

Lost & Found Fungi project report, April 2015

Brian Douglas

Hi all,

Here's the last month's assortment of updates for the Lost and Found Fungi project. It's a little delayed (sorry!) after getting behind schedule after a week participating in the (very enjoyable) British Mycological Society Spring Foray in Shropshire.

The good news is that this has allowed me to include more datasheets in this update than I would have been able to otherwise. We're hoping that this will give people a wider range of species that may interest them; enough time to identify potentially suitable habitat in their localities; and enough time to investigate them, even just in passing while keeping an eye on the ground.

Please note that if you do go looking for a Lost and Found Fungi target species, please let us know even if you don't find the fungus, and even if you don't find the appropriate host or habitat! That way, we can build up a map of suitable habitats, unsuitable habitats, and new finds. If anyone would like any suggestions of where they could look, don't hesitate to send me an email at b.douglas@kew.org and I'll see if I can find somewhere that might be worth investigating.

New species datasheets

Hypocreopsis lichenoides ([datasheet here](#))

Hypocreopsis lichenoides also known as "Willow Gloves", can be found in *Salix* carr and boggy woodland with *Salix*. It has been reported from September to May, but may be present throughout the year.



Until this month, this species was without a recent confirmed site, but at the end of April we were informed by Brian Coppins of a new record and site for *H. lichenoides* in Gordon Moss nature reserve, Berwickshire, found a week earlier by Sarah-Louise Davies of the Fungus Group of South East Scotland. This site now comprises the only confirmed extant population of this fungus in the UK!

Hypocreopsis lichenoides may not be entirely restricted to *Salix* - it actually grows on *Hymenochaete tabacina*, and so may be found on other trees colonised with this species such as *Corylus*. *Hymenochaete tabacina* is a distinctively tobacco-brown crust fungus that inhabits dead attached and fallen branches and twigs (especially when they intertwine). Its fruitbodies often have bracket-like edges, forming mini-shelf-like outgrowths and lacking pores underneath, resembling those of *Stereum* species. They differ in having minute hair-like setae on the underside, just visible with a 15-20x hand lens.

The ideal microhabitat to look in may be dense patches of *Salix* where branches are overlapping and "glued" together, or colonised by brown crusts. When mature, its only lookalike is *Hypocreopsis rhododendri*, which may also appear on *Salix* - but we're interested in reports of both. The best places to start looking may be in *Salix* carr in your localities, or in known sites for *Hymenochaete tabacina* - which can be searched for on the NBN website here: ([link](#)).

Chrysomyxa pyrolata ([datasheet here](#)),

The rust *Chrysomyxa pyrolata* can be found on the underside of leaves of *Pyrola* spp. (wintergreens), especially on *Pyrola rotundifolia* ssp. *maritima* (found on dune slacks or nearby woods), on which the most recent records have been made. It should be visible (if present), between April and August, so there's plenty of time to look for *Pyrola* if you're living near the coast or if there are known populations of inland *Pyrola* spp. nearby.

There's one known lookalike (*Pucciniastrum pyrolae*) and microscopy might be required to be sure of an identification, but we're interested in both of these rusts. The known distribution of the host can be seen here: ([link](#)).



Image © A.M. Ainsworth.

Ustanciosporium gigantosporum ([datasheet here](#))

Ustanciosporium gigantosporum, an ovary-smut of *Rhynchospora alba*, is only historically known from two sites and was until recently feared extinct in GB&I. However, two recent finds demonstrate that it is still extant, and may be a species that is under-recorded – a conjecture supported by the fact that there are extremely few records in the FRDBI from *Rhynchospora alba* at all!

Infected inflorescences should be present as soon as the host begins flowering (summer to autumn), but may be increasingly visible as the flowering season progresses. They are misshapen and may occur on stunted plants. The smut appears as a mass of black-brown spores within the glumes of the flowers.



There are several other similar ovary smuts on this sedge in GB&I, differentiated only by spore size – they're all rarely reported or extinct, so we're interested in reports of any of them. In fact, records of any fungus on *Rhynchospora* would be a big boost for fungal records on this plant in GB&I.

Rhynchospora alba is found in relatively acidic wetlands such as bogs, heaths and mires, distributed throughout GB&I: the currently known 10 km square (hectad) distribution of this species can be found here: ([link](#)).

Tulostoma niveum ([datasheet here](#))

The tiny white stalked puffball *Tulostoma niveum* is known only in GB&I at two sites in Scotland. Its habitat may be very specific – growing on bryophytes on limestone boulders (or walls), in areas with underlying calcareous geology. At a guess, this might correspond with the NVC habitat H8120 (calcareous and calcschist screes of the montane to alpine levels), for which a number of sites in GB&I are known ([link here](#)). If any of these are near you, they would be worth a visit! As always, we'd be very grateful for surveys or inspections of similar habitats that could support or rule out a wider distribution of this fungus.



The reported fruiting time is June to October, although fruitbodies may be visible year-round. The fruitbodies are about the size of rabbit droppings, so if you see any white ones on mossy limestone boulders or rocks, they may be worth a closer look.

Bovista paludosa ([datasheet here](#))

The “fen puffball”, *Bovista paludosa*, is currently known from four sites in GB&I, but only one since 2006. It’s very rarely reported, but since it grows on brown mosses in the midst of fen vegetation it also could be easily overlooked. It fruits between May and August, being initially whitish and gradually becoming brown as the exoperidium (outer surface layer) is shed.



Image © Sam Bosanquet, Natural Resources Wales

It occurs in calcareous fens, of which there appear to be many potentially suitable habitats spread throughout the UK. The first Welsh record of this fungus was found last year, which suggests that there are more potential sites to be found elsewhere if people keep an eye out. So, if anyone is passing through any fen or marshy sites, and sees any white or brownish golf-ball sized (or slightly larger) puffballs, please let us know – you may well have found it!

New records and finds

Dencoeliopsis johnstonii* and *Xenotypha aterrima ([datasheet here](#))

We were extremely glad to get an email from Brian Coppins informing us that the discomycete *Dencoeliopsis johnstonii* had been found in October 2014 in Crombie Country Park in Angus, Scotland, by Roy Watling. This record is the fourth known site in GB&I, and the third where it can be regarded as an extant population. Since there are now recent records from Scotland, Ireland and England, I’m hoping that at some point we can get a find (or at least some suitable habitat and *X. aterrima*) somewhere in Wales as well!



This month there have been a number of surveys to determine suitable habitats for *D. johnstonii*, by trying to assess the distribution of *Xenotypha aterrima*. The distribution has been extended to Shropshire, where a number of infected trees were found during the BMS Spring Foray visit to Fenn's, Whixall and Bettisfield Mosses National Nature Reserve. It was also found on two new sites in East Lothian and Berwickshire (the general locality of the type specimen) by Paul Cannon and Brian Coppins. Unsuccessful surveys were also undertaken in other woods in the area.

Hypocreopsis lichenoides

The most recent known site, in VC43 Radnorshire, was also searched by Paul Cannon in April but failed to reveal any presence of the fungus. There is concern that the site has been degraded due to forestry operations in the surrounding area, and the species may now be extinct in this locality.

Events

Paul Cannon attended a project meeting in East Lothian to discuss a possible lichenology mentoring programme with the British Lichen Society, and to refine the choice of lichen species on the Top 100 list.

David Genney of Scottish National Heritage took the Lost and Found Fungi project poster and some Scotland-targeted datasheets (particularly *Tulostoma niveum* and *Hypocreopsis lichenoides*) to the Scottish Biodiversity Information Forum conference, where it gathered “plenty of interest”. Many thanks again David!



Photo © David Genney

This month featured the British Mycological Society Spring foray in Shropshire, expertly led by Peter Smith. We're very grateful to all involved in the organising and running of the foray, both for letting us present details and updates about the Lost and Found Fungi project. We're also very appreciative of the interest from the participants, and hope many will be keeping an eye out in their areas for Top 100 species!

Recording sheets

If anyone would like to use the Lost and Found recording sheets for records and surveys (or to see what data we would ideally want to have) they're now available on the project webpage: ([link](#)). It's not critically important to use them – I'll be very happy with an email with standard record details of any finds, and further details of any surveys – but you may then get pestered for more information!

If you are conducting a survey, we would like to know the area covered by the survey so we can map it and put it online, and how many people and hours were involved. Any form of description of the area would be fine, whether this is by a complete description of the site surveyed, a drawing on a map, fully surveyed grid squares, or a track from a GPS or smart phone (I recommend using MyTracks on Android). If anyone has any queries about how to do this, please ask.

I think that's all for now!

Best regards,

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Project website: <http://fungi.myspecies.info/content/lost-found-fungi-project>