Chemical reactions stem base reacting blood red when KOH is applied to crusty velar remnants; $FeSO_4$ rusty; guaiac slowly blue, not rapid and intense as reported in some literature (Fig. 11).

Spores 6.8–9.8 × 6.4–8.1 µm, ellipsoid, average of 8.40 × 7.0 µm, n= 39, with low warts and almost complete reticulum (Fig. 12).

Spore deposit IIa–IIb, using the updated Romagnesi colour charts by Marxmüller (2014).

Pileocystidia cylindric, 0–1 septate, often with yellow-green end cells in KOH (Fig. 13).

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Fig. 14. *Suillellus queletii*. Photograph © Andy Overall.

Other notable species recorded in the park during 2025 were: *Suillellus queletii* (Fig. 14) which was noted from a few different spots along that southern boundary with *Quercus*, which seemed to enjoy a good year in general, certainly in these parts; *Amanita franchetii*; *Russula melliolens*; *R. decipiens* and *R. grisea*. I'm certain there will be other hidden gems waiting to reveal themselves in 2026, fingers crossed.

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Fungal Futures

Conservation news

Matt Wainhouse[1] & Rich Wright[2]

Another quarter has passed, and another government is in place. New Prime Minister Andy Burnham has now taken the reins and installed Angela Eagle as the new head of Defra – the third in a year. Mary Creagh, former Minister for Nature, is out, replaced by Jenny Riddel-Carpenter in her first ministerial role. The new cabinet has been sitting for a week at the time of writing, so it's too early to tell what direction the new ministers will take, but nature has not featured highly in the first week of policy announcements. Whether nature will continue to be framed as an impediment to growth (see Fungal Futures 1 & 2, (Wainhouse & Wright, 2025a; 2025b)), rather than as critical infrastructure for our survival, remains to be seen. The ministers will need to rapidly get on top of their briefs, with droughts being declared across the country, wildfires burning from Cornwall to the Cairngorms, and the rapidly approaching IUCN Biodiversity COP (COP17) in Armenia, where they will (we hope) be promoting the Fungal Conservation Pledge (see Fungal Futures 1 (Wainhouse & Wright, 2025a)), which encourages the treatment of funga on a par with flora and fauna.

Fig. 1. *Buglossoporus quercinus* (Oak Polypore) showing typical purple brown bruising. Photograph © Rich Wright.

Global Strategy for Fungal Conservation

Gaining momentum in the lead up to COP17 is the Global Strategy for Fungal Conservation (GSFC). It took another leap forward in June when it opened for public consultation. The strategy, which aims to integrate fungi into international conservation policy, will be published in Armenia in October. It is easy to underestimate the international effort behind developing this important document. One criticism of the Pledge is that it lacks a clear implementation framework – the GSFC begins to translate its aims into action. There is still a long road ahead, but let's hope our new Secretary of State for Environment recognises its value.

Species Recovery in England

Big news for fungal conservation in England was announced in July. The results of Natural England's £60 million Species Recovery Programme (SRP) were published by the Government as part of its efforts to meet targets to reduce extinction risk by 2042 (Defra, 2026b). The glossy press release focused on some of the more charismatic species (Defra, 2026a) – sea eagles and water voles – but buried in the small print were several exciting fungal projects that secured funding:

Predicting the future of threatened mycorrhizal fungi in the UK

This project, led by Royal Botanic Gardens, Kew, the University of Reading and The Crown Estate, will model future distributions of thermophilic boletes and stipitate hydnoids, while trialling seedling inoculation methods to support future reintroductions.

Evidence-based conservation of threatened decomposer fungi

A major portfolio of saprotrophic fungi projects in partnership with Cardiff University (Prifysgol Caerdydd), tackling the conservation challenges facing some of our most important decomposer fungi. This includes:

- Developing translocation strategies for iconic species, including *Hericium coralloides*, *Hericium erinaceus* and *Buglossoporus quercinus* (= *Fomitopsis pulvina*) (Fig. 1), to help establish best practice for responsible and effective conservation action (more on this below).
- Practical conservation for threatened wood decomposers, focusing on *Sarcodontia crocea*, *Podoscypha multizonata* and *Mycena renati*, with support from Gloucestershire Wildlife Trust.
- Developing pioneering approaches for non-wood decomposers and practical conservation strategies for *Desarmillaria ectypa*, *Battarrea phalloides*, *Bovista paludosa* and *Hohenbuehelia culmicola*.
- Restoring rare fungal interactions by creating recovery strategies for the fascinating mycoparasitic fungi *Hypocreopsis rhododendri* (Fig. 2) and *Hypocreopsis lichenoides*.

Fig. 2. *Hypocreopsis rhododendri* is the more common of the two British species of *Hypocreopsis*, commonly on *Corylus avellana* (Hazel), parasitising *Hydnoporia corrugata* (formerly *Hymenochaete corrugata*), but occurring here on *Prunus spinosa* (Blackthorn). Photograph © Rich Wright.

Enabling species recovery for fungi and lichens in temperate rainforests, grasslands and freshwater networks

- Plantlife International and their partners will be working with a wide-ranging suite of lichen and fungi species in two major projects: 'reviving rainforests' and 'grassland lifelines'.
- The Yorkshire Dales Millennium Trust will be focusing on 'wildflowers and waxcaps', with particular attention on *Primula farinosa* (Bird's-eye Primrose) and its smut *Urocystis primulicola* as well as *Hygrocybe spadicea* (Date Waxcap).
- Frogbit and its smut *Tracya hydrocharidis* will be focal species for 'recovering species through England's freshwater network', led by the Freshwater Habitats Trust.
- Natural England is leading a project on 'enabling lichen species recovery' generating evidence to support 15 lichen species as well as the reintroduction of *Parmeliella testacea* to the New Forest.

This is hugely exciting, and fungi have a much bigger share of the programme than ever before. It is certainly the biggest programme of species-focused fungal conservation since Royal Botanic Gardens, Kew's Lost and Found Fungi project. The research teams will be reaching out for support, but do get in touch if you'd like to know more and we can direct you to the people involved.

Natural History GCSE

Fungi remain poorly represented in school education (Ramsdale & Taylor, 2024). The curriculum in Scotland and Wales is somewhat more flexible than England's, giving teachers greater opportunity to include them. So it was with some relief that the consultation on the long-awaited Natural History GCSE in England was launched in June (Department for Education, 2026).

The BMS, long champions of including fungi in education, have been closely involved in developing the subject. The content is focused on understanding UK habitats and the diversity of species found within them, with 20 hours of fieldwork forming part of the qualification. The taxonomic breadth students will be expected to cover is impressive, and fungi, along with other traditionally under-represented groups, have central roles. The only concern was that the Government consultation document gave examples of habitats and the species associated with them... and fungi weren't included! C+: good, but could do better.

Help us find Oak Polypore

Oak Polypore (*Buglossoporus quercinus* = *Fomitopsis pulvina*, Fig. 1) is one of the UK's rarest fungi. It is globally Red Listed as Vulnerable (Kautmanova *et al.*, 2021), protected under Schedule 8 of the Wildlife and Countryside Act, and is known from only a few hundred oak trees across Britain. Although the UK holds one of the world's most important populations, the species is thought to suffer from low genetic diversity (Crockatt *et al.*, 2010), making it particularly vulnerable to future decline.

We're excited to be launching a new conservation project through the Species Recovery Programme, mentioned above, to better understand the population genetics of Oak Polypore and support future conservation translocations. To do this, we'll be collecting samples from populations across the UK over the coming year.

If you've seen Oak Polypore this summer, or come across it in the coming weeks, Rich Wright would love to hear from you. Please send details of any sightings, including the location (a grid reference, What3Words or a Google Maps pin are all fine), the date, and photographs if possible. These records will help us obtain permissions and licences for sampling visits next season and capture a representative snapshot of the species' remaining genetic diversity.

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Book reviews

Fungi of Temperate Europe Keys to the Basidiomycotes

Thomas Læssøe, Jens H. Petersen, Tobias Guldberg Frøslev and Jacob Heilmann-Clausen

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25 × 17.5 cm, 878 pages

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Typical price £60 from online mycological booksellers

For anyone that already had the wonderful two-volume photographic guide, *Fungi of Temperate Europe* (FTE) by Læssøe and Petersen, the news that the authors were also preparing a set of keys to accompany the volumes was extremely exciting. Up to then, the only thorough, modern set of keys to Basidiomycetes was the two-volume *Funga Nordica*. But those two volumes, excellent though they are, are already 18 years old, out of print, and fungal taxonomy and nomenclature have undergone many changes in that period, not least because of the rise of molecular sequencing, with many new species described. Also, they are entirely black & white with no photographs, just drawings of spores, etc.

I first heard from the authors of FTE of their intention to produce these new keys when we attended a conference together, back in 2019 but realised it was going to take a while as they were intending to produce a Danish version first before releasing an English language version. The first thing to say about the new keys is that they are not just a direct translation of the Danish version, the authors state that they have been extensively amended in the intervening years. It should also be mentioned that two other authors, Tobias Guldberg Frøslev and Jacob Heilmann-Clausen, have joined the original two; all are highly respected mycologists within their fields.

The authors state very clearly their approach to these keys as follows:

- They should be organised by morphology rather than phylogeny.
- Wherever possible common concepts should be used rather than technical terms.