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Mortality, gender, and the plague of 1361–2 on the estate of the bishop of Winchester¹

By any estimate the great pestilence of the late 1340s – the Black Death – was the most catastrophic of epidemics to strike Western Europe in the Middle Ages, apparently indiscriminate of age or sex. A mortality rate of somewhere between a third and half of the population is generally agreed. The consequences of this horrifying disaster were to lead to profound long-term changes in the economic and societal order of the medieval West. It is hardly surprising, therefore, that this 1348–9 epidemic has dominated discussion of the later medieval plague pandemic. Whilst the broad outlines and much local detail are firmly in place, the nature and effect of the Black Death remain the focus of lively debate. The specific epidemiological nature of the contamination, for example, is not even settled. As old assumptions are challenged and new interpretations offered, the historiography of the Black Death continues to grow.

Considerably less attention to date has been devoted to the recurrent pestilences of the later Middle Ages, both national and regional. In England such epidemics occurred with greatest vigour in 1361–2, but also in 1369, 1379–83, 1389–93, and on at least 13 further occasions in the following century.² These later outbreaks occasioned lower rates of mortality. Historians' chief interest has been in their cumulative effect on a persistently low level of population and fertility, rather

¹ The author would like to thank Professors Peter Coss and Pat Hudson for their valuable comments on earlier drafts of this paper. This article is an outcome of the 'Winchester Pipe Roll Project' (2000–3), which benefited from the generous funding of the Leverhulme Trust and the practical support of Hampshire County Council Record Office, Winchester.

² For useful summaries see Jim L. Bolton, 'The world turned upside down', in Mark Ormrod and Philip G. Lindley (eds), *The Black Death* (Stamford: Paul Watkins, 1996), pp. 17–78; John Hatcher, *Plague, Population and the English Economy, 1348–1530* (Macmillan: The Economic History Society, 1977), *passim*; Rosemary Horrox (ed.), *The Black Death* (Manchester: Manchester University Press, 1994), pp. 3–13; John F.D. Shrewsbury, *A History of Bubonic Plague* (Cambridge: Cambridge University Press, 1970), pp. 126–33.

than on individual epidemics. Yet there are features of the recurrent outbreaks which distinguish them from the pandemic's first visitation. In particular, some of them appear to have had the capricious and intriguing tendency to single out the wealthy and the young, especially young men. Although the sex-selective nature of the great second epidemic of 1361–2 was mentioned by chroniclers, such claims have been subject to little empirical analysis by historians.³ The aim of this paper is to address this deficiency by examining the entry fines from the estate of the bishop of Winchester.

The second great epidemic broke out in the spring or early summer of 1361, some 13 years after the Black Death.⁴ There was a general consensus amongst contemporaries that this second outbreak was rather less purgative and less toxic than its predecessor.⁵ Writing as events unfolded, the chronicler of Grey Friars in Lynn remarks that 'this pestilence was considerably less than that of thirteen years earlier'.⁶ Another relates that the epidemic was 'nothing near so dismal and universally fatal as the former'.⁷ Nonetheless the outbreak was severe. Several contemporary or near contemporary chroniclers describe the epidemic as a 'great pestilence' and as a 'general mortality' which 'oppressed the people'.⁸ Writing close

³ Gottfried offers just over a page on the outbreak in his final chapter, whilst Zeigler gives even less than this, though he does concede that in any examination of social change 'two and not one epidemics have to be taken into account.' Robert S. Gottfried, *The Black Death: Natural and Human Disaster in Medieval Europe* (London: The Free Press, 1983), pp. 130–1; Philip Ziegler, *The Black Death* (London: Collins, 1969), p. 234. J.F.D. Shewsbury's wide-ranging study of bubonic plague, published nearly four decades ago, continues to be a useful reference book for the second pestilence.

⁴ Exact datings vary. Ralph Higden's continuator refers to a date of 'about Easter [28 March]', whilst John of Reading points more precisely to '6 May 1361, that is the vigil of Ascension Day.' Horrox, *Black Death*, pp. 85–6. Shewsbury remarks that this epidemic, which he regards as influenza rather than bubonic plague, may have erupted in London as early as the autumn of 1360 or in the winter of 1361, but it was certainly endemic by May 1361. Shewsbury, *History of Bubonic Plague*, p. 128.

⁵ See Horrox, *Black Death*, pp. 85–8.

⁶ Horrox, *Black Death*, p. 86: 'hec tamen pestilencia fuit multo minor quam precedens [sic] anno 13^{mo}.' The author, almost certainly a Franciscan of Lynn, appears to have been writing contemporaneously with events. Antonia Gransden, 'A fourteenth-century chronicle from the grey friars at Lynn', *Economic History Review*, 2nd series, 72, 283 (1957), pp. 272–3 and 275.

⁷ Cited in Shewsbury, *History of Bubonic Plague*, pp. 128–9.

⁸ Horrox, *Black Death*, p. 85.

to the events, an anonymous Canterbury chronicler relates with some sense of drama: ‘In 1361 a grave pestilence and mortality of men began throughout the world.’⁹ The well-informed author of the *Anonimale Chronicle* looked back on this epidemic as the ‘second pestilence’ – a status not granted to subsequent outbreaks – giving it some parity with that of 1348–9. Contemporaries also suggest, however, that the plague’s return may have been rather more regionalised than in 1348–9. Both Higden’s continuator and the Lynn annalist note that the outbreak began in London, the latter adding that the pestilence was one to be found in the south of England.¹⁰ A letter close of 10 May 1361 states that Trinity Term was adjourned as ‘great multitudes of people are suddenly smitten [...] in the city of London as in neighbouring parts’.¹¹ In December of that year, the bishop of Winchester’s register records the appointment of Henry de Yakeslee as warden of St Thomas’ Hospital, Southwark, and ‘that since the death of fr. John de Bradeweie, the last prior, all the brethren are dead except one and the hospital is almost destitute’.¹² It is in the south that we find the well-known inscription on the church tower at Ashwell in Hertfordshire lamenting that the 1361–2 plague was ‘wretched, fierce and violent’ and that only ‘the dregs of the populace lived to tell the tale’.¹³

⁹ Horrox, *Black Death*, p. 86.

¹⁰ ‘in partibus australibus Anglie’, Gransden, ‘Fourteenth-century chronicle’, p. 275. Rosemary Horrox’s anthology of documents relating to the fourteenth-century plagues facilitates assessment of these contemporary observations. Horrox, *Black Death*, esp. pp. 11–12 and 85–8. The continuator of Higden’s *Polychronicon* and the Lynn and Canterbury chroniclers appear to have been writing very close to the events described, but Knighton, the author of the *Anonimale Chronicle*, and Thomas Walsingham were writing during the 1370s and 1380s and drawing on earlier material. Knighton and Walsingham certainly made use of Higden’s work. See Antonia Gransden, *Historical Writing in England*, vol. ii, c. 1307 to the Early Sixteenth Century (Ithaca and New York: Cornell University Press, 1982), pp. 43–57, 119–27, and 159–60.

¹¹ Calendar of Close Rolls, Edward III, 11 (London: H.M.S.O., 1892–), p. 182; see also pp. 197–8.

¹² S.F. Hockey (ed.), *The Register of William Edington Bishop of Winchester, 1346–1366*, part 1, Hampshire Record Series, 7 (Winchester: Hampshire County Council, 1986), pp. 163–4 and 207, nos. 1084, 1085, and 1426.

¹³ B. Dickens, ‘Historical graffiti at Ashwell, Hertfordshire’, in Violet Pritchard (ed.), *English Medieval Graffiti* (Cambridge: Cambridge University Press, 1967), p. 181; Colin Platt, *King Death: the Black Death and its Aftermath in Late-Medieval England* (London: UCL Press, 1996), p. 1.

More arresting are the chroniclers' remarks that later epidemics tended to attack the young. It is a persistent theme, but is associated in particular with the great plague of 1361–2.¹⁴ In the words of Henry Knighton, 'It was called the second pestilence and both rich and poor died, but especially young people and children.' After noting the geographical focus of the epidemic, the chronicler of the Grey Friars of Lynn writes of 'the death of children and adolescents, and of the wealthy.' Others offer a specific account of the contagion's sex-selective nature, observing that the epidemic of 1361–2 was prone to strike males. According to the continuator of Ralph de Higden's *Polychronicon*, 'About Easter 1361 a great pestilence of men began in London and then it steadily advanced from the south of England to the rest of the country, killing many men but few women.'¹⁵ The Chronicle of Melsa from the north of England describes the outbreak as the '*secunda pestilentia [...] que dicta est puerorum*.'¹⁶

Chroniclers of later decades take up the same theme. In addition to registering the deaths of several ecclesiastical and lay aristocrats including Henry Duke of Lancaster, Thomas of Walsingham expresses the view that, 'in 1361 there was a great pestilence which devoured men rather than women.' With words bearing a strong resemblance to those of Walsingham, John of Reading notes that, 'this year the mortality was particularly of males, who were devoured in great numbers by the pestilence.'¹⁷ Similar comments can be found in France, Spain, and other parts of

¹⁴ Horrox, *Black Death*, pp. 85–8. See also Bolton, 'World turned upside down', pp. 26–40.

¹⁵ Churchill Babington and Joseph R. Lumby (eds), *Polychronicon Ranulphi Higden, Monachi Cestrensis*, 8, Rolls Series (1865–96), p. 360, also quoted in Horrox, *Black Death*, p. 85.

¹⁶ Cited in Hatcher, *Plague, Population*, pp. 58–9.

¹⁷ Gransden, *Historical Writing in England*, pp. 56 and 124.

Europe.¹⁸ The 1361–2 plague was not unique in this. Walsingham comments that the outbreak of 1390 ‘especially attacked adolescents and boys’.¹⁹

Such remarks are most interesting, for a subsequent male–female imbalance in the population, especially amongst the young, would have severe consequences for longer-term fertility.²⁰ If the words of chroniclers can be substantiated, our grasp of the nature of the later medieval epidemics will be improved. The laying of some statistical foundations may provide historians with a further tool to investigate the complex dynamics of the later medieval population.

Towards the end of the fourteenth century national and regional bouts of infection had become routine and, in comparison with those of 1348–9, the chronicles’ accounts tend to become increasingly pithy. Even those writing of 1361–2 are relatively brief.²¹ Historians tend to mention the second pestilence only in passing in general accounts of the Black Death, and rather than being considered independently, the 1361–2 outbreak is usually studied only in its contribution to long-term population stagnation and economic decline. Repeated outbreaks were ‘not merely a disaster but a stupid and tedious bore’, whose cumulative effect was to act as a brake on the population and the economy.²² Recent research into late medieval patterns of morbidity, rates of mortality, and questions of long-term trends in marriage and fertility has tended to examine the more accessible institutional material

¹⁸ Bolton, ‘World turned upside down’, pp. 27–8; Hatcher, *Plague, Population*, pp. 58–9; Shrewsbury, *History of Bubonic Plague*, p. 127–9; Charles Creighton, *A History of Epidemics in England*, vol. 1, *AD 664–1666* (London: Frank Cass, 1965 edn), p. 203.

¹⁹ Gransden, *Historical Writing in England*, p. 124.

²⁰ John Hatcher, for instance, observes that distorted age and sex structures would have affected the population’s ability to reproduce and that ‘the fertility schedule might be lowered for a decade or more as depleted cohorts reached marriageable and child-bearing age.’ Hatcher, *Plague, Population*, p. 61; see also Maurice Keen, *English Society in the Later Middle Ages, 1348–1500* (Harmondsworth: Penguin, 1990), p. 38.

²¹ Horrox, *Black Death*, pp. 11–13.

²² John Saltmarsh, ‘Plague and economic decline in England in the later Middle Ages’, *Cambridge Historical Journal*, 7, 1 (1941), pp. 25–6 and 37.

of the late fourteenth and fifteenth centuries, leaving the few decades after 1361–2 largely untouched.²³

Whilst the long-term trends of the later medieval economy are reasonably well understood, the precise effects of the great second epidemic are less clear. For economic historians the importance of the second and subsequent epidemics is to be found in their contribution to economic decline and their compounding of the consequences of the Black Death. As long ago as 1941, Saltmarsh observed that the ‘beginnings of the permanent decay of the manorial system can first be traced, here and there, about the time of the second plague – the Pestis Secunda of 1361.’²⁴

Saltmarsh’s case may be overstated, but certainly the events of 1361–2 seem to have had some effect on prices and wages. Farmer has demonstrated that the sensitive prices of oxen and wheat both began to rise sharply in the two years after the second visitation, with wheat rising to more than 10s a quarter by 1363–4 and oxen to 17s an animal by 1364–5. Such increases concur with Phelps-Brown’s calculation of a sharp rise in the index of consumables about this time.²⁵ The decade also witnessed an overall escalation in wages across a range of occupations.²⁶ Farmer provides us with

²³ J. Hatcher, ‘Mortality in the fifteenth century: some new evidence’, *Economic History Review*, 2nd series, 39, 1 (1986), pp. 19–38; Barbara F. Harvey, *Living and Dying in the Middle Ages* (Oxford: Clarendon Press, 1993), pp. 122–9; Richard Lomas, ‘The Black Death in county Durham’, *Journal of Medieval History*, 15, 2 (1989), pp. 127–41; A.J. Pollard, *North-Eastern England During the Wars of the Roses. Lay Society, War, and Politics 1450–1500* (Oxford: Clarendon Press, 1990), p. 48; Christopher Dyer, *Lords and Peasants in a Changing Society. The Estates of the Bishopric of Worcester, 680–1540* (Cambridge: Cambridge University Press, 1980), pp. 223–5; Robert S. Gottfried, *Epidemic Disease in Fifteenth Century England: the Medical Response and Demographic Consequences* (Leicester: Leicester University Press, 1978), pp. 144–9; Jeremy P. Goldberg, ‘Mortality and economic change in the diocese of York, 1390–1514’, *Northern History*, 24, 1 (1998), pp. 38–55; Lawrence R. Poos, *A Rural Society After the Black Death: Essex 1350–1525* (Cambridge: Cambridge University Press, 1991), pp. 118–20; Richard H. Britnell, *Growth and Decline in Colchester, 1300–1525* (Cambridge: Cambridge University Press, 1986), chapters 6 and 13, *passim*.

²⁴ Saltmarsh, ‘Plague and economic decline’, pp. 25–6 and 37.

²⁵ David L. Farmer, ‘Prices and wages, 1350–1500’, in Edward Miller (ed.), *The Agrarian History of England and Wales*, III, 1348–1500 (Cambridge: Cambridge University Press, 1991), pp. 434–5; E. Phelps-Brown and S.V. Hopkins’ data, given in graphical form in Jim L. Bolton, *The Medieval English Economy 1150–1500* (London and Melbourne: Dent, 1980), p. 69.

²⁶ The work of William Beveridge remains valuable here: William Beveridge, ‘Wages in the Winchester manors’, *Economic History Review*, 7, 1 (1936), pp. 38–43; ‘Westminster wages in the manorial era’, *Economic History Review*, new series, 8, 1 (1955), pp. 21, 25, and 27. See also Michael

some more specific examples which indicate that it was the epidemic of 1361–2 that led to an immediate hike in wages: ‘even the Winchester manors had to break rank and custom by giving bribes and incentives.’ On the manor of Farnham the episcopal administration found itself compelled to pay wages of 12d an acre in the summers of 1361 and 1362, in contrast to the 8d of 1360, and slaters and their helpers took home 1¼d more in 1362–3 than they had done in 1360–1.²⁷ However, such examples do not indicate that the second epidemic was crucial to England’s economic fortunes. High as they were, prices rose together with wages, and the price rises of the early 1360s were a long way from famine levels.²⁸ It was perhaps the third pestilence of 1369 that had the most serious economic effect, for prices rose even further, although by the mid 1370s prices of wheat and other consumables had fallen again dramatically. Thus it is difficult to claim that the second pestilence had a particular influence on the price or wage trends of the later fourteenth century. However, the interval between the first and second epidemics was not long enough for the population to recover and, although fewer might have perished in 1361–2 than in the late 1340s, the proportional effect is likely to have been greater. The reappearance of epidemic in 1361–2 twisted the knife in an already wounded economy and ensured it could not, at least in the short term, get back on its feet.

Empirical data on the mortality of 1361–2 is relatively difficult to gather, and certainly far less readily available than for that of 1348–9. As far as the great

M. Postan, *Essays on Medieval Agriculture and General Problems of the Medieval Economy* (Cambridge: Cambridge University Press, 1973), pp. 191–4.

²⁷ Farmer, ‘Prices and wages’, pp. 471, 477, and 485. Though calculated as decennial means, Beveridge’s statistics do seem to indicate that a particularly sudden and large rise in rates for threshing and winnowing on the Winchester manors owed itself to the 1361–2 outbreak. Compare Table 1 (p. 38) with Chart A (p. 43). Beveridge, ‘Wages in the Winchester manors’, pp. 22–43.

²⁸ In the light of Farmer’s work it is difficult to accept Bridbury’s rather speculative remarks that prices hit famine levels in 1362 and in the subsequent three years, and that ‘if the price index is rightly linked to the pestilences then pestilence left a far deeper mark in 1361–2 than it did when it first devastated the country in mid-century.’ Anthony R. Bridbury, ‘The Black Death’, *Economic History Review*, 2nd series, 22, 4 (1973), p. 584.

majority of the population is concerned, the necessary evidence remains buried in diocesan registers and in manorial court and account rolls. Nonetheless, there is sufficient available material for analysis. Several authorities confirm the chroniclers' mention of wealthy victims in the second outbreak. Russell calculates that the death rate amongst tenants-in-chief was a massive 23 per cent; McFarlane determines an almost identical death rate of 23.9 per cent for the nobility, contrasting with 4.5 per cent in 1348 and 13 per cent in 1349.²⁹ A far higher rate of mortality in 1361 has also been observed amongst the Wiltshire tenants-in-chief,³⁰ whilst for the clergy of the diocese of York, mortality in 1361–2 was between 9.5 and 14 per cent.³¹ These figures are not representative of the lower social orders. Levels of mortality amongst manorial tenants in 1361–2 are indicated in a range of local studies. Titow's analysis of the bishop of Winchester's manor of Bishop's Waltham in Hampshire shows that some 65 per cent perished in the Black Death, whereas just 13 per cent did so in 1361–2.³² This latter figure is in line with those given in studies of other manors. Zvi Razi's work on the court rolls of the manor of Halesowen gives a mortality rate of around 43 per cent for the 1348–9 epidemic and only 9.3 per cent for that of 1361–2.

²⁹ Josiah C. Russell, *British Medieval Population* (Albuquerque: University of New Mexico, 1948), pp. 217–18 and 222. See also A. Hamilton-Thompson, 'The pestilences of the fourteenth century in the diocese of York', *Archaeological Journal*, 71 (1914), pp. 97–154; Bruce McFarlane, *The Nobility of Later Medieval England: the Ford Lectures for 1953 and Related Studies* (Oxford: Clarendon Press, 1973), pp. 168–71.

³⁰ A.E. Nash's work on the Wiltshire *Inquisitiones Post Mortem* for the period 1242–1377 shows that 22 Wiltshire lords perished in 1348 compared to 36 in 1361. The majority of these deaths took place in late summer and autumn. A.E. Nash, 'The mortality pattern of the Wiltshire lords of the manor, 1242–1377', *Southern History*, 2 (1980), pp. 31–43.

³¹ Russell, *British Medieval Population*, pp. 217–18 and 222; see also Hamilton-Thompson, 'Pestilences of the fourteenth century', pp. 114–15.

³² Jan Z. Titow, *English Rural Society, 1200–1500* (London: Allen and Unwin, 1969), pp. 69–70. Percentile comparisons of mortality between the two epidemics are not without problems, because reproduction and immigration on the one hand and migration, famine level harvests, and a temporal shift in fertility on the other, may skew comparisons. Poos observes population upturns in the mid 1350s on three Essex manors so that by 1363 the population of adult males was rather lower than one might have anticipated. Lawrence R. Poos, 'The rural population of Essex in the later Middle Ages', *The Economic History Review*, 2nd series, 38, 4 (1985), pp. 524–5. See also Bruce Campbell, 'Population pressure, inheritance and land market in a fourteenth century peasant community', in Richard Smith (ed.), *Land Kinship and Life-Cycle* (Cambridge: Cambridge University Press, 1984), pp. 96–101.

More recently, Pamela Nightingale, in her study of creditors' certificates, calculates a mortality of creditors of 14 per cent for 1362 and 10.5 per cent for 1363.³³ From the evidence of the Winchester estate heriots, Farmer suggests that the mortality in 1361–2 was about a third or a quarter of that established by Postan and Titow for the first outbreak.³⁴ Thus amongst the lower social orders the consensus is of a range of mortality between nine and 14 per cent.³⁵

Studies of longer periods of time suggest that the second and subsequent epidemics had a serious effect on an already depleted population. Bruce Campbell's study of the manor of Hakeford Hall in Coltishall, Norfolk points to a 55 per cent decline in tenant numbers between 1359 and 1370, a period including the third as well as the second outbreak. Richard Lomas computes a reduction of 43 per cent of Durham cathedral priory's tenants over the period 1348–9 to 1396.³⁶ More generally, William Rees notes that the epidemic in South Wales was 'severe' and that on Caldicot, a manor that was especially badly affected, close to 90 per cent of customary works were in decay.³⁷ Further north the properties of the Bishop of Worcester were badly affected, particularly in the eastern part of the estate: as many

³³ Zvi Razi, *Life, Marriage and Death in a Medieval Parish. Economy, Society and Demography in Halesowen, 1270–1400* (Cambridge: Cambridge University Press, 1980), pp. 103 and 127; Pamela Nightingale, 'Some new evidence of crises and trends of mortality in later medieval England', *Past and Present*, 187, 1 (2005), p. 47.

³⁴ Farmer 'Prices and wages', p. 438, n. 8; Michael M. Postan and Jan Z. Titow, 'Heriots and prices on Winchester manors', *The Economic History Review*, 2nd series, 11, 3 (1959), pp. 392–411.

³⁵ These figures are also in agreement with recent research on the valley of the Maurienne, in the western Alps of France, which indicates a mortality 'in the vicinity of 15 to twenty percent.' I would like to thank Michael Gelting for allowing me to read a copy of his paper 'Peasant prosopography and the second wave of the Black Death: Maurienne Savoy', given at The Medieval Symposium 'Living with the Black Death', SDU Odense, 8–9 November 2004.

³⁶ Lomas, 'Black Death in county Durham', pp. 134–5.

³⁷ William Rees, 'The Black Death in England and Wales as exhibited in manorial documents', *Proceedings of the Royal Society of Medicine*, 16 (February 1923), pp. 27–45; William Rees, *South Wales and the March, 1284–1415. A Social and Agrarian Study* (Oxford: Oxford University Press, 1924), pp. 249–52.

as 20 tenants may have died on the manor of Kempsey alone; here and on other manors of the Bishop as many as 29½ virgates fell vacant at this time.³⁸

Empirical evidence of the sex-selective nature of the 1361–2 epidemic has received some, albeit limited, attention. Sylvia Thrupp notes from the court rolls of Redgrave, Brandon, and Thorney that there was not only a high mortality in 1361, but also a distinct lack of male heirs in subsequent years. She also observes that on the manor of Thorney 31 per cent of men died without sons in the 1370s. There persisted over the following decades ‘a sinister proportion of the male tenant deaths being of men who left no sons or were childless’.³⁹ In connection with his work on the manor of Halesowen, Zvi Razi calculates that the death rate for men and women was about equal in 1348–9, but that just three women died in the year 1361–2 compared to nine men. The author appears to be rather uncomfortable with the evidence, however, and is driven to assume, despite the chroniclers, ‘that the low number of deaths of women recorded in 1361–2 was the result of omission, and that the second plague, like the later ones, took a heavy toll of life among the women of the parish’.⁴⁰ Given the relatively small numbers involved, his caution is understandable. Bruce Campbell’s work on Coltishall and at Martham in Norfolk

³⁸ Edmund B. Fryde, ‘The tenants of the bishops of Coventry and Lichfield after the plague of 1348–9’, in Roy F. Hunnisett and J.B. Post (eds), *Medieval Legal Records Edited in Memory of C.A.F. Meekings* (London: H.M.S.O., 1978), p. 235. See also Edmund B. Fryde, *Peasants and Landlords in Later Medieval England, c. 1380–c. 1525* (Stroud: Sutton, 1996), pp. 63–4. For further examples of the impact of the second pestilence see Bolton, ‘World turned upside down’, pp. 26–9; Hatcher, *Plague, Population*, pp. 18, 25, and 58–9. Shrewsbury notes that 192 institutions to vacant benefices were made in 1361 and 1362 in the diocese of Exeter. In Leicestershire 43 priests, the dean and 7 canons of Newark, and nearly all the brethren of St John’s hospital Leicester died of it. Shrewsbury also cites chronicle evidence recording that the epidemic killed around 1,200 people in London on the 24 and 25 June alone. Shrewsbury, *History of Bubonic Plague*, p. 128–33. Although one should be wary of projecting such figures onto the population as a whole, it is clear that mortality amongst the clergy could be very high indeed.

³⁹ Sylvia Thrupp, ‘The problem of replacement rates in late-medieval English population’, *Economic History Review*, 2nd series, 18, 1 (1965), pp. 109–10.

⁴⁰ Razi, *Life, Marriage and Death*, pp. 104, 126–9, and 143. See also Bolton, ‘World turned upside down’, pp. 27–8; Richard Smith, ‘Human resources’, in Grenville Astill and Annie Grant (eds), *The Countryside in Medieval England* (Oxford: Basil Blackwell, 1988), pp. 188–212; Edward Miller, ‘Introduction: land and people’, in Edward Miller (ed.), *The Agrarian History of England and Wales*, III, 1348–1500 (Cambridge: Cambridge University Press, 1991), pp. 5–6.

demonstrates not only a drastically reduced number of inheriting sons after the Black Death, but also a greatly increased rate of inheriting daughters between 1351 and 1375.⁴¹

The evidence which forms the basis of this study derives from the accounts of the bishops of Winchester, known as the Winchester pipe rolls.⁴² The bulk of the properties of the episcopal estate had come to the bishops by grants of the West Saxon kings in the seventh to tenth centuries, and whilst there was some flux in the number of manors as some were leased or taken back in hand and others split or merged, the estate was stable by the early fourteenth century: by 1361 it had consisted of 60 manors and boroughs for many years. Though the greatest concentration lay in Hampshire, a vast arc of episcopal property ran east to west from Surrey, across to Berkshire, Buckinghamshire, Oxfordshire, and west into Wiltshire and Somerset. The Winchester pipe rolls are the enrolled, fair copy post-audit accounts from each of the bishop's manors and boroughs. They survive in broken series from 1208–9 until the mid 1450s and thereafter in parchment volumes.⁴³ The huge quantity and range of the material provide a rich seam of information that scholars have mined for some time. An important section within each manorial account records property transfers and marriages, known as entry and marriage fines. Entry fines were levied by the bishop on admission of new tenants to customary holdings. Unusually, rather than recording a lump sum from courts' income, the bishops' pipe rolls itemise the payment of court fines. The records of fines provide

⁴¹ It is not clear to what extent the latter is directly connected with the epidemic of 1361–2. Campbell, 'Population pressure, inheritance', pp. 98–9.

⁴² The Winchester Pipe Rolls, Hampshire Record Office 11M59/B1/1–329. Dates and individual class marks are listed in catalogue CC 2.

⁴³ As was usual, the accounting year ran from Michaelmas to Michaelmas. Thus, for example, the account roll described as that for 1361 is in fact for Michaelmas 1360 to Michaelmas 1361. For a description of the records of the Winchester estate see T.W. Mayberry, *Estate Records of the Bishops of Winchester in the Hampshire Record Office* (Hampshire County Council, 1988), *passim*; see also the introduction to Richard H. Britnell (ed.), *The Winchester Pipe Rolls and Medieval English Society* (Woodbridge: Boydell Press, 2003).

the names of the parties involved, the nature of the property, and, either explicitly or implicitly, the reason for the property transfer. Further circumstantial evidence is often recorded. Landholding lay at the heart of the local peasant economy and its acquisition or loss contributes to our understanding of medieval population trends.

Analysis of entry fines is not an easy route to demographic knowledge. As little is known of age and nothing of other family members, unrecorded sub-tenants, the landless,⁴⁴ and patterns of migration, it is impossible to measure overall mortalities precisely. Neither can the number of tenants on any given manor be determined, nor detailed numerical reconstructions of shifts in population size and of social structures be made. Despite the limitations of the evidence, however, the Winchester fines have much to offer, for they are both numerous and distributed over a wide geographical area, allowing more statistical and regional analysis than other sources. Between 1360–1 and 1369–70, for example, there are some 4,186 entry fines covering the whole estate.⁴⁵

This study focuses on those transactions in property which arose as a result of the death of a customary tenant (fines *post-mortem*, either as inheritances or as conveyances to non-family members); *inter-vivos* transfers and marriages are largely excluded. The *post-mortem* entry fines in the 1350s represent approximately 55 per cent of all land transactions. Of these, 60 per cent are for inheritance, the remainder being *extra-familial* transfers. The fines are a useful source of evidence, because not only do they offer a complete record of *post-mortem* transactions in property, but the

⁴⁴ The number of landless could have been considerable. See Harold S.A. Fox, 'Exploitation of the landless by lords and tenants in early medieval England', in Zvi Razi and Richard Smith (eds), *Medieval Society and the Manor Court* (Oxford: Clarendon Press, 1996), pp. 518–68.

⁴⁵ The Winchester Pipe Roll database contains more than 70,000 entry and marriage fines covering the period 1263 to 1415. The increasing sophistication and availability of computer databases could not have been foreseen in 1977. Cf. Hatcher, *Plague, Population*, p. 62: 'It would clearly take some very sophisticated demographic analysis to calculate the precise effects of age- and sex-selective mortality, and the firm data from which such an analysis could be made are unlikely ever to be forthcoming in adequate quantities from medieval sources.'

relationship between the deceased and the successor is also made explicit.⁴⁶ Using them it is possible to compare relative mortality rates of customary tenants across manors and between sexes, thereby putting chroniclers' observations of the 1361–2 epidemic to the test.

I

The impact of the Black Death upon the bishop of Winchester's estate has received close scrutiny, chiefly from Levett and, more recently, Titow and Watts.⁴⁷ The effects of the second pestilence have been given comparatively little consideration.⁴⁸ Nevertheless, as they do for 1348–9, the manorial accounts demonstrate the severity of the 1361–2 epidemic. In addition to entry fines, the number of vacant tenements, lost rents, and other monies are recorded – and are indeed a marked feature of the pipe rolls.⁴⁹ The 1409/10 account roll for Cheriton manor, for example, lists defaults of rent, headed, 'Through the first pestilence, this being the sixty-second year' and 'Through the second pestilence, this being the forty-ninth year'.⁵⁰ The inclusion of these headings in the pipe rolls for many subsequent years testifies to a lasting

⁴⁶ As not all families of deceased customary tenants necessarily owed heriots, the *post-mortem* fines offer a more complete record of tenant mortality. Postan and Titow, 'Heriots and prices', p. 393.

⁴⁷ D.G. Watts, 'The Black Death in Dorset and Hampshire', in Tom B. James (ed.), *The Black Death in Wessex*, The Hatcher Review, 5, 46 (Southampton: The Hatcher Review Trust, 1999), pp. 21–8; Titow, *English Rural Society*; Jan Z. Titow, 'The decline of the fair of St Giles, Winchester, in the thirteenth and fourteenth centuries', *Nottingham Medieval Studies*, 31 (1987), pp. 58–75. See also D.G. Watts, 'The estates of Titchfield Abbey c. 1245 to c. 1380', unpublished B. Litt. thesis, Oxford University, 1957; Tom B. James, *The Black Death in Hampshire*, Hampshire Papers, 18 (Winchester: Hampshire County Council, 1999).

⁴⁸ It was the plague of 1361–2 that finally sealed the fate of St Giles' Fair in the suburbs of Winchester. See Titow, 'Decline of the fair', p. 63; Edward Miller, 'The southern counties', in Edward Miller (ed.), *The Agrarian History of England and Wales*, III, 1348–1500 (Cambridge: Cambridge University Press, 1991), pp. 140–1; Paul Harvey, 'The home counties', in Edward Miller (ed.), *The Agrarian History of England and Wales*, III, 1348–1500 (Cambridge: Cambridge University Press, 1991), p. 109.

⁴⁹ Other monies include those that accrued from properties not occupied under customary terms which were therefore regarded as vacant. See Jan Z. Titow, 'Lost rents, vacant holdings and the contraction of peasant cultivation after the Black Death', *Agricultural History Review*, 42, 2 (1994), pp. 97–114.

⁵⁰ Mark Page (ed.), *The Pipe Roll of the Bishop of Winchester 1409–10*, Hampshire Record Series, 16 (Winchester: Hampshire County Council, 1999), pp. 54, 210, 223, 257, and 340.

memory not only of the infamous Black Death, but also to the outbreak of 1361–2. No other visitations merited such headings, lending weight to the chroniclers' accounts of a ferocious epidemic.

An initial indicator of comparative levels of mortality in the two epidemics in southern England is given by the number of admissions to vacant benefices in the Winchester diocese, recorded in Bishop William Edington's register. The diocese was not coterminous with the episcopal estate, but levels of clerical mortality provide a useful comparison with the evidence of the entry fines. Registers have often been used by historians to illustrate and calculate the rate of the mortality of beneficed clergy in the diocese in 1348–9.⁵¹ Lunn argued that the Black Death occasioned a mortality rate of 48.8 per cent in the Winchester diocese, which was amongst the highest in England, whilst more recently Hockey has determined that there were 300 more vacancies in 1349 than in the preceding year.⁵² Table 1 has been calculated according to Hockey's edition of Bishop Edington's register.⁵³ It shows the clerical mortality for 1361 and 1362 in relation to that of the Black Death and the mean for the intervening years.

⁵¹ Shrewsbury, *History of Bubonic Plague*, pp. 90–3; Ziegler, *Black Death*, pp. 144–7; J. Lunn, 'The Black Death in the bishop's registers' (unpublished thesis, Cambridge University, 1930), now lost, but some statistics from it are in George G. Coulton, *Medieval Panorama* (Cambridge: Cambridge University Press, 1938), pp. 495–9; Ole J. Benedictow, *The Black Death 1346–1353: The Complete History* (Woodbridge: Boydell Press, 2004).

⁵² Lunn, 'Black Death', given in Benedictow, *Black Death*, p. 356; Hockey, *Register of William Edington*, pp. xii–xiii and *passim*.

⁵³ The problems inherent in the calculation of the levels of mortality of beneficed clergy are discussed by Benedictow. He outlines nine main areas in which the registers may prove inaccurate, one of the more important being that some new institutions were the result of a resignation rather than a death. Other factors include pluralism, absenteeism, the fact that bishops did not have right of institution to all benefices in their dioceses, and even that, in times of extreme mortality, the clerks did not necessarily enter all institutions. Benedictow, *Black Death*, pp. 343–9. Neither do the registers include unbeneficed clergy or members of religious houses. However, despite these problems, the evidence for the mortality of beneficed clergy in the 1360–1 epidemic is valuable when compared to earlier years and the Black Death. Table 1 was calculated using Hockey's figures for 1348 and 1349 and then counting all those institutions between 1351 and 1362 which were filled by reason of vacancy, ignoring resignations and exchanges. Whilst it is arguable whether these remaining vacancies were the result of death, Hockey points out that after April 1349 – when the epidemic was at its height – the clerks, with insufficient time and space, no longer recorded that the benefice was vacant by reason of death, but simply that it was vacant. Likewise, after June 1361, when numbers of vacancies had begun to rise dramatically, the phrase 'vacant by the death' was reduced to 'vacant'.

Table 1: Register of Edington, Vacant benefices

	1348	1349	1350	1351–60 (mean)	1361	1362
January	–	11	3	1	1	9
February	1	20	7	0.9	–	8
March	3	40	4	1.5	1	7
April	–	64	7	2.2	–	3
May	1	56	4	0.8	2	1
June	1	35	1	1.7	10	9
July	1	25	3	0.9	14	3
August	–	13	3	0.6	21	–
September	1	15	7	1	39	4
October	1	16	6	1.5	39	1
November	–	7	4	0.3	31	2
December	3	13	5	0.9	11	2
	12	315	54	13.3	169	49

Source: S.F. Hockey (ed.), *The Register of William Edington Bishop of Winchester 1346–1366*, part 1, Hampshire Record Series 7 (Hampshire, 1986), pp. xiii and 120–223

The figures support the accounts of chroniclers that fewer perished in 1361–2 than in the Black Death, and that the second outbreak was particularly virulent in the south of England. The mortality rate during the 1361–2 epidemic is severe compared to the mean in preceding years. The levels of mortality amongst beneficed clergy, suggested by the register, from May 1361 to the end of the following year equate to 58.5 per cent of those of 1349 and 1350. Lunn’s figure of 48.8 per cent mortality in the Black Death implies that the mortality level of clergy in the second outbreak was approaching 30 per cent. This is an extraordinarily high figure, particularly in comparison with Russell’s calculation of clerical mortality in the diocese of York of

between 9.5 and 14 per cent.⁵⁴ Whilst it is possible that there may have been an exceptional level of unauthorised absence and retirement – and recent findings do suggest that calculations of clerical mortality are likely to err on the side of inflation – these figures are striking.⁵⁵

Determining precisely when the diocese first became contaminated by disease is more difficult. Calculations for the lapse of time between contamination, the death of the beneficed priest, and the appointment of his successor during the Black Death have been the focus of some debate. More recent interpretations suggest a gap as short as eight-and-a-half to twelve-and-a-half weeks.⁵⁶ If the shorter of these two periods is applied to the first recorded clerical death, that of John de Westbury, rector of St Mary in Vallibus in Winchester, on 26 May 1361, this dates the start of the outbreak to Sunday 28 March, i.e. Easter day, which matches precisely the observation of Higden's continuator. The steep rise of new appointments in June indicates that contamination was well advanced by early May, and it was not until the late summer of 1362 that it began to abate. Table 1 also suggests that rates of infection peaked in the late summer and autumn, subsiding over the winter, a pattern similar to that identified by Hatcher and Harvey for later outbreaks amongst the Canterbury and Westminster monks.⁵⁷

Whether clerical mortality reflects the situation for the majority of the bishop's customary tenants is another matter. Indeed clerics might well have been at more risk of infection because of their visits to the sick and their duty to ensure that

⁵⁴ See n. 32.

⁵⁵ See n. 54. See also Benedictow, *Black Death*, p. 346.

⁵⁶ Benedictow offers the most recent discussion of this problem but relies chiefly on R.A. Davies' work on the diocese of Coventry and Lichfield. Benedictow, *Black Death*, pp. 140–1; R.A. Davies 'The effects of the Black Death on the parish priests of the medieval diocese of Coventry and Lichfield', *Historical Research*, 62, 147 (1989), p. 88. See also F.A. Gasquet, *The Great Pestilence* (London: Simkin, Marshall, and Hamilton, 1893), p. 130 and Ziegler, *Black Death*, p. 144.

⁵⁷ Hatcher, 'Mortality in the fifteenth century', p. 26; Harvey, *Living and Dying in the Middle Ages*, pp. 122–9. See also Bolton, 'World turned upside down', pp. 30–1.

sick parishioners had been shriven. A somewhat lower mortality rate for the bishop's customary tenants might be expected. Some measure of their level of mortality in the epidemic of 1361–2 can be gauged by simple comparison of the numbers of *post-mortem* entry fines over an extended period. The pattern of these land transfers between 1339/40 and 1379/80 leaves little doubt that the epidemic of 1348–9 brought about massive mortality, whilst that for 1361–2 was rather less severe but considerably worse than in other years. The figures for inheritance and other *post-mortem* land transfers suggest that the number of those who perished in 1348/9 was between three and four times greater than in 1361/2.

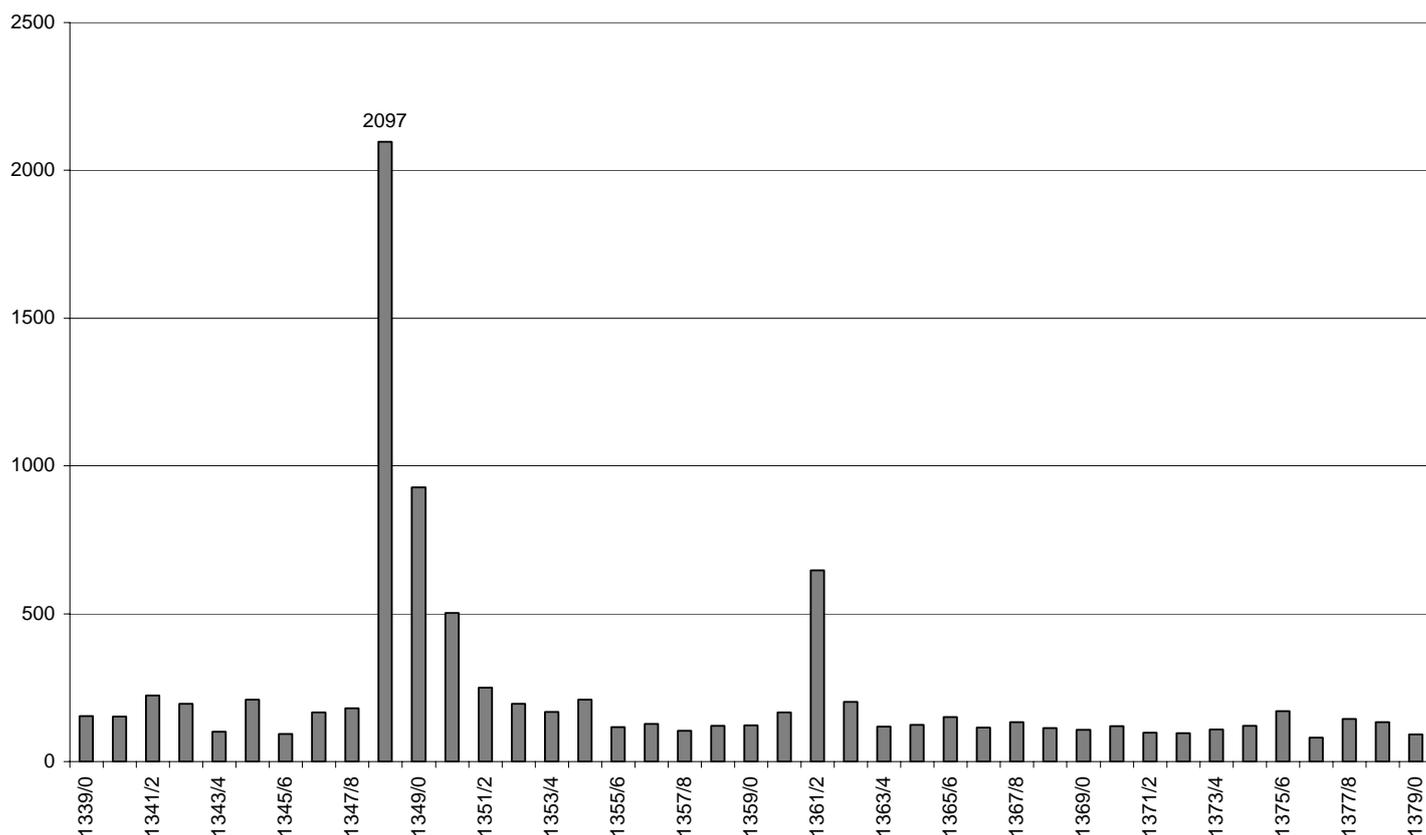


Figure 1: Inheritance and extra-familial *post-mortem* transactions 1339/40–1379/80

Source: Winchester Pipe Rolls, 11M59 B1/93–132

However, the two totals cannot be compared without caveats. Although the fines record the death of a tenant as a direct result of pestilence only rarely, for the sake of comparison, it must be assumed that deaths by other causes remained more or less static.⁵⁸ Moreover, many properties were not reoccupied immediately. The *post-mortem* fines indicate that tenements vacant due to the Black Death were still being taken up as late as 1354/5. The bulk of reoccupations of vacant holdings due to the 1361/2 outbreak took place within a year. Thus later property transfers need to be added to each epidemic's total. According to the entry fines for the whole estate in the nine years before the arrival of the Black Death (1339/40 to 1347/8), the mean of *post-mortem* fines indicates 141 deaths per year. As Figure 1 illustrates, it was not until the mid 1350s that the number of *post-mortem* transfers returned to similar levels. From then until the onset of the second epidemic there was an almost identical mean of 135 per annum. However, the delayed reoccupations are much less in evidence after the second outbreak – they were both fewer and decreased almost immediately. This suggests that the aggregate of mortality of the bishop's tenants in the second epidemic was lower than during the Black Death by a factor of 5.8. The rolls record an increase of 3,361 tenant deaths for the period 1348/9 to 1354/5, and an increase of 577 for the period 1361/2 to 1362/3. These figures correlate closely with those of other manors in Hampshire outside of the bishopric estate, but are marginally higher than those further afield. At Titchfield, for example, mortality was around 80 per cent in 1348, but between 12 and 18 per cent in 1361 – around five times less.⁵⁹

It is possible that already depleted local populations were hit proportionately harder by the second epidemic than the entry fines suggest as not all vacant holdings

⁵⁸ Explicit mention of death as a result of pestilence occurs in only a handful of cases, and all belong to the 1348 epidemic.

⁵⁹ Watts, 'The Black Death in Dorset', pp. 23–5; Watts, 'Estates of Titchfield Abbey', p. 186.

were reoccupied. An indication of this is to be found in net changes in the number of vacant holdings between the Black Death and the mid 1360s, recorded elsewhere in the pipe rolls and tabulated by Jan Titow. Whilst some of the more populous manors, such as Bishops Waltham and those of the Taunton group in Somerset, had very few long-term vacancies after either epidemic, others had many. At Twyford and Marwell there were 48 empty holdings in 1350/1, and although this had fallen to 42 by the mid 1350s the number had returned to 48 by 1364–5. The two manors were by no means unique. On a large number of the bishops' manors a modest reoccupation of vacant holdings in the 1350s was actually followed by new increases in vacancies in the early 1360s, in some cases dramatic ones. At Downton in southern Wiltshire, 33 vacant holdings in 1355/6 rose to 52 in 1364/5, leaving a further 328½ acres without tenants, and at Witney in Oxfordshire there were an additional 22 tenements unoccupied by the later date. Similar patterns are found elsewhere about the estate.⁶⁰ Clearly not all vacant holdings were the direct result of the great epidemic of 1348/9; some were due to an ongoing erosion of conditions – the result of 'a temporal shift in fertility or a net outflow of population by migration'.⁶¹ The fact that some manors experienced an increase in the number of vacant tenements whilst others were able to fill all or most of theirs is important, because it suggests significant variation in the gravity of the 1361–2 outbreak.

Only for the Hampshire manor of Bishops Waltham is it possible to calculate with any accuracy the number of tenants who perished. The chance survival of a rental of 1332 for this large and populous manor enabled Titow to determine that 264 out of a total of 404 tenants died in the year of the Black Death, leaving 140 and

⁶⁰ Titow, 'Lost rents', pp. 109–12.

⁶¹ Campbell, 'Population pressure, inheritance', p. 99.

indicating a 65 per cent mortality rate.⁶² Vacant holdings were reoccupied very quickly.⁶³ This permits calculation of the mortality level for the tenants of 1361/2. The Bishops Waltham account records 62 inheritance and other *post-mortem* fines during the second outbreak, i.e. 15.3 per cent, very close to the 13 per cent taken from heriots by Titow. As previously mentioned, analysis of the entry fines alone gives little indication of the overall number of tenants so it is not possible to calculate rates of mortality elsewhere. However, comparison of *post-mortem* fines – as a percentage of all entry fines for each manor – permits investigation of the relative differences in mortality. Different percentages of *post-mortem* land transactions for each manor indicate that rates of mortality across the Winchester estate were far from uniform.⁶⁴ This may point to variations in the epidemic's virulence.

Table 2 indicates some regional variation. Bishops Waltham has a rather high proportional mortality, but so too do many of its neighbouring episcopal manors in Hampshire, both north and south.⁶⁵ The bishop's estates in Wiltshire also experienced a relatively high proportion of deaths.⁶⁶ On the other hand those in the Taunton group appear to have been less severely affected.⁶⁷ It is difficult to see any pattern elsewhere, particularly on the more distant of the estate's manors. Whilst the Berkshire manors of Brightwell and Harwell experienced similar levels of mortality, this was not the case with Witney and Adderbury in Oxfordshire. Any manor with a

⁶² Titow used heriots and entry fines to make his calculations, as well as a rental for 1332. Titow, *English Rural Society*, pp. 69–70.

⁶³ Titow, 'Lost rents', pp. 99 and 109–12.

⁶⁴ On smaller manors, or on those recording few fines, the relatively small number of deaths may well be substantial in relation to total population.

⁶⁵ Ashmansworth, North Waltham, Twyford, Cheriton, Overton, Hambleton, Droxford, Bentey, Burghclere, Alresford, Woodhay, Bishops Sutton, Bitterne, Bishopstoke, Bishops Waltham, and Highclere.

⁶⁶ East Knoyle, Downton, and Bishopstone.

⁶⁷ It is noteworthy that, in the early fifteenth century at least, none of the manorial accounts for the Taunton group of manors – Holway, Otterford, Rimpton, Staplegrove, Bishops Hull, Nailsbourne, Poundisford, and Taunton Borough – contains sections recording vacant holdings arising from the second pestilence. Page, *Pipe Roll of 1409–10*, *passim*.

Table 2: Inter-manorial variation in the mortality of tenants 1361–3

Percentile range of <i>post-mortem</i> transfers	Number of manors	Manors (<i>post-mortem</i> fines/total fines/%)
>80%	10	Alverstoke, (2/2, 100%) Ashmansworth (3/3, 100%), Downton Borough (1/1, 100%), North Waltham (1/1, 100%), East Knoyle (14/15, 93.3%), Twyford (12/13, 92.3%), Cheriton (7/8, 87.5%), Overton (5/6, 83.3%), Warfield (31/37, 83.8%) Hambledon (21/26, 80.1%),
60–79.9%	18	Waltham St Lawrence (17/22, 77.3%), Droxford (13/17, 76.5%), Morton (3/4, 75%), Bentley (15/21, 71.4%), Fareham (27/35, 77.1%), Otterford (7/10, 70%), Bishops Sutton (24/35, 68.6%), West Wycombe (13/19, 68.4%), Bishopstoke (19/28, 67.9%), Bitterne (22/33, 66.7%), Burghclere (15/20, 65.2%), Downton (32/50, 64%), Woodhay (23/36, 63.9%), Bishops Waltham (83/138, 60.1%), Alresford (12/20, 60%), Adderbury (12/20, 60%), Bishopstone (6/10, 60%), Highclere (9/15, 60%)
40–59.9%	19	Brockhampton (31/52, 59.6%), Taunton Borough (4/7, 57%), Ecchinswell (9/16, 56.3%), Wargrave (9/16, 56.3%), Bishops Fonthill (5/9, 55.6%), Farnham (33.61, 54.1%), Merdon (24/46, 52.2%), East Meon (36/71, 50.1%), Holway (47/94, 50%), Marwell (3/6, 50%), Wield (3/6, 50%), Nailsbourne (26/53, 49.1%), Poundisford (44/91, 48.9%), Staplegrove (37/80, 46.3%), Ivinghoe (19/43, 44.2%), Brightwell (6/14, 42.9%), East Meon Church (5/12, 41.7%), Crawley, (4/10, 40%), Harwell (4/10, 40%)
20–39.9%	2	Bishops Hull (21/55, 38.2%), Witney (35/93, 37.6%)
<20%	5	Rimpton (1/8, 12.5%), Esher (1/9, 11.2%), Culham (0/1, 0%), Beauworth (0/1, 0%), Upton (0/1, 0%)

Notes: This table compares the entry fines through inheritance and extra-family *post-mortem* with the total fines for the estate's manors for the accounting years 1361–2 and 1362–3. The manor of Gosport records no fines for inheritance in this year.

Sources: Winchester Pipe Rolls, Hampshire Record Office 11M59 B1/114–115

proportion of *post-mortem* entry fines below about 50 per cent may be said to have escaped the worst effects of the epidemic. It must be borne in mind that a large proportion of property was always transferred as a result of death. Of the 2,207 fines for the whole estate in the five years prior to the second outbreak of plague, 35.8 per cent (791) were for *post-mortem* property. Anything considerably over this

percentage points to an increase in mortality due to the epidemic of 1361–2. Thus it is clear that manors such as East Knoyle, Cheriton, Twyford, Warfield, Hambledon, and Waltham St. Lawrence suffered a level of mortality easily comparable to that of the epidemic of 1348–9.

II

The entry fines can also be used to assess comparative mortality as determined by sex. The number and sex of those fining indicate the relative proportions of *surviving* men and women. Fines for inheritance allow an investigation into the distribution of customary property amongst various relatives. Of immediate interest are the relative proportions of women inheriting property during the Black Death, and in the periods prior to and during the second epidemic. The increase in the absolute as well as the proportional number of women succeeding to inheritances in 1361–2 is striking. It is equally striking that less than half the proportion of sons inherited compared to the previous decade, and to the period of the Black Death (Table 3a). The exceptionally high numbers between 1348/9 and 1349/50 are to be expected, and the fact that almost 60 per cent of heirs in 1348/9 and near 70 per cent in 1349/50 were male further indicates that men and boys did not suffer the same proportional mortality as they did in 1361–2.⁶⁸

An examination of the relationship of heirs and heiresses to their predecessors reveals much about the differences between the first two epidemics. Not only were women the predominant heirs in 1361/2, but widows were by far the most common of these (Table 3b).⁶⁹ Contrary to expectations a rather smaller proportion of

⁶⁸ See John D. Mullan, 'The peasant land market on the estate of the Bishop of Winchester between the Black Death and the plague of 1361', in Richard H. Britnell (ed.), *The Winchester Pipe Rolls and Medieval English Society* (Woodbridge: Boydell Press, 2003), p. 74.

⁶⁹ In most instances the entry fines make clear the relationship of the heir or heiress to the deceased. Transfers of inheritance to those described as kin are fines where the incoming tenant shares the same by-name as the previous occupier. It seems likely that kin are in fact cousins. This is not necessarily

Table 3a: Heirs 1340–1362

	son	son/stepson	son-in-law	brother	brother-in-law	nephew	grandson	great-grandson/nephew	uncle	Father	kin	Total male heirs	Total female heirs	Total heirs
1348/9	632	6	43	161	10	126	44	1	3	3	86	1115	778	1893
%	33.4	0.3	2.3	8.5	0.5	6.7	2.3	0.1	0.2	0.2	4.5	58.9	41.1	
1349/50	214	12	0	85	0	47	7	1	0	0	72	438	209	647
%	33.1	1.9	0	13.1	0	7.3	1.1	0.2	0	0	11.1	67.7	32.3	
1350/1– 1359/60	297	34	0	77	0	62	29	1	1	0	109	610	411	1021
%	29.1	3.3	0	7.5	0	6.1	2.8	0.1	0.1	0	10.1	59.8	40.2	mean
1360/1	28	3	0	4	0	1	2	0	0	1	5	44	35	79
%	35.4	3.8	0	5.1	0	1.3	2.5	0	0	1.3	6.3	55.7	44.3	
1361/2	98	6	0	53	0	14	18	0	2	0	43	234	365	599
%	16.4	2.7	0	8.8	0	2.3	3.0	0	0.3	0	7.2	39.1	60.9	
Totals	1269	61	43	380	10	250	100	3	6	4	315	2441	1798	4239
%	29.9	1.4	1.0	9.0	0.2	5.9	2.4	0.1	0.1	0.1	7.4	57.6	42.4	

Sources: Winchester Pipe Rolls, Hampshire Record Office 11M59 B1 92–114

the case outside of the Winchester estate. Working from the Halesowen court rolls, Zvi Razi demonstrates that reliance on same surname transfers leads to a serious underestimate of the number of intra-family transfers. Zvi Razi, 'Family, land and the village community in Medieval England', *Past and Present*, 93 (1981), pp. 16–18. Unlike the Halesowen court rolls, however, relationships in the pipe rolls are usually explicit, even when the surname is different. There are, for example, many nephews whose name differs from that of the uncle or aunt. Likewise there are many examples of sons and daughters with different surnames to their mother, often due to the mother's remarriage. The sum of evidence indicates that the scribes, mindful that their work was a court of record, were dutiful in recording family relationships. A relatively small number of fines are for joint entries into property, usually husbands and wives. These have been excluded from the table: 12 occur in the period 1350–55, seven in the period 1356–61, and two in 1361–2.

Table 3b: Heiresses 1340-1362

	Total male heirs	widow	Daughter	daughter/ step-daughter	sister	sister-in-law	niece	grand-daughter	great-grand- daughter/niece	aunt	kin	Total female heirs	Total heirs
1348/9	1115	362	229	1	65	0	54	29	2	7	29	778	1893
%	58.9	19.1	12.1	0.1	3.4	0	2.9	1.5	0.1	0.4	1.5	41.1	
1349/50	438	70	73	2	21	0	16	4	0	1	22	209	647
%	67.7	10.8	11.3	0.3	3.3	0	2.5	0.6	0	0.2	3.4	32.3	
1350/1- 1359/60	610	201	96	12	37	0	11	17	1	0	36	411	1021
%	59.8	19.7	9.4	1.2	3.6	0	1.1	1.7	0.1	0	3.5	40.2	mean 102.1
1360/1	44	19	8	2	1	0	2	1	0	0	2	35	79
%	55.7	24.1	10.1	2.5	1.3	0	2.5	1.3	0	0	2.5	44.3	
1361/2	234	277	35	3	29	0	2	1	0	1	17	365	599
%	39.1	46.2	5.8	0.5	4.8	0	0.3	0.2	0	0.2	2.8	60.9	
Totals	2441	929	441	20	153	0	85	52	3	9	106	1798	4239
%	57.6	21.9	10.4	0.5	3.6	0	2.0	1.2	0.1	0.2	2.5	42.4	

Sources: Winchester Pipe Rolls, Hampshire Record Office 11M59 B1 92-114

daughters, nieces, and granddaughters inherited than in the 1350s; the proportion of inheriting sisters was not significantly higher than in the previous decade. This could relate to the chroniclers' remarks that the young were especially vulnerable, and that older women had the best chance of survival. The relatively low proportion of inheriting daughters and sisters may indicate a reluctance to allow entry of these over nephews, grandsons, and more distant male kin. The comparatively low survival rate of males is exemplified by a lower proportion of inheriting male kin than in the previous decade. Minorities of male heirs are an immediate consequence of the 1348–9 epidemic, but do not feature any more significantly in 1361–2 than during the remainder of the century, reinforcing the notion that men and boys were particularly badly affected, and that it was often left to widows to take seisin.⁷⁰ The dominance of widows in 1361–2 indicates that a sufficiently high proportion of wives survived to negate the need for many families to look further down their line of heirs. The figures for the Black Death and its immediate aftermath paint a rather different picture. Here the spread of mortality was more indiscriminate. A far higher proportion of nephews and nieces inherited in 1348/9 than in 1361/2 for example.

There is an uneven spread in the proportion of male mortality across the manors of the estate in the second epidemic. The evidence (Table 4) shows some general patterns. The high proportion of heiresses in the years 1361/2 and the following year, indicating a lack of male heirs, is particularly marked on manors around Taunton, especially those of Bishops Hull, Staplegrove, Holway, and Poundisford, but with the exception of Otterford. The picture elsewhere is less clear, although the same tendency is noticeable on many of the manors clustered in mid

⁷⁰ Over the whole of the late thirteenth and fourteenth centuries there are 150 instances of guardians fining for wardships of heirs until their majority. Almost 40 per cent of these were in 1348/9, 1349/50, and 1350/1. Of the massive 100 fines levied at Farnham in 1349/50, half were for inheritance, and five of these were for the custody of heirs. In 1361/2 there were four such fines for custody of wards, none of them at Farnham.

Table 4: Inter-manorial comparison of heiresses to heirs 1361–2

Percentile range of female heiresses	Number of manors	Manors (heiresses/total heirs/%heiresses)
<60%	19	Alresford (11/11, 100%), Bishopstone (3/3, 100%), Rimpton (1/1, 100%), Taunton Borough (2/2, 100%), Bishops Hull (23/24, 96%), Ecchinswell (8/9, 89%), Cheriton (5/6, 83%), Bitterne (16/20, 80%), Staplegrove (23/30, 77%), Bishops Sutton (13/18, 72%), Holway (28/40, 70%), Poundisford (29/42, 69%), Ashmansworth (2/3, 67%), Woodhay (14/21, 67%), Downton (14/21, 67%), Farnham (17/26, 65%), Bishops Waltham (47/73, 64%), Merdon (13/21, 62%), Droxford (6/10, 60%)
50–59%	8	Nailsbourne (15/26, 58%), Hambledon (19/33, 58%), Wargrave (5/9, 56%), Fareham (12/22, 55%), Burghclere (7/12, 58%), Brightwell (1/2, 50%), Highclere (3/6, 50%), Ivinghoe (8/16, 50%)
40–49%	4	East Meon (15/33, 45%), Brockhampton (11/25, 44%), Bishopstoke (9/21, 43%), Twyford (2/5, 40%)
30–39%	3	Adderbury (4/11, 36%), Warfield (10/28, 36%), West Wycombe (3/8, 38%)
20–29%	2	East Meon Church (2/7, 29%), Waltham St Lawrence (4/14, 29%)
>20%	13	Otterford (1/6, 17%), Witney (1/9, 11%), Bentley (1/15, 7%), East Knoyle (1/18, 6%), Alverstoke (0/1, 0%), Crawley, (0/4, 0%), Esher (0/1, 0%), Harwell (0/3, 0%), Marwell (0/3, 0%), Morton (0/5, 0%), North Waltham (0/1, 0%), Overton (0/3, 0%), Wield (0/1, 0%)

Notes: The first figure in brackets is the number of female heiresses and the second the number of heirs both female and male. Beauworth, Gosport, Upton, Bishops Fonthill, and Culham record no fines for inheritance in these years.

Sources: Winchester Pipe Roll, Hampshire Record Office 11M59 B1/114

Hampshire and south of Winchester at Cheriton and neighbouring Bishops Sutton, as well as at Bishops Waltham, Merdon, and Droxford. On some Hampshire manors such as East Meon and Brockhampton many male heirs appear to have survived.

The more far-flung parts of the estate seem to have had a less pronounced sex differential in mortality. On Adderbury and Witney in Oxfordshire and on the Berkshire manors of Warfield, Harwell, and Waltham St Lawrence, predominantly

sons continued to inherit. Comparison of these figures with the overall level of mortality on manors (Table 2) sheds light on this distribution. It is particularly noteworthy that those manors of the Taunton group, whilst generally experiencing a very high proportion of male mortality, had lower fatalities overall. On some of those manors in which female heiresses did not predominate – such as Waltham St Lawrence and West Wycombe – it seems that overall mortality was higher. The manors of the Taunton group were densely populated, with a welter of small fragmented holdings and intense forms of agriculture. On Bishops Waltham the immediate reoccupancy of vacant holdings after the 1348–9 plague suggests a dense population; this was a manor that suffered an especially high rate of male mortality in 1361–2.⁷¹ It seems therefore that where the second epidemic was less virulent, it tended to attack male and younger tenants. More tentatively perhaps, it appears that where the epidemic was more acute, mortality was more indiscriminate.

Concentration solely on land transfers by inheritance gives only part of the picture. There is reason to believe that there was a much higher proportion of female heiresses – or at least potential heiresses – than the *post-mortem* fines indicate. Many widows entered into holdings without the need for a fine at all, depending on individual manorial custom. Convention ensured that the widow would have first refusal on the inheritance. The surviving early seventeenth century copy of the estate custumal shows that on a few manors – namely those of the Taunton group and at Brockhampton, Bishops Waltham, and Farnham – the widow had priority over other heirs.⁷² On nearly all manors widows were permitted to retain their husbands' lands

⁷¹ Titow, *English Rural Society*, p. 70.

⁷² This custumal (Hampshire Record Office, E 415808) was drawn up in 1617 by Sir Charles Montagu, steward of the bishopric. According to Mayberry: 'Despite its late date, the customary clearly reflects medieval conditions, the statement of each custom being followed by precedents extracted from the Pipe Rolls by Sir Charles Montagu.' Mayberry, *Estate Records of the Bishops*, p. 12. For a description of the customary and some analysis of its contents see Jan Z. Titow, 'Land and

for life without a fine, provided they lived chastely and unmarried; they could later fine for their property if they wished to remarry. For Farnham, the custumal declares that, 'a wife, whilst she lived single and chaste after the death of her husband, is able to hold the lands of which her husband died seised without fine. But if she has fined she is able to take another husband and hold the land during the term of her life.'⁷³ In the event of unchastity or remarriage without paying a fine, the woman's lands were forfeit. Only on the manor of Rimpleton, east of Taunton, was a fixed entry fine of a full year's rent compulsory, regardless of whether the widow remained single.⁷⁴ The majority of the fines by widows indicate that they were able to retain the whole of their husband's estate. Evidence that only the dower portion was forthcoming, as was the case on some manors in England, is scant.⁷⁵

Although it is difficult to calculate how many widows entered into their husband's inheritance without a fine, an examination of the manorial distribution of widows fining to retain property seems to back up the evidence of the custumal. There are several manors, particularly in the northern part of the estate and in Wiltshire, where fines by widows to retain their deceased husbands' properties are few. Yet the existence of more widows is evident because, although there are no fines for admittance, they appear as landholders in later remarriage and *post-mortem*

population on the Bishop of Winchester's estates, 1209–1350', unpublished thesis, University of Cambridge, 1962, and Titow's unpublished notes on the estate custumal, Hampshire Record Office, 97M97/B13.

⁷³ Titow's unpublished notes on the estate custumal, Hampshire Record Office, 97M97/B13.

⁷⁴ *Ibid.*, pp. 6–10. According to the custumal, widows were permitted to hold for life and remarry in the following manors: Taunton manors, East Meon, Hambledon, Fareham, Brockhampton, Bishops Waltham, Droxford, Bitterne, Bishops Sutton, Farnham, Bentley, Overton, North Waltham, Woodhay, Ecchinswell, Ashmansworth, Adderbury, and Bishopstoke. Widows were not permitted to hold land if they remarried in: Downton, East Knoyle, Upton, Bishops Fonthill, Brightwell, Harwell, Brockhampton, and possibly Witney. (Two contradictory rules are given for Overton.)

⁷⁵ Judith M. Bennett, *Women in the Medieval English Countryside* (Oxford: Oxford University Press, 1987), p. 163. A single fine at Farnham in 1282–3 records that Margery, widow of Walter Allen, fined to retain her husband's lands 'in the name of dower'. More enigmatically, a fine at Bishops Waltham in 1302/3 by Matilda, widow of Matthew Park, was for 'half a fering, a messuage in a third part of La Partyerd and a third part of a virgate and three acres of purpresture.' This suggests a widow's settlement of a third, but unfortunately the extent of Matthew Park's holding before this time cannot be ascertained.

finer.⁷⁶ It is unlikely that all of these widows did not anticipate remarriage, implying rather that local custom permitted remarriage without a fine. The evidence for the small Somerset manor of Rimpton indicates that the number of widows inheriting across the rest of the estate may approach twice the number of the entry fines.⁷⁷

The existence of additional widows may also be detected from some *inter-vivos* land transactions, cases in which the tenement bypassed the widow and went to either another heir or a new tenant outside the family. The most common instances are those in which a widow refused to pay a fine for her deceased husband's holding. Although the women were heiresses, they do not appear in the data as new tenants, but rather as third parties in land transactions. In the manor of East Meon in 1361/2, William, son of William Stigand, was charged a fine of 20 shillings, 'for a message and half a virgate once belonging to William his father in Ramsdean, and which Matilda, relict of William, refused to fine and refused her rights which she had in it.' The other form of *inter-vivos* land transfer to consider, albeit less common, is that in which an individual – again usually a woman – is said to have simply remised and quitclaimed her right to the estate. Between 1345 and 1415 some 372 women appear either to have done this or to have refused entry in favour of another (usually male) heir.

The surge of refusals and quitclaims in 1361/2 is striking and reinforces the evidence that an unusually high number of women became heiresses as a result of the

⁷⁶ Adderbury, Witney, and Brightwell in Oxfordshire; Upton, Bishops Fonthill, and East Knoyle in Wiltshire; Harwell in Berkshire; North Waltham, Crawley, and Overton in north Hampshire. There are just eight transactions on these manors in which a widow fines for her husband's lands over this period, possibly indicating that sons had first refusal.

⁷⁷ At Rimpton between 1262/3 and 1348/9 there were 65 fines of which 35 were inheritance. Of the 35, 21 were for widows retaining their deceased husband's property (60 per cent). An even higher proportion is evident between 1350 and 1415. There were 129 recorded transfers of land of which 28 were for inheritance, and of the 28, 24 concerned widows (86 per cent). This suggests a considerable inflation of the numbers of widows elsewhere.

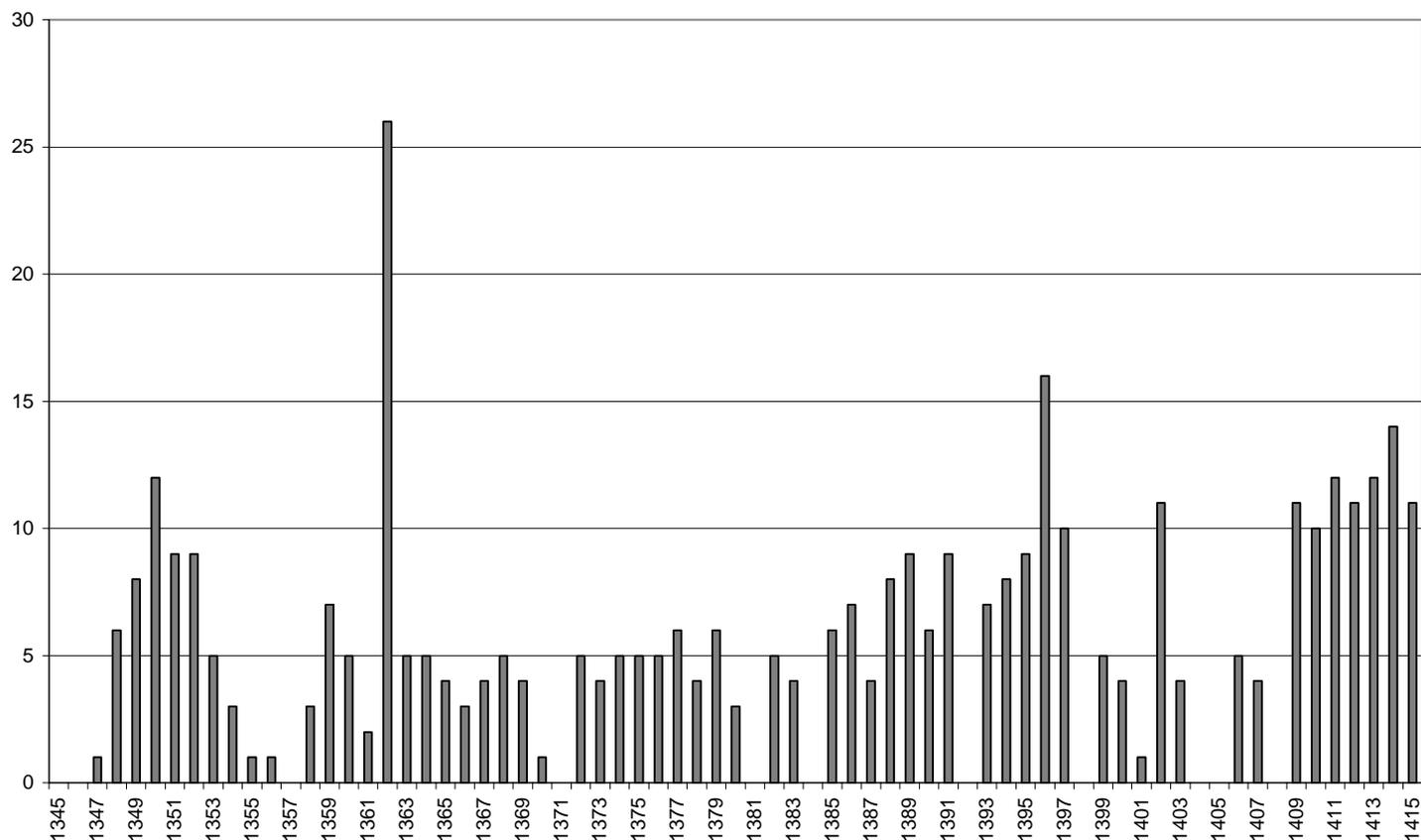


Figure 2: Refusals and quitclaims by female tenants, 1344/5–1414/5

Source: Winchester Pipe Rolls, 11M59 B1/97–161

epidemic. The vast majority of these women are termed widows in the pipe rolls. In other cases women refusing property are referred to as mother, grandmother, or kin, but these are most likely to be widows too as it is difficult to see on what other terms they could have held property. Analysis of the 13 instances of daughters quitclaiming their inheritance reveals them to be heiresses in default of sons; admittedly none of these occurs in the immediate aftermath of the second epidemic. Of the refusals in the later fourteenth and early fifteenth centuries, 61.4 per cent of the holdings are passed to family members – chiefly to sons, but also to daughters, brothers, and in rarer instances granddaughters, grandsons, nieces, and nephews. It is likely that in many instances these refusals were in fact a legal fiction, a means by which the

holding could be passed on to another family member. It was also a way of avoiding an additional and often substantial fine which would have occurred had the heiress initially accepted her inheritance. In some cases it is possible that refusals of inheritance were a means to avoid remarriage.⁷⁸

III

How much weight can be given to the evidence of the *post-mortem* land transfers and their support of the chroniclers' accounts? The study of change in medieval population is notoriously difficult. However, the marked shift in mortality indicated in the entry fines is significant. Although the fines do not document precise numbers of deaths, they do reveal remarkable trends that match the evidence given by chroniclers.

Yet the use of entry fines alone to determine comparative mortality presents problems. The population had already been much reduced by the events of 1348–9, and the second epidemic may have affected a higher proportion of the remaining population than a straightforward comparison indicates. Furthermore, whilst the *post-mortem* entry fines offer a reasonable basis for calculating the relative levels of mortality among the bishop's tenants, they give no evidence for the remainder of the manors' populations. It is reasonable to infer though that the tenants recorded in the fines were neither especially vulnerable nor especially resistant to epidemic, thus one would expect the comparative mortality of the two plagues for the remainder of the manorial populations to be similar. The chroniclers' remarks about the high death rate of children, especially boys – whose deaths are not recorded in the rolls – in the 1361–2 epidemic in fact point to a higher proportional mortality for the second

⁷⁸ The rise in the number of refusals by women from the mid 1380s merits further research, but is beyond the scope of this paper.

outbreak than inferred solely from the entry fines. Likewise, the probable numerous 'hidden' widows suggest a higher death rate of males than that revealed by aggregates of *post-mortem* entry fines alone. Despite their limitations, however, the entry fines are a valuable form of evidence for measuring sex differentials of mortality when used in conjunction with other sources.

This study of *post-mortem* land transfers confirms that the level of mortality of the 1361–2 epidemic was lower than that of the Black Death. It also demonstrates a significantly higher mortality of males than females in 1361–2, but it is not possible to offer a definitive explanation for this.⁷⁹ Many epidemiological diseases can cause an age and sex differential. A common denominator for infection is the added socio-behavioural risk of close physical proximity, as occurs in many social- and work-related circumstances commonly associated with the male population, implying a gender-selective, rather than merely sex-selective differential.⁸⁰

Whilst there are many possible diagnoses, bubonic plague is a strong candidate. The plague bacillus is an extremely complex organism, capable of mutating readily into a less virulent strain in order to survive.⁸¹ This may account for the markedly lower mortality in the 1361–2 outbreak. Early modern and more recent occurrences of bubonic plague have also shown a propensity to kill healthy young adults, particularly males.⁸² One explanation for this may be that many bacterial

⁷⁹ For the dangers of retrospective diagnosis of pre-modern disease see Vivian Nutton, 'Medicine in medieval western Europe', in Lawrence I. Conrad *et al.* (eds), *The Western Medical Tradition 800 BC to AD 1800* (Cambridge: Cambridge University Press, 1995), pp. 191–3.

⁸⁰ Peter Curson and Kevin McCracken, 'Flu downunder. A demographic and geographic analysis of the 1919 epidemic in Sydney, Australia', in Howard Phillips and David Killingray (eds), *The Spanish Influenza Pandemic of 1918–19. New Perspectives* (London: Routledge, 2003), p. 123. See also Hatcher, *Plague, Population*, p. 59.

⁸¹ John Theilmann and Frances Cate, 'A plague of plagues: the problem of plague diagnosis in medieval England', *Journal of Interdisciplinary History*, 37, 3 (2007), pp. 375, 380, and 382.

⁸² Figures for bubonic plague in the United States between 1974 and 1980 reveal that the largest number of cases involved children. There was a ratio of male to female mortality of about 2:1. Most cases were in the period May to October, precisely the time of year when people tended to work outdoors, come into contact with vermin, and have contact with others, paralleling the situation

pathogens require iron for growth and it is young males who carry higher levels of iron. Children and pre-menopausal women are prone to iron deficiency and are therefore less likely to suffer serious infection.⁸³ On the other hand, the 1361–2 epidemic also appears to show patterns of mortality resembling those of influenza. Comparison can be drawn with the influenza pandemic of 1918–19 where the incidence of death among those of the 20–40 age group, especially men, was extremely high: it was the strong, rather than the weak, who suffered most.⁸⁴

The findings of this study suggest future avenues of research. In addition to pathological explanations, both densities of local populations and differences in manorial work and agricultural practices deserve further exploration. Moreover, the survival of a comparatively high number of women in 1361–2 invites analysis of the social and demographic consequences of this imbalance in the population on the well-being of the estate.

amongst the Winchester clergy. Likewise, an outbreak in Sydney in Australia in 1900 killed more teenage and young adult males than other groups. The Sydney outbreak has been linked to the dockland area of the city, an area of dense male employment. Thomas Butler, 'The Black Death past and present. 1. Plague in the 1980s', *Transactions of the Royal Society of Tropical Medicines and Hygiene*, 83 (1989), pp. 458–60; Peter Curson and Kevin McCracken, *Plague in Sydney: the Anatomy of an Epidemic* (Kensington: New South Wales University Press, 1989), pp. 131–3. See also Bolton, 'World turned upside down', p. 37.

⁸³ Stephen R. Ell, 'Iron in two seventeenth-century plague epidemics', *Journal of Interdisciplinary History*, 15, 3 (1985), pp. 445–57.

⁸⁴ See the introduction to Phillips and Killingray (eds), *Spanish Influenza Pandemic*, pp. 8–9; Andrew Noymer and Michel Garenne, 'Long-term effects of the 1918 "Spanish" influenza epidemic on sex differentials of mortality in the USA. Exploratory findings from historical data', in Phillips and Killingray (eds), *Spanish Influenza Pandemic*, pp. 202–17; David Patterson and Gerald F. Pyle, 'The geography and mortality of the 1918 influenza pandemic', *Bulletin of the History of Medicine*, 65 (1991), p. 19. See also Shrewsbury, *History of Bubonic Plague*, p. 128.

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