low-high	
Individual class, profession or wealth	1532 Statute privilege (cumulative: each person has all the rights of those above them in the table)
Cow-herd apprentice Journeyman craftsman	2 shillings 9d. per yard maximum spending limit. NO FUR
Husband-man	5 shillings per yard NO FUR
Those who spend less than 40 shillings per year	One cloth per item of clothing, maximum 3 shillings 4 pence per yard Grey conny (rabbit) blake lambe whitte lambe of Englisshe, Welsshe or Irisshe growyng
Those who spend more than 40 shillings per year Yeomen Craftsmen Artificer	Maximum 6 shillings 8d. per yard [Most native furs allowed][90]
Those who spend more than £5 per year	No spending limit on above furs
Those who spend more than £20 per year	Blacke conny Bogye (lamb fur)
Those who spend more than £40 per year Heirs of those who spend over £100 per year Knights' heirs Esquires	Foynes (polecat/pine marten) Genettes called Grey genettes (civet cat?) Furre whereof the like kynde groweth not within this Realme[91]
Any Clergy without the highest degrees (listed below)	Grey Cony Blacke Conny Bogye Shankes (shanks) Calaber (squirrel) Grey fiche (polecat) Foxe Lamb Otter Bever
Archdeacons Deans Provosts	Foynes (polecat/pinemarten) Menever

[90] This is implicit in the restrictions for poorer people.
[91] 'This Realme' in 1532 is England, Irlande, Wales, Calice (Calais), Berwike or the Marches of the same.

Masters and Wardens of Cathedral and College Churches Prebendaries Academic doctors Bachelors of Divinity Those on doctoral or B.Div courses	
Bishop Abbot Prior Prelate	Stuff wrought or made oute of this Realme[92]
Knights Barons' Sons	Furres of Libardes
Foreigners Those given clothes to wear by nobility Ambassadors Lord Chancellor Lord Treasurer President of King's Council Lord Privy Seal	Any furres, excepte blake genettes
Barons Prior of St John's Jerim Viscounts	'Wollen Clothe made oute of this Realme, Blake Jenettes Luserns
Earls Dukes Marquises Knights in Order of the Garter Royal Family	Furres of Sables

The English hierarchy of animal-fur status runs from native lambskin and ordinary grey rabbit, all the way to sable and the mysterious *blake jenettes*.[93] Although there are some new furs in this list, overall it agrees very well with the fur import lists arranged

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[92] I have made the clergy and clerks' rows a different colour to indicate it should not be assumed that those after them have their privileges, although for the most part it does work out that way.

[93] The genet is described in King Henry VIII as a civet cat, an animal now confined in range to tropical Asia and Africa. Since this description is so close in date to these sumptuary laws, it is most probable that the animal called the genet in the sumptuary laws is also a civet cat. However this leads to some difficult questions: What is the difference between the ultra-high status black genet and the less high status grey? How did this creature gain popularity so far away from its home? And, even after it did, why were other animals with similar geographic ranges and arguably more beautiful pelts like tigers, lions and crocodiles not ever imported? It is interesting to note that in the customs records of London the first genet is first explicitly named in the records for 1502-3. It must have risen in favour quite quickly to become the highest-status fur in the 1532 sumptuary law.

in order of pelt-value which we found above. Beaverskin, although fairly high-up the status list is still subordinate to the most expensive and exotic furs like lynx and genet.

Taken together with the customs records, it is possible to draw conclusions about several things. Despite the tepidity that beaverskin was greeted with in the sumptuary laws, its price in the customs-import records demonstrate that it was highly regarded. Similarly, although the sumptuary laws do not name the beaver explicitly, even the generic laws regard exotic imported fur very highly, and since there were only nine main exotic imported furs, beaver must have been included on this list. But the purpose of statutes like the sumptuary laws is to legislate about already important issues. Statutes are usually made to change what is perceived as negative behaviour. In the fourteenth-sixteenth centuries the behaviour being legislated about was individuals wearing those sumptuous cloths and furs which were seen as more suitable to the wealthy and powerful.[94] The sumptuary laws therefore offer corroborating evidence that there existed a high demand for exotic furs. If there was no legislation, all merchants might have worn beaver hats from Flanders just like in the Canterbury Tales reference above.

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[94] Hayward (2009) *Rich Apparel*, pp.17-19.

Scottish Historical Records

Returning to the fourteenth century, the 'Assisa de Tolloneis' are a collection of customs duties on different items, written in Scotland in the second half of the medieval period. These laws form a small part of the 'Assizes of David' miscellany.[95] This was an apocryphal collection of laws attributed falsely to King David I of Scotland (ruled 1124-53), and said to have been written by him in Newcastle, but actually more probably collected by King Robert I (ruled 1306-1329) around 1318.[96] The 'Assisa de Tolloneis' part of this collection was either composed originally or compiled together with the other laws at this time, so can be dated to either in 1318 or not too long before this time.

A second version of this law has also been collected from the Northumberland Chartulary, a manuscript written in a fourteenth-century hand. Although the 'Newcastle Customal', which it is preserved with, *can* be securely dated to the end of the twelfth century, the toll list we are interested in is not present in the earliest manuscripts. It is attributed to King Henry I (ruled 1100-1135), but may well be original to the beginning of the fourteenth century, just like the Scottish attribution to King David I in the 'Assizes of David'.[97]

In both laws, furs are the second type of item considered. The list is short, and seems to concern only the most common and high status exports. I present the full text of both clauses in the Appendices.

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[95] In some versions of the Scottish laws, the customs duties are collected in the 'Custuma Portuum' rather than the 'Assizes of David'. I believe the two texts to have identical versions of the 'Assisa de Tolloneis'.

[96] Taylor, A. (2012) 'The Assizes of David 1, King of Scots, 1124-53', pp.197-238, in: *Scottish Historical Review, v*ol. 91, p.201.

[97] Johnson, C. (1925) 'The Oldest Version of the Customs of Newcastle-upon-Tyne', pp.169-178, in: *Archaeological Aeliana,* 4th series vol.1.

The animal names used in this extract are interesting because although the Latin was probably the original language of the text, two of the Latin terms are clearly borrowings from Scots or English. There are Latin words for the pine marten and beaver, but instead we find *martinorum* and *beueriorum* used. This proves both that the terms still had a fine currency in the vernacular, but also, that the author had not read or written about these animals in Latin frequently enough to know any word for them (unlike the other animals mentioned).

Since the Scots law mentions sables and *gray gryse* which were both non-native and imported from the far north, it is possible that beavers were exotic to Scotland just like they were exotic to Wales by this time. Coles has suggested that sable could refer to dark coloured polecat skins, but this does not account for the *gray grys*.[98] Admittedly this fur is not mentioned in the older Northumberland version of the law, but since we have one definite imported skin in the Scottish version, it seems illogical to suggest that the second is actually a strange name for a common skin. Nobles seeking high-status sable skins would probably not have been satisfied with the skins of polecats either. The fur trade was an international enterprise, and since beaver skins continue to be mentioned occasionally in documents up until the twentieth century, medieval export duties need not indicate local production any more than modern ones. Inverness became an important centre for the fur trade in the later medieval period,[99] and considering the popularity of the surname 'Pilche' or 'Pylche' (Furrier) in records of the fourteenth century the industry may have already begun before that.[100]

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[98] Coles (2006) *Beavers in Britain's Past*, p.166. 'Grey gryse' are specifically red squirrels in grey winter coat, grown only in northern Scandinavia and the Black Sea region.

[99] Lovegrove, R. (2007) *Silent Fields* (Oxford University Press), pp.24-5; Veale (2003) *The English Fur Trade*, p.170.

[100] MacBain, A. (1895) *Personal Names and Surnames of the Town of Inverness* (Northern Counties Printing and Publishing, Inverness).

If so, most probably furs were imported to be prepared, bundled and distributed as well as simply collected here.

Most importantly, the law does attest to the relative importance of beaverskin to the fourteenth century economy. In Scotland it was just as important as native fox, weasel, marten, wildcat and the two most important imported skins, squirrel and sable. Four pence was still the equivalent to the customs duty for eight living oxen, and therefore the exporting of these skins must have been a lucrative business to sustain such a cost. This level of industry cannot have been sustainable. The absence of the beaver from a very similar 1424 Act in Scotland (also in the Appendices) suggests beaver-skins were no longer being frequently exported. As I have said, this led Yalden to suggest that it marked the end of the beaver's presence on the island.[101] This is also around the time that beaverskin imports to Britain significantly slowed,[102] meaning that technically it could just reflect a downturn in the animal's popularity. However by the fifteenth century the beaver was likely to be increasingly unavailable across Europe.[103] It seems most likely that the beaver was left off the new act because it was no longer frequently exported.[104] There is tentative evidence that the beaver may have survived at some level in Scotland until the sixteenth century, but commercially exploited Scottish populations are a thing of the fourteenth century.

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[101] Yalden (1999) *The History of British Mammals*, p.161-2.

[102] Veale (2003) *The English Fur Trade*, pp.158-161.

[103] Ibid. p.175.

[104] It is clear that the beaver was still being imported. As discussed in the chapter, beavers were commonly imported to London until 1481. Less than a century after this the search for beavers was given new life with the discovery of the New World populations, which led to the sixteenth-century growth in popularity of beaver-felt hats.

There are several alternate readings of the 1424 law in different manuscripts.[105] Most of these do not significantly change the sense of the text, with the exception of the addition of the export duty on fox skins, and that some of the customs duties are different. For the marten skins, two manuscripts change the charge to 2s. (quadruple the price). Advocates 1 makes nine polecat skins worth 8d. whereas two other manuscripts make the ten worth 10d. Two manuscripts also change the number of rabbit skins and the amount they are worth, whereas the doe and roe hides were removed by Advocates 2. All this is not very important to us, but it does suggest that, unlike the Welsh law code value lists, the Scottish taxations were being altered to fit local burgh customs. The fact that doe and roebuck hide customs duties could be removed, fox skins added and rabbit skins changed ten-fold really reflects a law that was constantly changing to suit circumstances. It would be odd to imagine that the once hugely valuable beaver could have been completely ignored by all of these editors, unless beaver skins were no longer being exported.

Beaver-Confusion in the Middle Welsh Literary Tradition

Today if you look up 'beaver' in a Breton or Welsh dictionary you will find *afanc* and *avank* respectively. However, modern speakers of Breton and Welsh tend not to recognise this word unless they have read especially about beavers in their language.

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[105] Easily viewable via popup-notes on the online manuscript edition: Brown, K.M. et al. (2007-14) *The Records of the Parliaments of Scotland to 1707* (St Andrews, http://www.rps.ac.uk/), 1424/12.

Native speakers are more likely to use English or French loanwords in their speech. So where has the word come from?

Afanc has roots attested in all the modern Celtic languages, but it only seems to refer to the beaver in modern Welsh and Breton. As I discussed in the 'Vocabularium Cornicum' section, in its earliest forms the term seems to have been use in the Celtic languages to discuss monsters and dwarves. For example an *afanc* appears in the twelfth or thirteenth century Welsh 'Peredur', (although the episode is not found in the French 'Perceval') where it kills three brothers every day who are then brought back to life by their patient sister. When Peredur goes to fight the creature he is told that it will try to ambush him with a poisoned spear from behind a rock. Obviously the *afanc* here is a monster rather than a naturalistic animal.

The definition of *afanc* remained the same centuries later. Lewys Glyn Cothi, a fifteenth century Cywyddwr poet also describes the afanc briefly in his poem 'to Llywelyn ap Gwilym [of Bryn Havod]', (see the Appendices) a praise poem to a patron and favourite place of his. In this poem Lewys compares himself to the *afanc* saying it cannot be pulled from a place once it finds a home.[106]

It is much easier to imagine a stubborn Eurasian beaver refusing to be budged from a lake than a Eurasian beaver cowering with a stone spear, but this text probably is still referring to a water monster rather than a natural beaver. Reading between the lines, our text states that the narrator will not be pulled from the area by cart or oxen.

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[106] Johnston, D. (1837) *Gwaith Lewys Glyn Cothi* (University of Wales Press, Cardiff), p.125, 648. Johnstone, the editor of *Gwaith Lewys Glyn Cothi* agrees that the *afanc* here is a monster, and finds a very comparable use of the motif in another poem: 'Moliant Caeo' (p.98). However he does separate out another reference in 'Awdl Gyffes' as pertaining to the *afanc* as a *llostlydan* (i.e. beaver). I am not aware of any reason for this distinction, since this beaver comes in the middle of a list of Zodiac symbols (e.g. crab, bull, maiden, archer) (see p.515). Even if it was supposed to be a beaver here, this poem still exotifies the *afanc*.

If this is true, we are certainly talking about a water monster rather than a mundane beaver. The incipient story here seems to have inspired Iolo Morganwg, the famous eighteenth-nineteenth century forger to embellish a medieval tale based around Hu Gadarn, a folkloric hero.[107] In the forged material, Hu Gadarn was finally able to successfully drag an afanc water-monster from the lake to slay it,[108] but since this material is not original to the medieval or early modern period it falls outside of the remit of this study. However it is worth pointing out that the *afanc* remains a folkloric monster in some folklore from the modern era.[109]

Other medieval references to the afanc are usually ambiguous and short, but none of the references certainly or even probably refer to real Eurasian beavers until Prise's 'Description of Cambria', published in 1584 (possibly written fifty years earlier) and the bilingual 'Dictionarium Duplex' of 1632. This includes the reference to an *afanc* in Dafydd ap Gwilym's 'I Ddymuno Lladd y Gŵr Eiddig' (To wish death to the jealous huband) which insults a man by calling him 'gwthr afanc' (arse of the *afanc*).[110] 'Monster's arse' is a more likely translation. That the *afanc* is usually translated as a beaver is an example of the dangers of translating medieval Welsh poetry with modern Welsh knowledge alone.

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[107] See: Rejhon, A. (1983) 'Hu Gadarn: Folklore and Fabrication', pp.201-212, in: Ford, P. ed. *Celtic Folklore and Christianity: Studies in Memory of William W. Heist* (University of California, Los Angeles).

[108] Jones, O., Williams, E. & Pughe, W. (1870) *Myvyrian Archaeiology of Wales, collected ed.* (Thomas Gee, Denbigh), p.409.

[109] Rhys, J. (1901) *Celtic Folklore, vol. 1* (University of Oxford), pp.130-5.

[110] Edwards, H. (ed., trans. 2007), '116 - i Ddymuno Llad i Gwr Eiddig', *Gwaith Dafydd ap Gwilym,* accessed: 16/3/16, available http://www.dafyddapgwilym.net/cym/3win.htm. This has been held as evidence of the late survival of the beaver in Wales by, for example: Halley, D. et al. (2009) *The reintroduction of the Eurasian beaver Castor fiber to Wales: an ecological feasibility study / Ail-gyflwyniad yr afanc Ewropeaidd Castor fiber i Gymru. Astudiaeth dichonoldeb ecolegol.* (NINA Report 457, Norwegian Institute for Nature Research, Trondheim); Manning et al. (2014) '*New evidence for the late survival of the beaver in Britain'.*

How then did people talk about beavers when they needed to describe the animal in the medieval period between the loss of *llostlydan* and *bever* from the language and the redelimitation of the term *afanc* to refer to the beaver in the late sixteenth century? We do find one answer in the 'Welsh Bestiary of Love', a fourteenth century Welsh translation of the thirteenth century French 'Bestiaire d'Amour' (extract given in the Appendices).[111] This text calls the beaver by the term *kastrinn*. This is clearly a borrowing from the French word for the beaver (*castoires*), and this suggests that the terms *afanc*, *llostlydan* and *befer* were all unsuitable or archaic as words for the beaver. It also suggests strongly that no word that the translator knew of existed at that time for the animal in the Welsh language.[112]

It is also clear from the material of the story itself that the translator was wholly unfamiliar with the folklore of the beaver. The original legend of the beaver, as attested by classical authors and by Gerald of Wales, as well as in the Welsh Law text above is that the testicles of the beaver are useful for hunters to make castoreum. Thus the creature castrates itself when it knows it is being hunted in order to avoid death, and this is how it got its name *castor*. However the French original of the 'Bestiaire d'Amour' is ambiguous about the part of the beaver which is important, saying circumspectly: 'c'est une best qui a un member sour lui qui porte medechine'[113] (it is an animal that carries medicine of its own member). The Welsh translator understood this to mean that one of the beavers feet was medicinal, entirely missing the castration – *castor* etymologising, and even has the animal 'ffy ar i dair troed'

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[111] The earliest Welsh manuscript surviving of the text is dated c.1400 but is a copy of the (earlier) original translation.

[112] Thomas (1988) *Welsh Bestiary of Love*, p.10.

[113] Ibid.

(fleeing on its three feet). This part of the text is extant in two manuscripts, <u>Peniarth 51</u> and <u>NLW MS 13075</u>. One calls the animal a *castrin* the other a *kasstrin* and neither correct the mistake of the animal losing a foot rather than any other member. This confusion suggests that the beaver was extinct on the island at the time.

But confusion alone does not necessitate an animal's absence from a country, only its decline. Despite Gerald's repetition of the contemporary beaver-slave folklore, beavers were certainly around when he spoke in the twelfth century. Likewise, Chretien de Troyes' 'Cliges' (c.1176) confuses otters and beavers even though France is one of the few countries where a population of Eurasian beavers survived throughout the medieval period up until the modern era. These cautionary tales might make us wary of accepting any evidence that people in Britain were not aware of beavers. The English word *bever* itself seems to have been used to describe the Eurasian beaver, and that animal alone, throughout the Middle Ages. There are references to beavers, usually referring to their fur, in Lamberts 'Homily' of c.1200, in Higden's 'Polychronicon' of c.1387, in Chaucer's 'Canterbury Tales' of c.1386 and in 'Piers Plowman' written c.1394.[114] The importance of beaverskin to the medieval British fur industry, especially in London has been highlighted before,[115] and it may be the continued importation of beaver as a luxury fur item which lent the term *bever* a continued currency in England throughout the late medieval period.

However, the degree of confusion in late medieval Wales and, to a lesser extent, England, suggests that the beaver was gone. In Wales, the word *llostlydan* was completely lost, and there is also some evidence that, although the English term *bever*

[114] See *Oxford English Dictionary* for further references.
[115] Veale (2003) *The English Fur Trade*, pp.158-75; Dent (1974) *Lost Beasts of Britain*, p.58.

remained stable in England, the rest of the semantic field may have suffered even there. Back in England, Wright has edited one bilingual 'Pictorial Vocabulary' in his *Anglo Saxon and Old English Vocabularies*, which he estimates to be fifteenth century in date. Judging from the spellings of the English words, if genuine it cannot be much later than this, and it glosses both *ffeber* (beaver) and *lutrissius* (otter) by the English term *otere*.[116]

Folklore was being redelimitated too. In Shakespeare's *Henry IV, part 1* we find an otter described as a creature 'neither fish nor flesh'.[117] Even as far back as the twelfth century, Gerald of Wales lamented the animal was being eaten during Lent, as its tail was popularly considered (by Germans) as a kind of fish rather than animal meat. As we have seen previously, redelimitation of folklore most frequently occurs after an animal becomes very rare or locally extinct.

In one of the earliest true dictionaries, the 'Catholicon Anglicum' English-Latin dictionary, written in 1483, *brokk* is glossed with 'castor, beuer, feber' (beaver) as well as 'melota, taxus, taxinus' (badger). This suggests that there may have been some confusion about what exactly a beaver was, or that it may have been considered a type of badger. The modern editor of the dictionary also quotes the late fourteenth century 'Piers Plowman', the Middle English political vision text, where the eponymous main character entreats people to help hunt the 'bores and b[r]uckes þat breketh adown mynne hegges'.[118] The 'Piers Plowman' author may well have been thinking of beavers here since they are better known for felling trees than badgers, which burrow under

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[116] Wright (1884) *Old English Vocabularies*, pp.745-6, 760; Yalden (1999) *The History of British Mammals*, p.131-2.
[117] Jowett, J. Montgomery, W. Taylor, G. & Wells S. (2005) *The Oxford Shakespeare* (2nd ed., Clarendon Press, Oxford) III.3, p.500.
[118] Herrtage, S. (ed. 1881) *Catholicon Anglicum* (Early English Text Society, London), p.44.

hedges without damaging them at all. The mistake is repeated in Percyval's 1591

Bibliotheca Hispanica which glosses Spanish *bivaro* as 'a badger or brocke, fiber,

castor', and even in 1601, in Chester's *Loves Martyr* a 'waterie badger' appears in a list

of rare animals, even though the 'hunted beauer' is also mentioned on the list.[119] The

original Latin version of the 'Polychronicon' by Ranulf Higden, written in the mid-

fourteenth century speculated that Beverley in Yorkshire was named once upon a time

(*olim*) as a lake of beavers (*lacus castorum*). However both the medieval English

translations use alternative words for the beaver. The fifteenth century Harley M.S.

2261 translates as 'the lake of bevers or of grayes [badgers]', whilst John Trevisa's

translation (1387) notes that 'many brokkes were somtyme i-woned to come þider out

of þe hilles'.[120] This last is clear evidence that only was the beaver no longer found in

the area by the fourteenth century but that people had even begun to forget its name.

By the time we find references to the hunting of *fimbrium*[121] as 'Oterhunting', in the

'Record of Caernarvon' in the fifteenth century,[122] it seems most probable that a

straightforward redelimitation of the term *fiber* from the beaver to the otter is

responsible. Other parts of the record refer to otter-hunters and masters of hounds,

showing we are certainly talking about *Lutra lutra* not *Castor fiber* here.

This is also how I explain the late reference to a bounty for *a beverhed* in the

1789 parish record for Bolton Percy.[123] The Parish Records contain bounties following

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[119] Grosart, A. (ed. 1878), *Robert Chester's "Loves Martyr, or Rosalins Complaint* (N. Trübner &Co., London), p.108; I was not able to consult the *Bibliotheca Hispanica* but the line is quoted in the 'Badger' entry of the *Oxford English Dictionary*.

[120] Lumby, J. (ed. 1876), *Polychronicon Ranulphi Higden, vol. 6* (Trubner &Co., London), pp.204-5.

[121] This is a variant of 'fibrium'.

[122] Elilis, H. (ed. 1838), *Registrum vulgariter nuncupatum 'The Record of Caernarvon'* (Commissions on the Public Record, London). p.25, 142.

[123] Coles (2006) *Beavers in Britain's Past*, pp.188.

the sixteenth century 'Grayne Acts', which made it compulsory for parishes to

exterminate vermin (functionally most species of land mammal and many birds).

However, Lovegrove's more exhaustive search of the English-language parish records

failed to turn up any further examples of beaver culls,[124] making this entry an anomaly.

It is not that the records do not survive, Lovegrove catalogues thousands of entries.

Beavers simply stop being discussed as wild animals abruptly by c.1300 A.D.[125]

Overall, there was a widespread confusion between beavers and other animals

both in medieval Britain and abroad. Some of this can be attributed to naturally

observable similarities between the European mammal fauna, and some to the

ignorance of medieval authors, but ultimately there remains a core element of the

confusion which is probably attributable to the growing scarcity of the animal. This is

especially the case in Wales and in Welsh literature, perhaps since this country did not

suffer the same beaverskin-mania as the rest of the island, but is also perceivable in

English and Latin writing of the time period.

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[124] Lovegrove (2007) *Silent Fields.*
[125] See my previous remarks: Raye (2014) 'The Early Extinction of the Beaver'.

The Late Medieval Period

The earliest reference to *afanc* meaning beaver is from 1584, and it is probably no accident that the Welsh language finds a new word for the beaver shortly after the intensification of the exploitation of fur resources in Russia and the New World shortly afterwards. While beaver fur was important before the sixteenth century, from then until the nineteenth century beaverskin hats had no competition among the wealthy as wet weather gear.[126]

Shortly after this the word the term *bever* (or equivalents such as *bifar*) is visible once again in the Welsh language. This time it is purely a borrowing from English, but its continued use even today demonstrates how little currency the word *afanc* currently has among native speakers. The beaver is currently under trial reintroduction into the wild in Argyll, in the south-west Highlands of Scotland, and is being studied by the Devon Wildlife Trust. Perhaps the growing importance of the animal will be reflected in a growing awareness of the word *afanc* as a name for the Eurasian beaver among Welsh speakers, especially if *Prosiect Afancod Cymru* is able to reintroduce the species in the next few years as they hope.[127]

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[126] Dent (1974) *Lost Beasts of Britain*, pp.56-8.
[127] Welsh Beaver Project (2014) 'Two release sites proposed for Mid-Wales'.

Century	Welsh Terms used by Date		
	beuer	*llostlydan*	*Afanc*
1000 A.D.	Beaver (originally a native term?)	'Broad-tail' (originally a nickname?)?	Monster
1100 A.D.	Beaver (English borrowing?)	Beaver?	Monster
1200 A.D.	No meaning	Beaver	Monster
1300 A.D.	No meaning	Beaver	Monster
1400 A.D.	No meaning	No meaning (requires gloss)	Monster
1500 A.D.	No meaning	No meaning	Monster
1600 A.D.	No meaning	No meaning	Monster/Beaver
1700 A.D.	No meaning	No meaning	Beaver
1800 A.D.	Beaver-hat (English borrowing)	No meaning	Beaver
1900 A.D	Beaver-hat (English borrowing)	No meaning	Crocodile/Beaver
2000 A.D.	Beaver (English borrowing)[128]	No meaning	Monster/Beaver (attempts to reclaim being made)

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[128] The word 'befer' or 'bifor' in Welsh today has not been naturalised. Welsh speakers still recognise it as English.

Early Modern Evidence from Scotland

Hector Boece (1465-1536) published the work for which he is most famous, the Latin *Scotorum Historia*, in 1526-7. At the time, this was only the second 'History of Scotland' ever to be published, and Boece's position as first Principal of King's College (the predecessor to the modern University of Aberdeen), and his access to a printing press meant that the work was widely disseminated. A second edition was published in 1575, which added additional material and continuations. The text was translated into Scots three times.[129] The most notable of these is Bellenden's translation into Scots as the 'History and Chronicles of Scotland', a work commissioned by and dedicated to King James V. It was first presented to the king in manuscript form in 1533, but later heavily edited and probably reviewed by Boece himself among others before it was printed c.1536-40.[130] The work with its continuations, translations and adaptations continued to be read for centuries and George Buchanan's influential 1582 *Rerum Scotarum* was itself a condensed version of Boece's work.[131]

Boece mentions beavers twice in his text (although these sections do not appear in all translations),[132] once in his introduction and once in Book II. In the

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[129] Apart from Bellenden's translation there is also the 'Mar Lodge' translation and William Stewart's translation. There are also two subtly different versions of Bellenden's translation, the manuscript edition edited in 1938 by Chambers & Batho, and the printed edition edited in 1821.

[130] See: Royan, N. (1998) 'The Relationship between the Scotorum Historia of Hector Boece and John Bellenden's Chronicles of Scotland', pp.136-57, in: Mapstone, S. & Wood, J. (eds) *The Rose and the Thistle* (University of Michigan Press); Chambers, R. and Seton, W. (1919) 'Bellenden's translation of the History of Hector Boece', pp.5-15, in: *Scottish Historical Review, vol.17, no.65*. I have not been able to view the earlier version in the Auchinleck manuscript, so do not know if it differs with regards to the beavers in the text.

[131] Royan, N. & Broun, D. (2007) 'Versions of Scottish Nationhood, 850-1707', pp.168-183; Brown, I. (ed.) *Edinburgh History of Scottish Literature, vol. 1*. (University of Edinburgh Press), p.179.

[132] Beavers do not appear at all in William Stewart's early modern translation – Turnbell, W. (1858) *The Buik of the Croniclis of Scotland, William Stewart, vol. 1* (Rolls Series, London), pp.150-1. The whole introduction is cut from the 'Mar Lodge' translation, William Stewart's translation, as well as Bellenden's manuscript translation, meaning that beavers are mentioned only once (in Book II) in these versions of the text.

Even modern scholars have had difficulties with beavers in the text. The beaver in the Introduction is mistakenly translated as a 'ferret' in Sutton's modern edition, perhaps because beavers seemed too exotic to the translator. Polecats (the wild ancestors of ferrets) were probably widespread around Loch Ness at the time Boece was writing.

Appendices I have given Boece's original text, Bellenden's early modern printed

translation, with some notes from the 'Mar Lodge' translation, and a modern

translation. The first thing to note when comparing these three versions is the extent

to which Bellenden summarises and interprets the words of Boece.[133] This is obvious

through comparative length alone, but Bellenden also at times adds to or alters the

words of Boece. For exmple, he changes the idea of the citizens of Inverness being

turned to war to the idea that Inverness has bad neighbours, and alters the animals

around Loch Ness (leaving behind the deer, goats and otters). It is tempting to suggest

that the reason for this might be because he does not fully understand Boece's Latin,

and it is true that his work contains a number of translation errors.[134] However, Neill's

assumption, that this part of the text was poorly translated by Bellenden is

unsatisfying, as Coles has pointed out.[135] Recent scholars writing on the subject have

emphasised Bellenden's translation as a text in its own right, not just a copy of Boece's

study.[136]

This is true of our extract too. In this part of the text, Bellenden does seem to

be making conscious authorial decisions in his shortening.[137] His removal of the goats

and deer can be seen as a kind of cosmetic enhancement. By leaving these animals

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Given the strong intra-guild competition it is unlikely that feral ferrets could have survived for long in the area, but in any case, there is no evidence that this was what was intended by Boece's 'fibri'.

[133] Royan (1998) 'The Relationship', p.145.

[134] Sutton (2010) 'Author's Introduction', §5-6.

[135] Neill, P. (1821) 'Account of some fossil remains of the beaver (*Castor Fiber L.*) found in Perthshire and Berwickshire, proving that the animal was formerly a native of Scotland', pp.207-219 in: *The Memoirs of the Wernerian Natural History Society,* vol. 3, p.210-11.

[136] Royan (1998) 'The Relationship…'; Royan & Broun (2007) 'Versions of Scottish Nationhood, c.850-1707', pp.178-9.

[137] Sutton (2010) 'Author's Introduction', §5, Chambers & Seton (1919) 'Bellenden's translation of the History of Hector Boece', p.15.

out, he is left with pine marten, beaver, *quhitred*[138] and fox. The 'Mar Lodge'

translation follows Bellenden's translation and also adds 'otteris'. I would suggest that

the motivation for this change is that all of these furs are reasonably high status which

makes the Ness an amazing resource, the likes of which are rarely seen elsewhere in

Europe. The 'Mar Lodge' version actually confirms our theory of translational

motivation by explicitly stating that all these furs are 'vsit be nobilis and men of

gude'.[139] Meanwhile, wild horses still roam around the outside of the Ness, whereas

the less romantic deer and goats have been forgotten.

However, even though this translation appears to reflect a conscious decision,

it still makes the account untrustworthy. Loch Ness is unlikely to have ever had wild

horses (except perhaps feral ponies), or to have lost its wild deer, so these changes do

not reflect any attempt at closer ecological truth. From this perspective it may be

significant that William Stewart's translation of the text, which is intended to be

educational rather than political,[140] does not include this passage.

However, even if we discount the beavers in the 'Mar Lodge' translation and

Bellenden's translation, we must still contend with Boece's reference to beavers.

Traditionally Boece has been viewed as a Scottish Livy; a historian who does not use

primary sources, and who invents speeches and portents of doom to help flesh out the

narrative, as well as one who glorifies the past and complains about the present. More

recently it has been suggested that he may have based his work upon that of Richard

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[138] Middle English 'whitret' – 'white-rat'. Usually translated as weasel, but since the British subspecies of weasel never actually becomes white, unlike the British stoat, perhaps the latter animal was intended. Alternatively perhaps Bellenden believed that British weasel was as high status as continental weasels with their lettice coats.

[139] Watson, G. (1946) *The Mar Lodge Translation of the History of Scotland by Hector Boece* (Scottish Text Society, Edinburgh), p.124.

[140] Summerfield, T. (2007) 'William Stewart's Metrical Chronicle', pp.187-198, in: Summerfield, T. & Busby, K. (eds.) *People and Texts: Relationships in Medieval Literature* (Costerus New Series, Amsterdam).

Vairment.[141] One of Boece's concerns is to write a national history to contest the myth of a Britain founded by Brutus.[142] From that perspective it is understandable that he might overemphasise the extent of Scotland's natural resources. However, even if Boece did not invent his sources, the veracity of history is still questionable from a modern point of view. The majority of his history before the second millennium A.D. is, perhaps expectedly, unreliable and and his accounts of giants and miraculous events should make us cautious of accepting his tales of beavers. For example, in chapter 18 of the introduction alone, he discusses how Loch Spynie was silted up by the force of a special grass, and the skeleton of a fourteen foot man which he saw himself.

On the other hand, although Loch Spynie has not disappeared, other lochs with rivers feeding into them could have been silted-over by the deforestation of riverbanks upstream, through the natural processes of succession. This might make it appear to a casual onlooker that the lake was being eaten up by vegetation, whereas actually it is an effect rather than a cause. Likewise, the skeleton may actually have been that of another large mammal like a mammoth or whale or even just a fake made of wood. 'Little John' may well have been well known as Robin Hood's giant companion by the sixteenth century, so these bones could have been a tourist attraction of some kind.

One of the simplest tests of how reliable Boece is comes from listing all of the mammals and birds which the author attests are wild in Scotland, and finding what proportion of these were actually present in the time period:

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[141] Sutton (2010) 'Author's Introduction', §3; Royan, N. 'Hector Boece and the question of Veremund', pp.42-62, in: *Innes Review*, vol. 52 (2001). Coles (2006) *Beavers in Britain's Past*, p.180.

[142] Summerfield (2007) 'William Stewart's Metrical Chronicle', p.189.

Wild mammals and birds in Hector Boece's 'De Scotorum Historia'				
Animal	Latin name used	Geographical Location	Mentioned	Actually present
MAMMALS				
Beaver	Fiber, Castor	Inverness, Loch Ness	Intro.18; Book II.51 (*2!)	?
Deer	Cervus	"Everywhere"	Intro.18; 26; Book II.12; Book VI.23;24; Book IX.1	Yes
Dolphin?	Porcus	Inverlochy	Book II.51	Yes
Fox	Vulpes	"Everywhere"	Intro.18; 26	Yes
Goat (wild)	Capreolus, Hircus, Hoedus	Widespread	Intro.18; 32; Book III.31	Boece seems to have believed many domestic animals could be found in the wild. This may have been true of feral goats and swine.
Hare	Lepus	"Everywhere"	Book III.31	Yes
Horse (wild) Shetland Pony	Equus, Equus minutus	"Everywhere" Kirkwall	Intro.7;18;19; Book III.31; Intro.37	See goat comment above
Marten	Martes, fovina	Kirkwall; Loch Ness	Intro.18; 38; Book II.51	Yes
Mouse	Mus	Widespread	Book XV.61	Yes
Otter	Lutra	Loch Ness	Intro.18;	Yes
Rabbit	Cuniculus	Islands around Iona	Intro.23;26	Yes, released and farmed.
Seal	Vitulus marinus	Firth of Forth; Rona	Intro.21;32	Yes
Soay sheep?	Ovis	Soay	Intro.33	See goat comment.

?Walrus?[143]	Piscis ingens	Kirkwall	Intro.37	No
Weasel	Mustella	Loch Ness	Intro.18	Yes
White bull	Bos silvae candissima, taurus	Calledonian Forest	Intro.24	No
Wild Boar	Aper	Boar's Chase, St. Andrews previously	Book XII.51	See goat comment.
Wolf	Lupus	"Everywhere"	Intro.26; Book II.12; Book VI.15	Yes[144]
BIRDS				
Barnacle Goose	Clarkis, anser	Hebrides	Intro.34	Yes but description fictional.
?Black Grouse?[145]	Aquatilia[146]	Widespread	Intro.27	Yes
Bustard	Gustarda	"Merch" (?)	Intro.27	Yes
Capercaille	Capercalze, silvestris equus	Widespread	Intro.27	Yes
Crane	Grus	Kirkwall Island, Orkneys	Book III.31	Yes
Crow / Rook	Cornix	Widespread	Book IX. 43	Yes but rarely now found in north-west Scotland.
Dove	Columbus	Kirkwall	Book III.31	See goat comment.
Eagle	Aquila	Widespread	Intro.27; Book IV.46	Yes
Falcon	Falcones	Widespread	Intro.27; Book XI.23	Yes
Gannet	Solendis	Bass Rock, Ailsa	Intro.22; Intro.31	Yes

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[143] Fish that lies on shore lines, as big as a horse (etymologically wal-rus = whale-horse), big teeth and sought for hide which is made into ropes and oily blubber. See previous chapter for walrus categorisation as a fish. Robert Sibbald also interpreted Boethius' fish here as a walrus. See: Sibbald (1696) *Scotia Illustrata.* Book III.2.

[144] The wolf most probably did linger until the seventeenth century in Scotland although there is very little archaeological evidence for its survival into the second millennium A.D. (see: Pluskowski, "Where are the wolves?', pp.279-295, in: *International Journal of Osteoarchaeology, vol.16* (2006); Yalden (1999) *The History of British Mammals*, p.168.

[145] Black feathered bird with very red eyelids.

[146] Boece wrongly refers to all the game birds as waterbirds; the black grouse is described and not given a name.

Hawk	Accipiter	Widespread	Intro.27	Yes
Heron	Ardea	Widespread	Book III.31	Yes
Jackdaw / Chough[147]	Monedula	Widespread	Book IX.43; Book XV.61; Book XVI.6	Yes
Owl	Parra, bubo	Widespread	Book IX.43; Book XI.23	Yes
Raven/Crow	Corvus	Widespread	Book IX.43; Book XIII.22; Book XV.61	Yes
Swan	Olor	Loch Spynie, Kirkwall	Intro.18; Book III.31	Yes
Woodcock	Gallus silvestris	Widespread	Intro.27	Yes

The above list shows all of the wild mammals and birds found within the 'Scotorum Historia'. I have included only observations which are twice and three times removed from the animal (I have seen *x*; *y* can be found here), not cultural references (as fast as *z*).[148] I have also not included references to those species which he only mentions as being kept in captivity or domesticated (e.g. cattle). Although I have only included mammals and birds, the reader does not miss much by not seeing any of the other classes of animal. Boece was setting out to write a history of humans in Scotland and so his interest in Scotland's natural world extends only to those parts of it which are dangerous or commercially or aesthetically interesting to humans. Although he occasionally talks about fish, he is only really interested in those like salmon and herring which were caught for the table. He barely mentions any invertebrates, and likewise, with amphibians and reptiles he constrains himself to brief complaints about frogs and snakes.

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[147] The Latin for the two birds was probably the same throughout most of the medieval period.

[148] See introduction for an explanation of the "Stages of Removal" system.

The birds mentioned follow a similar pattern. Most of the birds he mentions (71%) are either consumed by humans or exploited in some other way. Five do not fit this mould: crows and rooks, jackdaws and choughs and ravens were important as agricultural pests, but crows, rooks and ravens also appear as graphic furnishings of battle scenes. The owls in the text had a more sinister but similar purpose, whereas the eagles may have been mentioned simply as charismatic apex predators.

Boece appears to be much more interested in mammals than he is in any other class of animal, but his categories are still quite generic and his list is very incomplete (he misses voles, squirrels, bats, moles, shrews, hedgehogs, polecats, badgers, wildcats, and most marine mammals). He also frequently fails to distinguish between domestic, cared for animals and truly wild creatures so that he depicts horses, goats and sheep as roaming around in the wilderness of Scotland for enterprising farmers to catch. Even if we ignore his ignorance about the domestic animals, he still includes two mammals which are hard to reconcile with the medieval evidence.

First, Boece includes a description of a huge fish, bigger than a horse with huge teeth and useful blubber. This is most likely to be a walrus by the description,[149] but there is little evidence that walruses survived in Britain beyond 1000 B.C. It is possible that Boece could have met a vagrant walrus. Such creatures still occasionally show up today, and one washed up on North Ronaldsay in the Orkney Isles in 2013 before swimming back out a few days later.[150] However his description is of an entire hunting industry. Unless he was actually describing the grey whale with its baleen tooth plates

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[149] Walruses were often considered to be types of whale in medieval Britain, see the conclusion to the whales chapter for more.

[150] Hall, A. (2008) 'Walrus' in: Harris, S. and Yalden, D. (ed. 2008), *Handbook of British Mammals* (The Mammal Society, Southampton), p.550; BBC (2013) 'Orkney walrus visitor heads back to the sea' (http://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-21653970, accessed: 16/3/16).

and shore bathing tendencies he must have been basing his account on an unreliable story.

Second, Boece reports that wild white bulls with manes could be found wondering through the Caledonian Forest. There are two issues with this statement. First, the setting for this story was well known in literature of the time, and even today the Caledonian Forest continues to be romanticised as a huge stretch of wilderness, representing how different Scotland is from England and Wales. Unfortunately, as Harting points out, the stories stem from exaggerated rumours.[151] Scotland certainly did not have any of its primeval forests left by the time Boece was writing, and stories of a huge Caledonian forest are most likely to have been inspired by seeing charred tree stumps on the Scottish moors.[152]

Today there remain several herds of so called 'wild, white cattle', the most famous of which is the herd at Chillingham, just north of Newcastle. In the eighteenth and nineteenth century,[153] these cattle were believed to be native, and descended from the British aurochs, but genetic studies have shown that the cattle are descended from our current domestic stock,[154] despite not having been 'improved' by the selective breeding of early modern farmers. There are occasional references to white cattle with red ears, very much like the Chillingham herd, in medieval Irish and Welsh literature. It is unclear whether these are separate animals, or the ancestors of the

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[151] Harting (1880) *British animals extinct within historic times*, pp.222-3.

[152] Rackham (1986) *The History of the Countryside*, p.306.

[153] For example: Harting (1880) *British animals extinct within historic times*, p.213ff.

[154] See: Hemming, J. (2002) '"Bos Primigenius" In Britain: Or, Why do Fairy Cows Have Red Ears', pp.71-82, in: *Folklore*, vol. 114.

modern Chillingham stock, but either way Boece's story of hunting white cattle may well have had some truth behind it.

These two stories prove that Boece relied on second hand evidence and hearsay as well as his own observations when it comes to the natural resources of Scotland. However, it is undeniably true that almost all of the animals he mentioned are actually found in Britain. Most tellingly perhaps, he does not mention *gris* (grey coloured red squirrel fur), lettice or sable which Britain has never produced, even though these products were the most important types of fur at the time he was writing.[155] It is safe to assume from his writing that beavers could be found in Loch Ness and around Inverness.

There is another problem however, and that is the question of quite how up to date Hector Boece's information actually was. Comparing his accounts it is interesting that the account in Book II is written mainly in the past tense. This story reads more like a ghost story than a historical narrative. This is especially true of the ending where it is said that the inhabitants and their merchandise can still be found in Inverness today. The implication of this rather vague assertion is that Boece's source on this area is out of date, and the real meat of the story all happened in the past. He is not sure what can still be found in Inverness. In addition, this section is the one that confusingly mentions beavers twice:

> marterellorum, ut vocant, *castorum, fibrorum* atque similium ferarum tergora… deportarunt domum.[156]
>
> (They deported home… the skins of so-called martens, of beavers, of beavers etc.)

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[155] See sumptuary laws and importation records above.

[156] Maitland, T. (1821) *The History and Chronicles of Scotland, vol. 1* (W. and C. Tait, Edinburgh), pp.xxxiii-iv, 69-70.

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Both *fiber* and *castor* are words for the beaver, and Boece mentioning the same animal twice suggests he is simply listing animal names with similar connotations rather than thoughtfully describing the kinds of animal pelts exported from Inverness. This is confirmed by his vague 'atque similium ferarum' (etc.) at the end. It is tempting to suggest that 'ut vocant' (as they are called) should go with the castoreum to run: 'martens, (castorum as they are called), beavers and...'. However *ut vocant* as a phrase almost always follows what it is referring to. Sutton's hypertext translation attempts to get away from the double beaver reference by translating *fibrorum* here as ferrets,[157] but it is more likely that Boece was simply caught up in the common late medieval European confusion about exactly what a beaver was. This was the force responsible for the confusion of the term in Latin and English, and also the loss of the term from the Welsh language which we have previously examined. The extant fur evidence we looked at earlier suggested that the last beaver fur was imported to London in 1481, and was no longer being exported from Scotland with any frequency by 1424. The decline in the amount of beaver fur must have driven awareness of the animal down even further by the time Boece was writing.

If Book II was the only part of Boece's text that survived, we would only be able to conclude that beavers had been at some point present in Loch Ness, and may have been more common there than across the rest of Europe, since international merchants came to obtain them. They were probably exported from Inverness, which most probably was founded expressly as a fur trade station.[158] Luckily for us, however, Boece is much clearer in his introduction. There he asserts quite clearly that beavers

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[157] *Scotorum Historia* (1575 version).

[158] Ritchie (1920) *The Influence of Man on Animal Life in Scotland*, pp.155-6.

are among those species still found in Loch Ness. Considering how reliable he is about

other animals, and considering that he was living in Scotland as he wrote, it seems

most probable that these remarks are trustworthy, although if he was personally

familiar with the state of the beaver in the country, it is curious he was confused about

its name only a little later on.

Inverness is situated at the head of Loch Ness, and it is most probable that the

population Hector Boece attested in his own time is the same one which was earlier

exploited for German merchants before the settlement descended into fighting and

rape. It is tempting to see the real reason for the settlement's low fortunes to be the

slump in the fur trade which occurred in the middle of the sixteenth century. If that is

the case then beaver populations may have been rejuvenated by the temporary stay

on commerce from Inverness at Boece's time of writing. However it would be wrong to

interpret this evidence as true of Britain in general. As we have seen, the beaver was

almost certainly lost from England and Wales centuries earlier, and Hector Boece does

only produce this single location for the animal in Scotland. The evidence supports the

existence of beavers at Hector Boece's time of writing, but it also suggests that they

were no longer being commercially exported, and the population was on the edge of

extinction.

Corroborating evidence for beavers in sixteenth century Scotland can be found

in two other texts which have not previously been translated or considered in detail.[159]

The first is 'De Origine Moribus et Rebus Gestis Scotorum' by John Lesley (1578). An

extract can be found in the Appendices. This text describes a *meles* which lives in

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[159] See: Raye (2014) 'The Early Extinction of the Beaver', for the first reference to Lesley.

riverbanks. The word *meles* usually refers to the badger in Latin. However, we have already seen that there is confusion between beavers and badgers in medieval material of this age. Badgers do not build their setts anywhere that might flood, so I believe that this text is describing beavers being hunted alongside foxes, hares, wolves, wildcats and the three types of late medieval deer. It is possible that this term might refer to the otter, but although otters and badgers are both confused with rare beavers, I have never seen medieval confusion between otters and badgers, two relatively common creatures.

The fact that populations were still high enough to allow casual hunting for pleasure rather than just sustained commercial hunting suggests that the beaver may still have been common in Scotland in the sixteenth century, but there is no evidence that it survived into the seventeenth, and there is evidence that it does not survive into the eighteenth. The concept of the beaver as one of Scotland's native but rarely seen animals was first challenged by Robert Sibbald in 1684. His 'Scotia Illustrata' includes an encyclopedia of animals, and one of these in the beaver. I have given a translation in the Appendices.

Several things can be gleaned from looking at Sibbald's account. First it is certain that he knows the difference between the species *Castor fiber* and *Lutra lutra*. He explicitly says that otters have 'pelle minus quam castoris' (less hair than a beaver's), showing that he at least sees the two animals as quite distinct. At the same time it is probable that his description of the otter is derivative of older beaver folklore. Although he gives a fair description of the otter, some parts of it seem strangely reminiscent. The construction of their waterproof burrows, and even amazing ability to stay underwater and hard bite are aspects we have previously seen

in previous naturalists' descriptions of the beaver. Since folklore is often redelimitated when animals become rare, the odd otters which Sibbald describes may indicate a flow of centuries when natural beavers were not frequently observed. His natural progression from the beaver to the otter suggests that the otter was thought of as a closely related animal and would perhaps have been the beaver's natural successor in folklore.

All this just highlights the most important part of the text for our circumstances. The first paragraph explains that although Sibbald has seen and understood Boece's account of beavers in the River Ness, he does not believe there are now any to be found in Scotland. Sibbald is not absolutely clear about this fact. His words are 'an nunc reperiatur nescio' (I don't know whether [beavers] can be found there). Coles has pointed to the doubt in Sibbald's tone and suggests that beavers still lived in the country unbeknownst to him.[160] This is possible, but there is no strong positive evidence for beavers after the sixteenth century, and it is likely that Sibbald was well informed on this point.

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[160] Coles (2006) *Beavers in Britain's Past*, p.180.

Conclusion

This chapter has been especially concerned with the historical evidence for beaver survival in Britain, some of which has not been examined or critically interpreted in recent years. We have made several key discoveries: That the original word for beaver in the Brittonic language was not *afanc* seems clear, but the very late development of *afanc* in Welsh (and Breton) as provided in the Welsh literature section has never previously been conclusively shown. Our findings justify Aybes and Yalden's cynicism about whether the term *afanc* can be accepted in medieval place-name evidence.[161]

There has also been a special emphasis on legal and importation evidence for beaver survival and beaverskin importation. There is evidence for the survival of beavers in the early legal material from Wales and Scotland, but from England we only have evidence of importation. The evidence suggests that the beaver was disappearing from Britain at the time of the medieval laws, although it stayed longer in Scotland than previously believed. It is possible to trace the fortunes of the animal over the centuries by reviewing the literature in broad strokes. Our earliest good sources are Gerald of Wales' descriptions from the end of the 12th century and the Welsh law codes which probably originate in or before the thirteenth century. In these sources the beaver is still being hunted for commercial use. It seems to be the skin of this animal which makes it valuable. Gerald speaks of the use of castoreum and consumption of beavers as exotic practices, and the law codes only place a value on the animal's skin. References to castoreum at this point and later always repeat the

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[161] See: Aybes & Yalden (1995) 'Place name evidence for wolves and beavers'.

folklore that the beaver bites off its own testicles, and this lack of realism suggests that the sources are unreliable.

I have previously argued that the beaver was gone from South Britain by 1300, and this view is still supported by an in depth analysis of the literature. Beaver skins were mass imported to London from at least 1386 suggesting that native stocks were unable to keep up with the demand for the creature. The English sumptuary laws of 1336-1547 give each animal's fur a differing status, and make it proper to a certain class of person. Beaverskin, where it is referred to specifically, is assigned a high status, more like an imported fur than a native fur. The huge importance placed on beaver fur during the period when the beaver was in decline and even after it becomes extinct strongly suggests that the price of its fur was the deciding factor in its extirpation from South Britain.

In Welsh literature, as I have noted, the native word for the beaver is either *beuer* or *llostlydan*, and not *afanc* which refers to water monsters and not the beaver until c.1600. After the term *llostlydan* becomes archaic and no longer understood c.1350,[162] there is no conventional term for the animal in use for over two centuries. One Welsh translator does not even recognise the castration folklore. In the same time period there is considerable confusion in Latin and English about the difference between the otter, beaver and badger. Late medieval and early modern Latin-English dictionaries class the *broc* (*Meles meles*) as a *fiber* (*Castor fiber*), and contemporary texts use the word in the same way. Other texts describe what seems to be the beaver using the term 'waterie badger', and fourteenth- and fifteenth-century glosses of the

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[162] The word 'kastrinn' is used in the Welsh 'Bestiary of Love' in the fourteenth century and the term 'llostledyn' is glossed with the (probably English?) word 'bever' shortly afterwards. The term is used fourteenth century Welsh laws without gloss but this is probably thanks to the context.

name 'Beverley' explain the place is called that because badgers frequent it. The term *bever* is sometimes used for the otter in early modern sources especially when the animal is being hunted. Linguistic confusion of animal terminology is usually diagnostic of the local extinction or rarity of the animal. Future researchers may be able to decipher further beaver records hidden behind records of otters and badgers.

Meanwhile in Scotland there is definite evidence that beavers are still present in the sixteenth century, long after they disappeared from south Britain. There is no evidence after c.1600 and evidence to the contrary by 1700 A.D. Boece suggests that beaver populations were being exploited by fur hunters in this period, so the reason for its extinction in Scotland may be the same as in South Britain. The last record of the beaver calls it *melus* (a badger) suggesting that linguistic confusion had taken hold of Scotland like it previously did south Britain.

Historical evidence for the beaver in Britain

Chapter 5 - Cranes

Introduction

According to the Animal Awareness Survey described at the beginning of this study cranes are still only poorly known. Further studies are unlikely significantly to improve the profile of the other animals mentioned above in our cultural memory, but there is considerable room for improvement in the crane's result.

This is especially interesting because the common crane (*Grus grus*) appears to have been one of the most popular birds in medieval culture. It is the most frequently mentioned wild bird in place names[1] and also the most frequently depicted in Insular medieval manuscripts other than the dove and eagle (which were religious icons).[2] Crane remains are the most common wild bird fauna excavated between the mid-fifth and mid-eleventh centuries, and they seem to have been one of the few species hunted for the table continuously from the Mesolithic to the late medieval period.[3] The species' low profile today is a product of the bird's extinction, and therefore it may be hoped that the bird could regain some popularity over the coming decades as it once again begins to spread across Britain.

The high percentage of people unsure about the crane's native status today may be due to confusion between the common crane, the (rare) white stork (*Ciconia ciconia*) and (still common) grey heron (*Ardea cinerea*). Cranes stopped breeding in

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[1] Boisseau, S. & Yalden, D. 'The former status of the Crane *Grus grus* in Britain', pp.482-500, in: *IBIS, vol. 140* (2008).

[2] Yapp, B. (1982) *Birds in medieval manuscripts* (Schocken Books, New York), p.13.

[3] Yalden & Albarella (2009) *The History of British Birds*, pp.117, 139; Sykes (2007) *The Norman Conquest: A Zooarchaeological Perspective*.

Britain when they were over-exploited by hunters in the sixteenth century.[4] Storks, on the other hand, seem to have always been only occasional migrants on the island.[5] As the crane became rarer the term 'cran[e]' was redelimitated to the grey heron.[6] The *Oxford English Dictionary Corpus of References* gives six different references to various birds being called cranes in the centuries following the disappearance of the crane, ranging from herons to cormorants.

However, linguistic confusion was commonplace even before the loss of the crane, and is not peculiar to the English language. Yapp complains that nearly every medieval British picture which is supposed to depict a stork has characteristics of the crane or the heron.[7] Although less well attested, Welsh too shows confusion between cranes (*garan*) and herons (*creyr*).[8] This is indicated in Dafydd ap Gwilym's poem 'Ei Gysgod' which I shall consider in detail below, but is most extensive in the early modern period. The *Geiriadur Prifysgol Cymru* corpus of references finds the word defined as a young bird in 'Geiriadur Syr Thomas Wiliems' (1604-7), used for a bird like a swallow in Rowland Vaughan's 'Yr Ymarfer o Dduwiol-deb' (1630) and was simply another word for the grey heron in the eighteenth century 'Geirlyfr' published with *Barddoniaeth Wiliam Llŷn.* Ross has pointed out that the related Gaulish term for the crane *garanus* is used to describe another heron-like wading bird, the little egret (*Egretta garzetta*) in a continental inscription.[9]

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[4] Ibid; Gurney (1921) *Early Annals of Ornithology*, p.168.

[5] Yalden & Albarella call it 'far rarer' and a 1416 nesting attempt is the only one the authors can find. Yalden & Albarella (2009) *The History of British Birds*, p.81.

[6] Ibid.

[7] Yapp (1982) *Birds in medieval manuscripts*, pp.14-15.

[8] Matheson (1932) *Changes in the Fauna of Wales*, p.53; Foster Evans (2006) 'Cyngor y Bioden', pp.52-3.

[9] Ross, A. (1960) 'Esus et les trois 'grues'', pp.405-438, in: *Ètudes Celtiques,* vol. 9, p.409.

And yet, it is also clear that English, Welsh and Latin do distinguish between the heron and the crane in the medieval period. Here are the relevant glosses from the bilingual 'Aelfric's Glossary' and 'Vocabularium Cornicum' (respectively), with the Latin, Old English and Old Cornish[10] terms used:

Grus: Cran
Grus: Garan

Ardea: Hragra
Ardea: Cherhit[11]

The 'Corpus Glossary' of c.700 confirms the English, providing *cornoch* and *cornuc* (both presumably Mercian versions of *cran* with the -och/-uc diminutive/descriptive suffix) for *grus* and *gravis*,[12] the 'Antwerp-London Bilingual Class Glossary' (c.1000 A.D.) also confirms *cran* for *grus* and *hraga* for *ardea*.[13] These glosses show that the terms were distinguished in theory, even if not always in practice. The distinctions can usually be confirmed in texts by the behaviour of the birds, but occasionally the birds' behaviour shows the opposite, that medieval authors did sometimes confuse the terms.

At time of writing the common crane has already returned to Britain. In 1979 three immature birds made their home in the Norfolk Broads. By 1981 they had

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[10] Mills has argued that the term garan is Welsh not Cornish based on the English loanword *kranna* used later in Lhuyd's *Archaeologica Britannica*. Considering how often words are lost when animals go extinct, Lhuyd's evidence is not definitive. More probably, *garan* could have been the term used in Cornish around the twelfth century, with the English word being borrowed for general usage after the crane declined, but before Lhuyd wrote. Padel makes more general criticism of Mills' 'multilingual gloss' theory, and also points out that *garan* is attested as Cornish in place names, and found in Breton as well as Welsh. See: Mills (2013) 'The Vocabularium Cornicum', p.144; Padel (2014) 'The name and date', p.182.

[11] Graves, *The Old Cornish Vocabulary*, p.216, entries 500-1.

[12] Sweet (1885) *The Oldest English Texts*, p.67.

[13] Porter, D. (2011) *The Antwerp-London Glosses* (Publications of the Dictionary of Old English, Potifical Institute of Mediaeval Studies), pp.70-2.

started breeding, but statistical models showed that the population would have a much better chance of re-colonising Britain if assisted with gradual releases over a period of years, so the bird is now being officially reintroduced to the Somerset Levels as well by the *Great Crane Project*.[14] Cranes are strong fliers and adult cranes cannot easily be stopped from returning to their original homes. Therefore the project opted for a very soft release and the team are hatching the eggs themselves over four years to prevent the birds leaving the project and flying home. Two of the oldest cranes in the project laid the first egg in 2013. In 2011 there were 13-14 breeding pairs of cranes elsewhere in Britain (mainly in the Norfolk Broads and Fens).[15]

The picture below, taken in 2012, shows a group of the adolescent reintroduced cranes on the Levels together with a friendly wooden cut-out of an adult crane (with adult red crest), around which food is dispensed in difficult foraging weather.

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[14] Mathews, F. Macdonald, D. (2001) 'The sustainability of the common crane (*Grus grus*) flock breeding in Norfolk: insights from simulation modelling', pp.323-333, in: *Biological Conservation* vol. 100.

[15] Stanbury, A. & UK Crane Working Group (2011) 'The Changing status of the Common Crane in the UK', pp.432-447, in: *British Birds,* vol. 104.

The common crane is the only species of crane native to Britain.[16] Unlike the heron, cranes are usually found 'grazing' in flocks. They have a voracious, omnivorous appetite and commonly eat grain, seeds and bulbs as well as invertebrates and amphibians, reptiles and small rodents. Cranes from northern and eastern Europe winter in the Mediterranean, and sometimes stop in countries in western Europe along the way. This means that Britain often saw wintering birds even after the breeding population went extinct.

Unlike the lynx and beaver, previous studies unanimously suggest that the crane did not cease breeding in Britain until after 1603. The reason for this appears to

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[16] It was previously believed that the now-extinct European crane (*G. primigenia)* may also have been present in Britain until at least the Iron Age, but Yalden interprets these remains as more probably representing the larger size which the common crane used to attain. See: pp.36-7.

be a complex interplay between human persecution and habitat shrinkage. The animals seem to have been in decline in the second half of the medieval period, and from c.1050 onwards crane remains are only excavated commonly from elite, not rural or urban sites.[17] The price of crane meat is also consistently the highest of any bird. Gurney points out that even as early as the 'Wardrobe Accounts of Edward I', the crane is priced at 3s., six times the price of a heron, even if it did continue sporadically breeding until around 1603.[18]

A dwindling number of references are found after this. When certain species of birds were given legal protection in 1534, the penalty for disturbing crane eggs was the highest of all.[19] This suggests not only that cranes were being disturbed by people but also that there was some awareness that human intervention was driving the species extinct. As the last breeding cranes were lost, Britain began to lose its over-wintering population.[20] Yalden has suggested that the last few cranes were lost with the third draining of the Fens in the seventeenth century.[21] However, it has been suggested that modern East Anglia alone could today support a self-sustaining population of 2,500 individuals.[22] East Anglia today is far less welcoming to cranes than it would have been even after the draining of the fens in the seventeenth century, so there is no reason to suggest that seventeenth century East Anglia could not have supported just as many. Yalden is probably right to suggest habitat loss affected cranes, like it did most wildlife, however it seems clear that the species' over-exploitation by humans was the deciding

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[17] See, ibid, pp.139-140. Sykes (2007) *The Norman Conquest: A Zooarchaeological Perspective*, p.74.

[18] Gurney (1921) *Early Annals of Ornithology*, p.57.

[19] Rackham (1986) *History of the Countryside*, p.37

[20] Gurney (1921) *Early Annals of Ornithology*, p.168-171.

[21] Yalden & Albarella (2009) *History of British Birds*, p.140; Sejeantson (2010) 'Extinct Birds'.

[22] Mattews & Macdonald (2001) 'The sustainability of the common crane... in Norfolk'.

factor in its extinction, as Stanbury and Shrubb have argued.[23] The crane was in

terminal decline long before the Fens were drained.

The historical record for cranes has recently been reviewed by Shrubb, and the

archaeological evidence has been reviewed by Yalden & Albarella.[24] This chapter will

not repeat either study; it will assume the presence of the species in Britain

throughout the medieval period and focus on answering some other basic questions.

How was the crane seen by medieval populations? Is there evidence in medieval

literature of the animal's decline? What sort of conflicts might future British

populations have to resolve, and how were they resolved in the medieval period? In

order to answer these questions we will arrange the material predominantly by main

theme, but the following table shows the main sources in chronological order:

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[23] Stanbury & UCWG (2011) 'Changing status of the common crane in the UK', p.435; Shrubb, M. (2013) *Feasting, Fowling and Feathers* (Poyser Ltd, London), p.70.

[24] Shrubb (2013*) Feasting, Fowling and Feathers*, pp.65-9; Yalden & Albarella (2009) *History of British Birds*, p.140.

Table: Main Evidence considered for cranes in medieval Britain	
Date A.D.	**Source**
c.650-750	'Liber Monstrorum' contains an account of the conflict between cranes and pygmies over harvest-time.
c.700	'Vita Sancti Columbae' (the Life of Saint Columba) preserves an account of an exhausted crane that is taken in by the saint and nursed back to health. This inspires a Gaelic tradition of Columba and his cranes.
748-54	King Ethelburt's letter to St Boniface begs for him to send cranes, but Boniface has previously made it clear he does not think falconry a proper pursuit.
c.1150	'Betha Colm Cille', the Gaelic life of Saint Columba contains an account of Columba being called a crane by a Queen. In revenge Columba turns her and her maid into gossiping cranes.
1188	The 'Topography of Ireland' Gerald of Wales' description of the island gives a lengthy description of the crane and its moral significance. It is drawn from classical and Bestiary accounts.
1189-1236	Laȝamon's Brut (c.1189-1236 A.D.) explains it is the fate of the 'royal bird' to end up on a dinner plate.
Manuscripts 1250 onwards, but text possibly older.	Several recensions of the 'Welsh Laws of Court' list cranes are one of the pre-eminent birds, protected for the king's falconer. When the falconer catches one he gets a prize.
1280-90	Havelock the Dane describes cranes alongside salmon, sturgeon and swans as part of an exclusive and perfect feast.
Manuscripts c. 1325, but text older (12/13c.).	In 'Canu y Meirch' Taliesin describes how he has been in the shape of a series of animals including a hungry crane.
c.1350	'Ei Gysgod' by Dafydd ap Gwilym, contains a description of the crane as never looking up from its grazing.
Translated 1483	'The Book of the Knight of the Tower' instructs that women should not be like cranes, craning their necks from one side to the other, but should look straight ahead like a hare.
1544	William Turner attests cranes still breed in in England, despite what people believed to the contrary.

1577	Volume 1 of 'Holinshed's Chronicles' contains 'An Historicall Description of the Island of Britayne', by Harrison describes cranes as amongst the other ordinary birds of England.
1590	In the 'Fairie Queen' a crane used in a figurative description of servant that looks fair but embodies gluttony.
1603	The 'Description of Pembrokeshire' attests cranes still breed in Wales.
1606	Nathaniel Baxter's 'Ourania' describes cranes like soldiers, but also has a natural sounding description of cranes flying in an arrowhead formation.
1662	Browne suggests cranes are still found in Norfolk in harsh winters.
1676-8	Willughby attests cranes still flock to Britain in his *Ornithologia.* Ray adds he is not aware of any breeding records in an edition two years later.

Classical and Bestiary Cranes

The idea that pygmies and cranes fight over wheat in the harvest season is very common in medieval depictions of pygmies. It is referenced in the Ancient Greek 'Iliad' and later in Pliny's 'Natural History'. Even after the 'Liber Monstrorum' the story continues to have currency throughout the medieval period. In the fourteenth century it is alluded to in the descriptions of the pygmies in the 'Travels of John Mandeville'.[25] This text continued to be printed and translated for centuries after. [26]

It is therefore not surprising that our earliest British source on cranes is a version of this story. The text is the 'Liber Monstrorum' (the Book of Monsters).[27] According to Lapidge, this text is probably attributable to one of Aldhelm's colleagues or disciples and can be attributed to c.650-750.[28] I have presented an extract from this text in the Appendices.

This aspect of the crane's folklore is a striking one partly because there are no accounts of medieval humans culling cranes to reduce their impact on agriculture, although cranes frequently forage on agricultural land, especially when other food sources are scarce.[29] This has led to human-crane conflict across Europe, especially on sites along the flight paths of migrating cranes. The fact that the pygmies are in conflict with the cranes suggests that the writers and audience of these stories understood

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[25] The reference is in some versions of the pygmy chapter (e.g. Cotton-Titus C.xvi), but not in others (e.g. BL Royal 13 C.xxxviii) and therefore it may have been introduced later on. See: Pollard, A. (1900) *The Travels of John Mandeville* (Macmillan & Co., London), p.138.

[26] Although note the crane passage is not found in the Welsh-language version of the sixteenth century, see E. Beynon Davies, 'Siôn *Mawndfil* yn Gymraeg', *Bulletin of the Board of Celtic Studies*, V.4 (1931), pp.298-324.

[27] We previously examined this text's account of lynxes in the relevant chapter.

[28] Lapidge, M. (1996) *Anglo-Latin Literature, 600-899* (Hambledon Press, London), pp.282-296; Orchard (1985) *Pride and Prodigies*, pp.86.

[29] Nowald, G. (2010) 'Cranes and People: Agriculture and Tourism', pp.60-4, in*: Cranes, Agriculture and Climate Change* (International Crane Foundation, Wisconsin).

that cranes did consume crops, but their conflict is farcical since they are so short. It seems unlikely this issue would have been the object of comedy if it was a serious agricultural problem. This impression is supported by English legislature of the sixteenth century which led to the mandatory culling of a huge number of pest species. Not only are cranes not included in the *Acts for the Preservation of Grayne*, they are actually explicitly protected, and fines were drawn up for disturbing them or their nests.[30] The only other species subject to this level of protection for a time were the red kite and raven which were protected within the confines of cities as useful urban scavengers.[31]

The autumn migration occurs shortly after harvest season so cranes are often permitted to exploit already harvested fields for corn (= wheat, *Triticum* spp.) stubble and grain missed by humans. However cranes also scavenge on newly sown fields which can cause significant financial damage.[32] In modern times, human-crane conflict has been resolved in a number of ways, most importantly by national schemes offering compensation to landowners, leaving fields in stubble for longer, and most usefully, by leaving piles of waste-grain as decoy for the cranes to eat.[33] This last option has been adopted by local farmers around the Somerset Levels for the UK reintroduction.

In medieval Britain there was not a strong tradition that cranes were pests. Salvi has attributed this to the fact that farming methods were extensive rather than intensive, mitigating the losses to each individual farmer, and perhaps especially

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[30] Rackham (1986) *The History of the Countryside*, p.37.

[31] See *Acts of the Realm*: 8 Elizabeth c.15.

[32] Shrubb (2013) *Feasting, Fowling and Feathers*, p.70.

[33] Nowald (2010) 'Cranes and People'; Salvi, A. (2010) 'Eurasian Crane (*Grus grus*) and Agriculture in France', pp.65-70, in same vol.

slowing the losses in migration season (after farmers have already harvested their main crop).[34] However a hint that the bird's depredation of agricultural crops was at least noticed might be found in the common depiction of the crane in medieval Welsh and Gaelic poetry as a gluttonous bird that never ceases from eating. This strongly contrasted with the ordinary perception of cranes as pre-eminent, noble creatures in accounts of feasts and romances of court. As we shall see later on, the various attempts made to reconcile these points of view were not successful. Perhaps another reason the crane was never explicitly accused of being a pest might have been that cranes provided high-status meat. Perhaps financially the cost of crane depredations could be met by the profit from hunting cranes. If this is the case, it was not a sustainable solution and may have contributed to the decline of the crane in Britain. In the modern period, the use of waste-grain as a decoy and/or leaving fields in stubble over winter are better solutions, and the low costs incurred can be met by eco-tourism. The Great Crane Project on the Somerset Levels has persuaded local farmers to leave their waste grain out for cranes to eat. Likewise, the Hawk Conservatory in Hampshire, England, helped finance its reintroduction (translocation) and post-release study of red kites to the area simply by inviting visitors to watch wild red kites come to feeding stations to be fed after the soft release of these species.

McDonald's research on large carnivores has shown that financial incentives work better than economic mitigation of losses to deter persecution.[35] Big game hunting of lions in Africa makes lions into an asset, but it has been responsible for

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[34] Ibid. p.65. He also suggests that crane population numbers were historically lower but this is certainly not the case for Britain.

[35] McDonald D (2014) 'Carnivores in Conflict: Almondo's Pact'. Keynote Lecture presented to the Mammal Society Spring Conference, 5th of April 2014.

catastrophic declines in local lion populations in southern Africa. His example of a financial incentive was the reward scheme in place in Swedish Sápmi (Lapland), where each community with a breeding wolverine on their land shares a large sum of money.[36] If the wolverines go missing or move on, the reward is lost. This reward need not be given by the government, and might be provided by ecotourism. This may also the reason that whilst both cranes and birds of prey were popular birds in medieval Britain, cranes went into decline whilst birds of prey prospered.[37] Cranes were more valuable dead for feasting, but birds of prey were more valuable alive. Today we have the opposite situation, so there is a clear need to commodify populations of live birds.

Gerald of Wales' 'Topography of Ireland' is a source which we already briefly examined in relation to his remarks about beavers on the River Teifi. It was written in 1188, and although Gerald did base part of the text on his real experiences of Ireland, his account of cranes seems to be entirely based on folklore (I:14). An extract from his discussion of cranes can be found in the Appendices.

The crane is ascribed several important characteristics in Gerald's description. At least two of these characteristics are based on observations of the real animals: (i) Cranes roost communally in huge flocks and do stand for long periods on one leg. However, in most cases it is clear Gerald is drawing from other sources. The idea that cranes make camp like soldiers and keep watch is from Pliny's 'Natural History' and repeated in the Bestiary tradition, as is the way they hold themselves awake with

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[36] See: Landa, A., Lindén, M. & Kojola, I. (2000) *Action Plan for the Conservation of Wolverines in Europe (*Gulo gulo*)* (Council of Europe, Strasbourg), p.21.

[37] Yalden & Albarella (2009) *History of British Birds*, p.136, 140.

stones.[38] For example, the bird is described similarly in Baxter's 'Ourania' of 1606 (see Appendices).

Close examination of these texts will not furnish any new evidence, so they are not reproduced in any more detail in the Appendices, but it is worth pointing out that the idea that cranes have livers hot enough to melt metal was also originally a part of the Bestiary identity of the ostrich, not the crane.[39] Perhaps the two large, long-necked birds were confused by Gerald or a predecessor.

In general Gerald's writing style here is reminiscent of that of the 'Physiologus' author in the Whales chapter. It is clear that Gerald's purpose in writing this passage is moral edification rather than ecological instruction. This is especially interesting since his purpose in writing the final two paragraphs about game birds is directly the opposite, as we shall see.

Although Gerald brings frustratingly little new information, it is significant that he speaks about the cranes in this way at all. Gerald's cranes are moral examples to pastors and prelates. This is a very different portrayal to the groaning trouble-stirring cranes of 'Betha Colm Cille', even though the two texts were written around the same time. It is a tribute to the high profile of the crane that their folklore was complex enough to support so many different points of view. Crane folklore is so well embedded in popular culture that Gerald feels he should discuss them as moral rather than physical entities.

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[38] See: White (1954) *The Book of Beasts*, pp.110-12; Thomas (1988) *Welsh Bestiary of Love.*), pp.21-22. Note the *Kalendr* in the Welsh Bestiary is not a heron like the editor suggests but *Caladrius*, a mythological bird.
[39] See: Buquet, T. (2013) 'Fact Checking: Can Ostriches Digest Iron?' *Medieval Animal Data Network (MAD)* (address: http://mad.hypotheses.org/131, accessed: 16/3/16).

Elsewhere Gerald gives some more original information. He notes cranes nest 'in ulteriori Ultoniae parte' ('the farthest parts of Ulster'),[40] which (if based on empirical evidence) is useful to know since they were lost as breeders in Ireland just like in Britain later on. In the 'Conquest of Ireland' he also notes that the Irish only started to eat 'carne gruina' (crane meat) for the first time when taught by King Henry II of England.[41] Ross has taken this as a suggestion that cranes were sacred and not eaten in early medieval Ireland.[42] The archaeological record is not clear on this point. Crane remains on human sites are not as common as those of other birds, but they do occur.[43] Ross points out this idea has resonance in modern folklore, and in a parish register entry from 1663,[44] but we shall see as we continue that crane flesh was definitely eaten in late medieval Scotland and Ireland. A more probable interpretation is to see this in the light of Gerald's colonialist attitude towards the Irish; that the Irish were so uncivilised they did not even eat civilised food. This comment may even have been intended to undermine the sovereignty of the Irish royal courts. Albarella and Thomas have suggested that the royal courts of Europe saw eating crane meat as a symbol of high status and civilisation. In this light, suggesting that the Irish were too barbaric to eat crane-meat until the English court taught them to would have reinforced the propaganda that England was not conquering Ireland but bringing it civilisation, and also reinforced the border between 'other' Irish and therefore comparatively normalised people from Britain. [45]

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[40] Dimock (1867) *Giraldus Cambrensis Opera 5*, p.124. L.2, cap.xl.

[41] Ibid. pp.279-80, l.1; cap.xxxiii.

[42] Ross (1960) 'Esus'.

[43] Hamilton-Dyer, S. (2007) 'Exploitation of Birds and Fish in Historic Ireland', pp.102-119, in: Murphy, M. & Whitehouse, N. eds. *Environmental Archaeology in Ireland* (Oxbow Books, Oxford).

[44] Campbell, J. (1900) *Superstitions of the Highlands and Islands of Scotland* (James Maclehose & Sons), p.240.

[45] Albarella, U. & Thomas, R. (2002) 'They dined on crane', pp. 23-38, in: *Acta Zoologica Cracoviensia,* vol. 45.

The 'Topography of Ireland' is usually split into chapters based on Gerald's original headings which all start 'De …' ('Concerning …'). Immediately after his account of cranes, before he starts the next chapter, Gerald also briefly mentions the presence/absence in Ireland of several British birds: the *pavones silvestres* (peacock of the wood = *T. urogallus;* capercaillie); *grutas* (*L. lagopus* red grouse here?); *acetae / cardioli* (*G. gallinago;* snipe; *S. ruticola;* woodcock); and *coturnices* (*C. coturnix;* quail); *ratulae* (*C. crex*; corncrake); and *alaudae* (?lark/pippit sp?).[46] These birds all have in common that they were frequently hunted and eaten.[47] Their position subordinate to the crane's chapter emphasises the crane's position, not just as a member of the category of consumed birds but actually at the forefront as the most important medieval game bird. The relative amount of time spent describing each species and the type of description (physical not moral) suggests that these species had a much lower cultural significance than the crane.

Gerald's comment that in Ireland the grouse are as small as partridges is not a compliment, but it may be interpreted as a remark on the absence of the black grouse (*T. tetrix*). It is not certain whether the black grouse ever inhabited Ireland.[48] If it did not, or if Gerald did not see any, his complaint would be understandable as the red grouse (*L. lagopus*) would be almost half the size of his preferred grouse. The red

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[46] For these last two see the *Dictionary of Medieval Latin from British Sources.* 'Corncrake' is provided by the dictionary as an uncertain translation of 'ratula'. 'Alauda' can refer to (a) the lark or (b) the pipit. Neither bird is a species of game and the reference may have been added simply because Gerald heard the bird whilst hunting the others.

[47] For the consumption of songbirds see: Fitter, R. (1959) *London's Natural History* (Collins, London), p.48. Smaller birds are not normally considered game today, but may have been special targets of falconers (technically: 'hawkers') with sparrowhawks.

[48] Van Wijngaarden-Bakker, L. (1989) 'Faunal Remains and the Irish Mesolithic', pp.125-33 in: Bonsall, C. ed. *The Mesolithic in Europe* (John Donald, Edinburgh), p.128.

grouse is closer in size to the red-legged partridge and much closer in appearance to the grey partridge (*A. rufa; P. perdix*).[49]

The comment about snipes can also be understood with some ecological knowledge. The woodcock (*S. rusticola*) closely resembles the common snipe (*G. gallinago*). The former lives in woodlands and is significantly larger than the latter which uses a wetland habitat.[50] The populations of the two birds are roughly even today. However when close records were first started forty years ago, there may have been five times as many snipe as woodcocks, agreeing with Gerald's testimony.[51] The jack snipe (*L. minimus*) is unlikely to be the species intended. It only migrates to Britain for the winter and it is ten times less common than the common snipe even in winter time.[52] This seems to have been true throughout the historical period. There are eleven times fewer archaeological records relating to it, and I know of no medieval texts that distinguish it.[53]

Comparison of species, after Hume (2002)			
Species	**Length (cm)**	**Wingspan (cm)**	**Weight (g)**
Crane	96-119	180-220	4,500-6,000
Black Grouse	40-55	65-80	750-1,400
Willow Grouse	37-42	55-66	650-750
Red Legged Partridge	32-34	45-50	400-550
Grey Partridge	29-31	45-48	350-450
Woodcock	33-38	55-65	250-420
Snipe	25-28	37-43	80-120

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[49] See: Hume (2002) *Complete Birds*, pp.93-99.
[50] Ibid, pp.210-212.
[51] Baillie, S. et al. (2013) *BirdTrends 2013* (British Trust for Ornithology, Thetford).
[52] Hume (2002) *Complete Birds*, p.210.
[53] Yalden & Albarella (2009) *The History of British Birds*, p.216.

The Columba Tradition and Cranes as Gluttons

Since cranes were so popular in medieval feasts, it is easy to see how they became symbols not just of wealth and status but also of gluttony and good eating.[54] However there is another side to this depiction that is not commonly seen. Sometimes cranes are depicted themselves as the gluttons. This folklore may have been reinforced by references to cranes supposedly having such strong digestion they could eat anything, as in Gerald of Wales' account.

Although cranes never become pests in medieval texts, they are not universally well spoken of either. Our next source for cranes is the same as the first source for whales which we looked at in the last chapter. 'Vita Sancti Columbae' (the Life of Saint Columba) is a late seventh-century hagiography written by Adomnan of Iona. I have presented an extract in the Appendices.

Adomnan was one of Columba's successors as abbot over the island. That means one of his main preoccupations was praising Columba and praising the monastery that he founded. The topos of a saint saving a helpless animal is a common one in hagiography. It conveys the saint's gentleness, but also his ability and desire to protect the weak, and, in this case, his position as a defender of Ireland. The use of this topos is especially interesting in this passage, because the animal in question seems to be a crane. Cranes were very commonly hunted with falcons and were one of the most common birds in medieval feasts. It is to be expected that anyone else finding a weak crane unable to fly away would have eaten it. The fact that Columba not only did not eat it, but foresaw its difficulties and made arrangements to protect it shows him as an

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[54] Albarella & Thomas (2002) 'They dined on crane'.

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ultimately gentle and selfless man, like the saints who take in hunted deer. The

passage might be interpreted as a straight-forward adaptation of the parable of the

sparrow which is cared for by God influenced by the hagiographical motif of the wild,

hunted animal which comes to the saint for protection.[55] Most importantly though,

this crane is a denizen of the north of Ireland, Columba's own birthplace. By portraying

him as opposing tradition to protect the bird Adomnan paints Columba as a true

patriot.

A great deal has been made of this story of the crane. It has been suggested

that not only was the crane from Ireland, it may have had some special pagan

significance to Columba.[56] This would provide a reason for him to look after it here,

and it would also explain the strange reference to St. Columba as the 'crane-cleric' in

'Betha Colm Cille' from the twelfth-century (also found in the Appendices).[57]

The twelfth-century 'Betha Colm Cille' contains a great deal of interest to us.

Wordplay was popular in medieval Gaelic texts and it is in full force here. The queen's

initial insult against Columba is calling him *corrclerech* (crane-cleric). In her translation,

Herbert has suggested the force of the insult is in the suggestion that Columba is bent

and therefore physically ugly. This cannot be right, as the primary meaning of the

insult is clear from the repercussions. Since the queen is ultimately punished by being

turned into a crane, the initial impetus of the insult is probably that Columba is like a

crane in some manner. At the same time, Ross is probably correct to suggest that the

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[55] *Luke* 12:6-7; *Matt* 6:25-34; 10:29-31.

[56] Finlay, I. (1979) *Columba* (Victor Gollancz Ltd., London), pp.23-26.

[57] See: Herbert, M. (1988) *Iona, Kells and Derry* (Clarendon Press, Oxford), pp.180-193. Note the earliest manuscript is from the fifteenth century, and this part of the story is given as an appendix because it is not found in the <u>Leabhar Breac</u>, ibid, p.211-12.

term had multiple connotations. It can just mean curved or crane-like but it can also mean strange or false.[58]

Alternatively, the term could equally have been intended to just give Columba another of the crane's attributes. Later on in the text we find another crane related term. In the second stanza of the poem (in the fifth paragraph), the queen asks Columba 'Cia corrugad sin fil ort?' (What's that stirring you're up to?). It is clear from the text that this question was intended to be offensive. The queen calls it 'go ro olc'. *Olc* is a word usually meaning evil, but it can also mean 'pitiful' or even 'mischievous' in the later language. 'Corrugad' does not have anything to do with cranes etymologically, but in this context the similarity of the first syllable of the word with the term *corr* (crane) might suggest that this is an action cranes should be expected to do. This would explain why the queen's words were personally offensive to Columba, beyond her actions.

The queen has made an error here. It is she, and not Columba, who is stirring up trouble in this poem. That may be why at the end of the poem she is the one who is turned into a crane. At this point in the text we find another characteristic of cranes. The queen's handmaiden is turned into a crane along with the queen 'ar cneit' (because of [her] groaning). At the end of the text the term is repeated. Even as cranes, the women continue to 'do gniat cneta' (make groans).

The women's complaining appears to be a part of why their punishment was appropriate. Cranes have a unique cry, which is celebrated on the Great Crane

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[58] Ross (1960) 'Esus', p.431.

Project's homepage as 'an explosive guttural call'.[59] In medieval bestiaries the term

grus was popularly believed to be onomatopoeic, and the call was less well liked.[60]

Chaucer kindly describes the voice as having a trumpet's sound,[61] but it is the object of

censure in another poem, 'Dychan i Dre'r Fflint ac i'r Pibydd' (A Satire of the Town of

Flint and the Piper) by the Welsh poet, Tudur Penllyn (c.1420-1490). In this poem

Tudur hears a man playing a bagpipe, and describes it as 'Garan annoddef lle y

gwery'[62] (an insufferable crane where he plays). An alternative version of the same

poem has 'llais garan yn llaes gery' ('the voice of a crane, blowing melancholically').[63]

In any case, it is clear that being turned into a crane here is an insult. We have

moved from the innocent, exhausted crane of 'Vita Sancti Columbae' to a less

sympathetic depiction. The topos of someone being transformed into a crane as a

punishment is known elsewhere in Gaelic literature. In 'Duanaire Finn', preserved in a

sixteenth-century manuscript, a woman is turned into a flightless crane which cannot

migrate by a jealous rival.[64] In the fifteenth-century 'Agallamh na Senorach' from

<u>Dublin Royal Irish Academy MS 24</u>, Oisin has a conversation with another woman who

has been turned into a crane.[65] These are both Irish examples and therefore fall

outside of the remit of this survey, but future researchers could profitably compare the

texts in detail. For example, the 'Agallamh' crane is described as 'san leana' (in the

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[59] Great Crane Project (2014) 'Home' (address: http://www.thegreatcraneproject.org.uk/, accessed: 16/3/16)

[60] Barney et al. (2006) *Etymologies of Isidore of Seville*, p.264: XII.ix; XII.xiv; White (1954) *The Book of Beasts*, p.110.

[61] Lynch, K. (2006) *Dream Visions and Other Poems, Geoffrey Chaucer* (W.W. Norton, London), l.344.

[62] Roberts, T. ed. (1958), *Gwaith Tudur Penllyn ac Ieuan ap Tudur Penllyn* (University of Wales Press, Cardiff), p.53 (30.39).

[63] This line is not found in the standard edition but in: Davies, W. (1837) *Gwaith Lewis Glyn Cothi* (Honorable Society of the Cymmrodorion, Oxford), p.390, l.43.

[64] See: MacNeill, E. (1908) *Duanaire Finn* (Irish Texts Society vol. 7, Dublin), pp.21-22. Synopsised in Nagy, J. (1985) *The Wisdom of the Outlaw* (University of California Press), p.98; 261.

[65] Note this is the 'Agallamh na Seanorach' of c.1400, not the more famous 'Acallam na Senorach' of c.1200 A.D. See: Ní Shéaghdha, N. (1945) *Agallamh na Seanórach*, vol. 3. (Leabhair ó Laimhsgribhnibh, Dublin), pp.84-91.

marsh) just like the crane in 'Betha Colm Cille'. Both cranes are also to live an unnaturally long life. This may be derivative of another common topos in Gaelic, although not English, Welsh or Latin literature.[66]

From 'Betha Colm Cille' we have found that cranes may have been seen as creatures that stirred each other up, were bent-over or groaned frequently. However, as Sharpe points out, this text does not provide clear proof that the crane should be seen as having any special totemic significance for St. Columba. Sharpe also reminds us that Christian authors are just as capable as pagan ones of using animals in their narratives.[67] Ross points out that cranes are not typically associated with pagans but with Christians.[68] She also points out an explanatory note in the later 'Life of Columba' by Manus O'Donnell (finished 1532 A.D.). As Columba leaves Ireland, sad seagulls come to his ship, and Columba understands them, suggesting a special relationship with animals. The narrator adds:

Extract from 'O'Donnell's Life of Columba'	
Gaelic original	**English Translation**
Et do derbadh an sceoil sin, do cuaidh corr ar cuairt docum C[olumb] C[hille] ó Eirinn a nAlpain go hI amail mebhruighes Adhamnan naem air.[69]	And to confirm that story, a crane went on a trip to Columba from Ireland to Iona in Scotland like Holy Adhamnan explains.

The author is suggesting that the crane in 'Vita Columbae' came specifically to visit St. Columba. There is no medieval authority for this belief, but it is worth noting, as it adds

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[66] See the immortal crane in: Ross (1960) 'Esus', pp.429-30.

[67] Sharpe (1995) *Life of St. Columba*, pp.311-12.

[68] Ross (1960) 'Esus', p.431.

[69] Kelleher, A. (1913) 'Betha Coluimb Chille', pp.242-287, in: *Zeitschrift für Celtische Philologie*, vol. 9, p.280.

another layer of historical significance to the interpretation of the scene. Perhaps we cannot separate out medieval and modern interpretations of the story as easily as we would like.

Returning to our first text, 'Vita Sancti Columbae', Sharpe makes the suggestion that the bird may have been a heron rather than a crane. His suggestion is made on the basis that the author's native Irish language lacked different words to distinguish the two birds (corr), so the scribe's judgement is not sound in this matter. Sharpe's reason for doubting Adomnan's knowledge of Latin animal names is unclear. He is aware of the former distribution of the crane across Britain, but suggests 'here and elsewhere' Latin references to the *grus* should refer to the heron rather than crane.

I am not convinced by Sharpe's suggestion. There is actually some textual evidence to suggest that the scribes of both texts had some practical knowledge of the birds discussed. The dative form used at the end of 'Betha Colm Cille': 'hi corraib lena' (into marsh-cranes) may even be a species level identification. The earliest translation of the Old Testament into Irish (first published in 1685) gives in one verse *ccorr ghlais* (white heron) for the stork and *chórrmhónadh* (moor heron) for another migratory bird, most likely the crane.[70] The latter term was also found in use by Edward Dwelly, the compiler of the first modern Scottish Gaelic dictionary, and this has now become the official name of the species in Gaelic today.[71]

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[70] Bedell, U. & O Domhnuill, U. (1817) *Biobla Naomhtha* (British and Foreign Bible Society, London) *Jeremiah* 8:7. Translations of the animal terminology in Bibles of this period were intended to be familiar rather than exact. The crane is probably used in this passage about migratory species because it was known to be migratory. The species has been replaced in the modern *Bíobla Naofa*.

[71] Dwelly (1911) *The Illustrated Gaelic Dictionary*; Betts, M. & Schofield, R. (2007) 'Common Crane', pp.539-540. in: Forrester, A. et al. eds. *Birds of Scotland* (2012 ed. The Scottish Ornithologist's Club, Aberlady). It is worth noting that this term was probably not established before Dwelly's time as Carmichael (1900-1971) gives a different term entirely and Harvie-Brown & Buckley (1888) ignore the species: See: Ap Rheinallt, T. (2010) *Obair gun Duais* (The Islands Book Trust, Kershader), p.111.

In 'Vita Sancti Columbae' meanwhile, the animal in the text seems very clearly to be a migratory bird, accustomed to crossing large bodies of water. Variations of the word *peregrinatus* (traveller, foreign) are used three times in the text, suggesting the bird may have been thought of as migratory. Although grey herons do sometimes migrate, this is much less common than the annual flight of the cranes from northern Europe. Herons historically are likely to have been less common than cranes for two reasons: (i) Herons are territorial birds; whereas cranes live in large flocks, and (ii) herons are piscivores and so much more specialist in their eating habits meaning that the same area could support a smaller population. I discussed the crane's importance to humans and its popularity in the Introduction, and it seems clear that cranes also would have been better known than herons. Whilst migrating, cranes are frequently blown off-course by high speed winds. Today, and in the past, birds in the western flight aiming for France, Spain and Portugal are sometimes blown off-course through Britain.[72] This is especially the case for young birds on their first migration. Birds lost in migration often arrive in Britain when the wind is to the north as the 'western flyway' migration path usually runs south of Britain.[73] The birds arrive exhausted, but recover if they find safe habitat to eat, rest and regain their strength.[74] This seems exactly what is being described in 'Vita Sancti Columbae', down to the detail of the wind blowing in the right direction. After recovering their strength, windswept cranes either stay where they are or resume their interrupted course. The latter course seems to be the one chosen by the bird in our text.

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[72] Stanbury & UCWG (2011) 'Changing status of the common crane in the UK', p.442; Gurney (1921) *Early Annals of Ornithology*, p.168.

[73] Mattews & Macdonald (2001) '*The sustainability of the common crane... in Norfolk*'.

[74] Gurney (1921) *Early Annals of Ornithology*, p.202.

Could a clever naturalist have anticipated the crane in the same way Columba did in 'Vita Sancti Columbae'? Late migrants are the most likely to become lost in the wind. Perhaps Columba knew that it was the season of the migration and that high winds were expected. Clearly however, knowing the exact date and time the final bird would arrive was only possible through Columba's miraculous prophetic vision, and the reason the story was being told.

There seems no reason to doubt the author's use of the term *grus* (crane). It was previously thought that cranes were never widespread in Scotland.[75] This view is no longer sustainable in light of the archaeological evidence.[76] Boisseau and Yalden were only able to find three places named after cranes in Scotland; they point out the comparable number of sites found in Wales, and argue that the lack of evidence so far discovered from Scotland and Wales is due solely to the disproportionate lack of place name studies for the two countries compared to England.[77] Modern sightings of migrating cranes are the most common across the west of Britain, including Scotland, but are also known from the Hebrides.[78]

It is worth pointing out that the crane in the text was *esurientem* (hungering). In this context there is nothing suspicious about the word. Of course a bird carried around by the wind for days would be weak and hungry. However this is also the characteristic that defines cranes in later texts, and from that perspective the use of the term here may have been intended to invoke a cliché.

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[75] Gurney (1921) *Early Annals of Ornithology*, p.173.
[76] Betts & Schofield 'Common Crane'.
[77] Boisseau & Yalden (2008) 'The former status of the Crane'.
[78] Stanbury & UCWG (2011) 'Changing status of the common crane in the UK'.

A good example of a hungry crane comes from the poetry of Dafydd ap Gwilym, who is one of the most well-known Welsh poets of the medieval period. He flourished in the mid-fourteenth century. He may have lived in north Ceredigion although he was well travelled within Wales.[79] As well as satirical and praise poetry Dafydd commonly uses a persona who engages an animal 'love messenger'. Although this first-person persona is involved in pursuing young women he is not always depicted seriously and often employs self-deprecating humour.[80] Once he is memorably described by a magpie as 'Llwyd anfalch gleirch lled ynfyd'[81] (you wretched, grey, half-witted old man). By undercutting his own poetic persona Dafydd injected humour into the genre of love poetry.

Dafydd's most interesting description of the crane comes from 'Ei Gysgod' ('His Shadow'), and I have presented an extract in the Appendices. Near the beginning of his poem, Dafydd greets his shadow and begins heaping scorn on it in the *dyfalu* style; he compares it to a series of ridiculous and ugly things. It is only at the end of the poem when he realises that all his criticisms reflect on him since the shadow is his own.

This description is reminiscent although not quite the same as the 'world upside-down' motif we saw used by Chaucer's 'Cliges' in the last chapter. At least some of the things are clearly supposed to be ridiculous images. A stable-master would never play hobby-horse just like a monster would not take the unthreatening form of a tonsured monk. Although black friars lived as beggars, they usually wore fine clothes.[82] Other lines might not have been ridiculous at all. Although rich people were buried in

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[79] Bromwich (2003) *Dafydd ap Gwilym*, pp.xiii-xiv.

[80] Ibid. pp.xx-xxi. He is like Ovid before him in this respect, see: Lewis, B. (2008) 'Bardd Natur yn Darllen Bardd y Ddinas?', pp.1-22, in: *Llen Cymru*, vol. 31.

[81] Ibid. p.83.

[82] Mann, J. (1973) *Chaucer and Medieval Estates Satire* (Cambridge University Press), pp.43-4.

ornate clothes, ordinary people were probably wrapped in burial shrouds. Presumably these could be made of hemp as easily as anything else. If so, this is a straightforward (if rather offensive) description of the shadow, just like calling it a 'farmyard pole'.

The two lines possibly concerning cranes are probably also meant to be ridiculous descriptions. A likely translation of 'bwrw ei gwryd' (lit: throw its span) is 'extend to full length', something the crane cannot do (the other possible interpretation would be of the bird stretching its wings). The crane is naturally a 'craned' bird, just like it is described in 'Betha Colm Cille'. Cranes usually have their heads bent to the ground to eat although they do straighten out when they fly (unlike herons).

Likewise, a crane does not become 'full from grazing marshy stalks'. They keep their necks almost permanently bent to eat. Most likely Dafydd is making a joke – a crane which is satisfied and no longer hungry is almost as ridiculous a suggestion as the master of a group of prize stallions playing hobby-horse.

Although *garan* more usually refers to the common crane, and *creyr* (mutated *gryr*) to the grey heron, the lines do not work well ecologically if interpreted like this. The first line in particular must refer to the crane rather than the heron. Herons only eat fish and small aquatic animals, which they catch with a quick, stabbing motion. Cranes on the other hand eat grains and bulbs as well as invertebrates, amphibians and reptiles but not fish. The word used here, *pori* (grazing) suggests the crane's way of eating with head held permanently down, rather than the quick jabs of the heron. Perhaps Dafydd's knowledge of the behaviour of these particular birds was poor.

If this line is about the crane, and uses a different linguistic term to the line following, is the line following it supposed to be about another bird (the heron)? On ecological terms, the line may fit the heron even better than the crane. Herons do not straighten out, if that is the meaning intended, as they fly, unlike cranes. There is also a comparable reference in another satirical fourteenth century text. Casnodyn's 'Dychan i Drahaearn Brydydd Mawr' satirises his subject as 'ais grëyr' (heron ribs), critically implying he is bent over and does not stand straight.[83] From a literary point of view, Foster Evans has also suggested that the two terms in this extract are likely to refer to different birds based on style.[84] Dafydd ap Gwilym's favourite *dyfalu* style is to draw upon a series of different metaphorical descriptions of the same object of satire. With this in mind it is most likely that Dafydd's usage was the opposite of what we might expect, namely *garan* for crane and *gryr* for heron. But other options are possible too. He may have simply not differentiated between the terms, or both lines could be about the crane, with Dafydd just wanting to use a different term on each line for poetic reasons. Finally, it is also possible Dafydd was simply referring to behaviour he had witnessed from a number of tall water-birds, or that he intentionally swapped the behaviours of the two to enhance the world upside-down topos.

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[83] Daniel, R. (ed. 1999) *Gwaith Casnodyn* (University of Wales, Aberystwyth), p.82.

[84] Foster Evans (2006) 'Cyngor y Bioden', p.53. Note that Foster Evans interprets the term *creyr* to mean *Ardea Cinerea* and *garan* to mean *Grus grus* as is more usual.

Cranes 'grazing' on the Somerset Levels.

This negative side of the crane is found in other texts too. In the later 'legendary' poetry of the fourteenth century <u>Book of Taliesin</u>, an interpolation in 'Canu y Meirch' describes Taliesin's experience changing himself into various animals and I have presented a short extract in the Appendices. This poem emphasises the crane's greedy nature. There is some difficulty with the exact translation, but the meaning is clear. Just like wildcats are fond of climbing trees, the nature of a crane is to seek out food to eat.

It is not only the crane's greedy nature which is criticised in the medieval tradition though. In the 'Book of the Knight of the Tower', a fourteenth century French text, translated into English by William Caxton in 1483 (see Appendices), Caxton explains to young women that the way the crane turns its head from side to side is

unseemly and fickle. Here it is not the crane's appetite that is criticised but its deportment.[85] The crane has a snaking neck which means it can see in all directions without moving its body. It also keeps its neck bent whilst on the ground as we have seen. Less than a century later, the same characteristic was the object of confused admiration by Spenser in the *Fairie Queene,* and today to have a neck like a swan is a positive image. But to the author of 'The Book of the Knight of the Tower' it seems to have been as ugly as it was to the author of 'Betha Colm Cille' centuries before.

Caxton makes two terminology changes in his translation of our extract. His 'vane' is probably suggested from the context as an instrument that turns its face from side to side quickly in high winds. Actually the source-term *belette* refers to the weasel (*M. nivalis*), another species which is too twitchy to be a proper role-model to noble ladies. More seriously, Caxton's 'hare' was not intended to be a hare at all. The translation may have been suggested by Aesop's fable of 'The Tortoise and the Hare' but the term *liniere* is probably a mistake for *limier* (lymer; the medieval scent-hound).[86]

When we set the species side by side the distinction is clear. Cranes are ignoble animals, like weasels and tortoises, not to be imitated by noble ladies. They would do better to imitate the noble hare or the scent hound. It is probably not coincidental that these are the animals involved in the hunt *par force*, which was thought to be the most noble sport of the medieval period.

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[85] The cranes ugly spindly appearance is also the object of censure in later Welsh poetry, as we shall see later, see: Arthur Howard Williams, 'Adar y Cywyddwyr' (unpublished PhD dissertation, Aberystwyth Univeristy, 2014), pp 170-4.

[86] Regnier-Bohler, D. (1986) 'Femme / Faute / Fantasme', pp.475-500, in: Universidad Complutense (ed.), *La Condicion de la Muder en la Edad Media* (Los Llanos, Madrid), p.488.

The Pre-eminent Crane

Confusingly, despite cranes often being described as ugly gluttons, there is another dimension to their description which is just as common. The aristocratic elite of the late medieval period prided themselves on their consumption of game, especially deer hunted with hounds and waterfowl hunted by falconry. Albarella and Thomas have suggested this need not have been based on any particular gastronomic appreciation of taste, but instead an attempt to separate themselves from the lower classes, especially with the growing affordability of domestic meat.[87] This suggests a reason which might explain why crane was one of the most prestigious meats. Cranes seem to be ordinarily caught only using falcons, but only highly trained gyrfalcons and peregrines can be trained to attack cranes.

Of all hunted birds, the crane is probably the most frequently mentioned and the highest status. For example, the 'Welsh Laws of Court' (see the Appendices) list only three pre-eminent birds, and whenever they were caught, the chief falconer was given a special reward. Apart from the falconer's tame bird, each of the texts noted list three pre-eminent birds. However, the common crane (*G. grus*) is only mentioned in the 'Iorwerth' lawbook. The others all exclude the crane, and instead include the curlew (most probably: *N. arquata*).[88] Beyond this, the tokens the king gives the falconer change in each version. In 'Iorwerth', when the falconer brings down one of the pre-eminent birds, he is given three gifts. In 'Cyfnerth' this appears corrupted. The falconer is given three gifts every day of the year, but when he brings down a pre-

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[87] Albarella & Thomas (2002) 'They dined on crane'.

[88] The curlew is called '[ch]wibonoglyc vynyd' (the mountain whistler) in Welsh, probably to differentiate it from the various other (smaller) British birds in the sandpiper family like snipe, woodcocks and true sandpipers. All these have less distinctively whistling calls and/or do not breed in upland areas. Hume (2002) *Complete Birds*, p.189.

eminent bird, he is given the gifts by the king's own hand. Further, the falconer is also given three signs of the king's favour (holding stirrup, etc.). In 'Iorwerth' these signs of favour were given to the falconer every day. Finally, 'Blegywryd' unites the gifts and the services together as rewards for falconers who are able to take a pre-eminent bird.

Although the 'Iorwerth' lawbook has the oldest manuscripts, 'Cyfnerth' is usually considered to be less developed from the hypothetical original text.[89] However, in the case of the crane readings, 'Iorwerth' seems at first sight, to preserve a simpler and therefore potentially less-developed reading.[90] On the other hand, it is notable that every other lawbook tradition agrees against 'Iorwerth' in omitting the crane. It is therefore not clear which reading is more original in this case.

Both the 'Iorwerth'-as-innovator and 'Cyfnerth'-as-innovator models for this passage could have rational motivations. The crane could have been left off later lists because it was becoming so rare that it was rarely caught, and no longer distinguished from the heron. Alternatively, the crane could have been interpolated into 'Iorwerth' as the obvious linguistic partner of the heron, already on the list, especially if the editor of 'Iorwerth' was not familiar with the *chwibonogyl*.

Both readings are possible, and in this case, perhaps it is not possible to reconstruct the original text. Some previous scholars have even suggested that the part of the Welsh law-codes represented in the 'Laws of Court' (including the law about the Falconer) may actually have never had a historical reality. Stacey, for example, suggests that these laws are inspired more by the romance genre than

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[89] 'Cyfnerth' is usually the least developed, which is why it is used for the standard edition found in Jenkins (1986) *The Law of Hywel Dda.* See Charles-Edwards (1989) *The Welsh Laws*, pp.20-1.
[90] The section is 3 lines in 'Iorwerth' compared to 23 in 'Cyfnerth' in the Appendices.

contemporary practice.[91] From this perspective, it need not matter to us, even if we could find out, whether or not the crane was an original member of the list, or why it was added or removed. What we can be sure of, is that at least one tradition of scribes and lawyers saw it as a pre-eminent bird.

The fourth Welsh reference and fifth reference in Latin and Welsh are not part of the 'Laws of Court' but are, in a way, even harder to situate. The references are clearly related, and the fact that the same reference can be found in 'Blegywryd', 'Cyfnerth' and Latin 'A' suggests either that this law was also first written before the lawbooks separated, or that it was a very popular one. However, these laws are part of the additional material appended to the end of the manuscripts and are therefore not regarded with the Welsh law proper in Jenkins' translation (*The Law of Hywel Dda*).

We are able to guess at the reason for these laws. They have a nearly identical form to the Welsh laws about beavers which we looked at in the last chapter, and were probably written with exactly the same purpose in mind. The 'Cyfnerth' lawbook introduces a fine, and also states that the king should get the worth of cranes, eagles (most probably: *Haliaeetus albicilla*) and ravens (*Corvus corax*) wherever they are slain. This prevents poachers from making a profit from hunting these birds. The Latin 'A' and 'Blegywryd' lawbooks are more explicit and expressly forbid hunting these birds without the permission of the landowner. The motivation behind hunting the crane is easiest to estimate. As the 'pre-eminent' bird of feasts and falconers the crane had to be protected from persecution and saved for the gentry.[92] But the motivation behind

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[91] For example: Stacey, R. (2000) 'King, Queen and Edling in the Laws of Court', pp.29-62, in: Charles-Edwards, T., Owen, M., Russell, P. eds. *The Welsh King and His Court* (University of Wales Press, Cardiff).

[92] Jenkins, D. (2000) 'Hawk and Hound: Hunting in the Laws of Court', pp.255-280 in: Charles-Edwards, T., Owen, M., Russell, P. eds. *The Welsh King and His Court* (University of Wales Press, Cardiff), p.265.

protecting the raven and eagle can only be guessed at today. The birds must have had some perceived value to motivate their protection. In their recognised role as urban scavengers, ravens were protected by law in urban areas of England at this time, and may also have been protected by custom in Cornwall for a different reason.[93] Perhaps they also filled one of these two roles in Welsh urban areas. The white tailed eagle was in decline at the time, so its protection could have been to correct this decline. Princes were often compared with eagles in later praise poems.[94] Perhaps the eagle was protected as a noble bird (like the swan in England) or perhaps it was protected to maintain populations for hunting like the crane. A possible motivation for hunting the crane can be suggested with more confidence: the law simply protects the ability of the court to hunt the crane.

Falcons that could attack cranes were clearly a status symbol for kings in the medieval period. When King Ethelburt of Kent paid his respects to St. Boniface (c.748-54 A.D.) he sent a 3.5 lb gold-lined silver drinking cup and two woollen cloaks. All he asked in return were St. Boniface's prayers and a pair of falcons (see the Appendices for an extract).

The art of taking cranes through falconry is clearly something King Ethelburt has had demonstrated to him, and it is possible that he was aware or had been shown St. Boniface's gift of falcons to King Ethelbald of Mercia (745-6 A.D.).[95] Although Ethelburt makes it clear that the donation he sent along with this letter is a donation, not a payment, the fact that he asks for something in return suggests ulterior motives.

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[93] See: Lovegrove (2007) *Silent Fields*, pp.123; 165; Ramsay (2012) 'Was Arthur once a raven?'.
[94] For example, see the late extract from: 'Anogaeth i Rys ap Rhydderch o'r tywyn' in the lynxes chapter.
[95] Ibid. p.101.

The King's large donation shows how much this request means to him. His style even changes as he talks about the cranes and begs for them to be sent. In the first paragraph he is using the first person (I wish… I think) and there are elements of poetic word play ('ars et artis audatia', 'arripere et arripiendo'). These elements disappear in the middle section where the king returns to using the royal we, but he returns to his rhetoric at the end of the text ('educantur, et edomantur ac doceantur'). There seems to be a real passion behind the King's writing at this point. The only native bird able to kill a crane in flight, as Ethelburt intends, is the peregrine falcon. It is unclear which falcons Boniface could easily acquire. Perhaps he had access to gyrfalcons from Scandinavia or lanner falcons from Italy and Greece. Either of these falcons can also be trained to take cranes on the wing.

We do not have a copy of Boniface's reply, if he sent one, but he may not have approved of the letter. In 747 A.D., very shortly before Ethelburt sent his letter, Boniface sent a letter to the Archbishop Cuthbert of Canterbury. Here he reports on the Frankish Synods and explains happily that he and his colleagues have banned the clergy from keeping dogs, falcons and hawks. Perhaps he saw the venery arts as a pleasure of this world rather than of God. Hunting was frequently banned for clerics in the medieval period.[96] Although he sent falcons to King Ethelbald of Mercia, King Ethelbald later attracted censure for sexual misconduct, and proved himself to be part of St. Augustine's earthly estate rather than a holy citizen of heaven.

On the other hand, despite clerical disapproval, cranes continued to be seen as a pre-eminent bird. They were not just suited to hunting with falcons, they were

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[96] Willard, R. (1947) 'Chaucer's "Text that seith that hunters ben nat hooly men"', pp.209-51, in: *Studies in English*, vol. 26.

alsoelements of great feasts. The Middle English romance 'Havelok the Dane' (1280-90) describes a perfect meal (ll. 1723-1734). I have presented an extract in the Appendices. The table is set, grace is said, and a fantastic meal is brought out. Cranes are the very first food to be mentioned in this meal, and they are set alongside swans and venison, followed by salmon, lamprey eels and sturgeon (caviar?). Only meats and wines are described —meat was not the mainstay of a meal for ordinary (poor) people in the late twelfth century.[97] Clearly this was a meal fit for kings, and perhaps even only permitted to royalty, with foods which are still considered as very high status today. That this was the case in the medieval period is suggested by the fact that archaeologically, crane remains are exclusively found on elite sites after 1000 A.D.[98]

References to cranes being ordered, cooked and eaten in historical records are especially common in the sixteenth century, as we shall see in the next section. However they are also found earlier on. *The Close Rolls of Edward I* (ruled 1272-1307) and those of Henry III (ruled 1216-1272) describe cranes being ordered for the royal kitchens.[99] King John (ruled 1199-1216) seems to have been especially fond of cranes as Gurney and Harting have shown.[100] In records from 1212-13 alone he took out gyrfalcons four times to catch cranes. Two of these occasions were holy days. On the Feast of the Holy Innocents, shortly after Christmas he caught seven cranes, and fed fifty paupers for each one he caught. On the Feast of the Purification (Candlemas) he

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[97] Singman, J. (1999) *Daily Life in Medieval Europe* (Greenwood Press, Westport), p.54.

[98] See, ibid, pp.139-140. Sykes (2007) *The Norman Conquest: A Zooarchaeological Perspective*, p.74.

[99] Deputy Keeper of the Records (1900-1936), *Calendar of the Close Rolls of Edward I* (1272-9) and *of Henry III* (1247-51; 1251-3; 1254-6; 1261-4) (His Majesty's Stationery Office, London). See also: Albarella & Thomas (2002) 'They dined on crane'.

[100] Gurney (1921) *Early Annals of Ornithology*, pp.49-50; Harting, J. (1883) *Essays on Sport and Natural History* (Horace Cox, London), pp.77-8. Gurney also gives several other historical examples, left out here for the sake of brevity.

caught nine cranes and feasted one hundred paupers.[101] We are told that John caught cranes and that he feasted paupers in the same breath, and the Feast of Innocents reference makes the causal relationship clear: John fed so many paupers because he caught so many cranes.

Gurney has sought to explain this relationship as a reward, by suggesting that feeding paupers encouraged common people not to touch royal quarry.[102] This suggestion is unsatisfying. A feast is a good reward from a patron to a rich person, but a less good deterrent for a poor person who needs to find food every day or starve. The feasting makes more sense as a kind of moral justification and public relations exercise as Warren has argued.[103] As we have seen, the venery sports were not seen as fit engagement for holy people, and perhaps King John might have been censured for hunting with falcons on holy feast days. At the same time, this section has shown how popular falconry was with the upper classes, so John would not have wanted to give it up either. Kings often feasted paupers on festivals anyway. Feasting paupers was a selfless, charitable act which was good for the soul. By connecting his falconry with this action, John was probably trying to re-brand his hobby with a more positive association.

There is also a reference in Laȝamon's Brut (c.1189-1236 A.D.) to cranes being hunted by hawks and hounds (ll. 10,060-10,068). This is worth closer attention, and I have presented it in the Appendices. Firstly a note on language: although Middle

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[101] 'Rotulus misae anno regis johannis quarto-decimi, ad 1212-13'. Text edited in: Cole, H. (ed. 1844), *Documents Illustrative of English History in the Thirteenth and Fourteenth Centuries* (George E. Eyre & Andrew Spottiswoode, London), pp.250; 253.

[102] Ibid.

[103] Warren, W. (1961) *King John* (University of California Press, Berkeley), pp.140-1.

English by date, Laȝamon's 'Brut', especially that in the Cotton Calibula A.ix text is

defined by its difficult archaic language, lack of French borrowings and common Old

English compounds.[104] One of the conservative features of this text is its grammatical

gender system. Readers of the original text will realise the crane is referred to as

masculine – it is called 'he', 'him' and 'his'. I have translated this to 'it' to avoid

confusing modern readers.

King Arthur is the focus of Laȝamon's 'Brut' and our extract here is no

exception. The 'Brut' compares the Saxon army fleeing from King Arthur to a wild

crane fleeing across its wetland habitat. Presumably the metaphor was suggested by

the place in which the armies fought: since the battle happened on a ford, the hunting

of a crane must have seemed like an especially appropriate comparison. This account

is really valuable for our purposes because in order to enliven the poem, the poet

offers naturalistic detail of real hunting, as Lang has pointed out.[105] The crane is a

figurative companion, but it is described so vividly that we might suspect Laȝamon

based the account on his personal experience of the bird.

The reference to the bird's flock makes it clear the text is referring to a crane

not a heron. But beyond that, the crane here is correctly identified as a part of the

fenland ecosystem. A hint of what this must have been like can be gained by looking at

fenland of the English Fens. Before it was drained, this was an area of alkaline, marshy

flooded land. Today, the Fens are extensively used by arable farmers to grow reeds or

hay, although the term *mor* used in the Old English explicitly defines the area of our

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[104] See: Barron, W. & Weinberg, S. (1995) *Laȝamon Brut* (Longman Group, Harlow, Essex), p.ix.
[105] Lang, A. (2003) *History of English Literature* (Wildside Press ed, Holicong), pp.49-50.

text as a wasteland. The marshy area is 'veined with watercourses' which are obviously deeper than the surrounding swamp.[106] In the last century the Fens have been re-colonised by migrating cranes, and the current official reintroduction program is taking place on the Somerset Levels, a similar environment on the other side of the island. This is exactly the habitat in which we might expect to find a crane.

The metaphorical fenland is distinguished by two zones: there are the reeds which are called *lond*, where the crane is pursued and flushed out by hounds, and the *flod* where the crane is pursued by hawks.[107] These two environments can be identified as the marshland around a river, and the open water of the river itself. The hunting method is identifiable as well. The hawks used here were birds of the sky rather than birds of the fist – these former are falcons which specialise in watching from the sky until large water birds were driven from cover by the hounds.[108]

The fact that the crane is described as *wondrien* might refer to its seasonal migration, but alternatively it might also refer to the crane's practice of grazing in different areas each season, sometimes even moving from day to day. This has provided a challenge to the *Great Crane Project* website which aims to direct eco-tourists to visit the cranes, and they have dedicated a section of their website to providing up-to-date location information. At time of writing the website is directing visitors to Aller Moor and western Sedgemoor.[109] These are not actual moors in the

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[106] See: Natural England (2004) 'The Fens', pp.59-65 in: *Natural Character Areas.* (Natural England, Worcester)

[107] The term hawk might refer explicitly to a hawk (not a falcon) if so, this reference is to the goshawk (*Accipiter gentilis*), as the sparrowhawk is too small to hunt cranes. The adjective 'swifte' however might suggest a falcon rather than a hawk, and the term 'hauek' is used generically for both species in the medieval period. In this case the reference is more probably to a peregrine falcon (*Falco peregrinus*). Both species are attested in the archaeological record. See: Cherryson, A. (2002) 'The identification of archaeological evidence for hawking in medieval England,', pp.307-14, in: *Acta Zoologica Cracoviensia,* vol. 45.

[108] Horobin, D. (2004) *Falconry in Literature* (Hancock House, Surrey), pp.36; 45.

[109] Great Crane Project (2014), 'Autumn Update', address: http://www.thegreatcraneproject.org.uk/seeing-cranes/sightings-map, accessed: 16/3/16.

sense of heather-coated upland, but moors in the sense of wasteland or wetland, just like Laȝamon describes in his description.

Finally it is also worth noting how central to the narrative the idea that the crane will be eaten is. On the last line the crane is described as a 'kinewurðe foȝel' (king-worthy fowl), suggesting that it is the meat of kings. This directly corresponds to the idea of the crane as a 'pre-eminent' bird in Welsh texts. The idea that the crane will meet its fate is also significant. This is a generic euphemism for death, but it might suggest the idea that the fate and purpose of every crane is to be hunted and eaten. Although our references are not exclusively to rich people hunting and eating the birds, it is clear that the crane had a high status. For example, the 'Life of Saint Magdalena' in the 'Early South English Legendary' does describe the poor saint as including cranes in her seafaring provisions, but since *crannes* are listed alongside the royally protected *swannes*[110] we need have no doubt that the food was supposed to inspire awe.

It is clear from these references that for the nobility, falconry was considered a noble sport and cranes were one of the most noble birds. The only thing that is unclear was how widely held this opinion was. Medieval courts valued cranes and that ordinary medieval audiences knew cranes were a high-status food. But did the poorer sort in society value the crane at all, or did the aristocratic preoccupation with consuming the bird at feasts just further associate it with gluttony? A hint of this may be found in our next text.

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[110] Horstmann, C. (ed. 1887) *The Early South English Legendary* (Early English Text Society, London), p.473.

The contrast between the idea of cranes as the pre-eminent birds, and the idea of cranes as ugly gluttons finds its ultimate expression in the early modern period. In Book I canto 4 of Spenser's (1590) *Fairie Queene* uses the crane as a metaphor for a servant that looks fair, but seems to embody gluttony (ll.181-9). See the Appendices for an extract. The servant's depiction here is as a hated, fat, gluttonous creature that eats too much and takes more than it needs. But at the same time, the servant is still beautiful, and has a long and fine neck. Spenser probably chose the crane as a metaphor because of its similar nature. The crane also has a long and fine neck but fills it like a glutton, never ceasing from grazing, as we saw in the description by Dafydd ap Gwilym.

This resolution is the opposite of that attempted by King John centuries earlier. By feasting paupers King John hoped to give a positive spin to his falconry and to improve the image of cranes. Spenser has reconciled the idea that cranes are precious and beautiful with the idea that they are ugly, wasteful gluttons by having them depict a beautiful creature, but also by having their beauty be deceptive and transitory. But as we shall see, there is no evidence that Spenser's reconciliation of the two traditions was any more successful than that of King John centuries earlier.

Early Modern Cranes

Scotland

Although it is often claimed that the crane was not widespread in Scotland, this is incorrect.[111] There is archaeological evidence for crane exploitation throughout the historical period up until the late medieval period.[112] Gurney found seven historical references to cranes in Scotland from the sixteenth century alone.[113] Shrubb, dating the evidence by season has pointed out the number of records of cranes from Scotland in crane breeding season.[114] We have already outlined the medieval Gaelic tradition of the crane with the example of 'Betha Colm Cille', and there are also references in Scots literature. For example, Montgomerie's 'Flyting against Polwart' c.1580-90 contains another description of the bird. Montgomerie's opponent is compared with a crane as an insult following on from the tradition we have seen where the crane is an ignoble bird:

> Or like an Cran, in mounting soon o'rethrowen;
> That must take aye nine steps before shee flye'.[115]

Despite the late date and location in Scotland this description does certainly belong to a crane rather than a heron, since the grey heron can take off almost immediately, unlike the crane which does need to run.

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[111] See: Boisseau & Yalden (2008) 'The former status of the Crane'.

[112] Betts, M. & Schofield, R. (2007) 'Common Crane', pp.539-540, in: Forrester, A. et al. eds. *Birds of Scotland* (2012 ed. The Scottish Ornithologist's Club, Aberlady).

[113] Gurney (1921) *Early Annals of Ornithology*, pp. 171-3.

[114] Shrubb (2013) *Feasting, Fowling and Feathers*, p.65.

[115] Irving, D. (ed. 1821) *The Poems of Alexander Montgomerie* (W. & C. Tait, Edinburgh), p.129.

The poem is not necessarily an indication of wild abundance, since the King's court which Alexander Montgomerie belonged to probably had live and dead cranes shipped to them. *The Accounts of the Lord High Treasurer of Scotland* show two cranes were brought to the king of Scotland in 1505, and at least six in 1506. In 1507-8, money was sent to Glasgow to support two live cranes there, and in 1533, the large sum of 31 shillings 10 pence was sent to Stirling to support the town's two cranes and flock of peacocks.[116] There are other references to live cranes being moved around in England, and Shrubb has suggested the animals might even have been domestic pets in Britain like they were elsewhere in Europe.[117] The Latin 'A' lawbook of the Welsh laws uses the crane as one of its three examples of an 'ave mansueta' (a tamed bird), suggesting the same might have been true all around Britain.[118] An unedited poem by the Welsh poet Gruffudd ap Dafydd ap Hywel (fl. 1480–1520) requests the gift of a tame crane from a patron in north-east Wales.[119] The poet's attitude to the bird may follow the negative *dyfalu* example of Dafydd ap Gwilym which we discussed earlier:

> Dano y rhoed (adwen y rhain)
> Dau gogail fal gwy gigwain
> Diawl a wthiodd dwy lathen
> Dan i bais, un yw ben[120]

> (Under it have been put (I recognize them) / Two distaffs like two spits, / The devil has pushed two rods / Under its smock, and one for it head)

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[116] Paul, J. (ed.1901-5) *Accounts of the Lord High Treasurer of Scotland,* vols. 3,4,6. (Commissioners of His Majesty's Treasury, Edinburgh).

[117] Shrubb (2013) *Feasting, Fowling and Feathers*, pp.67-8; Bartosiewicz, L. (2005) 'Crane: food, pet and symbol', pp.259-269, in: Grupe, G. & Peters, J. (eds.) *Feathers, grit and symbolism.* (Documenta Archaeobiologiae 3, Oxbow Books, Rahden, Leidorf 2005).

[118] Emanuel (1967) *Latin Texts of the Welsh Laws*, p.147.

[119] For a discussion, see Arthur Howard Williams, 'Adar y Cywyddwyr' (unpublished PhD dissertation, Aberystwyth Univeristy, 2014), pp 170–4.

[120] Ibid. p. 171.

The bird even aggressively pursues visitors like a guard-dog: 'syn y kawn was yn kynig / sias ar bawb a'i siswrn big' [121] ('I was astonished to the find the lad / giving chase to everyone with his scissor-beak').

Still, there is no evidence of a medieval captive-breeding program, and most of these birds did not last very long. Some of those bought in 1506 were delivered straight to the cook. That means the texts suggest cranes could still be found in the wild around Scotland. However the fact that the animals were collected at all rather than just hunted in the wild, and the fact real money was spent on acquiring them suggests they continued to be rare and high status creatures, perhaps much like the kinds of native species found in UK zoos today.

England and Wales

It is generally accepted that the crane continued to have a seasonal migratory presence in Britain long after the breeding population became extinct.[122] This is also reflected in Harrison's 'Description of England' (1587, I:3.18) where he claims the local people set superstitious stock in 'sight of the first flockes of cranes that flée southward in winter'.[123] The nature of the superstition is not attested but it is clear that these cranes were noticed, and perceived as winter birds.

The rarity of cranes at this point is attested by the 1533-4 'Acte ayenst Destruccyon of Wyldfowle', written to protect the eggs and nests of wildfowl. Crane

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[121] Ibid. p. 172.

[122] Gurney (1921) *Early Annals of Ornithology*, pp.168-171.

[123] *Chronicles of England, Scotland and Ireland,* 1587 ed. vol. 1.

eggs were one of the few species explicitly recognised in the Act. The fine for the destruction of each crane egg was 20d., the same as the fine for the destruction of any (also undergoing reintroduction) great bustard (*O. tarda*) eggs. This was the highest tier of fine, above the fine for destroying eggs of bitterns, herons, 'shovelards' (8d.), and mallards, teals and 'other waterfowl' (6d.).[124]

And it was not just the Scottish king that continued to prize cranes. The *Patent Rolls of Edward VI* (1547-53) make several allowances for landowners to hunt on crown land, as a reward for good service.[125] There are two possible reservations we can make against the formulaic theory. First, the list of animals which the landowners were allowed to shoot was exhaustive and formulaic, so it is possible that cranes could have remained on the list even after they went extinct. If so, it would have been based on the understanding that the crane was a type of bird (perhaps a heron), and that these landowners were allowed to shoot all birds. However the fact that the Patent Rolls of this period do not mention wolves, wild boars or beavers, but did mention wolves in 1232-1301 would tend to argue against this idea.[126] The second reservation against this evidence is that the authors could be using the term 'crane' to refer to the heron, in which case the crane could already be extinct.[127] This reservation does not hold up to scrutiny either. *The Letters and Papers of Henry VIII* make many sixteenth-century references to cranes, including, a letter from 1528 complaining that wild fowl are hard to come by but enclosing eight cranes, six curlews, six 'mewed knots', three

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[124] *Statutes of the Realm,* vol 3. (1509-1545), p.445.

[125] Public Record Officer (1921-6) *Patent Rolls of Edward VI* (1547-53) (His Majesty's Stationary Office, London)

[126] Ibid. pp.190-1. This is probably the reason for the Lincolnshire fen laws, which protect the crane even in 1780. See: Gurney (1921) *Early Annals of Ornithology*, p.168.

[126] Raye (2014) 'The Early Extinction of the Beaver'.

[127] Holloway, S. (1996) *The Historical Atlas of Breeding Birds in Britain and Ireland, 1875-1900* (Poyser Ltd, London), p.433.

'gray birds' and one heron.[128] This reference is useful not only because it shows that

cranes could still be obtained, but also because it demonstrates that cranes (*G. grus*)

and herons (*A. cinerea*) were still being differentiated. Another comparable reference

to cranes and herons at the same time can be found in the *Manuscripts of the Duke of*

Rutland of 1541.[129] Since cranes breed alone whilst herons breed together, the

possible last reference in 'Moliant Rhys ap Dafydd' by Lewys Glyn Cothi (c. 1425-1489)

to 'lle nythod crehyrod haf'[130] (a place where *creyr*s breed [in the] summer) probably

refers to the heron, not the crane. However cranes almost certainly did still breed in

Wales at the time. There are several references to cranes in the 1603 'Description of

Pembrokeshire'. It is stated that cranes can be found year-round, and that they breed

in marshes whilst herons breed in tall trees (which is true).[131] A corroborating Welsh

reference distinguishing *creyr* (*A. cinerea*) and *garan* (*G. grus*) can be found in Penarth

MS 147, f.223[132] suggesting the birds were certainly still present.

It is clear that despite its rarity, the crane *was* still well known in the sixteenth

century. In 1577 the first edition of the text most commonly known as 'Hollinshed's

Chronicles' was written. The first volume of this text is made up of a text by William

Harrison called 'An Historicall Description of the Island of Britayne' (in three books).[133]

The third book discusses Britain's natural resources and especially its wild and

domestic animal stocks. Harrison is one of the first to scientifically distinguish slow

worms and snakes, frogs and toads, newts and lizards and even some different species

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[128] Brewer, J. (1872) *The Letters and Papers, Foreign and Domestic, from the reign of Henry VIII* Vol. 4.2 (Longman &Co, London), p.158.

[129] *The Manuscripts of the Duke of Rutland*, vol. 4, p.321.

[130] Johnston (1995) *Gwaith Leys Glyn Cothi*, p.104 (42.41).

[131] Miles (1994) *Description of Pembrokeshire*, pp.140-3.

[132] Quoted in: Jones, T. (1926) *Gwaith Tudur Aled*, vol 1. (University of Wales Press Cardiff), p.xxiii; and *Geiriadur Prifysgol Cymru*.

[133] Parry, G. (1984) 'William Harrison and Holinshed's Chronicles', pp.789-810, in*: The Historical Journal,* vol.27.

of these, although he himself claims to have difficulty telling apart different native birds. I have presented his description of cranes in the Appendices.

Harrison's initial humility in the face of Britain's bird biodiversity is understandable but the list of species which follow his claim is a considerable one. It seems probable that not only is his claim about Britain's wild fowl abundance derived from general knowledge, but also his extensive species list. Harrison even lists the crane as present in England and also lists the bittern and heron, making it clear there is no confusion between these species. This is corroborated by John Lesley's 'De Origine Moribus et Rebus Gestis Scotorum' (1578), which we previously mentioned as referencing beavers. This book describes Scotland's 'grues plurimi' (many cranes) as well as its herons.[134] Both authors were writing to praise Scotland's biodiversity and natural resources, and were probably writing from tradition rather than from personal observation, but the sixteenth-century references taken together do suggest that cranes could still be found throughout Britain, if only in winter.

In the seventeenth century Baxter provides a good description of the arrowhead formation which many birds fly in (see the Appendices), and may well be based on actual observations of the birds in England. Despite Holloway's opinion that the crane disappeared before the end of the sixteenth century,[135] corroborating evidence for the continued awareness of cranes in the seventeenth century has been provided by Gurney's exhaustive study of historical records.[136] Re-examining these references in depth would serve no purpose and fall outside of the remit of this

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[134] Lesley (1578) *De Origine Moribus*, p.24.
[135] Holloway (1996) *The Historical Atlas of Breeding Birds.*
[136] Gurney (1921) *Early Annals of Ornithology*, pp.164-173.

chapter, but it is worth describing the evidence. Gurney found three pioneer

naturalists who described the species presence in the seventeenth century. Francis

Willughby's *Ornithologia*, edited and extended by John Ray (1676-8) noted that large

flocks of cranes still come to Lincolnshire and Cambridgeshire.[137] As Gurney points out,

the first edition says they can be found in the summer, but two years later in the

English edition this is left out, and Ray comments that he is not sure they still breed in

the country.[138] Probably the authors meant to write winter instead of summer, when

migrating flocks might have been seen. Shrubb has charted the reports of cranes from

the thirteenth century by month, and points out that even at this time there was

already a bias towards reporting cranes from September-January each year.[139] This

would agree with Gurney's other authority Thomas Browne (c.1662), who noted that

cranes were often seen in Norfolk in hard winters.[140] Gurney also cites the evidence

provided by the diarist, John Evelyn (1665), who went to visit Browne and was shown

his collection of eggs. Evelyn connected the eggs with 'several kinds [of bird] which

seldom or never go further into the land, as cranes, storks, eagles and water-fowl'.[141]

I am inclined to doubt Evelyn's evidence. Most likely Browne talked about

eagles, cranes and storks whilst showing him the eggs of other species. In any case

Evelyn is not a reliable judge concerning the presence/absence of the crane at the

time, or the identification of eggs. The testimony of the other three is reliable, but the

very fact they take the time to argue for the continued existence of the species

suggests it was not widely known in the seventeenth century. Naturalists are usually

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[137] Ray, J. (ed. 1678) *The Ornithology of Francis Willughby* (John Matyn, London), p.174.
[138] Gurney (1921) *Early Annals of Ornithology*, p.173.
[139] Shrubb (2013) *Feasting, Fowling and Feathers*, p.65.
[140] Southwell, T. (ed.1902) *Notes and Letters on the Natural History of Norfolk* (Jarrold & Sons, London), p.6.
[141] Bray, W. (1901) *The Diary of John Evelyn*, vol. 2. (M. Walter Dunne, London), pp.72-3.

much more aware of rare wildlife than the general public. References to cranes even in

the sixteenth century are far more common in the winter, when cranes would have

been migrating. How well known were cranes at this point really? Gurney splits the

ending of the crane into two eras. The crane stopped breeding in Britain by 1700, and

from 1650-1750 the crane is only a winter migrant, after which the heron takes its

name.[142] Actually though, Gurney appears to have been overly ambitious with these

dates. His own evidence supports an earlier time-frame. He managed to find eleven

references in historical documents to cranes in the sixteenth century, but only the

above three naturalists' accounts in the seventeenth. There is also no indication they

bred late into the seventeenth century. The last evidence Gurney was able to find for

cranes breeding in England is in the *Accounts of the Chamberlains of Norfolk* in 1542,[143]

and from a note by William Turner in *Avium Praecipuarum* in 1544.[144] He also points

out the 1603 reference in the 'Description of Pembrokeshire'. But even in the sixteenth

century, Turner explains that some people outside Britain do not think cranes breed

there any more. This suggests his reason for writing. Most of *Avium Praecipuarum* is

spent explaining the classical authors' thoughts about birds, with only occasional notes

from Turner's own experience. Turner was most probably motivated to write this note

because people doubted Britain had breeding cranes. This suggests Britain's breeding

cranes were not well known, presumably because the populations were dwindling.

The lack of evidence from the seventeenth century contrasts with the strong

evidence from the sixteenth century and suggests that the cultural era of the crane

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[142] Gurney (1921) *Early Annals of Ornithology*, p.168.

[143] Southwell, T. (1901) 'On the breeding of the crane in East Anglia', pp.160-70, in: *Transactions of Norfolk and Norwich Natural History Society*, vol. 7, p.168.

[144] Evans, A. (ed. trans. 1903) *Turner: On Birds* (Cambridge University Press), pp.96-7.

was over by 1650. Nathaniel Baxter's 'Ourania' from 1606 is one of the latest literary

acknowledgements of the bird, and the 'Ourania' describes so many species it could be

regarded as a naturalist's handbook itself. The evidence suggests that the crane was no

longer well known as a breeder by 1544, although some continued to breed until

around 1603. The bird continued to be known as a winter migrant, but was forgotten

by ordinary people by c.1650. After this date, the term was most often used to refer to

the grey heron. Considering the proportion of sixteenth century references which

come from Scotland, and the late reference to the birds breeding in Wales in 1603, the

birds may have been more common there than in England in the sixteenth and

seventeenth centuries. However, unlike the beaver, there is no evidence to suggest

that the crane's survival was on a regional basis.[145] Although it has been suggested that

British cranes did not migrate,[146] there is significant evidence to the contrary, as we

have seen. It is clear that, to some extent, western European cranes can be treated as

a single population.[147] Crane populations seem to have been significantly impacted

across western Europe by the beginning of the seventeenth century,[148] and our

evidence suggests that Scotland and south Britain were no different. Although there is

evidence that flocks of cranes regularly visited Britain in the late seventeenth century,

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[145] Martin Martin, who died in 1718, once observed a flock of sixty cranes. He explains cranes are one of the birds found in the Hebrides. See: Martin, M. (1703) *A Description of the Western Islands of Scotland* (second 1716 ed., A. Bell, London), p.157. This is apparently what has inspired the idea that cranes lived longer in Scotland than in south Britain. Shrubb cites Darling and Morton Boyd on this point, but they do not present any evidence. See: Shrubb (2013) *Feasting, Fowling and Feathers*, p.67; Darling, F. & Morton Boyd, J. (1964) *The Highlands and Islands* (Collins New Naturalist, London). I have not found any other evidence to support this theory.

[146] Stanbury & UCWG (2011) 'Changing status of the common crane in the UK', p.442. The reintroduced cranes in Somerset do not migrate because they were *not* raised by other cranes.

[147] Mingozzi, T. et al. (2013) 'Autumn migration of Common Cranes *Grus grus* through the Italian Peninsula: new vs. historical flyways and their meteorological correlates', pp.165-177, *Acta Ornithologica,* vol. 48.

[148] Betts & Shofield (2007) 'Common Crane', p.539; Holloway (1996) *Historical Atlas of Breeding Birds*, p.433; A note in *The Ancient and Present State of the County and City of Waterford,* claims 'during the great frost of 1739 some few cranes were seen in this country, but none since, or before, in any person's memory'. See Smith, C. (1746) *The Ancient and Present State of the County and Ciety of Waterford* (Physico Historical Society, Charles Smith, Dublin), p.337. Up until the existence of breeding cranes in East Anglia was widely known, they were classed as a rare migrant species in Britain.

and sometimes later,[149] cranes had begun to lose their place in Britain's cultural memory by 1650.

Conclusions

In the introduction to this chapter I pointed out the popularity and vivacity of the crane in the medieval cultural consciousness. This might surprise a modern audience. Less than half (43%) of my sample of the UK public were aware that the crane is native at all. The bird is significantly less well known than the beaver (64% awareness) and various 'whale' species (66% awareness). However, the crane was more important and better known to medieval Britain than the beaver or any kind of whale. With that in mind it is important to draw a caveat here. I have not been able to look exhaustively at every reference to the crane. In particular, the historical references I have described represent only a sample of those available. I believe I have at least mentioned all the main literary references to the crane, but some of these references are treated only in footnotes or given a cursory glance. A future researcher could profitably extend the bones of this chapter into a full monograph, or create an exhaustive encyclopaedia of historical references.

Having said that, the most important research question of this chapter was: 'how was the crane seen by medieval populations of Britain?' We have been able to answer this question by assigning the references to cranes into four main categories. I began by describing references to the 'Classical and Bestiary Cranes'. These

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[149] See for example: Hill, J. (1752) *An History of Animals* (Thomas Osborne, London), pp.456-7. Hill attests that flocks of cranes are still occasionally seen in Lincolnshire in the eighteenth century. He also says some people think they still breed but that this is incorrect.

descriptions fit into a pan-European and in some cases pan-global concept of the crane which had currency for thousands of years. Cranes fight pygmies in Pliny's 'Natural History' of the first century A.D., through the English 'Liber Monstrorum' of c.650-750 A.D. and even in the English 'Travels of John Mandeville' from the fourteenth century. They do not only fight pygmies. I do not look in great detail at the crane Bestiary tradition, but there is a topos of flocks of cranes being described as soldiers, with scouts flying ahead and sentinels keeping watch at night. The best example of this is in Gerald of Wales' 'Topographia Hibernica' (c.1188 A.D.), but the birds are described in exactly the same way centuries later, in Baxter's 'Ourania' of 1606. The bird's martial significance in these texts is especially interesting because it mirrors the bird's character in Iron Age Gaul, as Ross has suggested.[150]

When the idea of the fighting crane was brought into the medieval bestiaries it acquired a moral significance. Cranes have sentinels, and wake each other with loud voices in the night because they are vigilant against evil in the night. Cranes can swallow anything because they melt everything with the fire of their bowels, just like we should melt stubbornness with charity. However, this idea of the crane was very formulaic and stylised. There was another tradition, clear especially in Gaelic and Welsh poetry which looked down on the crane. The bird is depicted as greedy and bent-over. The origin of these attributes is not absolutely known. I can think of four options. (i) They could have been inspired from natural observation since the bird spends most of its time 'craned over' and might appear to be grazing. (ii) In modern times migrating cranes have done a great deal of damage to late agricultural crops.

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[150] Ross (1960) 'Esus'.

Although winter harvests were probably not commonplace in the medieval period, the crane's insatiable pecking at leftover stalks and abandoned crops might have been noted. (iii) While maligned by ordinary and hungry poor people, cranes were prized by rich people made them the centre-piece of ornate banquets, so the birds could have been called gluttonous by association with this. (iv) Finally, the bird's gluttony at least might have been inspired by the classical model, since Bestiary cranes are known to be able to swallow anything. This negative portrayal of the crane is so persistent there is unlikely to be only one answer. Most likely, each one of these factors was responsible at one time or another. The crane's voice, which was admired in the Bestiary tradition, was also the common object of satirical comparison for a bagpipe in 'Dychan i Dre'r Fflint ac i'r Pibydd', and made a suitable vehicle for the complaining voices of two punished women in 'Betha Colm Cille'. Likewise the crane's greed was satirised by late medieval Welsh poets in 'Canu y Meirch' as well as the aforementioned 'Ei Gysgod' by Dafydd ap Gwilym.

If the classical literary crane is a noble beast, and the observed crane of poetry is a bird so ridiculous that it furnishes material for satire, the animal hunted by elites in society is another creature again. The crane appears to have been the pre-eminent hunted and consumed bird in historical texts. Laȝamon's 'Brut' (c.1200) calls it a royal bird fated for the plate. It is one of the very exclusive foods eaten in a feast in 'Havelock the Dane', and a sample from the historical record shows the bird was just as pursued by the real medieval aristocracy as by their literary counterparts. It was legally protected by the English and Welsh aristocracy and seems to have been pursued especially by falconers.

However religious attitudes towards falconry at the time were not positive. Falconry and hunting were banned for those living the monastic life, and the venery sports were classed with the mundane rather than spiritual pursuits. King John seems to have been aware of the poor reputation of the venery sports. As we saw in the last section, he attempted to give falconry a less wasteful and frivolous reputation by feeding paupers each time he caught a crane on a major festival day. His intention seems to have been to commodify the crane. People need not see cranes as only ridiculed greedy beasts, they were actually valuable resources, beloved by the highest echelons of society. The idea of the crane as the pre-eminent bird of falconers was not entirely new, but seems to have grown in importance through the late medieval period. It sits uneasily with contemporary ideas of the crane as a denigrated bird.

The crane's identity is never fully resolved in the medieval period, and it continues to be ascribed these three characters in the Early Modern period. The bird remains the pre-eminent quarry for noble falconers but it also retains its martial identity, and continues to be identified in poetry as a greedy, 'craned' animal. King John was not the last to try and 're-brand' the bird. Spenser's 'Fairie Queen' also engages with these two ways of thinking about cranes and uses the image of a crane to describe a greedy, yet (deceptively) beautiful man.

Ultimately, human-crane interactions proved to be unsustainable in the early modern period. The bird seems to have been lost across Britain at around the same period. There is clear evidence that the birds bred in Wales and Scotland as well as England until 1600. The last record of cranes nesting in Britain is from Pembrokeshire, Wales from 1603 A.D., and by 1650 the cultural era of the crane was over in British literature. By this time, cranes must have stopped migrating to Britain in any strength,

and Britain saw 300 years with only rare migrants passing through, until the late twentieth century recolonisation and re-introduction in Britain. Technically, Gurney was right to say that migrant cranes continued to be regularly seen in Britain until almost 1700,[151] but Boisseau and Yalden and Stanbury et al. are also right to suggest that cranes were almost forgotten by 1600 A.D.[152] The final historical sightings of the crane in Britain have been mapped by Shrubb, so I will not repeat the work here.[153]

Finally, it is worth noting that this project has found less medieval confusion between cranes and other tall waders that expected in the introduction. There does seem to be some confusion in Dafydd ap Gwilym's 'Ei Gysgod', and also some in the Welsh laws, but for the most part our medieval authors seem to have no trouble differentiating herons and cranes. This is difficult to reconcile with the widespread confusion in artistic depictions, and the widespread confusion attested from the early modern and modern periods.[154] The answer is probably that the crane began to become confused with the heron mainly in the early modern period, and only *after* crane populations declined and the bird's profile lessoned. People continue to confuse cranes and herons today, when popular awareness of the bird as native is at only 43%.[155] This model will be verified in the next few decades as crane populations begin to rise as the recolonised and reintroduced birds begin to breed. This in turn should drive a greater cultural awareness of the bird, and, if I am correct, see them less easily confused by the people living on the island.

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[151] Gurney (1921) *Early Annals of Ornithology*, p.168.
[152] Boisseau & Yalden (2008) 'The former status of the crane *Grus grus* in Britain'; Stanbury & UCWG (2011) 'Changing status of the common crane in the UK', p.435.
[153] Shrubb (2013) *Feasting, Fowling and Feathers*, p.66.
[154] Yapp (1982) *Birds in medieval manuscripts*, pp.14-15.
[155] Some of those surveyed may even have understood the term crane to belong to the grey heron (*A. cinerea*).

Chapter 6 - Conclusions

This study has explored medieval portrayals of lynxes, whales, beavers and cranes. In the case of each species we have been able to find additional sources, bring new perspectives of old sources and come to new conclusions about extinction dates and causes. Up until now the standard position has been that the lynx disappeared too early to appear in British literature, except for one reference. I have found some additional references but also argued that that several descriptions of lions and perhaps even wildcats may preserve the final memories of the lynx in Britain. Cranes are usually portrayed as the pre-eminent birds for falconry and feasting in court documents and medieval romances, however I have found a strong tradition of religious texts describing the crane as a sinful and gluttonous bird, suggesting views about the creature are more complicated than was previously understood. Beavers have sometimes been said to have survived in south Britain until the seventeenth and eighteenth century. I have shown that the literary-historical evidence does not support this opinion, and that beavers are forgotten and misunderstood in England and Wales by 1300, although there is evidence they survived in Scotland for longer. Scholars have previously been divided about whether whales were hunted in Britain in the early medieval period. I have found some indication in the literary evidence that they were, but that this hunting was low-key until the tenth century A.D. corresponding with the 'fish event horizon'. Beyond this I have found that the nomenclature used to describe large whales did not denote any particular species or even just cetaceans in the medieval period.

But to some extent these conclusions are less important than the success of the methodologies, critical approaches and sources of this project. In this conclusion I would like to examine these.

Redelimitation

One of the most significant conclusions of this thesis concerns redelimitation: the way the names and folklore which are attached to one species can become attached to another species instead. Although this process has long been commented on[1] this project has furthered the opinion of Yalden that the process is often triggered by extinction.[2] For example, the term 'crane', although very commonly applied to the grey heron (*Ardea cinerea*) in the modern period was almost exclusively used for the common crane (*Grus grus*) in medieval literature. Its name was only ever confused after the bird became less common. The term *bever*/beaver was almost exclusively used for the Eurasian beaver (*Castor fiber*) in the early medieval period, but in the late medieval and early modern period there is widespread confusion about whether the English term *bever* and Latin term *fiber* could describe the otter (*Lutra lutra*) or badger (*Meles meles*). In this case the confusion goes in the opposite direction as well. The term *broc* and *waterie badger* (usually *Meles meles*) in particular are both used to describe the beaver and form some of the last (and previously overlooked) references to the species on the island.

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[1] For example: Dent (1974) *Lost Beasts*, pp.24-5; Rackham (1986) *The History of the Countryside*, p.33; Foster Evans (2006) 'Cyngor y Bioden', pp.54-7.

[2] Yalden & Albarella (2009) *The History of British Birds*, p.121.

This thesis has proposed that the frequency of linguistic confusion depends on the strength of the relevant species' profile in the cultural memory. Cultural memory I define as a collaborative, cultural re-construction of the past. Species which are well known (cat, dog, goldfish) have a considerable profile. No native speaker of a language would be likely to confuse these terms. This is not necessarily tied to whether a species is native or frequently seen. People do not often confuse lions and tigers, or hippos and giraffes, despite rarely ever seeing living examples. However, these species have a vibrant profile in our cultural memory and are often depicted in cultural outputs. In the same way, extinct animals do not automatically become forgotten. People in Britain would still be unlikely to mistakenly call a dog or fox a 'wolf'. The species which go extinct and then become confused are those which are to a large extent, forgotten. We can say these species either no longer have profiles at all in the cultural memory, or have only vague profiles. The beaver, lynx and crane have all suffered from this, and although large whales have generally been safer, it is possible that today's habit of calling the dolphin a type of whale in English would not have been possible without the severe depletion of several large whale species in the east Atlantic.

When using this method it is important not to be biased by an overly scientific approach. Some species were commonly called by different names in the past. As we have seen, the dictionary term for the beaver in modern Welsh is *afanc*, but this meaning is a modern innovation and previously the terms used seem to have been *befer* and *llostlydan*. The presence or absence of the element *afanc* in place-names is therefore irrelevant to the fortunes of the beaver before the sixteenth century.[3]

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[3] See notes in beaver chapter on the term *afanc*.

Semantic shift can be more subtle too. The Old English term *hwæl* (modern version: 'whale') was more generic in the medieval period and could be used for almost any large sea creature. The term *hwales ban* (lit: whale's bone) and the Welsh version *asgwrn morfil* both referred commonly to walrus ivory in the medieval period and not to the bones of cetaceans, or even baleen (called 'whalebone' in colloquial eighteenth and nineteenth century English). Glossaries make overcoming this difficulty much easier because they provide linguistic maps of word-correspondence for when they are written. Even finding similar terms in different languages can help. I have used the zoological writings of Albertus Magnus (a German writing in Latin) to identify a word in Middle Welsh (*amrant morfarch* = lit: 'whale's eyelash') as referring colloquially to baleen.[4]

Future researchers attempting to pinpoint the date of the decline of a species could measure the species' profile in the cultural memory (through literary references, artefacts, artwork etc.). The method is not conclusive but if the number of cultural references to a high profile species suddenly drops, and it is known that the species became extinct afterwards, it is logical to consider correlating the two events. Note that this method only provides a *terminus ante quem* (date before which) the decline must have taken place. There is often a lag-time between an animal's decline in its environment, and its profile's decline in the cultural consciousness. Use of this method has provided an extinction date for the beaver of pre-1300 A.D. in south Britain and before 1600 A.D. in Scotland.[5]

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[4] Raye (2014) 'Evidence for the use of whale-baleen'.
[5] Raye (2014) 'The Early Extinction of the Beaver'.

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It should also be recognised that studies of redelimitation and eco-sensitive readings in general are subjective.[6] There is some danger of incipient myth making. The subjectivity of the discipline can be illustrated by a familiar example. When scholars were not aware of the late survival of the lynx, the textual evidence we now recognise as referring to lynxes was interpreted to suggest it referred to wild cats or lions.[7] Obviously new scholarship needs to reflect new knowledge, and this project has found several medieval and early modern texts which were previously overlooked because the fact of the lynx's late existence in Britain had not been ascertained. However, our new interpretations are just as subjective as the old ones, and may well change again with time. No interpretation will ever match the author's vision, and the further a reader is separated in time and culture from an author, the less alike their interpretation is likely to be. Furthermore, a large percentage of our texts do not take part in any set time or place but in a group of imaginary heroic ages created by the text itself; the text is not inspired by an age, the text itself inspires the age. Since the author would have known about the animals which are the focus of our study, it is hoped that an eco-sensitive interpretation will come closer to author's original intention, but there is no way of being sure.

At the same time, if this study raises public awareness of the animals in question, it has done well. Wyver was able to draw a positive correlation between people's awareness of the lynx and their positivity towards lynx reintroduction.[8] The

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[6] Interpretation of historical documents remains less of an objective science than the interpretation of archaeological records, but historical texts better facilitate safe and detailed analysis of beliefs, cultural practices and religion, things which are more difficult to ascertain from the archaeological record. The classic study is Hawkes' hierarchy of inferences, although this has been challenged by later studies. See: Hicks, D. (2010) 'The Material-Cultural Turn: event and effect', pp.25-98, in: Hicks, D. & Beaudry, M. eds. *The Oxford Handbook of Material Culture Studies* (Oxford University Press), p.42.

[7] See for example, Dent (1974) *Lost Beasts.* Chapter on 'The Catamount', pp.81-96.

[8] Wyver, J. (2014) *The Lynx Effect.*

same is likely to be true of other animals too. My informal awareness survey suggested that only 19% of people were aware that the lynx had lived in the wild in Britain in the last 2,000 years. Further historical studies like this one should hypothetically help bring about increased acceptance for eventual reintroduction. At the beginning of 2014 the prospect of reintroduction of beavers into south Britain looked unlikely. The Welsh Beaver Project was not allowed to begin reintroduction, and I presented a paper suggesting (with tongue in cheek) that the beaver needed additional PR assistance.[9] However, that all changed later in the year with the campaign for the (illegally introduced) beavers on the River Otter. There was public outcry after DEFRA announced plans to capture the animals, and public pressure eventually led to the Devon Wildlife Trust being invited to place a bid with Natural England to begin a monitoring project, allowing the beavers to remain in the wild with official sanction. This means beavers are now effectively reintroduced in England, for the next three years at least.[10] At time of writing (Summer 2015), the Lynx UK Trust and Rewilding Britain Charity have just launched public consultations and PR campaigns on the possibility of reintroducing the lynx. Some of these species just need a push to be returned to our cultural memory.

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[9] Raye, L. (2014) 'The Case for the Early Extinction of Beavers in medieval Britain', paper presented at the Mammal Society Annual Conference, Birmingham Aston University, April 6th 2014.

[10] Devon Wildlife Trust (2014) 'Devon's wild beavers', *Devon Wildlife Trust* (address: http://www.devonwildlifetrust.org/devons-wild-beavers/, accessed: 16/3/16).

The Importance of Geography

Another very important finding is that the extinction dates for medieval animals in Britain often differs significantly between Scotland and south Britain:

Species	Date lost from south Britain	Date lost from Scotland	Reference
Lynx	900	1700 (?)	This project
Beaver	1300	1600	Raye, 2014 – disputed.
Wild boar	1300	1700	Ritchie, 1920 - disputed.
Wolf	1350	1700	Yalden, 2002
Crane[11]	1650	1650	This project
Pine marten	1900[12]	Still present	Lovegrove, 2007
Wild cat	1900	Still present	Lovegrove, 2007

I leave out the grey and right whale, because we did not look in any detail at the (international) early modern evidence for these species. I have also added additional species to the list to show that the trend continued throughout the medieval period and even up until the present day. The reason is likely to be the relative proportion of land in each country that is developed.[13] The exception is the crane, which seems to have ceased breeding in south Britain and Scotland at around the same time. This is probably because, as a migratory bird, crane populations are more closely connected than those of territorial, relatively short-dispersal-range mammals.

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[11] As a breeding bird.

[12] There was still a possible relict population in Wales but it was functionally extinct when the species was reintroduced in 2015, see: Buttriss N. 2014. Pine Marten recovery project. *Vincent Wildlife Trust*. (address: http://www.vwt.org.uk/docs/ezines/pine-marten-e-news-feb2014.pdf?sfvrsn=0 accessed: 16/3/16).

[13] Raye (2014) 'The Early Extinction of the Beaver'.

However it is important not to interpret all perceived geographical bias to an earlier extinction date. This study found, unsurprisingly, that differences in cultural output can also be attributed to the different cultural importance of various animals. In our chapter on whales most of the evidence was from English and Latin sources. There was good evidence from Scottish sources but almost none from contemporary Welsh sources. This matches the modern day range of cetaceans in British coastal waters, and so reflects the geography, but it is probably also in part due to the much better North Sea links of England. The establishment of the Danelaw in England may have brought about increased trade links between England and Scandinavia. It is especially notable that our evidence suggests that English people started whaling at around the same time walrus ivory was first introduced into Britain.

There is also geographical bias in the evidence for lynxes from medieval Britain. There was very little lynx evidence in English, much more in Latin (especially Latin from Scotland), but the best evidence was found from Welsh sources. This is unlikely to reflect any real geographical prejudice of the actual lynx. I have speculated that it is more likely to reflect where there is continuity of tradition. Redelimitation is most likely to occur in places where there is an actual break in language tradition. In south Britain, at about the same time the lynx was in terminal decline, the English language was being established as the language of the people. Stories about lost animals would presumably last longest in a linguistically conservative area, not one undergoing linguistic and cultural changes like most of England did in the second half of the first millennium A.D.

Cultural Homogeneity and Cultural Attitudes

Another of the biggest surprises from the study was the degree of folkloric homogeneity and the derivative nature of media in the medieval period. David Attenborough has recently claimed that 'the success of nature documentaries risks creating the first generation of British children who know more about gorillas than the wildlife in their own gardens'.[14] Medieval people may not have known much about gorillas, but just like today, African fauna like lions and elephants took pride of place in the cultural media[15] and may even have had stronger profiles in the elite, literate cultural memory than most native wild animals. Likewise, each of our species had certain characteristics which were known across Europe. Almost every account from Britain of the beaver which we looked at described the pan-European self-castration folklore, and ideas of the crane's nightly sentinel duty were also common throughout the European Middle Ages. I have defined this pan-European animal folklore as the Bestiary tradition, since the folklore is found most commonly in bestiaries, and the exotic fauna seems to have been originally popularised by the bestiaries.[16]

In this study I have deliberately avoided discussing bestiaries in order to focus on what is unique and definitive of British sources. This runs at the risk of exoticising my sources. It should be emphasised at this point that medieval and renaissance authors from Britain *did* participate in the European-wide medieval literary stage. For

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[14] Lusher, D. (2014) 'Sir David Attenborough says', *Daily Mail online* (address: http://www.dailymail.co.uk/femail/article-2569361/Sir-David-Attenboroughs-childhood-memories.html, accessed: 16/3/16).

[15] George, W. (1981) 'The Bestiary: a handbook of the local fauna', pp.187-203, in: *Archives of Natural History,* vol. 10.

[16] Ibid, although note that often the folklore is found before the 12th century popularisation of the Bestiary tradition in Britain. In these cases Pliny's 'Naturalis Historia', the 'Physiologus' and Isidore of Seville's 'Etymologiae' were the key tradition bearers.

the most part, any educated person could be expected to be aware of the pan-Europe

Bestiary tradition.[17] I have refrained from discussing this folklore more often because I

wanted to be able to draw conclusions about specifically British fauna and beliefs held

by people from Britain. In some cases this has been useful. For example, from the

Bestiary tradition we get the idea that beavers were especially prized for their

castoreum. Although I have found references to the importance of castoreum from

Britain, I have also found people distancing themselves from it. Previous scholars'

assumptions about the product may have given an inflated idea of its actual medieval

use.[18]

Another way our approach has been successful is in exploring cultural attitudes

about the species in question. By taking a species-by-species, chronological view it has

been possible to pinpoint changes in how people saw different species. For example,

there is a general shift in how large whales are portrayed at the end of the first

millennium. Literature before this date describes the whale as a monstrous beast;

sometimes actively malicious, sometimes just an untrustworthy one. In the late ninth

century, 'The Voyage of Ohthere' was produced, which described Ohthere's trip to

hunt whales and walruses.[19] Shortly after this walrus ivory seems to enter the

marketplaces of Britain, and, if we can trust our analysis of 'Aelfric's Colloquy', some

English people start going whaling themselves. After this, portrayals of whales more

often describe exploitable animals than monsters.

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[17] Although note the confusion in the Welsh translation of the beaver folklore in the 'Bestiary of Love', suggesting the beaver was forgotten in Wales for a time.

[18] It is actually acknowledged that this is an assumption in: Kitchener & Conroy (1997) 'The history of the Eurasian beaver', p.104.

[19] This is around the same period as the establishment of the Danelaw and presumably closer trade links with Scandinavia.

Of course, sometimes multiple attitudes towards our species can be current in the same period. We have seen that cranes in the second half of the medieval period are sometimes described as ugly gluttons and sometimes the most highly-praised quarry of falconers. Both attitudes seem to have been equally valid, and the martial conception of cranes from the bestiaries was also found at the same time. This kind of complicated and contradictory portrait may be symptomatic of the bird's very strong profile in the medieval cultural memory.

Innovations and Implications

Few of the methods used in this project are totally original to it, most have been used in some ways in previous studies.[20] However it is worth mentioning the success of some methods and sources here. Apart from the species-by-species, attitude based methodology described above, the most influential lens adopted was the 'stages of removal' questions. These have been an attempt to automatically assess a sighting based on the stages between the actual animal and the reader. In some cases the lens has worked very well, such as in the case of 'Peis Dinogad' and the 'Voyage of Ohthere' and helped narrow our focus from figurative descriptions, dreams and visions. However the lens is not perfect for three-reasons. (i) Sometimes it wrongly dismisses texts. The genre conventions of some of the best texts, like for example, the geographical 'Scotia Illustrata' by Robert Sibbald, remove the observer from the account entirely, even though this text is in some cases based on personal experience.

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[20] See: Introduction.

(ii) Although the lens dismisses all figurative references, I also predict that there is a correlation between the number of figurative references to animals in cultural media, and that animal's profile in the cultural memory. People today are unlikely to say that someone is turning their neck like a crane, but it was common when the animal was still found in Britain. If quantitative, 'distant-reading' analysis becomes possible with medieval texts, this would be a worthy avenue of research. (iii) There are also times when the lens produces false positive accounts. Most of the time we are protected from these by the audience's expectation that the author maintain 'verisimilitude of setting' (naturalism). This is not always the case. In 'Beowulf' the main character explains that he once fought-off nine whales with a sword. Despite being expressed in the first-person ('I did this') this was a boast and the heroic age setting of the poem means that audiences do not mind some non-naturalistic details their setting.

Although cultural references do not always preserve useful knowledge about actual species, they remain important. The ubiquitous idea of beavers castrating themselves in the medieval period cannot have any basis in truth since beavers have internal genitalia. However the presence of this folklore in texts is useful for our purposes since it warns that the author is drawing on older traditions and we need to look for evidence to suggest the author has any original experience to contribute.

This study is also characterised by its inter-disciplinary interest in British history and synthesis of different historical documents. At times this has worked very well. The use of museum data on ivory helped explain the cultural context of texts mentioning 'whale bone' from Old English 'Ohthere' to Middle Welsh 'Rhonabwy'. The high profile of beaverskin in the London customs importation records from the fourteenth century allowed the in-depth use of the English Sumptuary Laws, despite only a single

reference to beaver appearing within these laws. The comparative frequency of crane in medieval feast records provided hints about when the crane became extinct in Britain but also helped explain the species' high profile in romantic literature. However, this approach has undoubtedly missed useful details in the literature. I was able to present a theory about the correct length of the 'ell' in 'Ohthere' not by finding different sizes in different texts, but by an intra-textual analysis. My broad view of the corpus may have overlooked internal details in other texts.

For example, this is the first major study of extinct animals to make use of modern research on the Welsh law codes. Historical research has made it clear that the Welsh law codes are better studied as a *process* than a single authoritative text. It is no longer appropriate to cite the Welsh laws as a single document, or to assign them any certain date prior to the thirteenth century (except to say that they were probably codified before this date). It is also important to note that some of the laws may have found their origins in romance rather than historical practice.[21] However, by comparing different versions of similar laws it is possible to come to some strong conclusions about the place of certain animals in medieval Wales.[22] For example, several laws about cranes can be found in the thirteenth- and fourteenth-century lawbooks. Each of them attests that the falconer should be honoured whenever he catches a crane, suggesting that this was part of the tradition of laws before the lawbooks separated. There is a late attempt to preserve the hunting of cranes for the royal court (just like we find in contemporary English sources) and some dissention among the lawbooks

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[21] For example: Stacey, R. (2000) 'King, Queen and Edling in the Laws of Court', pp.29-62, in: Charles-Edwards, T., Owen, M., Russell, P. eds. *The Welsh King and His Court* (University of Wales Press, Cardiff).

[22] See the sections in Beavers and Cranes.

about which three birds should be the pre-eminent birds of falconry. Previous scholars, viewing the Welsh lawbooks as a single text have missed important laws which are only present in one version.[23] I believe I am the first scholar not exclusively researching the legal tradition to mention the laws about the queen's costume and beaver castoreum. The Welsh laws are so complicated that a monograph-length study of the wild fauna in the law material would be justified.[24]

The fur importation records, given preliminary discussion by Veale are also worth a more in-depth study.[25] Why were pine marten, ermine (winter stoat) and beaver pelts being imported to London when there should have been a local supply? A study incorporating records of the animal-product trade from Britain's other ports may be able to either corroborate or refute ideas of local beaver and lynx scarcity. These records could contribute a history of human-animal relationships in Britain before Lovegrove's parish records[26] begin in the early modern period.

Two other sources deserve special recognition. (i) Robert Sibbald's natural history, 'Scotia Illustrata', has never been fully translated but translated extracts were critical for understanding the beaver in Britain, and also contributed to understanding the lynx. A modern, searchable translation of this text is a priority for researchers interested in the pre-industrial Scottish fauna. (ii) Gerald of Wales' travelogues 'Topographia Hibernica' and 'Itinerarium Kambriae' have been quoted in every chapter

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[23] For example Aybes & Yalden note only two of the four distinct laws I found: Aybes & Yalden (1995) 'Place-name evidence for wolves and beavers' p.214.

[24] A starting place for such a study is produced by Owen (2009) 'The Animals in the Law of Hywel'.

[25] Veale (2003) *The English Fur Trade*, pp.158-9.

[26] See: Lovegrove (2007*) Silent Fields.*

and a considerable study of the fauna of south Britain c.1200 would be possible by a researcher using Gerald's sources alone.

But at present the most common use made of historical evidence by environmental scientists is to justify reintroductions, and at present the most common use of ecological evidence by scholars of the historical landscape is to furnish anecdotes to support species identifications. Although useful, this level of interdisciplinary engagement is superficial and almost always supportive rather than critical. The danger with this is that it can lead to confirmation bias (only looking at evidence which is supportive, and ignoring absence of evidence or negative evidence) and circular reasoning (basing a conclusion on a conclusion which was based on the first conclusion). The dangers of this for modern ecologists are significant. If a date or reason for extinction is misunderstood, the requirements for reintroduction might also be misunderstood. For example, this thesis has suggested that the beaver was hunted to extinction. This suggests that Britain's rivers may not need significant alteration before beavers can be accepted again. However, as we saw in the beavers chapter, other authors have emphasised habitat-destruction as the reason for extinction, If this is the case, beavers may be unable to survive in modern Britain with its drained wetlands.

For historians the risks are less obvious but still significant. If the natural distribution of a species is misunderstood, a text can be needlessly relegated to the realm of fiction or even intentionally re-interpreted. For example, references to lions in otherwise naturalistic texts have attracted creative translation for years to avoid impugning the authority of sources. Although I have found a few references to the *llewon/llewyn* which I have translated as lynx/monstrous cat, this word does not

appear as such in Welsh dictionaries. If I am right, an entire word has been obliterated from the dictionary based on the opinion that it should not exist. If I am wrong, I am suggesting adding a word to the dictionary based on a few anomalous forms and the opinion that I think the word *ought* to exist.

This project has argued that at least three of its four target species became extinct due to direct human action (hunting). Habitat loss and indirect human action may have had some effect, but the dates that the species became extinct together with the fact they can be introduced without problems strong suggest the main cause was direct rather than indirect.

It is interesting to note the growing awareness of this anthropogenic (human-driven) extinction through the historical period. Ascertaining local extinction to historical periods is often difficult because in the past there was not such a strong sense of an objective native fauna for Britain. People did not generally notice the lynx was missing, rather they slowly forgot it, and transferred memory about it to other species. However, by the late medieval period we began seeing hints in the law-codes that people were aware of the danger. The Welsh legal tradition preserves beavers as the preserve of the royal court, and the English royal court made some attempts to protect the crane for personal exploitation in the early modern tradition in the same way. It is popularly believed that global extinction was not widely known until Georges Cuvier popularised catastrophism; the idea that fossil species did not all evolve into modern species but that some simply vanished.[27] He was actually not the first to advocate this theory, but in any case, cases like the beaver in Scotland suggest a wide

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[27] Rudwick, M. (1997) *Georges Cuvier: Fossil Bones and Geological Catastrophes* University of Chicago Press, p.76.

awareness of the potential for local extinction well before Cuvier wrote. Generally it was not the case that people did not believe extinction was possible, they just forgot certain extinct species had formerly been common.

It should be noted that this concern was still motivated by personal interest. The Welsh court wanted to preserve their ability to wear beaverskin and the English court wanted to preserve their ability to pursue falconry. Even the original aim of the *International Convention for the Regulation of Whaling* (1946), before the moratorium was made, was still for commercial interest. The *Convention* was intended to safeguard the natural resources of whale stocks. It is not until the second half of the twentieth century that we find less selfish concern for the biodiversity of the planet becoming an objective in the legal tradition, as shown for example in the 2007 version of the *EU Habitats Directive* (92/43/EEC).

The non-commercial interest in biodiversity is a recent and still fragile consideration, and that is why many modern schemes attempt to incentivise the conservation of rare and reintroduced species. The Scottish Beaver Project and Great Crane Project both kept some money aside for reimbursing financial losses, but McDonald has suggested the most efficient way to raise interest is to actively equate the presence of a species with financial gain rather than just to offset losses. I argued that this may also have been King John's intention when he fed paupers each time he caught a crane, eight centuries ago.

Considering how little attention has been paid to this subject by literary historians, the conclusions of this thesis remain subjective. But the most important aim of this thesis is not to answer all the questions but to facilitate communication and criticism

between the disciplines of literary history and environmental science. It is vital to establish further interdisciplinary discourse accessible to scholars of both disciplines, as well as policy-makers and the general public. Ecocriticism, written in jargon-filled, subject-specific journals, is often not accessible to scholars of the historical past.[28] Zooarchaeology has had considerably more success in reaching ecological research, and etymological research is being heard, but the discourse channels between the latest historiographical research and the latest ecological research need to be re-opened.

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[28] For an example of this problem from a Celticist perspective see Lewis, B. (2010) 'Celtic Ecocriticism', pp.71-81, in: *Cambrian Medieval Celtic Studies*. vol.59.

Appendix 1 – Survey of Animal Awareness

Introduction and Methodology

The main aim of the survey was to test the existence of a small group of "forgotten beasts" in the mind of the general public. According to my theory, the former existence in Britain of native animals like the wolf and wild boar which have been hunted to extinction is still well known, but the presence of other animals, e.g. the lynx, whale, bear and crane, has been forgotten. This survey tested the theory by giving participants a list of 26 animals and asking whether each was native to Britain within the last 2000 years or not. The answers were aggregated and then each animal's results could be compared with its fellows to assess what percentage of people was aware of each species. In order to obtain comparable data, the animal-list contained a mixture of native (wild and extirpated) animals as well as a number of non-native animals.

Between November 2012 and August 2013, 37 respondents in Cardiff outside the National Museum, 45 respondents in Oxford between the Ashmolean and Taylorian, 34 respondents in Edinburgh, outside the National Museum and 39 respondents in Exeter, outside the Royal Albert Museum volunteered to take part in a survey on wildlife. This survey had been previously tested on a small number of colleagues at Cardiff University and the number of animals had been edited slightly to balance the number of negative and positive answers given. All volunteers testified that they had lived in Britain for at least a year (the majority were local) and all were fluent in English, but no personal information was collected. These participants were

uniformly briefed that they were taking part in an optional survey of public awareness of wildlife in Britain and given the following prompt:

I'm going to say an animal's name, and I want you to tell me if it is native or not. By that I mean: Has it lived wild, on the island of Britain, at any time in the last two thousand years without humans ever introducing it. Some of these animals are rare, so don't feel bad if you are not sure what the animal is, just tell me.

Results and Discussion

Overall 147 sets of results were usable. Eight sets of results were rejected, three were incomplete, three didn't understand the question and two were not given in good faith. These results were distinguished from the results of less well informed people by control questions. It was expected that all respondents should be able to identify the mountain lion and reindeer as not native and the toad and raven as native.

The species were named in alphabetical order and each type of animal was called generally by its most common English name (as given in the table below). This caused some difficulties. For some participants these names were too broad and they asked for clarification. In each case I responded that I was interested in "any type of x" (the most common of these were anticipated as noted below). Nevertheless, many of the names were still unfamiliar to some respondents. In each case when asked "what is that?" I refused to comment to ensure that each participant had the same amount of information.

The following is the aggregated data expressed in percentage form:

ALL RESULTS, in %			
Animal/Opinion	native	not native	unsure
Mountain lion	4%	91%	4%
Toad	86%	8%	6%
Newt	85%	7%	8%
Raven	83%	12%	5%
Wolf	75%	25%	1%
Adder	73%	12%	16%
Reindeer	23%	72%	5%
Wild boar	72%	23%	5%
Eagle (any kind)	71%	24%	4%
Wildcat	69%	27%	5%
Canadian goose	20%	68%	13%
Grey squirrel	31%	67%	3%
Whale (in British coastal waters)	66%	27%	7%
Beaver	65%	25%	9%
Viper	29%	60%	11%
Red kite	59%	10%	31%
Pine marten	52%	16%	33%
Lizard (any kind)	52%	44%	3%
Bear	50%	48%	3%
Polecat	42%	37%	21%
Crane	41%	37%	22%
Carp (the fish, any kind)	59%	28%	12%
Lynx	22%	56%	22%
Rat	77%	19%	4%
Fallow deer	60%	18%	22%
Rabbit	79%	16%	4%

Animal's native status well known
Animal's native status poorly known
Animal's native status forgotten

The chart above presents the aggregated data of my participants' awareness as a percentage of the whole. For example, 91% of the participants claimed that the mountain lion was not native when asked for this survey. The data is organised by awareness, with those animals in green at the top of the chart being very well known to my respondents (known by >70%) and those in red at the bottom the least well known (less than a 50% knowledge). Considering that most participants never used the "unsure" option, 50% of people is only just a better percentage than expected by chance, and indicates a complete lack of popular consensus on the issue.

Scholars of the history of nature in Britain ought to be congratulated that the wolf is so well known. Indeed more people knew that the wolf was native to Britain at some point in the last 2000 years as knew that adders are still found on in Britain's grasslands. Eagle conservationists have obviously also been successful in raising awareness of their charge, although how many people are aware of sea eagles as well as golden eagles is still unknown.

More worrying are the figures of still existing animals in the yellow. More than half of my participants still recognised the true native status of these creatures, but at the same time, more than one third of my participants typically wrongly asserted or denied the existence of these animals in Britain even when directly quizzed on the subject. All of these animals except the grey squirrel are rare, and many of my participants did not even recognise the names of some these creatures (most notably the pine marten and red kite). If these creatures remain rare, awareness of them is likely to dip still further, and it is possible that their names could be lost or recycled to more common creatures. Thankfully though, both of these creatures are the subjects of continued conservation work which is likely to raise their profiles in future. Lizards are still very uncommon in Britain except on moors, heaths and sand-dunes which might explain the incredibly low awareness of them. Interestingly, the awareness of these creatures was 22% better in Exeter, clearly indicating that the local presence of creatures improves local awareness.

The most interesting results are those I have highlighted in red. These are the responses where awareness is less than 50%, or a greater percentage of people is wrong or unsure about a species than right about it. Since more than half of my participants were wrong about the presence or absence of these animals, when the

results apply to native animals it is appropriate to label them as 'forgotten'. Despite being aware of wolves and wild boar, most of my participants were not aware that cranes and lynxes had also inhabited Britain until recently. Clearly the crane reintroduction still has some way to go before cranes are as well-known from their Somerset Levels and Norfolk Broads populations are as well-known as eagles and red kites. Cranes were actually known 10% less than the rest of the nation's average in Exeter. Polecats are also very rare, and during the World Wars were confined to Wales, although their range has been expanding lately.

Rarer still are pine martens, and so it might surprise some to see that awareness of them is so good, although the percentage of people "not sure" about them was also very significant. I believe there were two factors which contributed to this. First, a large percentage of those that positively identified the pine marten as a native species seemed to be under the misapprehension that it was a type of bird (like a house martin). Although I do not have an objective figure, many of my participants asked me whether the species were related (in order not to influence my respondents I did not answer this question unless they asked it after finishing the questionnaire). Secondly, just the week before my first surveys in Cardiff and Oxford (8th of November 2012), a pine marten found dead on a road in Powys had made national news since it meant that pine martens were probably not confined only to the Scottish Highlands.[1] Two respondents mentioned seeing this in the news suggesting that the publicity did raise the species' profile. On the other hand, the pine marten's figure, although higher than I expected it to be is still one of the lowest on the survey. Considering only native,

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[1] The BBC's coverage of the sighting is not the most comprehensive, but it is probably the most influential, see: BBC, 'Pine marten carcass in Powys, first in Wales since 1971' (8th November 2012, BBC, address: www.bbc.co.uk/news/uk-wales-20261153, accessed: 16/3/16).

still present species, only the lizard and polecat are more unknown, and only the whale and wildcat are as close.

Likewise, most of my participants were unaware that the medieval additions: rabbits, fallow deer and rats were not native. To put the results in perspective, almost as many people incorrectly believed the rabbit to be native as knew that the raven was. There have been a large number of studies of animal introductions through time recently, so this issue may already be being remedied. However I would argue that the mistaken identification of an animal as native is nowhere near as damaging as a false impression that an animal is exotic. The one can only help the creature, the other will actively hinder any attempts at reintroduction and may trickle into medieval scholarship, leaving scholars less likely to identify or distinguish currently rare fauna.

The most controversial animals are those between which my participants were split between believing them to be native and believing them to be foreign. This includes most notably the bear, although interestingly even modern scholars are divided about whether the bear bred natively in Britain into the first millennium A.D., and if so how late.[2] Two of my participants quoted Shakespeare's stage direction 'Exit pursued by a bear', in *The Winter's Tale,* Act III, Scene III*.* According to this survey, people were less aware of native bears and beavers than native whales, so certainly these animals merit further investigation.

In general, as was expected from the sites chosen for the surveys, the participants can be classified as educated but not expert. Most people recognised our best represented modern animals like the raven, toad, and newt as native, and the

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[2] See for example: Yalden (1998) *The History of British Mammals*, p.111; Ritchie (1920) *The Influence of Man on Animal Life in Scotland*, p.115.

most obviously exotic animals (e.g. mountain lion, reindeer, Canada goose) were usually identified as not native. The unusual indecision regarding the viper was expected. Up until 200 years ago "viper" was still as common a term for *vipera berus* (adder),[3] and many participants questioned why I had mentioned this animal twice. It is possible that a greater percentage of people would have regarded this animal as native if I had not already asked about the adder.

Edinburgh Discrepancies

Oxford and Cardiff to some extent share a similar culture and fauna, and although the data for each place reveals slight differences, their data is well suited to being studied

Cardiff, Exeter and Oxford Results			
Animal/Opinion	native	not native	unsure
Adder	79%	13%	9%
Beaver	60%	30%	10%
Canadian goose	24%	65%	11%
Carp (the fish, any kind)	62%	27%	11%
Fallow deer	63%	20%	17%
Red kite	65%	12%	24%
Reindeer	17%	77%	5%
Viper	27%	64%	9%
Whale (in British coastal	63%	29%	8%
Wild boar	76%	22%	2%
Wildcat	68%	28%	4%

in aggregate. However Oxford and Cardiff were much closer to each other than Edinburgh was to either one of them, as shown below:

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[3] See for example Cooke's account in *Our Reptiles* (1865), esp. pp.66-7.

Edinburgh %			
Animal/Opinion	native	not native	unsure
Adder	52%	9%	39%
Beaver	85%	9%	6%
Canadian goose	6%	76%	18%
Fallow deer	52%	9%	39%
Red kite	39%	6%	55%
Reindeer	42%	55%	3%
Viper	36%	45%	18%
Whale (in British coastal w	76%	21%	3%
Wild boar	58%	27%	15%
Wildcat	73%	21%	6%
Wolf	88%	12%	0%

The most different of these results which are presented above, can be explained by the ranges of the animals in question. The beaver reintroduction trial at Knapdale has proved its worth since in Edinburgh 85% of the participants knew that the beaver was native, whilst in the rest of Britain only 60% did. On the other hand, only 39% of the participants from Edinburgh were aware that the red kite was native, whilst the figure was 65% elsewhere and 71% in Oxford and Cardiff alone. It seems clear that the flagship benefits of reintroduction do have a geographical limit. At the same time, given the strong red squirrel population near Edinburgh it may be surprising that 55% believed the grey squirrel to be native, whilst that figure was 18% in Oxford and Cardiff.

Other conservation activities have either not significantly raised awareness, or have done so on a national level. There was not a significant difference in awareness of the eagle between Edinburgh, Oxford and Cardiff, despite eagles being restricted in range to Scotland, and being the subjects of years of conservation work there. Likewise cranes are no better known in England and Wales than in Scotland, suggesting that the campaign to improve knowledge of these birds has not yet been successful.

The Edinburgh participants were very knowledgeable about rare and extinct animals, and the amount of people aware of wolves, wildcats and whales was between 10 and 20% better in each of these cases. Strangely the awareness of wild boar was not so good, and only 58% knew boar to be native, as opposed to 76% elsewhere. A few people asked me what the word 'boar' meant, so perhaps the better survival of cognates for the words 'wolf' and 'cat' in other languages meant that foreign-language speakers were better able to understand and identify these creatures. For simplicity I did not collect profile information for the samples, but it was my impression that my Edinburgh sample was more multicultural than my Oxford or Cardiff one, and was less likely to have native-level English. Finally participants from Edinburgh were 27% less aware of the adder, and 25% more likely to falsely identify reindeer as a native species compared to the others. I originally intended the reindeer to act as a control question; allowing me to identify corrupt result sets, but to some extent the people of Edinburgh might have believed that anything could be found north of them.

Unfortunately the vital Edinburgh results for polecats and pine martens are missing, and these questions have not yet been redone at time of publication.

Conclusion

Overall, I have proved my theory that a small number of extinct animals like the lynx, the crane and the bear are "forgotten" to an educated but not expert sample. These animals may be separated from the wolf and wild boar which are "lost beasts" (to use Dent's title) but not "forgotten" ones. The other animals highlighted in red above are

also priority targets for improving profiles and the polecat and lizard both urgently
need more public outreach work.

I have also found evidence for the 'flagship' theory, and that knowledge of rarer
animals is regionally different. It is particularly interesting that, for example, lizards go
from a 'forgotten beast' (47% knowledge in Oxford, Edinburgh and Cardiff) to just a
rarer one (68% knowledge) in Exeter. Lizards are much more common in southern
Britain, especially in grassy wilderness areas like nearby Dartmoor.

There are also a number of species which are not native that are frequently
assumed to be native. To the extent that my survey can be generalised it seems that
only one in five people are aware that the rabbit is not a native species, and the figures
for the carp, rat and fallow deer are not much better. However, I have argued that this
knowledge, although incorrect is not a priority for future outreach programs.

Surveys wishing to further investigate the use of the term "viper" to designate
vipera berus might also vary by asking about the viper before the adder. It would also
be very interesting to see whether people are more aware of golden or sea eagles in
Britain, especially in Scotland where the sea eagle is probably a more important
subject of conservation projects.

Finally, I have stressed the need throughout to avoid researcher-bias by giving
different information to each subject. I would advise future researchers to also try to
stay as close to laboratory conditions as possible by use of a basic script rather than
describing animals differently to each participant. However, pine martens and fallow
deer have proved to be problematic in this survey. Perhaps the use of a single picture

to illustrate each species would be a fair compromise and avoid giving different

information to each participant.

Appendix 2 – Glossaries

The following is a comparison of animal nomenclature used in the 'Antwerp-London' bilingual class glossary with the nomenclature used in the slightly earlier 'Aelfric's Glossary' appended onto it, together with the glosses from the 'Vocabularium Cornicum', which a Cornish gloss of Aelfric's 'Glossary'. I have included only individuals from the animal, bird, pest or fish lists which were found wild about Britain, and usually (unless the species is very important for the purposes of this thesis) only those which at least two lists have an entry for. This improves the chance that the word is an established one rather than an invented one. I mainly follow the order of Aelfric (which is in some respects very similar to the 'Antwerp-London' order). Items in *italics* are not found on the main animal list but in other lists following. This is especially important for final two terms in Aelfric's list as they were probably only inserted into the Glossary at a later date.

Source Latin lemma (headword)	Aelfric's Old English 'Glossary' from c.1000 [1]	The 'Antwerp-London' glossary, c.1000 [2]	Gloss from 'Vocabularium Cornicum', c.1100 [3]	Modern English equivalent term
Lupus	Wulf	/	Bleit	Wolf
Licos	/	Wulf	/	Wolf
Leo	Leo	/	Leu	Lion
Linx	Gemenged hund and wulf	Lox	Commisc bleit hahchi	Lynx/Between dog and wolf

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[1] Gillingham (1981) *An Edition of Abbot Aelfric's Old English-Latin Glossary with Commentary.*

[2] Porter (2011) *The Antwerp-London Glosses*, pp.57-60; 70-3; 121.

[3] Graves, *The Old Cornish Vocabulary.*

Urus	/	Wesend	/	?Aurochs?
Bromus marinus	Seolh	/	/	Seal
Ursus - Ursa	Bera - Heo[-bera]	Bera - Byrene	Ors /	Bear She-bear
Lutria, Lutrius	Oter	Otor	Doferghi	Otter
Fiber, Castor, Ponticus	Beofer	Befer	Befer	Beaver
Feruncus, Ferunca, Ferunculus	Mærð	Mærð	/	Marten / polecat
Mustela	Wesle	Wesle	Louennan	Weasel
Talpa	Wande-wurpe	Wande-wurpe	God	Mole (moulde-warpe)
Cattus, Murilegutus, Muriceps, Musio, Murilegus	Cat	Catt	Kat	Cat ?and Wildcat?
Glis	Sis-mus	Sise-mus	Logoden	Dormouse
Cervus, Eripes, - Cerva - Hinnulus - Capreus, Capreolus - Caprea - Damma	Heort - Hynd - Hind-cealf - Rah-deor - Ræge - Dā	Heort, Buc - Hind - Hind-cealf - Rah-deor - Hræge - /	Caruu - Euhic - Loch euhic - Kytiorch - Yorch - Da	Hart, red deer stag - Hind, female red deer - Hind, Fawn - Roe buck - Female roe (doe) - Doe (fallow?)
Lepus, lagos	Hara	Hara	Scouarnoc	Hare
Sus - Scrofa, Scroffa - Aper - Verres - Magalis - Porcellus, Suilli, Porcelli, Nefrendes	Swin - Suga - Bar - Bar - Bearh - Fearh	Swyn - Sugu - Wilde bar - Tam bar - Bearh - Fearas	Baneu, hoch[4] - Guis - Bahet - Bahet - Torch - Porchel	Pig, Swine - Sow - Wild Boar - Tame boar - Boar, castrated boar - Piglet
Aquila	*Earn*	*Earn*	*Er*	Eagle
Ciconia	*Storc*	*Storc*	*Storc*	Stork

[4] The 'Vocabularium Cornicum' glosses *porcus* as *hoch* and *sus* seperately as *baneu*.

Grus	*Cran*	*Cran*	*Garan*	Crane
Ardea	*Hraga*	*Hraga*	*Cherhit*	Heron
Ciconia	*Storc*	*Storc*	*Storc*	Stork
Corvus	*Hræm*	*Remn*	*Marburan*	Raven
Gracculus, Monedula *Gracculus, Garrulus*	/ *Hroc*	*Ceo* *Hroc*	*Palores* /	Jackdaw and Chough Rook
Butio *Milvus*	/ *Glida*	*Cyta* *Glida*	/ *Acoul*	Kite Kite (Glede)
Accipiter *- Fulco, Capum*	*Heafuc* *- Hwael-Hafoc*	*Spear-Hafoc* *- Wealh-Hafoc*	*Bidneþein* *- Falbun*	Hawk Falcon
Bubo *Noctua, Strinx*	/ *- Ule*	*Uf* *- /*	/ *- Hule*	Owl Owl
Cetus,	*Hwæl*	*Hwæl*	*Moruil*	Whale
Balena	*Hran*	*Hwæl*	/	Whale
Musculus	/	*Hran*	/	Male whale or pilot fish.
Delfinus, Delphin, Bocharius, Simones	*Mere-Swin*	*Mere-Swin*	*Morhoch*	Dolphin/Porpoise

David Porter has produced the authoritative edition of the 'Antwerp-London Glossary',

and although the second part of his glossary, containing an introduction and notes, has

not yet been released, some preliminary notes have been published in volume 98 of

the *Journal of English and German Philology*. In this paper he criticises Gillingham's

view that the two Old English glossaries above present separate versions of a single

British glossary tradition. He argues instead that the 'Antwerp-London Glossary' is

directly dependent on 'Aelfric's Glossary', although since the former also used the

sources of the latter in some ways they could also be said to be sibling texts. In any

case he makes clear that 'Aelfric's Glossary' is roughly a generation older than the 'Antwerp-London Glossary'.

This is odd since many of the pieces of animal nomenclature in the 'Antwerp-London Glossary' would make more sense if that glossary was older than its predecessor. If this were the case for example, I could suggest that the reason that scribes after 'Antwerp-London' no longer distinguished between *aper* and *veres* (wild and tame boar) may well be because all the wild boar of southern Britain were by that point enclosed within the *foreste* and parks of the nobility, as Rackham suggests).[5] Likewise the use of the term *lox* to translate *linx* would make more sense of the 'Antwerp-London Glossary' were from a previous century when the word *lox* was more used. Finally the fact that the word *damma* (perhaps fallow deer) is only glossed in 'Aelfric' and not in the 'Antwerp-London' Glossary would be better explained if 'Aelfric's Glossary' was later, and therefore came after the fallow deer was introduced to Britain. The explanation for these discrepancies can probably be found in the 'Antwerp-London' glossator's use of what Porter calls 'rare and exotic, sometimes Aldhelmian, sometimes Greek... highly technical... the ornate Insular diction known as hermeneutic Latin'.[6] The keen eyes of the 'Antwerp-London' glossators were finding nuances of meaning from old texts which the terms no longer had in the vernacular. If they had not done this we might never have known that the language had such nuances. However there is a down-side to the Antwerp-London glossator's attention to detail. By giving words like *lox* and making a distinction for example between *hran* and *hwæl*, a modern reader can easily be fooled into thinking that Old English animal

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[5] Rackham (1986) *The History of the Countryside*, pp.36-7.
[6] Porter (1999) 'On the Antwerp-London Glossaries', p.184.

nomenclature was more nuanced than we know it actually was. The sceptical reader need only look at the uses of the terms *hran* and *lox* in chapters 2 and 3 to decide for themselves whether these words were really used frequently with the translations suggested by the 'Antwerp-London Glossary' in mind.

Appendix 3 – Texts Describing Lynxes

'Peis Dinogad' (whole text)

Jarman's text	English Translation
Pais Dinogad, fraith fraith,	Dinogad's coat is speckled, speckled
O grwyn balaod ban wraith	From the skins of martens which I made it
'Chwid, chwid, chwidogaith!'	Tweet, tweet, tweeting!
Gochanwn, gochenyn wythgaith	I was singing, eight slaves were singing:
Pan elai dy dad di i helia,	When your father would go a' hunting
Llath ar ei ysgwydd, llory yn ei law,	A spear on his shoulder, a club in his hand
Ef gelwi gŵn gogyhwg:	He would call swift hounds
'Giff, Gaff, daly, daly, dwg, dwg!'	Giff! Gaff! Catch! Catch! Fetch! Fetch!
Ef lleddi bysg yng nghorwg	He would slay fish in a coracle
Mal ban lladd llew llywiwg.	Like when a lion slays [its] prey.
Pan elai dy dad di i fynydd	When your father would go to [the] mountains
Dyddygai ef pen iwrch, pen gwythwch, pen hydd,	He would bring in a roe deer, a wild boar, a stag
Pen grugiar fraith o fynydd,	A speckled grouse from mountainside
Pen pysg o Raeadr Derwennydd.	A fish from the Falls of Derwennydd
O'r sawl yd gyrhaeddai dy dad di â'i gigwain,	Out of the number your father would reach with his hunting-spear
O wythwch a llewyn a llwynain	Of wild boar and lynxes and foxes
Nid angai oll ni fai oradain[7]	None could leave if it was not winged[8]

An extract from 'Pa Gur'

Medieval Welsh Original (850-1100 A.D.)	English Translation
Kei win a aeth von	Fair Cei went to Môn
y dilein lleuon	to destroy a monster (?).
y iscuid oet mynud	His shield was a fragment
erbin cath paluc.	against cath paluc.
Pan gogiueirch tud.	When people ask,
Puy guant cath paluc.	"Who killed cath paluc?" [*or* "whom did C.P. kill?"]
Nau ugein kinlluc	Nine score fierce (men)
a cuytei in y buyd.	fell for its food,
Nau ugein kinran...	nine score warriors... [9]

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[7] Modern orthography version by Jarman (1990) *The Gododdin*, p.69, ll.997-1013.

[8] This is my translation, as are all the other translations in the Appendices without footnotes.

[9] Bromwich (1961) *Trioedd Ynys Prydein*, pp.45-7; 484-5.

An extract from 'Dadolwch yr Arglwydd Rhys'

Welsh Original (1189-95 A.D.)	English Translation
Draig eofn eang ei derfyn	A fearless dragon, wide his territory
Dragon rwyf, rhwyddwalch gyngelyn	Dragon lord, generous adversary[11]
Dragon fardd, dragon falch fyddyn,	Dragon bard, proud dragon of hosts
Dragonawl dra ganwyf o ddyn.	Dragonlike for as long as I sing of a man.
Canaf wawd i'r priawd a'i pryn,	I sing in praise of the claimant who earns it
Prif arglwydd brolwydd, bron Heilyn,	The high lord of prosperity, breast of Heilyn
Braisg anlloedd beirdd borthloedd berthyn	Splendid wealth, support of bards that belong to him
Brwysg brydau, brwydr ddechrau ddychryn	Berserk in mind, terrible at the start of battle
Brad Brynaich, branes a'i canlyn,	[At the] treachery of the Englishmen, crows around him
Braw dachwedd gyminedd gymyn	A terror of bloodshed, a frenzy of death
Gwrŷs efnys dychrys, dychryn—	A dreadful battle begins. His spear is horrible. His violence does not wane
Ei ongyr, ei angerdd nid edfyn.	Packs of wolves gnawing on flesh around him
Gnawd uch cnawd cnudoedd ar gylchyn	The trail of the champion [continues] like this for many years
Arllwybr llawr, neud llawer blwyddyn	A lion of hosts, his lands are respectful
Llew llysoedd llysaidd ei derfyn,	A lively court, [its] ruler the support of *big cats*
Llys eorth, llyw adorth *llewyn*,	[Spear]-bough breaker, red-handed pursuing the English
Gwŷdd wosudd, llofrudd Lloegr ddilyn,	Men of attitude, a fearless host
Gwŷr wosgo wosgordd ddiergryn	A violent youth of fine armour
Gwyrdd wasgar o wisgoedd ceinmyn,	Brave in attack, conqueror of the borders
Gwrdd osod, gwr gorfod gorfyn.	After drunkenness and pure-white mead
Gwedi myddw a medd gorewyn	Around wide feasting around the wide land of his ancestors
Am hirwledd am hirwlad ei hyn	Around the generous one, around the one who cleaves armies
Am gedawl, am gadau ddybyn,	Around a noble host, around great horns of yellow [mead]
Am gyrdd wawr, am gyrn mawr melyn,	May the generous one be worthy of nobility
Gorpo hael, haelonaeth wobryn,	Heir to the worthy wild seed of Merfyn[12]
Hawl wodrudd hil mawrfudd Merfyn,	Joyful lord, his country around him
Gwawr gwendorf, gwendud o'i gylchyn,	Gain the fair country of heaven, true home of the saintly.
Gwenwlad nef, gwir addef gwiryn [10]	

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[10] Jones & Owen (1995) *Gwaith Cynddelw Brydydd Mawr,* vol 2, pp.189-90. I have moved 'ei ongyr' from line 11 to 12.

[11] It is impossible to know whether 'dragon' here is intended to be singular or plural. In the twelfth centuries the forms were identical, so that the poet could be referring to a 'lord of dragons' or a 'dragon lord'.

[12] Merfyn is probably Mefyn Fych an ancient ancestor to Rhys, whose descendants were sometimes called the Merfynion.

Extracts from the 'Liber Monstrorum'

Latin original (675-750 A.D.)	English Translation
Leonem, quem regem esse bestiarum, ob metum eius et nimian fortitudinem poetae et oratores cum phisicis fingunt, in frontem beluarum horribilium ponimus. Qui fiunt generaliter colore fuluo, sed tamen albos cum ingentibus iubis leones et in taurini corporis magnitudine habuisse Indus fertur. Et ipse uastissimae leo formae describitur Hercules sub rupe Nemeaei montis occidit.	We place in the forefront of fearsome beasts the lion, which because of his dread and excessive strength poets and orators, as well as scientists, imagine to be the king of the beasts. They are generally of a tawny colour, but the Indus, however, is said to have had white lions with huge manes and bodies as large as bulls. And the same kind of lion of the most enormous size is described, which Hercules slew under the rock of the Nemean mountain.
...	...
Tigres sunt ferae horrendae animositatis, quae in India et apud Hyrcanos et in Armoenia nascuntur. Et sunt ualde rapaces et mirae uelocitatis: unde et Tigris, Assyriorum fluuius, eo quod rapidissimo cursu ad instar ipsius bestiae a monte Caucaso prorumpit ab ea nomen accepisse describitur.	Tigers are wild animals of fearsome hostility, which are born in India and amongst the Hyrcanians and in Armenia. And they are extremely rapacious and of amazing speed; whence also the Tigris of Assyria is said to have derived its name since it rushes from Mount Caucasus with the swiftest of currents, just like that beast.
Lynces bestiae maculosis corporibus sunt, que et nimium ferocitatem habent et pantheris uario sunt colore consimiles, que et in Syria et in India et ceteris quibusque regionibus nascuntur.	Lynxes are beasts with spotted bodies, which both have outstanding ferocity and are very like panthers in their mottled body. And they are born in both Syria and India, and in certain other areas.
Pardus est fera rapax et toto corpore discolor, qui Alexandro et Macedonibus cum ceteris nocuerunt bestiis, paulo postquam Aornim petram expugnauit in India a qua prius Hercules terrae motu fugatus recessit. Et Indorum rex, quodam tempore, quia ibi maxime nascuntur, ad regem Romae Anastasium duos pardulos misit in camelo et elefanto, quem Plautus poeta ludens lucabum nominauit.	The leopard is a rapacious wild beast of mixed colour on its whole body, and they caused harm to Alexander and the Macedonians, along with other beasts, just after he took by storm the Aornis Rock, from which Hercules had earlier retreated, put to flight by an earthquake. And on one occasion the king of India, since they are especially born there, sent two little leopards to King Anastasius of Rome on a camel and an elephant, which the poet Plautus jokingly named a Lucanian cow.
Pantheras autem quidam mites, quidam horribiles esse describunt. Quas poeta Lucanus ad liram Orphei cum ceteris animantibus et bestiis a deserto Thraciae per carmen miserabile prouocatas cecinit, dum ipse tristis et maerens ad undam	Some describe panthers as gentle, others as fearsome. And the poet Lucan sang that they were stirred from the Thracian desert along with other animals and beasts towards the lyre of Orpheus because of his sorrowful song. For he himself was sad and grieving by the waters of

Strymonis raptam Eurydicen lacrimabili defleuit carmine.

...

Leopardi feri ac terribiles sunt, qui atrocissimarum binae formae ferarum permixtam habent horrendi corporis formam, quia ex leonibus et pardis generantur. Quos ferunt iuxta Rubrum mare et in quibusdam aliis regionibus nasci.

Strymon, he lamented in piteous song for Eurydice who had been snatched away.

...

Leopards are wild and fearsome, and have a body of fearsome form born from the twin shape of the most dreadful wild animals, since they are produced by lions and panthers. They say that they are born next to the Red Sea and in certain other areas. [13]

Extracts from the 'Enigmata'

Latin original (700-800 A.D.)	English Translation
De leone Setiger in siluis armatos dentibus apros Cornigerosque simul ceruos licet ora rudentes Contero. nec parcens ursorum quasso lacertos Ora cruenta ferens. Morsus rictusque luporum Horridus haud uereor regali culmine fretus; Dormio nam patulis non claudens lumina gemmis	On the lion I have bristly skin and I destroy the fierce-tusked boars of the forests And the horned deer; although they roar I do not spare them, but strike even the shoulders of bears I am bloody-mouthed and fear not the snapping jaws of wolves; I am savage, relying on my royal dignity; I sleep without closing my luminous, gem-bright eyes[14]

Medieval Hunting Manual Descriptions of Lynxes

Gaston Phoebus de Foix, (1387-9 A.D.), 'Livre de Chasse' (medieval French)	Edward, Duke of York, (1413 A.D.), *The Master of Game* (medieval English)
Chat est assés commune beste ; si ne me convient jà dire de sa faisson ; quar pou de gens sont qui bien n'en ayent veuz. Toutesvoyes y a il de diverses manières de chatz sauvaiges, espicialment il en y a uns qui sont grans comme liépardz et ceulx appelent aucons lous serviers et autres chatz lous ; et c'est mau dit, quar ils ne sont ne lous cerviers ne chatz lous.	The cat is a common beast enough therefore I need not tell of his making, for there be few men that have not seen some of them. Nevertheless there be many and diverse kind of cats, after some masters' opinions, and namely of wild (cats). Especially there be some cats as big as leopards and some men call them loup cerviers and other cat-wolves, and this is evil said for they are neither wolves nor cerviers nor cat-wolves.

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[13] Orchard, A. (1995) *Pride and Prodigies: Studies in the Monsters of the Beowulf-manuscript* (University of Toronto Press), pp.290-299.

[14] Stork (1990) *Through a gloss darkly*, p.148.

On les pourroit mieulx apeler chatz liépars que autrement; quar ils trayent plus prés à liépard que à autre beste. Ilz vivent de ce que autres chatz vivent fors tant qu'ils prenent des gelines et des oves, et une chièvre ou une brebis s'ils la truevent toute seule ; quar ils sont einsi grans qui un lou, et ont auques la forme d'un liépard, mes qu'ils n'ont pas si longue queue; un lévrier tout seul ne se pourroit prendre à riestenir un de ceuls chatz. Il prendroit et tendroit ferme plustost un lou qu'il ne feroit luy; quar ils ont les ongles comme un liépart et en oultre très male morsuve.

On les chasse pou se n'est d'aventure, et quant chiens le truevent d'aventure il ne se fet pas longuement chassier, mes se met tantost en defense, ou il monte sur un arbre; et pource qu'il ne fet point longue fuyte, en parleray je pou; quar la chasse de luy n'a guères de mestrise. Ils portent et sont en amour comme une autre chat, mes ils ne font de leurs chatons fors que deux. Ils demeurent ès caves des arbres et font ilec leur lit de fouchières et d'erbes, et le chat masle aide à nourrir ses chatons en la forme que fet un lou.[15]

Men might (better) call them cat-leopards than otherwise, for they draw more to a leopard kind than to any other beast. They live on such meat as other cats do, save that they take hens in hedges and goats and sheep, if they find them alone, for they be as big as a wolf, and almost formed and made as a leopard, but their tail is not so long. A greyhound alone could not take one of them to make him abide, for a greyhound could sooner take and hold fast and more steadfastly a wolf than he could one of them. For he claws as a leopard and furthermore bites right [hard].

Men hunt them but seldom, but if the hounds find peradventure such a cat, he would not be long hunted for soon he putteth him to his defence or he runneth up a tree. And because he flieth not long therefore shall I speak but little of his hunting, for in hunting him there is no need of great mastery. They bear their kittens and are in their love as other cats, save that they have but two kittens at once. They dwell in hollow trees and there they make their ligging and their beds of ferns and of grass. The cat helpeth as badly to nourish his kittens as the wolf doth his whelps.

Of common wild cats I need not to speak much, for every hunter in England knoweth them, and their falseness and malice are well known. But one thing I dare well say that if any beast hath the devil's spirit in him, without doubt it is the cat, both the wild and the tame. [16]

Extract from Gessner Historiae Animalivm.

[15] Lavellée, J. (ed. 1854) *Le Chasse de Gaston Phoebus Comte de Foix* (Bureau du Journal des Chasseurs, Paris), pp.77-8.

[16] Baillie-Grohman, F. and William, A. (1909) *The Master of Game* (Chatto &Windus, London), pp.70-1. The final paragraph is original to the *Master of Game.*

Original Latin (1603 A.D. ed.)	Modern English Translation
<u>De Lynce Indica vel Africana</u> His addam quae illustris vir Iohannis Bonar de Balicze liber Baro Castellanus ad me scripsit de lynce Indica vel Africana his verbis. In libro Iconum animalium, nullam fecisti mentionem Indicae vel Africanae Lyncis, praeterquam istius nostrae quae Germanico vocabulo Lox vocatur. Sed quia Plinius illius meminit induxit me authoritas tanti viri, ut & istam ad te depictam mitterem & illius mentionem facerem (picturam nacti non sumus, forte amissa est) Videtur enim cuius Plinius meminit multum differre a nostro lupo ceruario, qui cum sit maximus, vix attingit mediocrem lupum magnitudine. Ista vero Constantinopli depicta ferocem atque ingentem bestiam ostendit. Preterea istorum nostrorum Luxorum qui in Moschouia, Lituania, Russia, Polonia, Hungaria, Germania capiuntur rari sunt admodum insignibus maculis in dorso conspersi, sed in ventre tantum. Scotia tamen & Suecia mittit omnium pulcherrimos. Isti vero, de quibus loquor sunt maculis tam in dorso quam ventre aliisque membris pleni, nec sunt adeo villosi & delicati vti nostrates cum habeant pilos asperos serosos & breues. Insuper nostratum maculae sunt rotundae, istorum vero triangulares & similes folio vocato *kleblat.* Hęcille.[17]	<u>Of Indian or African Lynxes</u> I shall take this [section] from that illustrious man John Bonar of Balic, free baron[18] and castellan. He wrote to me of the lynx of India or Africa in these words: "In the book *Icones Animaliam* (Images of Animals), you make no mention of the lynxes of India or Africa, except that which we call *lox* in German. But because Pliny mentions it, the authority of such a man induced me to send this image to you and you can mention this. (We can't find this picture, it is perhaps lost.[19]) Indeed, it seems that ths one which Pliny mentions differs greatly from our lupus-cervarius, which even at its greatest size scarcely attains the size of a mediocre wolf. The one painted in Constantinople is truly revealed to be a ferocious and giant beast. Moreover, of those lynxes of ours which may be caught in Muscovy, Lithuania, Russia, Poland, Hungary, Germany are rarely so greatly speckled with spots on the back but only on the belly. On the other hand, Scotland and Sweden send the most beautiful of all of them. of these I say they are spotted both on the back and on the belly and other areas [and] they are neither so greatly shaggy nor soft as ours though they have rough, serrated short hairs. Actually, the spots of ours are circular, of these the respective [spots] of theirs are triangular and similar to the leaf you call the *kleblat* [clover]."[20] That's it.

[17] Gessner (1603) *Historiae Animalivm*, p.683.

[18] i.e. a *freiherr,* a lord who was not anyone's vassal.

[19] This note is from the 1603 edition.

[20] kleblat = clover in German as Cyril Edwards pointed out to me.

Topsell *The History of Four-Footed Beasts*

English original (1607 A.D.)

Bonarus had oftentimes seene them hunted in Moschouia, Littuania, Pollonia, Hungaria, and Germany: But he commendeth aboue al other the Linxes of Scotland and Swesia, as most beautifull, hauing Triangular spots vpon theyr skinnes. But the Indian and Affrican Linxes, he saith haue round spots, sharpe-bristly-short-haire, and full of spots on all parts of their body, and therefore they are not so delicate as the Linxes of Europe, which with good cause he coniectureth to be the Linxe that Pliny speaketh of, and not vnlike to that which is bred in Italy. [21]

Extract from 'Scotia Illustrata'

Latin original (1684 A.D.)	English Translation
Felis animal familiare ac domesticum, leoni non dissimile, facie ac dentibus & unguibus. In tenebris illi fulgent radiantque Oculi.	The [house] cat is a familiar and domesticated animal, not dissimilar to the lion in face and teeth and claws. In the shadows its eyes burn and glow.
Felis sylvestris major est domestica, densiore & longiore pillo, colore fusco, variato, cauda crassiore. Aviculis vescitur, lepusculis, &c.	The wildcat is bigger than the domestic, with thicker and longer fur, the colour is dark and streaked, the tail is thicker. It feeds on small birds, hares etc.
felis syriaeca multis punctis interstincta, ore torvo & toroso, pectore & pedibus amplis.[22]	The cat of Syria is dappled with many spots, with a savage and muscular jaw, [and] with a large chest and paws.

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[21] Arbor (2008) *The History of Four-Footed Beasts and Serpents,* p.491.

[22] Sibbald, R. (1684), *Scotia Illustrata* (Jacob Kniblo, Josuhua Soling & John Colmar, Edinburgh). II.3.6; (p.11/13).

Appendix 4 – Texts Describing Whales

Extract from 'Vita Sancti Columbae'	
Latin original (675-700 A.D.)	**English translation**
De ceto magno quomodo sanctus praesciens dixerat	**How the Saint spoke with foresight about a great whale**

Quadam die, cum vir venerabilis in Ioua demoraretur insula, quidam frater, Berachus nomine, ad Ethicam proponens insulam navigare, ad Sanctum mane accedens, ab eo benedici postulat. Quem Sanctus intuitus, inquit,
'O fili hodie intentius praecaveto ne Ethicam cursu ad terram directo per latius coneris transmeare pelagus; sed potius, circumiens, minores secus naviges insulas; ne videlicet, aliquo *monstruoso* perterritus *prodigio*, vix inde possis evadere.'
Qui, a Sancto accepta benedictione, secessit, et navem conscendens, Sancti verbum quasi parvipendens, transgreditur; majora proinde Ethici transmeans spatia pelagi, ipse et qui ibi inerant nautae vident, et ecce *cetus mirae et immensae magnitudinis*, se instar montis erigens, ora aperuit patula nimis dentosa, supernatans. Tum proinde remiges, deposito velo, valde perterriti, retro reversi, illam obortam ex belluino motu fluctuationem vix evadere potuerunt, Sanctique verbum recognoscentes propheticum, admirabantur.
Eadem quoque die Sanctus Baitheneo, ad supra memoratam insulam navigaturo, mane de eodem intimavit *ceto*, inquiens,
'Hac praeterita nocte media, *cetus magnus* de profundo maris se sublevavit, et inter Iouam et Ethicam insulam se hodie in superficiem eriget aequoris.'
Cui Baitheneus respondens infit,
'Ego et *illa bellua* sub Dei potestate sumus.' Sanctus, 'Vade,' ait, 'in pace, fides tua in Christo te ab hoc defendet periculo.'

One day, while the blessed man was living in Iona, a brother called Berach, who was on the point of sailing for Tiree, came to St Columba in the morning for a blessing. The saint looked at him closely and said:
'My son, you must be very careful today. Do not try to go directly across the open sea to Tiree, but instead take the roundabout route by the Treshnish Islands. Otherwise you may be terrified by a monster of the deep and find yourself scarcely able to escape.'
With the saint's blessing he set off and boarded his boat, but he went against the saint's advice as though he thought little of it. While crossing the open sea between Iona and Tiree he and those with him in the boat saw—look!—a whale of extraordinary size, which rose up like a mountain above the water, its jaws open to show an array of teeth. At once the men dropped the sail and took to the oars, turning back in terror, but they only just managed to avoid the wash caused by the whale's motion. Remembering what the saint had foretold, they were filled with awe.
That same morning Baithéne was also going to sail to Tiree. The saint said to him:
'In the middle of last night, a great whale rose up from the depths of the sea, and today it will heave itself up on the surface of the sea between Iona and Tiree.'
Baithéne answered him:
'That beast and I are both in God's power.'
'Go in peace,' said the saint. 'Your faith in Christ will shield you from the danger.'
Baithéne was blessed by the saint and set sail from the harbour. They had already crossed a considerable stretch of sea when Baithéne and those with him saw the whale. While all his companions were terrified,

Baitheneus tum deinde, a Sancto benedictione accepta, a portu enavigat: transcursisque non parvis ponti spatiis, ipse et socii cetum aspiciunt; perterritisque omnibus, ipse solus aequor et *cetum*, ambabus manibus elevatis, benedicit intrepidus. Eodemque momento bellua magna, se sub fluctus immergens, nusquam deinceps eis apparuit.[23]

Baithéne without a tremor of fear raised his hands and blessed the sea and the whale. Immediately the great creature plunged under the waves and was not seen again.[24]

Extract from 'Columba's Island Paradise'	
Middle Gaelic Original (1100-1200 A.D.)	**English translation**
Meallach liom bheith i n-ucht oiléin ar beinn cairrge, go bhfaicinn ann ar a meince féth na fairrge … Go bhfaicinn a healta ána ós lear lionnmhar; go bhfaicinn a míola mára, mó gach n-iongnadh.[25]	It would be sweet to me to be in the bosom of an island / upon a rock So that I could see there often The calmness of the sea … So that I could see its splendid bird-flocks Over the bountiful sea If I could see its whales Greatest of all wonders

Extracts from the Old English 'Physiologus'	
Old English original (c.950 A.D.)	**Modern translation**
Nū ic fitte gēn ymb fisca cynn wille wōðcræfte wordum cȳþan þurh mōdgemynd, bi þām miclan hwale Sē bið unwillum oft gemēted, frēcne and fer[h]ðgrim, fareðlācendum, niþþa gehwylcum; þām is noma cenned, fyrnstrēama geflotan, Fastitocalon. Is þæs hīw gelīc hrēofum stāne, swylce wōrie bi wædes ōfre, 10 sondbeorgum ymbseald, sǣrȳrica mǣst, swā þæt wēnaþ wǣglīþende þæt hȳ on ēalond sum ēagum wlīten; and þonne gehȳdað hēahstefn scipu tō þām unlonde oncyrrāpum, sǣlaþ sǣmearas sundes æt ende, and þonne in þæt ēglond ūp gewītað collenferhþe; cēolas stondað	Again now, in a song about the fish species, I will set forth words with poetic skill conforming to my intellect, concerning the great whale. He is often encountered unintentionally, dangerous and savage in his every attack, by all seafaring men. To him, floating creature of the mountainous oceans, the name Fastitocalon [Asp-Turtle] is attributed. His appearance is like shaly rock such as crumbles along the water's edge surrounded by sand-dunes, a most enormous reef, so that travellers on the ocean wave imagine that they are looking with their eyes upon some island; and then they tie up the high-prowed ships to the false land with anchor-ropes, secure the sea-steeds at the ocean's limit and

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[23] Reeves (1857) *Vita Sancti Columbae*.

[24] Sharp (1995) *Life of St. Columba.* I.19, pp.125-6.

[25] O'Rahilly, T. (1927) *Measgra Dánta, part 2* (Cork University Press), p.120.

bi staþe fæste   strēame biwunden.
Ðonne gewīciað   wērigfer[h]ðe,
20 faroðlācende,   frēcnes ne wēnað.
On þām ēalonde   æled weccað,
hēah fyr ælað.   Hæleþ bēoþ on wynnum,
rēonigmōde,   ræste gel[y]ste.
Ðonne gefēleð   fācnes cræftig
þæt him þā fērend on   fæste wuniaþ,
wīc weardiað,   wedres on luste,
ðonne semninga   on sealtne wæg
mid þā nōþe   niþer gewīteþ,
gārsecges gæst,   grund gesēceð,
30 and þonne in dēaðsele   drence bifæsteð
scipu mid scealcum.
Swā bið scinna þēaw,
dēofla wīse,
[...]
Hē hafað ōþre gecynd,
50 wæterþisa wlonc,   wrǣtlīcran gīen.
Þonne hine on holme   hunger bysgað,
and þone āglǣcan   ǣtes lysteþ,
ðonne se mereweard   mūð ontȳneð,
wīde weleras;   cymeð wynsum stenc
of his innoþe,   þætte ōþre þurh þone,
sǣfisca cynn,   beswicen weorðaþ.
Swimmað sundhwate   þǣr se swēta stenc
ūt gewītað.   Hī þǣr in farað,
unware weorude,   oþþæt se wīda ceafl
60 gefylled bið;   þonne fǣringa
ymbe þā herehūþe   hlemmeð tōgædre
grimme gōman.
[...]²⁶

then go bold hearted up on to the island. The vessels remain fast by the shore eddied about by the current.
Then, weary at heart, the seafarers encamp: they are unsuspecting of danger. On the island they kindle a light and light a great fire; the men are happy, weary and longing for rest. When, sly in his trickery, he feels that the travellers are resting secure in him and are keeping to their camp yearning for fair weather, then forthwith into the salt wave down he boldly goes with them, this demon of the ocean, and makes for the bottom, and then in a cavern of death consigns them to drowning, the ships with the men.
Just so is the practice of evil spirits, the way of devils –
[ll. 32-48 not included.]
He has another characteristic, this proud roamer of the waters, yet more remarkable. When hunger troubles him at sea and provokes the monster with longing for food, then the lord of the ocean opens his mouth, his wide lips. From out of his inwards comes a delightful fragrance so that other kinds of sea-fish are tricked by it, and those swift in swimming swim to where the sweet fragrance is issuing further. There they enter in an unwary crowd until the wide muzzle is filled; then suddenly the grim jaws gnash together around the prey.
[l.49ff. not included]²⁷

Extract from the 'Topographia Hibernica' of Gerald of Wales	
Original Latin (c.1188 A.D.)	English translation
Inter alias vero insulas una est nuper nata, quam Phantasticam vocant; cui talis eventus originem dedit. Die quodam sereno emersit in mari cumulus terrae non modicus, ubi nunquam antea terra visa fuerat, videntibus et admirantibus insulanis. Quidam enim ex his dicebant *balaenam, vel aliam marinam belluam monstruosam* esse. Alii vero, considerantes	Among the other islands is one that arose recently and which they call the 'phantom' island. Its origin came about in this way: One fine day the inhabitants of the islands noticed that a large mound of earth arose in the sea where land had never been seen before. They all wondered. Some said that it was a whale or some other monstrous sea animal. Others however,

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²⁶ Cook (1921) *The Old English Physiologus.*
²⁷ Bradley, S. (1982) *Anglo-Saxon Poetry* (2004 ed. Everyman, London), pp.355-7.

quod sine omni motu persisteret, dicebant; "Nequaquam, sed "terra est." Ut autem hanc ambiguitatis contentionem certitudo dirimeret, electi juvenes de insula quadam proximiore illud navicula remis adire statuerunt.

Accedentes vero tam prope, ut applicare se jam arbitrati fuerint, tanquam in mare descendens ab oculis eorum insula prorsus evanuit. In crastino vero similiter apparens, eosdem juvenes simili delusione decepit. Tertio tandem die senioris cujusdam consilio accedentes, sagittam igniti ferri in insulam arcu praemiserunt, et sic applicantes terram stabilem et habitabilem invenerunt. Multis itaque patet argumentis, *phantasmati* cuilibet ignem semper inimicissimum...[28]

reflecting that it remained without any movement said 'No, not at all. It is land.'

They wanted, nevertheless, to remove the uncertainty, and so they selected young men from the island nearest to it, and sent them over to it in a rowing boat. When they had approached so near that they were on the point of disembarking, the island disappeared entirely from before their eyes as if descending into the sea. It appeared again in the same way on the following day, only, however, to play a similar trick on the same young men. On the third day they followed the advice of a certain old man in first throwing at the island as they approached it an arrow of red-hot iron, and then disembarking they found the land stable and habitable.

And there are many proofs that fire is always most hostile to phantoms…[29]

An extract from 'Beowulf'

Old English original (?680-750 A.D.?)	Modern translation
Beowulf maþelode, bearn Ecgþeowes: `Hwæt, þu worn fela, wine min Unferð, beore druncen ymb Brecan spræce, sædgest from his siðe! Soð ic talige, þæt ic merestrengo maran ahte, earfeþo on yþum, ðonne ænig oþer man.	Beowulf spoke, the son of Ecgtheow: 'Well, Unferth my friend, drunk with beer you have talked a great deal about Breca, told of his adventure. I claim for a fact that I had greater strenth in the sea, hardship on the wave, than any other man.
Wit þæt gecwædon cnihtwesende ond gebeotedon --- wæron begen þa git on geogoðfeore--- þæt wit on garsecg ut aldrum neðdon, ond þæt geæfndon swa. Hæfdon swurd nacod, þa wit on sund reon, heard on handa; wit unc wið *hronfixas* werian þohton. No he wiht fram me flodyþum feor fleotan meahte, hraþor on holme; no ic fram him wolde.	As boys we two came to an agreement and boasted—we were both then still in our youth—that we would risk our lives out on the ocean; and we did just that. As we swam in the sea we each took a naked sword, strong in our hands; we meant to defend ourselves against whales. He was quite unable to float far away from me across the waves of the flood, to move more quickly in the water; nor would I leave him.
Ða wit ætsomne on sæ wæron fif nihta fyrst, oþ þæt unc flod todraf, wado weallende, wedera cealdost, nipende niht, ond norþanwind heaðogrim ondhwearf;	So we stayed together on the sea for the space of five days until the flood, the surging sea, drove us apart; the coldest of weather, darkening night and the

[28] Dimock, J. (1867) *Giraldus Cambrensis Opera,* vol. 5 (Longmans Green, Reader and Dyer, London), p.94-5. 'Topography of Ireland', II.12.

[29] O'Meara (1951*) The History and Topography of Ireland*, pp.66-7.

hreo wæron yþa.
wæs *merefixa* mod onhrered;
þær me wið laðum licsyrce min
heard hondlocen, helpe gefremede,
beadohrægl broden, on breostum læg
golde gegyrwed. Me to grunde teah
fah feondscaða, fæste hæfde
grim on grape; hwæþre me gyfeþe
wearð,
þæt ic aglæcan orde geræhte,
hildebille; heaþoræs fornam
mihtig meredeor þurh mine hand.

Swa mec gelome laðgeteonan
þreatedon þearle. Ic him þenode
deoran sweorde, swa hit gedefe wæs.
Næs hie ðære fylle gefean hæfdon,
manfordædlan, þæt hie me þegon,
symbel ymbsæton sægrunde neah;
ac on mergenne mecum wunde
be yðlafe uppe lægon,
sweordum aswefede, þæt syðþan na
ymb brontne ford brimliðende lade ne
letton.
Leoht eastan com,
beorht beacen Godes; brimu swaþredon,
þæt ic sænæssas geseon mihte,
windige weallas. Wyrd oft nereð
unfægne eorl, þonne his ellen deah!
Hwæþere me gesælde, þæt ic mid
sweorde ofsloh
niceras nigene. No ic on niht gefrægn
under heofones hwealf heardran
feohtan,
ne on egstreamum earmran mannon;
hwæþere ic fara feng feore gedigde
siþes werig. Ða mec sæ oþbær,
flod æfter faroðe on Finna land,
wadu weallendu.

battle-fierce north wind turned against us. The waves were savage; the anger of the sea-fish was aroused. My body-armour, hard with the hand-forged links, afforded help against the enemies there; the woven war-garment, decked with gold, lay on my breast. A fierce, hostile ravager dragged me to the bottom, held fast in the grasp of the grim creature. Nevertheless it was given to me that I should reach the monster with the point of my war-sword; the onslaught of battle carried off the mighty sea-beast by my hand.

Frequently those loathsome assailants pressed hard upon me thus; I served them with my dear sword, as was fitting. The wicked evildoers had no joy whatever in that glut, feeding off me sitting round a banquet at the bottom of the sea. But in the morning, wounded by blades, they lay along the sand of the shore, put to sleep by swords, so that never again would they hinder the passage of ocean voyagers across the high seas.

Light came from the east, the bright beacon of God; the ocean grew calm so that I could see promontories, windswept ramparts of the sea. Fate will often spare a man not yet destined for death if his courage is good. In any case it befell me that I struck down nine sea-monsters with the sword. I have not heard tell of a harder fight by night beneath the vault of heaven, nor of a man under greater stress in the tides; yet I escaped from the grasp of foes alive, exhausted from the exploit. Then the sea, the flood with its currents, the surging waters, carried me away to the land of the Lapps.[30]

'The Palatine 68 Gloss'

Medieval Original (800-900 A.D.)	Modern translation

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[30] Swanton, M. (ed. 1997) *Beowulf* (Manchester University Press), pp.58-61, ll.529-596.

Manducat unum quodque animal in mari alterum. Et dicunt quod vii minoribus saturantur maiores, ut vii fiscas selaes fyllu, sifu selas hronaes fyllu, sifu hronas hualaes fiyllu.[31]

Each animal eats another in the sea. And they say that seven smaller ones satiate a larger. Thus: seven fishes fill a seal, seven seals fill a *hron* and seven *hrons* fill a *hwalh.*

Extract from Bede's 'Ecclesiastical History of the English People'

Latin Original (c.731 A.D.)

English translation

Fluuiis quoque multum piscosis ac fontibus praeclara copiosis, et quidem praecipue issicio abundat, et anguilla. Capiuntur autem saepissime et uituli marini, et delphines, nec non et balenae; exceptis uariorum generibus concyliorum; in quibus sunt et musculae…[32]

[Britain] is remarkable too for its rivers, which abound in fish, particularly salmon and eels, and for copious springs. Seals as well as dolphins are frequently captured and even whales; besides there are various kinds of shellfish, among which are mussels... [33]

Extracts from: 'The Voyage of Ohthere'

Old English original (850-899 A.D)

English translation

Ohthere sæde his hlaforde, Ælfrede cyninge, þæt he ealra Norðmonna norþmest bude. He cwæþ þæt he bude on þæm lande Norþweardum wiþ þa Westsæ. He sæde þeah þæt þæt land sie swiþe lang norþ þonan; ac hit is eal weste, buton on feawum stowum styccemælum wiciað Finnas, on huntoðe on wintra, and on sumera on fiscaþe be þære sæ.
He sæde þæt he æt sumum cirre wolde fandian hu longe þæt land norþryhte læge, oþþe hwæðer ænig mon be norðan þæm westenne bude. Þa for he norþryhte be þæm lande: let him ealne weg þæt weste land on ðæt steorbord, ond þa widsæ on ðæt bæcbord þrie dagas. Þa wæs he swa feor norþ swa þa *hwælhuntan* firrest faraþ
...
Swiþost he for ðider, toeacan þæs landes sceawunge, for þæm *horshwælum*, for ðæm hie habbað s*wiþe æþele ban* on hiora toþum. Þa *teð* hie brohton sume þæm cyninge, & hiora *hyd* bið swiðe god to sciprapum.
Se *hwæl* bið micle læssa þonne oðre *hwalas*: ne bið he lengra ðonne syfan elna lang, ac

Ohthere said to his lord, King Alfred, that he lived furthest north of all Northmen (Norwegians). He said that he lived in the northern part of the land, beside the West Sea. He said however that the land extends a very long way north from there, but it is all waste, except that in a few places here and there *Finnas* [Lapps] camp, engaged in hunting in winter and in summer in fishing by the sea.
He said that on a certain occasion he wished to investigate how far the land extended in a northerly direction, or whether anyone lived north of the waste [*or* wilderness]. Then he went north along the coast; he kept the waste land on his starboard side and the open sea on his port side all the way for three days. Then he was as far north as the furthest the whale hunters go.
… [Ohthere continues still further north]
He chiefly went there, in addition to the surveying of the land, for the walruses, because they have very fine bone in their teeth – they brought some of the teeth to the king – and their hide is very good for ship's ropes.
The whale [i.e. walrus] is much smaller than other whales – it is not longer than seven ells long – but the best whale hunting is in his own land: they are

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[31] Napier, A. (1900) *Old English Glosses* (Clarendon Press, Oxford), p.220.

[32] Plummer, C. (1846) *Venerabilis Baedae Historiam Ecclesiasticam Gentis Anglorum* (Clarendon Press, Oxford), p.10.

[33] Colgrave et al. (1969) *The Ecclesiastical History of the English People*, p.9.

on his agnum lande is se betsta *hwælhuntað:* þa beoð eahta and feowertiges elna lange, & þa mæstan fiftiges elna lange. þara he sæde þæt he syxa sum ofsloge syxtig on twam dagum.

He wæs swyðe spedig man on þæm æhtum þe heora speda on beoð, þæt is on wildrum. He hæfde þa gyt, ða he þone cyningc sohte, tamra deora unbebohtra syx hund. Þa deor hi hata ð hranas; þara wæron syx stælhranas. Ða beoð swyðe dyre mid Finnum, for ðæm hy foð þa wildan hranas mid.

He wæs mid þæm fyrstum mannum on þæm lande; næfde he þeah ma ðonne twentig hryðera & twentig sceapa & twentig swyna, & þæt lytle þæt he erede he erede mid horsan.

Ac hyra ar is mæst on þæm gafole þe ða Finnas him gyldað. Þæt gafol bið on deora fellum & on fugela feðerum & *hwales bane* & on þæm sciprapum þe beoð of *hwæles hyde* geworht & of seoles.

Æghwilc gylt be hys gebyrdum. Se byrdesta sceall gyldan fiftyne mearðes fell & fif hranes & an beran fel & tyn ambra feðra & berenne kyrtel oððe yterenne & twegen sciprapas; ægþer sy syxtig elna lang: oþer sy of *hwæles hyde* geworht, oþer of sioles.[34]

forty-eight ells long and the biggest fifty ells long; he said that he and six others killed sixty of them in two days.

He was a very prosperous man in respect to those possessions that their wealth consists of, that is, of wild animals. When he sought the king, he still had six hundred domesticated animals unsold. These animals they call reindeer; six of them were *stæl* [decoy] reindeer. They are very valuable among the *Finnas,* since they can catch the wild reindeer with them.

He was among the foremost men in that land. However, he did not have more than twenty head of cattle and twenty sheep and twenty pigs, and the little that he ploughed he ploughed with horses.

But their wealth consists mostly of the tax that the *Finnas* pay them. The tax consists of animals' skins and of birds' feathers and whale's bone [probably =ivory] and of those ship's ropes that are made from whale's hide and from seal's.

Each pays according to his rank: the highest in rank has to pay fifteen marten's skins and five reindeer's and one bear's skin and ten *ambers* of feathers, and a bear- or otter- skin tunic, and two ship's ropes; each must be sixty ells long, one must be made from whale's hide, the other from sealskin.[35]

An Extract from Aelfric's 'Colloquy' c.1000 A.D.

Latin original	Old English gloss	Modern English translation
Cur non piscaris in mari?	Forhwi ne fixast þu on sæ?	Why don't you fish in the sea?
Aliquando facio, sed raro, quia magnum nauigium mihi est ad mare.	Hwilum ic do, ac seldon, forþam micel rewyt me ys to sæ.	Sometimes I do, but seldom because it is a great journey for me to the sea.
Quid capis in mari?	Hwæt fehst þu on sæ?	What do you catch in the sea?
Alleces et isicios, delfinos et sturias, ostreas et cancros, musculas, torniculi, neptigalli, platesia et platissa et polipodes et similia. *[Latin terminology is unclear here, but gloss is easier]*	Hærincgas ond leaxas, mereswyn ond stirian, ostran ond crabban, muslan, winewinclan, sæcoccas, fagc ond floc ond lopystran ond fela swylces.	Herrings and salmon, dolphins and surgeon, oysters and crabs, muscles, periwinkles, cockles, plaice and sole and lobsters and many similar.
Uis capere aliquem *cetum*?	Wilt þu fon sumne *hwæl*?	Do you want to catch a *whale*?
Nolo.	Nic.	I do not.
	Forhwi?	Why?

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[34] Lund, N. & Fell, C. (1984) *Two Voyagers in the Court of King Alfred* (William Session Ltd., York).

[35] Bately & Englert (2007) *Ohthere's Voyages.*

Quare?
Quia periculosa res est capere *cetum*. Tutius est mihi ire ad amnem cum hamo meo, quam ire cum multis nauibus in uenationem *ballene*.
Cur sic?
Quia carius est mihi capere piscem quem possum occidere, quam *illum*, qui non solum me sed etiam meos socios uno ictu potest merger aut mortificare.
Et tamen multi capiunt *cetos*, et euadunt pericula et magnum pretium inde adquirunt.
Uerum dicis, sed ego non audeo propter mentis me ignauiam

Forþam plyhtlic þingc hit ys gefon *hwæl*.
Gebeorhlicre ys me faran to ea mid scype mynum, þænne faran mid manegum scypum on huntunge *hranes*.
Forhwi swa?
Forþam leofre ys me gefon fisc þæne ic mæg ofslean, þonne *fisc*, þe na þæt an me ac eac swylce mine geferan mid anum slege he mæg besencean oþþe gecwylman.
Ond þeah mænige gefoþ *hwælas*, ond ætberstaþ frecnysse, ond micelne sceat þanon begytaþ.
Soþ þu segst, ac ic ne geþristge for modes mines nytenyssæ. [36]

Because it is a dangerous thing to catch a *whale*. It is safer for me to go to a river with my hook [gloss='my ship'], than to go with many ships hunting a *whale*.
Why so?
Because it's preferable to me to catch a fish that I am able to kill than *that* [gloss='than a *fish*'] which could sink or slay not only me but also my companions with one hit.
And yet, many catch *whales*, and avoid danger and then acquire great reward [gloss= 'great wealth'].
You speak [the] truth, but I do not dare because if my mind's cowardice [gloss='mind's ignorance'].

An Extract from Albertus Magnus' 'De Animalibus'	
Latin Original (1220-1280 A.D.)	**Modern English Translation**
Utrumque autem duorum quae pellis sunt planae, spissum et nigrum habet corium et super oculos suos qui sunt valde magni ita quod quindecim homines large capit fovea unius oculi (et aliquando capit viginti) sunt additamenta per modum ciliorum cornea, longitudinis octo pedem et minus et plus, secundum quod piscis maior est vel minor: et haec additamenta cornea sunt in figura magnae falcis cum qua secantur gramina et sunt ducenta quinquaginta super unum oculum et totidem super alterum, et ex parte latiori radicantur in pelle et ex parte strictiori separantur, nec eriguntur ita quod rigescant porrecta de corpore, sed iacent disposita a radice oculi versus tempora piscis ita quod apparent unum os latum sicut magnum vannum, et utitur illo piscis pro coopertorio oculi tempore magnae tempestatis.[37]	Now, each of the two [types of whale] which has a smooth skin has a flat, thick and black hide. Above its eyes (which are so big that the pit of one of the eyes [can] normally take fifteen men and sometimes it [can] take twenty), there are eyelashes fashioned like horn appendages eight feet or more or less in length, depending whether the fish is bigger or smaller than others. These horn appendages are in the shape of great scythes with which [people] mow the grass, and there are over two hundred and fifty, and the same number on one eye as over the other, and these are rooted in the skin from the widest part and these are drawn apart at the thinnest part. Nor are they raised in such a way that they are fixed extending away from the body, but they lie [rather] arranged at the root of the eye against the temples of the fish, so that they appear *to be one wide mouth* as one large fan, and the fish uses this for covering [its] eyes during [each] great storm.[38]

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[36] Garmonsway (1991) *Ælfric's Colloquy*, pp.28-30.

[37] Stadler, H. (ed. 1920) *Albertus Magnus, De Animalibus Libri XXVI* (Munster, Aschendorffschen). Lib. XXIV, cap. 1, pp.1522-3. – This is book 24 within 'de animalibus' which is book 26.

[38] This translation first appeared in: Raye (2014) 'Evidence for the use of whale-baleen'.

Appendix 4 – Texts Describing Beavers

An extract from Aldhelm's 'Enigmatica'	
Latin original (700-800 A.D.)	**Modern English translation**
De castore qui latine fiber dicitur Hospes preruptis habitans in margine ripis Non sum torpescens. oris sed belliger armis Quin potius duro uitam sustento labore; Grossaque prosternens mox ligna securibus uncis. Humidus in fundo tranat quo piscis aquoso Sepe caput proprium tingens in gurgite mergo Vulnera fibrarum nec non et lurida tabo Membra medens. Pestemque luemque resoluo necantem Libris conrosis et cortice uescor amaro	I am a dweller on the edge of steep stream banks, And not at all lazy. But warlike, with the weapons of my mouth I sustain my life with hard labour, Laying low huge trees with my hooked axes. I dive in to the water, where the fish swim, And immerse my own head, wetting it in the watery surge. The wounds of sinews and limbs foul with gore I can cure. I destroy pestilence and the deadly plague I eat the bitter and well-gnawed bark of trees[39]

An extract from the 'Itinerarium Kambriae' by Gerald of Wales	
Original Latin (c.1191 A.D.)	**English**
Habet et aliud fluvius iste sua specialitate notabile. Inter universos namque Kambriae seu etiam Loegriae fluvios, solus hic *castores* habet. In Albania quoque, ut fertur, fluvio similiter unico habentur, sed rari. De hujus autem bestiæ natura, qualiter a silvis ad aquas materia vehant; quanto artificio ex attracta material mediis in fluctibus *munimenta* connectant; quam *defensionis* artem contra venatores in occidente prætendant, quam in oriente, de caudis quoque pisceis, ut aiunt, potius quam carneis, pauca interserere non inutile reputavi. *Castores* enim, ut *castra* sibi in fluviis construant, sui generis servis pro rheda utentes, a silvis ad aquas lignea robora miro vecturæ modo contrahunt et conducunt. Quidam enim ex his, naturæ imperio servire parati, ligna ab aliis præcisa ventrique supine imposita quatuor pedibus complectentes,	The Teifi has another remarkable peculiarity. Of all the rivers in Wales, and of those in England south of the Humber, it is the only one where you can find beavers. In Scotland, or so they tell me, there is again only one stream where beavers live, and even there they are rare. I thought that it would be useful to include a paragraph of two at this point about the habits of these animals: the way in which they convey their building materials from the woods to the water; with what artistry they construct their dams in the middle of rivers from the materials which they have collected; how they protect their dwellings in Western countries and in the East against those who hunt them; and a word about their tails, which are fish-like, so to speak, rather than what one would expect of a land animal. Beavers build their castle like lodges in the middle of rivers. They have an extra-ordinary method of conveying and carting timber from the woods to the water, for they use other beavers as wagons. The beavers of one team gnaw down the branches, and then another group has the instinct to turn

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[39] Stork, N. (1990) *Through a gloss, darkly* (Pontifical Institute of Medieval Studies, Toronto), pp.170-1.

lignoque in ore ex transverso locato dentibus ab aliis hinc inde cohærentibus, retrogradeque trahentibus, non absque intuentium admiratione simul cum oneribus attrahuntur. Simili quoque naturæ artificio, in scrobium purgatione, quas sibi pedibus in terram fodiendo scalpendoque conformant, meloti utuntur. In utroque vero animalium genere servi notabiles inveniuntur, tam degenerante quadam naturæ deformitate, quam abrasa et attrita dorsorum depilatione.

In aliquot vero profundissimo fluvii angulo et pacifico, in *castrorum* constructione tanto artificio ligna connectunt ut nec aquæ stilla penetrando subintret, nec procellæ vis labefactando concutiat; nec violentiam quamlibet præter humanam, et hanc ferro munitam reformident. Ex salicum autem ramis in *castrorum* constructione ligna connectunt, soliisque variis. In altum quantum aqua excrescere solet et ultra, ostiis interius a solio in solium aptatis, machinam distinguunt; ut juxta fluminis incrementa fluctuantes undas, cum voluerint, ab alto despicere valeant: ex salicibus autem, ut per annuos crescendo salicum saltus hispidum exterius silvescat arbustum, tota interius arte latent.

Hoc animal in aquis ad libitum perdurat; et sub eisdem, more bufonum, velutique phocæ pilosæ, quæ fluxum maris atque refluxum lenitate pilorum et hispiditate declarant, halitum fovet. Sub aquis igitur indifferenter et sub divo hæc animalium genera spiritum trahunt. Suntque tibiis curtis, corpore lato, caudis nullis vel quasi mutilatis, et talpis quodammodo sive melotis in corporis compositione conformia. Notandum etiam quod quatuor hæc solum bestia dentes præfert; oris anteriori parte duos supra et duos inferius e contra ; eisque latis plurimum et acutis, tanquam dolabris utitur ad secandum.

over on their backs and to hold this wood tightly against their bellies with their four feet. Each of these last grips a branch in its teeth which sticks out on either side. A third group holds tightly on to this cross-branch with its teeth and pulls the animal in question along backwards together with its load. Anyone who witnesses this manoeuvre cannot fail to be impressed. Badgers use a not dissimilar device when they are cleaning out their sets, which they arrange to their satisfaction by digging into the soil and scraping it with their paws. It is remarkable that in both species of animal there are to be found slaves which are prepared to accept a debasement of their natural habits and to suffer at the same time a certain wear and tear of the skin on their backs.

There in some deep and tranquil bend of the river the beavers piece together with such skill the logs of wood which form their lodge that no drop of water can easily enter and no storm however violent do harm to it or loosen it. They have no reason to fear any attack, except that of us human beings, and even we must bring our weapons shod with iron. When they are building a lodge they bind the logs together with willow wands. The number of storeys placed one above the other varies according to the rise in the water-level which they foresee. They plan their construction so that it just protrudes from the water, with connecting doorways inside to lead from one storey to another. Whenever they have decided that it is necessary, they can keep a lookout from the top and watch the rising waters when the river is in spate. As the years pass and the willow-wands keep on growing, the lodge is constantly in leaf and becomes, in fact, a grove of willow-trees, looking like a natural bush from the outside, however artificially constructed it may be within. The beaver can remain in the water as long as it chooses: and when under the water it can hold its breath, as do toads and hairy seals, which last creatures mark the ebb and flow of the tide by the alternate smoothness and roughness of their fur. Those three species of animal live indifferently under the water or in the air. Beavers have short legs, a broad body and no tail to speak of, or at the best very short ones, and they are made rather in the shape of moles or badgers. It is worth noting that the beaver has only four teeth, two at the top of the mouth and two below. These teeth are very

Habent autem in proxima *castris* ripa *scrobes subterraneas*, *latibulaque* in sicco munitissima. Ad quæ venator explorans dum præacutis sudibus desuper transpenetrare molitur, ictum audiens et violentiam timens, quam citius ad *castri munimenta* se bestia confert. Sed primo ad ipsum foraminis ingressum in ripa residens, aquam exsufflat, terram pedibus scalpens immiscet, et ex limpida visuique pervia turbidam reddit et coenulentam; ut sic hostis a ripa cum fuscina ferrea saltum observantis artem arte deludat.

In eois autem regionibus, cum canes narium sagacitate sequaces se nullatenus effugere [non] posse præsentit, ut damno partis totum redimat, partem quam appeti naturali industria novit projiciendo in venatoris prospectu seipsam bestia castrat. Unde et a castrando Castor nomen accepit. Præterea, si bestiam præcastratam canes iterum forte persequantur, ad eminentem statim se conferens locum, coxa in altum elevate, partem venatori quam appetit præcisam ostendit.

De quibus Cicero in Scauriana; "Redimunt se ex illa "parte corporis, propter quam maxime expetuntur."

Juvenalis; "Qui se Eunuchum ipse facit, cupiens evadere damno Testiculi"

Et Bernardus; "Prodit item castor proprio de corpore velox

Reddere quas sequitur hostis avarus opes."

Sic igitur ut hinc pellem, quæ in occidente quæritur, tueri valeat, illine partis medicinalis quæ in oriente diligitur largitione, totum quanquam tamen non totum conservet, mirabili, ne dicam ingenio, vi quadam ingenita et quasi discretiva, venatoris astutiam vitare molitur.

Notandum quoque quod *castores* caudas habent latas et non longas, in modum palmæ humanæ spissas; quibus tanquam pro remigio natando funguntur. Cum que totum corpus reliquum valde pilosum habeant, hanc partem omni pilositate carentem, in

broad and sharp, and the animal uses them to cut with, as if they were an adze.

Near their lodges they build underground hiding-places in the river-bank, carefully protected retreats which they dig into the dry earth. When the hunter comes to prise the beaver out and strives his hardest to poke sharpened poles down into its den, the creature hears the attack and knows that danger threatens. It retreats as fast as it can to the protection of its dam .; but first, while still in the river-bank, it sits up the water all round the entrance to its hole, scraping at the earth with its feet to form a muddy mixture, thus making the clear transparent river all thick and foul. In this way by its own stratagem it finds an answer to the wiles of the enemy, who is standing on the bank above, holding his three pronged spear and waiting for the beaver to spring out.

In Eastern countries, when the beaver finds that it cannot evade the dogs which are following it by its scent, it saves itself by self-mutilation. By some natural instinct it knows which part of its body the hunter really wants. The creature castrates itself before the hunter's eyes and throws its testicles down. It is because of this act of self-castration that is is called *castor* in Latin. If a beaver which has already lost its testicles is hard pressed a second time by the hounds, it rushes to the top of a hillock, cocks up one of its hind-legs and shows the hunter that the organs which he is really after have already been cut off.

In the oration Pro Scuro, Cicero says of beavers: 'They ransom themselves by cutting off that part of their bodies for which they are most commonly pursued.' Juvenal says the same: This beast, Himself a eunuch makes, but saves his life at least, without his testicles

So does Saint Bernard: The beaver saves his life by offering at full speed

Those vital organs which the lustful hunters need.

In order to save its skin, which is much sought after in the West, and in the East that medicinal part of its body which is so greatly prized there, the beaver thus does what it can to escape from the traps laid by the hunter, giving evidence of remarkable instinct and cunning, but even so not saving itself completely.

Beavers have broad short tales, thick like the palm of the hand, which they use as a rudder when they are swimming. All the rest of their body is hairy,

morem phocæ marinæ, planam habent et levigatam.

Unde et in Germania, arctoisque regionibus, ubi abundant *beveres,*[40] caudis hujusmodi, piscium naturam ut aiunt, tam sapore quam colore sortitis, viri etiam magni et religiosi jejuniorum tempore pro pisce vescuntur. Videntur tamen quod juris in toto quoad totum hoc in parte quoad partem: nec pars a toto tanta generis diversitate distare consuevit.[41]

but this part is smooth and slippery, and, like the seal's tail, completely without hair.

They are very common in Germany and the Arctic regions: and there, in times of fasting, the great leaders of the Church eat these tails instead of fish,[42] accepting them for their flavour and their colouring, for in this, they say, they could be taken for fish. It would seem that what is true of the whole remains true of the whole, whereas what is true of the part is true of that part only; but in normal circumstances the part cannot be generically different from the whole.[43]

An extract from 'Historia Norwegie'	
Medieval Latin original (1170-1220 A.D.)	**Modern English translation**
Ibi infinita numerositas bestiarum, scilicet ursorum, luporum, lyncorum, uulpium, sabelorum, lutrearum, taxonum, castorum. Que bestia mirabiliter cauta: dum sepius a ueltribus uenatorum petatur, tres subterraneas ad aquas sibi foueas concauat. Succrescente limpha mediam siue supremam tenet, decrescente uero canibusque aduentantibus, seruulo catellis obiecto secus fenestram relicto, se quasi domum cum coniuge et catulis in infimum confert infimum, unde sibi ad aquas liberior pateat aditus. Plus enim in lymphaticis quam in terrestribus confidit meatibus. Dum uero pro hiemalibus alimoniis congregandis plus insudauerint ulmos pregrandes dentibus circumcidentes, cuius arboris subere libentissime uescuntur, seruulo suo suppino anterioribus pedibus fustem tenenti superponunt, sicque illo pro uectigale utentes magnam copiam domum contrahunt, ipsi fustem rectibus capientes utrimque baiulum trahendo amminiculantur. Est enim quoddam castorum genus seruile minimi	There is no limit to the number of wild animals there: bears, wolves, lynxes, foxes, sables, otters, badgers and beavers. This last beast, the beaver, is marvellously wary. Since it is very often chased by hunters' hounds, it digs itself three underground dens by a stream. When the water rises, it keeps to the middle or top one, but when the water is low and dogs are snapping, they leave a slave-beaver in the way of the hounds at the entrance, and the master-beaver, as if homeward bound, makes his way with mate and cubs to the lowest den, where he has freer access to the stream, for they put more trust in travel by water than by land. When winter provisions are to be gathered in, they work all the harder, using their teeth to cut down huge elms (whose bark is the food they prefer) and load them on their slave, who lies on his back holding a bar of wood in his front paws. They use him as a cart in this way and bring in a great quantity, helping each other to drag the load-bearer by gripping the bar with their teeth. For there is a certain servile class of beaver which fetches a very small price and on account

[40] Gerald's use of the term 'beveres' here is reminiscent of the possible Old Cornish and Breton term 'befer'. Could the use of the word here be a borrowing from Welsh? It is unlikely. The English pluralisation suggests that Gerald considered the word to be English in origin, and a similar term again is used in the Scots-Latin of 'The Assizes of David'.

[41] Dimock, J. (ed. 1868) *Giraldi Cambrensis Opera, vol vi.* (Longmans, Green, Reader and Dyer, London), pp.114-118.

[42] In medieval Christian Europe, consuming normal meat was forbidden during Lent and other fasting periods but consuming fish was permitted. Gerald is reporting that beaver-tails were considered fish by those in northern Europe, much like barnacle geese in Ireland, a belief which Gerald criticises elsewhere in the text.

[43] Thorpe, L. (trans. 1941) *The Journey through Wales and Description of Wales* (Penguin Books, Harmondsworth), pp.174-7.

pretii et ob frequentem laboris usum haut pilosum immo leue. Sunt eciam apud Finnos scuriones quam plures ac mustele. De quarum omnium bestiarum pellibus regibus Norwegie, quibus et suiecti sunt, maxima tributa omni anno persoluunt.[44]

of frequent use for work is not furry but smooth-skinned. Among the Lapps are also a great many squirrels and ermines, and every year the Lapps pay the skins of all these animals as large tribute to the kings of Norway, whose subjects they are.[45]

Extracts from the 'Medieval Welsh Laws'		
Medieval Latin version	**Medieval Welsh version**	**Modern English translation**
The Welsh wild animal pelt value lists, from the fourteenth century 'Cyfnerth' lawbook		
	Croen ych neu uuwch neu dyma garw neu ewic neu dyuyrgi deu dec keinhawc a tal pop vn. *Croen llostlydan hanher punt atal*, Croen beleu pedeir ar hugeint atal. Croen carlwg deudec keinhawc atal.	Ox or cow hide or hart or hind or otter [pelt is] twelve pence in value for each one. *Beaver hide [is] half a pound in value,* a marten hide [is] twenty-four pence in value. Stoat [ermine] hide [is] twelve pence in value.
The more developed version of the list in the thirteenth century 'Iorwerth' lawbook		
	Croen ych; uyth Croen hyd; uyth Croen buch; seyth Croen euchyc; seyth Croen dauat; keynyauc Croen gauar; keynyauc Croen yurc; un Guert croen lluynauc; uyth Croen deuerky; uyth Croen bleyt; uyth Croen beleu; pedeyr arhugeynt Croen llosledan; cheugeynt	Ox hide; eight [pence] Stag skin; eight [pence] Cow hide; seven [pence] Hind skin; seven [pence] Sheepskin a penny Goatskin; a penny Buckskin; one [penny] [The] value of a fox pelt; eight [pence] Otter pelt; eight [pence] Wolf pelt; eight [pence] Marten pelt; twenty four [pence] Beaver pelt, six-score [pence][46]
The mid thirteenth century Latin lawbook 'B' variant version with the fourteenth century 'Blegywryd' lawbook re-translation		
Precium lostlydan: dimidium libre, precium beleu xxiiii denarii. Precium deuyrgi: xii denarii	*Gwerth llostlydan, wheugeint* gwerth beleu, pedeir ar hugaeint yw.	*Value of a beaver[-hide]: six-score pence [Latin: half a pound],* value of marten [hide] 24 pence, [Latin only: value of otter[hide] : 12 pence].

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[44] Ekrem, I. Mortensen, L. & Fisher, P. et al. (2003) *Historia Norwegie* (Museum Tusculanum Press, Copenhagen), pp.58-61.

[45] Kunin & Phelpstead (2001) *History of Norway.*

[46] In the standard translation of *Hywel Dda: The Law,* Dafydd Jenkins gave 'three-score pence' as the value of the beaver (p.188). I believe this to be an error in translation or transcription. I have checked every 'Iorwerth' MS and none give this price. Most are viewable online and I owe thanks to Morfydd Owen for providing a copy of the relevant page in K. 'Iorwerth' MS D. gives twelve pence as the value of ox and stag following 'Cyfnerth', and K assigns a seven pence value to these creatures.

A legal triad, found in the fourteenth century 'Cyfnerth' and 'Blegywryd' and thirteenth century 'Latin' A and 'D' lawbooks

Tres sunt lymbi regnis qui ad regem pertinent: scilicet lost lodan, belea et carllung. Et si in predatione inventi fuerint, regis erunt

Tri phryf y dyly y brenhin eu gwerth py tu bynnac y llather : llostlydan, a beleu a charlwnc, canys oc eu cr6yn y g6neir amaer6yeu y dillat y brenhin.

[There are] three creatures which the king gets the price of wherever they are slain: beaver and marten[47] and stoat because [the] fur vestments of the king are made from their skins.

'Latin' E. fifteenth century variation of the triad

Tria debet regina habere: llosdledan, beleu, karlung

[These are the] three [furs] that a queen ought to have: beaver, marten, stoat [ermine]

A legal triad and commentary found in the fourteenth-fifteenth century Peniarth 164, miscellaneous manuscript

Tri rhyw bryf y sydd yn cyfreith: beleu, a llostlydan, a charlwng y cymwyll yng cyrfreith am eu crwyn...[48] y hyw a'r frenhines pa du bynnac y... llostlydan y befyr rhywogaeth gra llwyt... a'e geillieu y gellir meddeginiaeth rhag tostedd:.. pan eler y'w hely y gwybydd may o achaws y gwllyeu... sef a wna yna y tynnu e hun y wrthaw a'e taflu... ac yna pryfeda y lle... yna bydd distrwyl arnaw.[49]

Three species are game by law: the marten and the beaver and the [ermine] stoat. [This is] reasoned in the law for their skins which [] they are for the queen wherever [they are slain]. The beaver (beaver[50]) is a kind of grey fur and its testicles can [be made into] medicine against aches [] when people go to hunt it, it knows that it is because of its testicles, [] this is what it does then, wrenching them off itself and throwing them away [] and then the place gets worms [] then [its] destruction will be upon it.

An extract from the the 'Assizes of David' in the Ayr Manuscript and the Northumberland Chartulary ?1300-1350 A.D.?

Original Latin	Original Scots	Modern English translation
De tymbria wlpium cirogrillorum martinorum murelegorum sabinorum *beueriorum* uel fimilium, de unaquaque timbria ad exitum iiij d.	Of a tymmyr of skynnis of toddies, quhytredys, mertrikis, cattis, *beueris,* sable, firrettis, or swylk vthyr of ilk tymmyr, at the outpassing iiij d.	For a bundle of 25 skins of foxes, weasel, martens, wildcats, *beavers,* sables, [*Scots only:* ferrets], or another similar [*Latin only:* for each bundle], when exiting, 4d.

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[47] Roberts offers sable for 'beleu' in one of her translations (Roberts, S. (2011) *The Legal Triads of Medieval Wales* (University of Wales Press, Cardiff), pp.66-7) but this has no linguistic authority. See: *Geiriadur Prifysgol Cymru.*

[48] This text has several gaps in the original, which are reflected with elipses and brackets in the translation.

[49] Emanuel (1967) *The Latin Texts of the Welsh Laws*, pp.82,126, 247, 503; Williams, S. & Powell, J. (1967) *Llyfr Blegywryd* (University of Wales Press, Cardiff), pp.52, 114; Roberts (2011) *The Legal Triads*, pp.66-7; 134-5; Wade-Evans, A. (1909) *Welsh Medieval Law* (Oxford University Press), p.98; Owen, A.(1841) *Ancient Laws and Institutes of Wales*, vol.1 (Commissioners on the public records, London) VC.xix, p.288; vol.2, XIV.vi.7; pp.592-3; Dates from: Harris, M. (2006) *A Bibliography of the Welsh Law Manuscripts* (Seminar Cyfraith Hywel, Aberystwyth)

[50] The author of the Welsh text or a scribe adds the English word to assist people who are not familiar with the term *llostlydan*.

De timbria schorellorum ij d. De mille de Gris uel de scorello preparatis et coieratis, viij d. De qualibet pelle de lutir, ½d.	Of the tymmyr of skurel ij d. Of ane hundreth gray gryse and skurel dycht and letheryt viij d. Of ilk otyr skyn a halfpenny.[51] De tymbra de Gupillis vel martinis vel sablium vel beverium iiij.d. De dacra pellium caprinarum j.d. De tymbra de scurellis ob.[52]	For a bundle of 25 squirrel [skins], 2d. For one hundred grey squirrel [skins] and tawed and prepared squirrel, 9d. [*Latin only:* The amount] for each otter skin a halfpenny. For a bundle of 25 [skins] of foxes or martens or sables or beavers, 4d. For a dicker of 10 goats furs 1d. For a bundle of 25 squirrel [skins], a halfpenny.

Extract from Records of Parliaments of Scotland, James I, A.D. 1424/12 'Off the custumis of diverse wild best skynnis'

Original Scots	Modern English Translation
Item it is statut and ordanit at na man hafe mertrik skynnis out of the realme, ande gif he dois in the contrary he sall pay to the king vj d. of custume for ilke skynn; and for tene fowmart skynnis callit fichois, viij d.; and for ilk [hunder] cunyng skynnis, xij d.; and for ilk tene ottir skynnis and tod skinnis, vj d.; of ilk dakir[53] of hert or hynd skynnis, xij d.; and of ilk ten dais and rais hydis, iiij d.[54]	Next it is statuted and ordained that no man move pine marten skins out of the realm, and if he does [so] on the contrary, he shall pay to the king 6d. of custom[s duty] for each skin; and for ten polecat skins (called fitchows), 8d. and for each hundred rabbit skins, 12d. and for each ten otter skins and fox skins[55], 6d.; of each bundle of hart or hind skills, 12d., and of each ten doe and roe[buck] hides, 4d.

An extract from 'Peredur'

Middle Welsh text (1200-1300 A.D.)	English translation
Mi a wn dy hynt. Mynet yd wyt y ymlad a'r adanc, ac ef a'th lad, ac nyt o'e dewred namyn o ystryw. Gogof yssyd idaw, a philer maen yssyd ar drws yr ogof, ac ef a wyl pawb o'r a del y mywn ac nys gwyl nef efo. Ac a lechwayw gwenwynic o gyscawt y piler y llad ef bawb…[56]	I know your intention. You are going to fight with the afanc, and it will kill you, and not by bravery but rather through a trick. It has a cave and there is a pillar of stone at the entrance of the cave and it sees everyone that may come inside and no-one sees it. And with a poisonous stone spear it kills everyone from the shadow of the pillar…

An extract from 'I Llywelyn ab Gwilym ab Tomas Vychan, Bryn Havod', by Lewys Glyn Cothi

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[51] *Acts of the Parliaments of Scotland. 1*, p.667.

[52] Ibid. pp.33-5.

[53] A daker is normally ten skins, see: OED (2014) 'dicker, n.1' in: *Oxford English Dictionary* (www.oed.com).

[54] Brown et al. (2007-14) *The Records of the Parliaments of Scotland to 1707*. 1424/12.

[55] The fox skins are only added to two manuscripts.

[56] Goetinck, G. (ed. 1976) *Historia Peredur vab Efrawc* (University of Wales Press, Cardiff), p.47.

Original Welsh (1450-1500 A.D.)	English Translation
Yr afanc er ei ofyn wyf yn llech ar fin y llyn o don Llyn Syfaddon fo ni thynnwyd ban aeth yno ni'm tyn men nac ychen gwaith oddyma heddiw ymaith.[57]	I am [like] the afanc which, despite being sought, hides on the edge of the lake. It could not be drawn from the wave of Llyn Syvaddon. And I will not be drawn out from here today by toil of cart nor oxen.

An extract from 'The Welsh Bestiary of Love'	
Original Welsh (1300-1400 A.D.)	**English Translation**
Kans velly y gwna yr enivail a elwir kasstrin. Ar vn o'i bedwar troet y mae meddigynaeth, a'i hely a wnair yn chwannoc o achos y troet hwnnw. A ffo a wna yntav hyd hwya ac y gallo, a phan ddiffykio, ef a wyr o natur na helit ef ond o achos y troed hwnnw. [Ag yna i tyrr ef y droed honno ymaith o'i ddannedd, ag a'i gad hi ar y ffordd val i kaffer hi. Ag yna i ffy ef ar i dair troed. Ag velly pan gaffo yr helwyr y droed honno, nid ymlidiyr ef ymhellach, ag velly i diank ef.] [58]	The animal is called the 'kasstrin' because of this: on one of its four feet is a medicine, and it is hunted eagerly because of that foot. And the animal itself flees as far as it may, and when it grows weary it knows by instinct that it is hunted only because of that foot. [And then it rips that foot itself with its teeth and leaves it on the road so that it can be taken. And then it flees on its three feet. And thus when the hunter gets that foot, he does not pursue the hunt, and thus it escapes.]

An Extract from the 'Scotorum Historia' by Hector Boece alongside Bellenden's translation.		
Hector Boece's Latin original, 1526-7 A.D.	**Modern English Translation of Latin**	**Bellenden's translation into Scots, 1537 A.D.[59]**
Nessa vero fluvius ex lacu eiusdem nominis exortus… nullo unquam sidere concrescere potest nec ipse quoque lacus. Quicquid autem in eos congelatum infertur extemplo liquescit, praecipuo commodo equis luto glacieque rigentibus. Est ad ostia Nessae oppidum Envernes nomine numeroso hallece olim	The River Ness actually emerges from a loch of the same name… It is never able to freeze, nor is its loch. Whatever frozen thing is carried by it immediately melts, of special help to horses, solid with ice and grime. To the mouth of the Ness is the settlement called Inverness. Once [it was] bountiful with numerous herring, now however [it is] deprived of its blessing by a divine judgement: the cause of	Nes risis fra ane loch under the same name... Nothir fresis the water of Lochtie[60], nor yit the loch that it cumis fra, in ony storme of winter; and, to the greter admiratioun, ony frosin thing that is cassin in it, meltis and resolvis hastelie : it is, thairfore,

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[57] Johnston, D. (1995) *Gwaith Lewys Glyn Cothi* (University of Wales Press, Cardiff), p.125.

[58] Thomas (1988) *Welsh Bestiary of Love*, pp.9-10, 23-24. The first paragraph from text B (Peniarth 51) and was written by Gwilym Tew (fl. C. 1460-80). The second paragraph is illegible in this manuscript and therefore taken from text C (Aberystwyth MS 13075) from c.1600.

[59] There are three contemporary translations into Scots, but only Bellenden's printed translation includes the Prologue on Cosmography, which is where our first extract comes from.

[60] Bellenden's translation here is probably wrong. The ellipsis shows where I have omitted a part of the text which refers back to the River Lochtie, which Boece was previously discussing before he moved on to the Loch Ness. In this context, Boece's comments may be about the River Lochtie but they are more likely to be about the River Ness, his new topic.

foecundum, nunc ira numinis eo beneficio privatum: causam vulgo in hominum quorundam insolentiam referant, qui efferi immani cupiditate certantes pro piscibus scelerato sanguine undas commacularunt. Id enim persuasum habent, quum pro conchis, hallecibus, atque id genus piscibus, quos benigna Dei providentia ad pauperum inopiam largitur certamen usquam initur, multo inde tempore nihil aut exiguum quidem eorum apparere.

Ad Nessae lacus longi quatuor et viginiti passuum millia, lati duodecim, latera propter ingentia nemora ferarum ingens copia est cervorum, equorum indomitorum, capreolorum, et huius modi animantium magna vis. Ad haec marterellae, fovinae, ut vulgo vocantur, vulpes, mustellae, *fibri,* lutraeque incomparabili numero, quorum tergora exterae gentes ad luxum immenso pretio coemunt.

…

which is explained to refer to the pride of certain people who stained the water red with criminal blood in savage desire competing for fish. Indeed, they have been persuaded of this, because, from the time the contest took place, the many muscles, herring, and those sort of fish (which benign God's providence grants to wretched paupers as charity) [have] never or rarely appear[ed] there.

Along the stretch of Loch Ness, (twenty four miles long, twelve wide), because of the huge, wide forests, there is a quantity, great in strength, of huge wild animals, of deer, of wild horses, of goats and of these kinds of animals. There [are] an incomparable number of martens (*fovins* as the unschooled call them), of foxes, of weasels, *of beavers* and otters, people pay an immense price for the fur of these luxurious pelts.

…

richt proffitable to al frosin beistis. In the mouth of Nes standis the toun of Innernes ; quhare sum time wes gret plente and tak of herying, howbeit thay be now evanist, for offence that is maid aganis sum Sanct. Treuth is, quhen ony avaricius and unhappy men fechtis for the fische that God sendis, be his infinit gudnes, to the sustentatioun of the peple, and diffoulis the see be thair blude; mony yeris eftir, na fische swomis in that place.

Beside Lochnes, quhilk is XXIV milis of lenh and XII of breid, ar mony wild hors; and, amang thame, ar mony martrikis, bevers, quhitredis, and toddis; the furringis and skinnis of thaim ar cost with gret price amang uncouth marchandis.

…

Condidit etiam in Albionis parte quae orientem spectat loco haud multum a Nessa lacu diverso (de quo affatim supra) civitatem aliam, et Envernessam a lacus atque fluminis inde defluentis nomine vocitatam. Ad hanc olim magnus ex Germania mercatorum fiebat concursus, merces quarum regio est indiga ad indigenarum usum quotannis advehentium., unde marterellorum, ut vocant,

He also founded another settlement in the part of Scotland which is in the east, a place not many [miles] away from Loch Ness (about which [I said] enough above). And by name [it was] called Inverness, after the loch and river flowing from there. To here, once upon a time a great gathering was made of merchants from Germany, annually importing merchandise which was needed by the region for indigenous use, then they shipped home the pelts of martens, as they are called, of *castors* and *fibers* and of

King Ewin biggit ane othir town on the river of Nes, quhilk is yit namit Innernes; quhair sum time wes gret repair of marchandis, quhilkis come out of Almany to seik riche furringis; as martrikis, bevaris, and siclik skinnis,[61] quhilkis

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61 The 'Mar Lodge' translation situates the town by Loch Ness rather than the River Ness. It also adds 'ottirris' to this list, and explains that all these furs are 'vsit be nobillis and men of gude'. Watson (1946) *The Mar Lodge Translation*, p.124

castorum, fibrorum atque similium ferarum tergora, quorum nobiliorum vestibus est usus, compluribus cum aliis rebus ad mercatum accommodatis secum deportarunt domum. Extat urbs eadem multis et optimis mercibus ut olim abundans, accolarum iniuriis qui caedibus, depopulationibus et rapinis sunt adicti, frequentius afflicta, priscum nomen adhuc retinens.

similar animals from which the vestments of the nobles are made, together with other items from the market which suited them. The town survives in the same manner, with much of the best merchandise which once abounded there. It still retains its former name [but now it is] plagued more often with injuries to its inhabitants who are addicted to murders, to marauding and to rapes.

aboundis in that regioun. This town remanis yit, under the auld name, full of marchandise and guddis; howbeit it be oftimes heryit be evil nichtbouris liand thair about. [62]

An extract from 'De Origine Moribus et rebus Gestis Scototorum'

Latin Original (1578 A.D.)	Modern English Translation
Quarum venatione per odorisequos canes impense sese recreant nobiliores. Nostri autem id solatii, infequendo vel ex agris leporem & vulpem, vel ex littore et amnium ripis melem, vel ex montibus lupum, felemve, ac maxime quidem cervum, damam, aut capream odorisequis simul & velocissimis aliis canibus praedam prosequentibus capessunt. [63]	Most of the nobility enjoy themselves by hunting with scent-hounds. Indeed, our [people] take the same enjoyment either capturing the hare and the fox which are to be pursued from the fields or the *meles* from the shores and deep river banks, or the wolf or cat from the mountains, but the greatest of these are the red stag, the fallow stag or the roe stag with scent hounds and with the fastest other [sight] dogs to escort the game.

An extract from 'Scotia Illustratia' by Robert Sibbald

Latin Original (1684 A.D.)	Modern English Translation
Boethius dicit *fibrum* seu *castorem* in Scotia reperiri; an nunc reperiatur, nescio. Lutra animal amphibium est, astutum & malignum, e fibrorum genere, longius latiusque cato, minus fibro, colore fusco ad castaneum deflectente, cum nitore. Caput ei oblongum, instar putorii, dentibus acutis instar canis venatici, morsus acerrimi. Collum crassius, crura breviora, pedibus posterioribus planis & membrana communitis, cauda oblonga terete in fastigium definiente, pelle minus quam *castoris* spissa, frequenti & brevi pilo	Boece said that *fibers* or *castors* could be found in Scotland, whether any can still be found there, I do not know. The otter is an amphibious animal cunning and malignant. [It is] a kind of beaver, longer and wider than a cat, smaller than a beaver. [It is] dark in colour, almost chestnut with black. Its head is long like a ferret's, with sharp teeth like a hunting dog with a very sharp bite. Its neck is rather thick, its legs rather short, its back feet are flat and strengthened with skin. A long, cylindrical tail ending in a point, its fur is less thick than a beaver's, with guard and ground

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[62] *Scotorum Historia* (1575 version) Preliminary.18; Book II.51; Maitland (1821) *The History and Chronicles of Scotland*, pp.xxxiii-iv, 69-70. Here I use 1821 the printed edition of Bellenden rather than the 1938 manuscript edition, as the manuscript version does not include the first extract.

[63] Lesley (1578) *De Origine Moribus*, p.5.

conspersa. Circa fluenta & lacus degit. Vivit ex captu piscium, quos mira agilitate & astutia venatur. Diu sub aqua se continent.

In Antro (referente Jonstono) velut tabulatum ex ramis & virgis construunt, super quo, ne madefiant, noctu cubare solent, & per aliquot milliaria ex aquae rivulo piscinae odorem excipient. Cicurantur & in quibusdam regionibus, ad certum signum, in aquas se ad pisces capiendos conjicere edocentur, unde, ad coqui nutum, pisces in culinam deferent. Carnes a rusticis alibi comeduntur: sed crasse sunt, lentae & pituitose.[64]

hair mixed together.[65] They stay near rivers and lakes. They live by seizing fish, which they hunt with amazing agility and astuteness. They can remain underwater for a long time.

In the holt (referred to by Johnston), they construct something like a floor from branches and twigs. By night they are accustomed to lie-up above this, undampened, [although] they will catch the scent of fish from the water of the stream for a distance of several miles. They have been tamed and in some regions they are taught, at a certain signal, to dive into the water to capture a fish, then, at the command of the cook, to bear the fish to the kitchen. Their flesh is eaten by rustics elsewhere but it is fat, slow, and sickly.

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[64] Sibbald, R. (1684) *Scotia Illustrata.* II.3.4 (p.10).

[65] This translation is tentative. Most mammals have two types of hair in their fur, longer waterproof guard hairs and shorter ground hairs or 'underfur' for warmth. Often the guard hairs are plucked or sheared when furs are tawed.

Beavers have more easily distinguishable and shearable guard hairs. The Furskin project which examines animal furs under an electron microscope for identification, estimates the guard hair and underfur of *Lutra lutra* to be 15-25mm and 6-12mm in length, whereas *Castor fiber* has a length of 25-55mm and 6-15mm in length. That makes a 2.7cm difference in contrast; a very significant difference if you are attempting to pluck out the guard hairs (they cannot be shaved without forming stubble). See: 'Otter', 'Beaver' at: www.furskin.cz (2011).

Appendix 5 – Texts Describing Cranes

Extract from 'Liber Monstrorum'	
Latin original (650-750 A.D.)	**English translation**
Et quoddam inuisum genus humanum in antris et concauis montium latebris nasci perhibentur qui sunt statura cubitales et, ut testantur, adversum grues, in tempore messis, bellum coniungunt, ne eorum sata diripiant. Quos Greci a cubito pigmeos uocant.	And it is said that a certain hostile [or 'unseen'] race of people are born in caves and the hollow recesses of mountains, who are a cubit in height, and, it is reckoned, join war against cranes at harvest-time, in case they snatch their crops. And the Greeks call them Pigmies, from [the Greek word for] 'cubit'.[66]

Extract from 'Topography of Ireland'	
Latin original (1188 A.D.)	**English translation**
<u>De grue, ejusque natura.</u>	<u>Of the crane and its nature</u>
In tanta vero numerositate se grues ingerunt, ut uno in grege centum, et circiter hunc numerum, frequenter invenias. Haec avis, singulis vicissim alternis noctibus, natura dictante, communi indemnitate excubantibus, uni insidens pedi, altero implumato lapidem suspensum tenet; ut ejusdem casu, si forte sopor irrepserit, iterum ad vigilias statim redeat experrecta. [Aves istae praelatorum ecclesiae typum gerunt. Quibus supra gregem vigilandum esse dignoscitur et excubandum, quia qua hora fur venturus sit, penitus ignoratur;] et cura aliqua sacra animo tanquam lapis est suspendenda, quae et torporem omnem prorsus excutiat, et nihil praeter se meditari permittat ; quae etiam si forte interdum exciderit, mens ipsam desuescere nesciens, eandem iterum tanquam a somnis experrecta resumat. [Periculum quoque avis haec clamore indicat. Sic et ecclesiastici pastores lupos divinis ab ovili latratibus arcent, et	Cranes are so numerous that in one flock alone you will often see a hundred or about that number. These birds, by a natural instinct, take their turns by night in watching the common safety, standing on one leg only, while in the other featherless claw they hold a stone. They do this so that if they should go to sleep, they will be wakened again immediately by the fall of the stone and continue their watch. [These birds carry a model for the prelates of the church, which, as is discerned, should be vigilant and keep watch over the flock because the hour at which the thief will come is not known.][68] Some sacred duty should occupy our minds which, like the stone, will shake off torpor and allow us to think of nothing else but itself. If then it should by chance slip from our minds sometims the mind, not used to being without it, will, as it were, wakened from its sleep, take it up again. [Also, this bird signals danger with a call. In this way, the shepherds of the church keep wolves from the sheepfold with their divine

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[66] Orchard (1995) *Pride and Prodigies*, pp.272-3.

[68] O'Meara was translating a slightly different edition which did not have the sections in square brackets. See discussion in Beavers chapter for explanation of Gerald's changes to his sections on animals.

infatigabili clamore tanquam tuba vocem exaltant.]

Avis eadem tam calidum, tam igneum jecur habet, ut ferrum forte ingestum transire nequeat indigestum.

Sic igne caritatis accensa viscera ferreos olim et inexorabiles animos domant et mitigant, et ad pacis fraternae concordiam mansuescere jam compellunt.

Pavones silvestres hic abundant.

Gallinae vero campestres, quas vulgariter grutas vocant, hic rarae sunt et modicae perdicibus tam in quantitate quam colore persimiles.

Acetae vero, quae et cardioli dicuntur, tam majores et silvestres, quam minores et palustres, infinitissimae. Minorum tamen et palustrium copia major.

Item coturnices hic plurimi. Ratulae vero rauca et clamosae infinitae. Diemque laudantes alaudae innumerae. [67]

barking, and with untiring vigor, they raise their voice like a trumpet.]

This bird has such a warm and fiery liver that, if it should eat iron, it will not let it through undigested.

So too bowels aflame with the fire of charity will tame and soften hearts that were once as hard and unyielding as iron, and compel and soften them to the union of brotherly love.[69]

Capercaillies abound here. Wild hens, which are commonly called grouses, are rare and modest-sized here [in Ireland]; in size and colour [they are] just the same as partridges.

Snipe (which are also called *cardioli*) are quite innumerable; both the larger, woodland kind and the smaller wetland kind. Yet the number of the smaller wetland kind is greater.

Here [there are] also many quails. Actually, the raucous and clamouring ?corncrakes? [are] infinite, and [there are] innumerable larks singing praises to the day.[70]

Extract from the 'Ourania'

English original (1606 A.D.)

They keepen therefore silence in their Flight,
Till they haue scap'd that mountaine in the night.
As two lynes of a Tryangle meeting together,
At the end, so flyen they in colde weather,
In two rankes spredding themselues a sonder,
They joyne at one sharpe end, great is the wonder.
They haue one leader, whome they duly marke,
Following one another in the darke.
This leader lighteth farre off from the rest,
As one with solitarinesse opprest.
Hee [a crane] keepes his standing as a Centinell,
That all his Souldiers might in safetie dwell.
But if an aduersary come that way,
He makes a noyse: The troup is in array.
He mountes, they mount, they take them to their wings

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[67] Dimock (1867) *Giraldus Cambrensis Opera 5*, pp.46-7.

[69] O'Meara, J. (1951) *The History and Topography of Ireland* (1982 ed. Penguin Books, London), pp.40-1.

[70] The last three paragraphs are my translation as O'Meara skips part of this section and leaves some words untranslated.

To seeke some place that lesser perrill brings[71]

Extract from 'Vita Sancti Columbae'

Latin original (c.700 A.D.)	English translation
De alia etiam re, quamlibet minore, puto non esse tacenda sancti jucunda praescientia, et prophetizatio viri	**About another subject, though a little one, I think I should not pass over in silence the saint's happy foreknowledge and prophecy**
Alio namque in tempore, cum Sanctus in Ioua inhabitaret insula, unum de fratribus advocans, sic compellat, 'Tertia ab hac illuscescente die expectare debebis in occidentali hujus insulae parte, super maris oram sedens: nam de aquilonali Hiberniae regione quaedam hospita *grus*, ventis per longos aeris agitata circuitus, post nonam diei horam valde fessa et fatigata superveniet, et pene consumptis viribus, coram te in litore cadens recumbet; quam misericorditer sublevare curabis, et ad propinquam deportabis domum, ibidemque hospitaliter receptam, per tres dies et noctes ei ministrans, sollicite cibabis; et post expleto recreata triduo, nolens ultra apud nos peregrinari, ad priorem Scotiae dulcem, unde orta, remeabit regionem, plene resumptis viribus; quam ideo tibi sic diligenter commendo quia de nostrae paternitatis regione est oriunda.' Obsecundat frater, tertiaque die post horam nonam, ut jussus, praescitae adventum praestolatur hospitae, adventantemque de littore levat lapsam, ad hospitium portat infirmam, esurientem cibat. Cui ad monasterium vespere	Once, when the saint was living in Iona, he called one of the brethren to him and said: 'Two days from the one now dawning, you should go to the west side of the island and sit up above the shore keeping watch. After the ninth hour a guest will arrive from the north of Ireland, [a crane][73], buffeted by the wind on its long flight, tired and weary. Its strength will be almost gone and it will fall on the shore in front of you. Take care how you lift it up, having pit for I, and carry it to the nearby house. Look after it and feed it there as a guest for three days and nights. Afterwards, at the end of the three days, when the heron is revived it will no longer want to stay as a pilgrim with us, but when its strength is recovered it will return to the sweet district of Ireland from which it came. This is the reason I am so solicitous you should do this, for the [crane] comes from my own homeland.' The brother obeyed. At the ninth hour of the third day he waited as he was told for the expected guest to come. When the bird arrived and collapsed, he lifted it from the shore and carried the weak, hungry creature to the house ad fed it. He returned to the

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[71] Baxter, N. (1506) *Sir Philip Sydney's Ourania* (Edward White, London), p.32. This facsimile edition from Early English Texts Online (http://eebo.chadwyck.com), page numbers from modern editor.

[73] As explained in the notes, Sharp gives 'heron' in his translation, but the original Latin gives *grus* (a crane). I have amended these forms back in square brackets.

reverso Sanctus, non interrogans sed narrans, ait,
'Benedicat te Deus, mi fili, quia peregrinae bene ministrasti hospitae, quae in peregrinatione non demorabitur, sed post ternos soles ad patriam repedabit.'

Quod ita ut Sanctus praedixit et res etiam probavit. Nam trinalibus hospitata diebus, coram hospite ministro, de terra se primum volando elevans in sublime, paulisperque in aere viam speculata, oceani transvadato aequore, ad Hiberniam recto volatus cursu die repedavit tranquillo. [72]

monastery in the evening, and the saint, not questioning but affirming, said to him:
'God bless you, my son. You have looked after the pilgrim guest well. It will not remain here, but after three days will return home.'

What the saint foretold was borne out in the event. After three days as a guest, the bird first rose from the ground in the sight of the host who had looked after it; it flew upwards and for a while spied out its course through the air, then setting off over the ocean in a straight line of flight, it returned to Ireland in fair weather. [74]

Extract from 'Betha Colm Cille'	
Gaelic original (c.1150 A.D.)	**English translation**
At-cuas don righain a mac do escaine ¬ righe do Domnall. At-bert an righan fria a hinailt: 'Erigh co Aod ¬ abair fris dia faba in corrclerech ud cadus aga nibam sidhachso fris.' At-cuas do Colm Cille in ni sin¬do cetaig don righain ¬ dia hinailt beith 'na *da cuirr* a nDruim Ceta on lo sin go laithi an bracha, ut poeta dixit: Assaigh ferg an righan de Do Domnall isin rige, Geall rige do Domnall and, Is a mac fein gan ferand. 'Cia corrugad sin fil ort?' Ar an righan go ro olc, 'nibam sith fri hAod cen cleith Ar cadhus duit, a clerig'. Is cet duitsi cidat corr Ar in clerech go ro lonn, 'ar cneit dot' inailt cen acht, Beith 'na cuirr at', comitecht A hinailt is ben Aoda Saoiter hi *corraib lena,* Mairid beos, do-gniat cneta, A nDruim Ceta cen sena.	The queen was informed that her son was cursed and the kingship given to Domnall. The queen said to her maid: 'Go to Aodh and tell him if that stooped (crane-like) cleric receives respect from him, I will not give him any peace.' This was related to Colum Cille and he willed the queen and her maid to become two cranes in Druim Cet from that day hence until the Day of Judgement, *ut poeta dixit* (as the poet said): The queen's anger rises on this account That Domnall should have kingship, A promise of kingship for Domnall there, And for her own son to be without territory 'What stirring-up are you engaged in?' Said the queen very cruelly; 'I will not be at peace with Aodh without concealment Because of (his) honouring you, O cleric.' 'You are to be a crane', Said the cleric very angrily 'on account of your maid's sighing, without doubt, She will be a crane along with you.' The wife of Aodh and her maid Are changed into marsh cranes, They still live and make complaint In Druim Cet, without denial

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[72] Reeves, W. (ed. 1857) *Vita Sancti Columbae* (Academic Press, Dublin), pp.90-1.

[74] Sharp (1995) *Life of St. Columba,* p.150, I:48

Nó da tsencuirr Droma Ceta   *Or* the two old cranes of Druim Cet[75]

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[75] The last line is an alternative ending to the five-line stanza. Presumably the scribe knew two versions. Herbert (1998) *Iona, Kells and Derry*, pp.245; 267.

Extract from 'Ei Gysgod' by Dafydd ap Gwilym	
Original Welsh (c.1350 A.D.)	**Modern English**
Tebygach wyd, tebyg chwith,	Strange likeness, you are more like
I drychiolaeth hiraethlawn	a fearsome phantom
Nog i ddyn mewn agwedd iawn.	than a normal human being.
Heusor mewn secr yn cecru,	A squabbling herdsman in chequered dress,
Llorpau gwrach ar dudfach du;	an old woman's shanks on black stilts;
Bugail ellyllon bawgoel,	shepherd of phantoms carrying a load of filth,
Bwbach ar lun manach moel;	bogeyman shaped like a bald monk;
Grëwr yn chwarae griors,	herdsman playing hobby–horse,
Grŷr llawn yn pori cawn cors;	lanky heron grazing bog reeds;
Garan yn bwrw ei gwryd,	crane[76] stretching to its full length,
Garrau'r ŵyll, ar gwr yr ŷd;	with spectre's[77] legs, on the edge of the cornfield;
Wyneb palmer o hurthgen,	face like a blockhead pilgrim,
Brawd du o ŵr mewn brat hen;	a black friar in an old cloak;
Drum corff wedi'i droi mewn carth,	shape like a corpse wrapped in a hempen sheet,
Ble buost, hen bawl buarth?	where have you been, you old farmyard pole? [78]

Extract from 'Canu y Meirch'	
Original Welsh (1100-1300 A.D.)	**Modern English translation**
Bum kath penurith ar tri phren	I've been a speckle-headed wildcat[79] on three trees
Bum pengafyr ar yscawpren	I've been a nightjar[80] on an elder tree
Bum <u>garan</u> gwala gwelet golwc	I've been a <u>crane</u>; with his gaze eyeing up his fill.[81]

Extract from 'The Book of the Knight of the Tower'	
Original French c.1372 A.D.	**Caxton's English 1483 A.D.**
Ne samblés pas à tortue ne à grue ; celles semblent à la grue et à la tortue qui tournent le visaige et la teste par dessus et	Be ye not like ne semblable the tortuse ne to the Crane which torne their visage and the heede about their sholders and wynde their

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[76] Note: this line better suits the heron, whilst the line before better suits the crane.

[77] This reference is ambiguous. Bromwich (ibid) suggests a [barn] owl (*T. alba*). There would have been nothing 'upside-down' about a barn owl exploiting arable land. Most likely this lines refers to a lost piece of supernatural folklore.

[78] Cynfael Lake, A. (ed., trans. 2007), '63 - Ei Gysgod', *Gwaith Dafydd ap Gwilym,* accessed: 16/3/16, available http://www.dafyddapgwilym.net/cym/3win.htm.

[79] Amended from 'cat' as wildcats are rarely called just 'cats' like this anymore.

[80] Haycock's translation of 'godwit' for this line seems ecologically improbable and linguistically dubious. Godwits are wading shore birds which are not associated with any kinds of tree. There are no other textual authorities to this meaning of 'pengafr' (goat-face) in *Geiriadur Prifysgol Cymru*. I suggest a more probable species is the nightjar (*Caprimulgus europaeus*). The nightjar is called *caprimulgus* because it has been popularly believed to milk goats at night. As popularised by Aristotle (384-322 B.C.) in the 'Historia Animalium' (IX:30). *GPC* provides the related modern Welsh terms 'gafr wybr' (sky goat), 'gafr fynydd' (mountain goat), 'gafr wanwyn' (spring goat) and 'gafr y gors' (gorse goat), all meaning 'nightjar' or various snipe species.

[81] Haycock, M. (ed. 2007) *Legendary Poems from the Book of Taliesin* (CMCS, Aberystwyth), p.393.

qui vertillent de la teste comme une belette. Aiez regart et manière ferme comme le liniere, qui est une beste qui regarde devant soy sans tourner la teste ne çà ne là. Soiez ferme comme de resgarder devant vous tout droit plainement, et, si vous voulez regarder de costé, virez visaige et corps ensemble ; si en tendra l'en vostre estat plus seur et plus ferme, car l'on se bourde de celles qui se ligierement brandellent et virent le visaige çà et là.[82]

hede here and there as a vane. But haue youre regard and manere stedfast lyke as the hare hath which is a beest that seeth alwey to fore hym euen right forth without tornyng of his heede here ne there. Alwey see that ye be stedfast in lokyng playnly to fore you. And yf ye wylle loke a syde torne youre visage & youre body to geder. And so shalle ye hold you in youre estate more ferme & sure. For they be mocqued that so lyghtely cast their sight and hede and torne their visage here and there.[83]

Extract from 'The Welsh Laws of Court'	
Original Welsh	**Modern English translation**
'Iorwerth' lawbook from the thirteenth century	
Ef a dale y anredethu o teyr anrec e dyt e lladho y hebauc un o tri ederyn; ay bun ay caran ay cryhyr.[84]	He [the Falconer] shall get the honour of three gifts [on] the day his hawk may kill one of [the] three birds: the bittern or the crane or the heron.
'Cyfnerth' lawbook from the fourteenth century	
Pa dyd bynhac y dalyo hebogyd crychyd, neu hwnn neu chwibonogyl uynyd o rym y hebogeu tri gwassanaeth a wna y brenhin idaw: daly y uarch tra esgynho; a daly y uarch tra disgynho; a daly y uarch tra achubo yr adar. Teir gweith y hanreca y brenhin ef y nos honno oe law ehunan ar uwyt kanys yn llaw y gennat yd anrecca beunyd ef eithyr yny teir gwyl arbenhic ar dyd y lathro aderyn enwawc. … Teir anrec a geiff y gan y brenhin beunyd yn llaw y gennat eithyr yn y dyd y dalho y hebawc ederyn yn enwawc neu yny teir gwyl arbenhic canys ehun ae kymer yna. Y dyd y dalhyo yr hebogyd ederyn enwawc ac na bo y brenhin yn y lle pan del yr hebogyd y'r llys a'r ederyn gantaw y brenhin a dyly kyfodi	Whatever day that the falconer catches a heron, or a bittern or a mountain curlew by the power of his hawks, the king does three services for him: holding his horse while he mounts; and holding his horse while he dismounts; and holding his horse while he retrieves his birds. The king serves him that night three times with food from his own hand. Because, every day he serves him by the hand of the messenger, except only [on the] three chief holidays [and] on the day he may kill a pre-eminent bird. … Every day, three presents are given by the King into the hand of the messenger [for the falconer] except on the day that the hawk takes a pre-eminent bird or except [on] the three chief holidays because he himself brings them then. The day that the falconer may take a pre-eminent bird with the king not present, when the falconer may come to the court with the bird with him the king ought to rise before him, and if he does not rise, he ought to give [whatever] clothes he may be wearing to the falconer**.**

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[82] de Montaiglon, A. (1854) *Le Livre du Chevalier de La Tour Landry* (P. Jannet, Paris), p.24.

[83] Offord, M. (ed. 1971) *The Book of the Knight of the Tower* (Oxford University Press), p.25.

[84] Owen (1841) *Ancient Laws and Institutions of Wales, 1.* VC.x.12 pp.24-5.

racdaw ac ony chyuyt ef a dyly rodi y
wisc a uo ymdanaw yr hebogyd.[85]

'Cyfnerth' lawbook from the fourteenth century

Tri edyn y dyly brenhin ev gwerth pa le bynnc ev lladher: eryr a garan a chicuran; perchennawc y tir y llader arnaw a dyly dec a deugein y gan y neb a'e llatho.[86]	[There are] three birds, the worth of which the king should get wherever they are slain: eagle and crane[87] and raven. The owner of the land it was slain on should [get] fifty [pence] from the one who slew it.

Welsh of the 'Blegywryd' lawbook of the fourteenth century with thirteenth century Latin 'A' alongside[88].

__Welsh__	__Latin__	__Modern English translation__
Tri gwassannaeth a wna y brenhin y'r hebogyd y dyd y kaffo whibonogyl vynyd, neu grychyd neu bwn oe hebogydyaeth: nyt amgen, daly y warthafyl pan disgynho a dala y varch tra gymhero yr hebawc a'r ederyn a daly y warthafyl wrth ysgynno ac yn y nos hono y dyly y anrydedu o teir anrec.[89]	Cum hebogyt aucupando ceperit aut bwn aut hwybonogyl uenyt aut cherechyt,[90] in illa die rex debet ei ter servire, scilicet, tenere scansilem eius dum descendat ad separandum accipitres ab avibus captis, et tenere equm ipsius dum separat et tenere scansilem eius dum ascendit; et in illa nocte ter debet eum honorare de ferculis suis.[91]	Three services that the king does for the falconer, whenever he catches a mountain curlew or a heron or the bittern[92] (Welsh: through his falconry)[93] namely: He shall hold his stirrup when he dismounts (Latin: to separate the hawk from the captured bird) and hold his horse when he removes the hawk and the bird and hold his stirrup when he mounts and on that night he shall receive the honour of three presents (Latin: [the king] should honour him from his plate.)[94]

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[85] Ibid. GC.xv; pp.650-55.

[86] This is a variant of the more usual version of the triad which instead describes falcons, hawks and ravens. It is contained only in Harley MS 4353 and the Bodorgan MS. (Roberts (2011) *The Legal Triads*, pp.66-7). Presumably the variant was suggested by analogue to the last law text.

[87] Roberts' translation gives heron as the translation of *garan*. This interpretation lacks textual authority. *garan* was the usual word in Welsh for crane not heron. The correspondence is also attested in the 'Vocabularium Cornicum' (see the appendices), where *garan* glosses 'grus' and 'cran'.

[88] Also found in Latin 'C', 'D' and 'E'.

[89] Roberts (2011) *The Legal Triads*, pp.94-5; Owen (1841) *Ancient Laws and Institutions of Wales,* vol. 1. DC.xiii.2; pp.366-7. The part in italics is not included in Roberts' edition but Owen does not include a note to suggest it is absent from any manuscripts.

[90] 'chrechyt' = alternative form of *creyr*. Modern Welsh form: 'crychydd'.

[91] Emanuel (1967) *Latin Texts of the Welsh Laws*, p.114.

[92] 'Latin C' gives 'gruem vel ardeam vel bubonem, id est, bun' (a crane or a heron or an owl, that is, a bittern). 'Latin E' requires the falconer to 'regi obtulerit' (bring it to the king) before he gets his honours. This is peculiar since the king is supposed to hold the falconer's stirrup when he goes to fetch the bird. 'Latin D' and 'Latin E' make it clear the king is only supposed to hold the falconer's stirrup when he fetches 'una avium nominatarum' (one of the named birds), not every bird for the rest of the day. Perhaps some falconers were abusing their privilege.

[93] 'Latin C' and 'Latin D' concur.

[94] 'Latin C' suggests this honour is sending three pieces of food. 'Latin D' suggests it is three drinks. 'Latin E' suggests the falconer should be honoured every day except the day he catches a special bird, and the three principal feast days.

Welsh of the 'Blegywryd' lawbook of the fourteenth century with thirteenth century Latin 'A' alongside.

Tri edyn ny dylyir eu llad ar tir dyn arall heb ganhat: eryr, a garan a chicuran: y neb a'e lathro, talet dec a deugeint aryant Y perchennawc y tir.[95]	Tres aves non debent occidi in terra non sua sine licentia ipsius cuius terra est: scilicet, aquila, grus, corvus, id est, kycveran; quorum occisor xl denarios reddet.[96]	[There are] three birds that ought not be slain on another person's land without permission: the eagle, the crane and the raven [*Welsh:* (i.e. the *kycveran*)], anyone who may slay [them] pays 40 pence [*Welsh:*fifty pence].

Extract from the 'Correspondence of St. Boniface'

Original Latin (748-54 A.D.)	Modern English Translation
His itaque breviter summatimque prelibatis unam rem preterea a vobis desidero mihi exhiberi, quam vobis adquirere valde difficile esse, iuxta quod mihi indicatum est, nullatenus reor: hoc est duos falcones, quorum ars et artis audatia sit grues velle libenter captando arripere et arripiendo consternere solo. Ob hanc etenim causam de harum adquisitione et transmittendarum ad nos avium vos rogamus, quia videlicet perpauci huius generis accipitres in nostris regionibus, hoc est in Cantia, repperiuntur, qui tam bonos producant fetus et ad supradictam artem animo agiles ac bellicosi educantur et edomantur ac doceantur...[97]	Having thus briefly mentioned these things, there is one other favour which I desire to ask and which, from all I hear, will not be very difficult for you to grant, namely to send me a pair of falcons of such cleverness and courage that they will without hesitation attack cranes and, having caught them, will bring them to earth. We ask you to procure these birds and send them to use since there are very few hawks of this kind in our country— that is, in Kent—which produce such good offspring, of quick intelligence, combative, and capable of being tamed, trained, and taught for the above-mentioned purpose.[98]

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[95] Found in all 'Blegywryd' manuscripts except <u>NLW Llanstephan 29</u> but also in one 'Cyfnerth' manuscripts (<u>NLW 20143</u>). It is also found in another 'Cyfnerth' manuscript (<u>BL Cotton Cleopatra B.v</u>) but there it is missing 'ny dylyir eu llad' (that ought not be slain) suggesting that the birds themselves are present without permission. It is also present in Latin 'D' (<u>Oxford Bodley Rawlinson</u> C821). See Roberts (2011) *The Legal Triads*, pp.80-1; 136-7. Roberts does not mention Latin 'A' (<u>NLW Peniarth 28</u>), so there seems to be some confusion about which of the two manuscripts contains the law.

[96] Emanuel (1967) *Latin Texts of the Welsh Laws*, p.128.

[97] Tangl. M. (1916) *Die Briefe des Heligen Bonifatius und Lullus* (Monumentis Germaniae Historicis, Berlin), pp.229-1, letter 105.

[98] Emerton, E. (trans. 2000) *The Letters of St. Boniface* (Columba University Press), p.157.

Extract from 'Havelok the Dane'

Original English (1280-90 A.D.)

Thanne were set and bord leyd,
And the beneysun was seyd,
Biforn hem com the beste mete
That king or Cayser wolde ete:
<u>Kranes,</u> swannes, veneysun,
Lax, lampreys, and god sturgun,
Pyment to drinke and god claré,
Win hwit and red, ful god plenté -
Was ther inne no page so lite
That evere wolde ale bite.
Of the mete forto telle
Ne of the win bidde I nout dwelle;
That is the storie for to lenge ...[99]

Extract from Laȝamon's 'Brut'

Original English (1189-1236 A.D.)	Modern English Translation
Arður wende his speres ord; and forstod heom þene uord. þer adruncke Sexes; fulle seoue þusend. Summe heo gunnen wondrien; swa doð þe wilde cron. i þan moruenne; þenne his floc is awemmed. & him haldeð after; hauekes swifte. hundes in þan reode; mid reouðe hine imeteð. þenne nis him neouðer god. no þat lond no þat flod. hauekes hine smiteð; hundes hine biteð. þenne bið þe kinewurðe foȝel; fæie on his siðe	Arthur turned the point of his spear and denied them the ford; full seven thousand Saxons drowned there. Some went wondering as does the wild crane in the moorland fen when his flock has scattered and swift hawks pursue him, hounds ruthlessly attack him in the reeds. Neither the land nor the water is safe for him then: hawks strike him, hounds bite him. Then the royal bird is doomed in his tracks.[100]

Extract from the Spenser's *Fairie Queen.*

Original English (1590 A.D.)

And by his side rode loathsome Gluttony,
Deformed creature, on a filthie swyne;
His belly was up-blowne with luxury,
And eke with fatnesse swollen were his eyne,
And like a <u>Crane</u> his necke was long and fyne,
With which he swallowed up excessive feast,
For want whereof poore people oft did pyne;

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[99] Herzman, R., Drake, G. & Salisbury, E. (1997) *Four Romances of England* (Medieval Institute Publications, Kalamazoo).

[100] Barron, W. & Weinberg, S. (1995) *Laȝamon Brut* (Longman Group, Harlow, Essex), pp.518-9.

And all the way, most like a brutish beast,
He spued up his gorge, that all did him deteast.[101]

Extract from 'An Historicall Description of the Island of Britayne' by William Harrison.

<u>Original English (1577 A.D.)</u>

Order requireth that I speake somewhat of the Fowles also of Englande, which I may easily deuide into the wilde and tame, but alas such is my small skill in Fowles, that to say the truth I can neyther recite their nombers nor well distinguishe one kinde of them from an other. Yet thys I haue by generall knowledge, that there is no nation vnder the sunne which hath in time of ye yere more plentie of wild Fowle then we, for so many kindes as our Iland doth bring forth: We haue therfore the Crane, the Bitter, the wilde and tame Swanne, the Bustarde, the Hieron, the Curlew, the Snite, the Wildegoose, Doterel, Brant, Larke, Plouer, Lapwing, Téele, Wigeon, Mallard, Sheldrake, Shoueler, Pewet, Seamewe, Barnacle, Quaile, Woodcocke, Partrich and Feasant, besides diuers other, whose names to [m]e are vtterly vnknowne, and much more the taste of theyr flesh wherewt I was neuer acquainted. But as these serue not at al seasons, so in theyr seuerall turnes, there is no plentye of them wanting, wherby the tables of the Nobilitie and Gentrie should séeme to be dayly vnfurnyshed.[102]

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[101] Wauchope, G. (1903 ed.) *Spenser's The Fairie Queene Book 1* (The Macmillan Company, New York).

[102] *The Chronicles of England, Scotland and Ireland, vol. 1,* Book III.9.

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[1] In the Bibliography I do not provide a place of publication where it is given in the name of the publisher, e.g. 'Cambridge University Press'.

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