

The Lost and Found Fungi project Update March-April 2016

Brian Douglas

Hi all,

Here's the latest news from the Lost and Found Fungi project!

Updates to the Lost and Found Fungi project website

We've recently made some changes to the Lost and Found Fungi project website ([link here](#)).

Species pages: We've added many more species pages of target species, and are well on the way to having the full 100. Please take a look at the various species categories on our homepage. Some species may be present in your area even if they haven't previously been recorded, particularly if they're host specific, so it's well worth having a look to see what could be out there for you to find!

Vice county pages: Every Watsonian vice county in Great Britain and Ireland now has its own summary page on our website. These contain lists and distribution maps of target species, potentially extinct or "lost" species, and records of target species. They also contain a notes field for any project-relevant information, unsuccessful search activity, and anything else relevant to our Top 100 Target Species.

These pages are intended as an information hub for anyone involved in the LAFF project, but at the vice county level. This will hopefully make it easier for interested groups and individuals to identify and "adopt" particular species, or sites, which are near to them. Please also let me know if there is anything else you wish to be added which could help the LAFF project and your own groups at the vice county level, for instance links to recording group websites, web resources, direct links to newsletters, and so on.

Habitat pages: We've grouped many of the target species into broad habitat categories to make them a little more memorable. If you're looking for fungi in coastal areas, grasslands, woodlands, wetlands, or upland areas, it might be worth checking beforehand to see if any of these species, or any of their hosts (if they are host-specific), could plausibly be present.

"Species to look out for" page: We now have a dedicated "Species to look out for this month" link on our homepage, updated every month. It currently shows that 26 of our target species may be fruiting this month across the UK, and also displays a distribution map of previously recorded sites for these species.

Facebook and Twitter: We've just started Facebook and Twitter accounts for the Lost and Found Fungi project to help spread awareness of our target species and fungal conservation in general. Please have a look, and follow and "like" us if you use these social media platforms. Facebook link [here](#), Twitter link [here](#).

Fungal conservation

Paul Cannon has provided a dedicated Fungal Conservation page to the Fungi of Great Britain and Ireland website (of which the LAFF homepage is a part) which you can access [here](#), or from the main [Fungi of GB&I website](#).

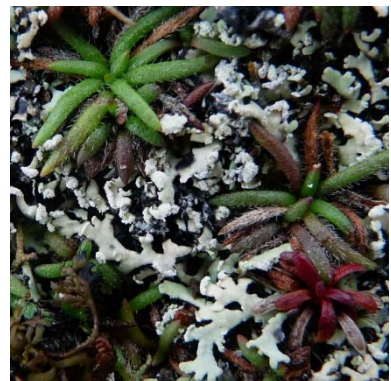
This page details some of the major issues of fungal conservation in GB&I, and provides links to current official and unofficial species assessments. Notably, these include a copy of the submitted “[Red List of Fungi for Great Britain: Bankeraceae, Cantharellaceae, Geastraceae, Hericiaceae and selected genera of Agaricaceae \(*Battarrea*, *Bovista*, *Lycoperdon* & *Tulostoma*\) and Fomitopsidaceae \(*Piptoporus*\)](#)” by Justin Smith, Laura Martínez Suz and Martyn Ainsworth (2015). This assessment covers a few of our Top 100 Target Species, all of which will be reassessed and resubmitted for formal Red Listing towards the latter part of the project.

Recent finds and surveys

Lichen surveying and mentoring in the Scilly Isles

Paul Cannon has been taking part in lichen surveying on the Scilly Isles, with the objective of mentoring volunteers in identification skills as well as surveying for rare species. The LAFF Target species [Acarospora subrufula](#), [Usnea subscabrosa](#) and [Heterodermia propagulifera](#) were targeted. There were eight participants including Holger Thüs (Natural History Museum) as the main expert, and six volunteers from southern England.

A population of *Acarospora subrufula* was found on Great Ganilly, one of the uninhabited islands of the Scillies; this find represents the first properly localised record of the species from Great Britain. Specimens identified in the field as a possible *Usnea subscabrosa* turned out to be the common species *U. flammea*, indicating that *U. subscabrosa* remains a difficult species that needs specialist survey records. The known sites of *Heterodermia propagulifera* were surveyed, revealing that populations had increased significantly in size since the previous surveys, possibly a result of disturbance of the site by storms in previous years. Additionally new sites were found for other lichens of major conservation interest, including *Pseudocyphellaria aurata* and [Lobaria virens](#).



Acarospora subrufula (image © P.F. Cannon), *Usnea subscabrosa* (image © Natural History Museum, London) and *Heterodermia propagulifera* (image © P. Lambley and [British Lichens](#) website).



Image © L. Large

Daldinia petriniae ([species page](#) and [map](#))

Bert and Gill Brand of the [Warwickshire Fungus Survey](#) invited us down to Wootton Waven to help resurvey the site of 1971 record of *Daldinia petriniae* by M.C. Clark, the author of “A Fungus Flora of Warwickshire”. After an hour or two of searching we found a *Daldinia* fruitbody on a cut log (presumably *Alnus*), which later proved to be the correct species, refound in Warwickshire after 43 years. This is the first find in GB&I since 1998, but hopefully more populations will turn up if we can convince people to actively look for it. Many thanks to Bert and Gill for inviting us down, helping us to make this find, and for being so hospitable!



Image © A.M. Ainsworth

Helvella leucopus ([species page](#) and [map](#))

Mark Steer and other members of the [Glamorgan Fungus Group](#) have been watching out for the fruiting of the “palefoot saddle” *Helvella leucopus* at Merthyr Mawr in Glamorgan. There were no sightings of it last year despite targeted surveys, and it hasn’t shown this year so far. However, it has been regularly seen on at least four occasions in previous years (until 2006), so fingers crossed...

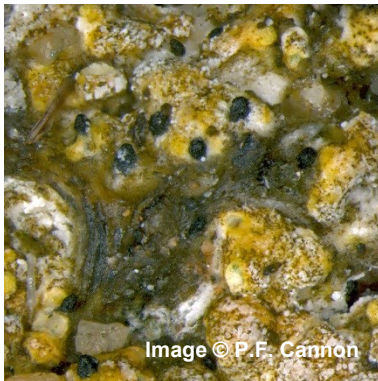


Image © P.F. Cannon

Lichenochora epifulgens ([species page](#) and [map](#))

Surveys on Tennyson Down, Isle of Wight, have been targeting *Lichenochora epifulgens*, a fungal parasite of the rare lichen *Gyalolechia (Fulgensia) fulgens*. The host lichen was found, but samples of a black pyrenomycete parasite turned out to be a species of *Muellerella* rather than the *Lichenochora*. Interestingly, the *Muellerella* has been provisionally determined as *M. lichenicola*, but is not entirely typical of that species and may turn out to be a new species. Pauline Penna has also reported a recent observation of *L. epifulgens* at Rock dunes in Cornwall.



Image © P.F. Cannon

Tulostoma niveum ([species page](#) and [map](#))

Carl Farmer of the [Lorn Natural History Group](#) has informed us of a new site for the tiny moss-dwelling puffball *Tulostoma niveum* on the Isle of Lismore, found by Teenie Wilson. The find comprised four fruitbodies on moss on a wall, at a considerable distance from the previous site discovered in 2015 in Lismore. Members of the LNHG have been on the lookout for more populations of this species since the first Lismore find, so its very gratifying to see a new find turn up this year!



Urocystis colchici ([species page](#) and [map](#))

Ray Woods has kindly provided us with details of his Breconshire vc42 records of the smut *Urocystis colchici* on leaves of *Colchicum autumnale*. This species is currently only known from four localities in the wild in GB&I, although there have been a couple of recent reports from infected garden plants.

Thanks to Ray we now know of three sites near Hay on Wye, one showing a very healthy *Colchicum* and smut population in 2015, and another one which hosted the fungus in 1982 but which showed no sign of the host (or smut) when he looked earlier this year.



Vankya ornithogali ([species page](#) and [map](#))

Stewart Taylor has confirmed that *Vankya ornithogali* is still present in the site found last year in Forres (Moray vc95), Scotland. A widespread search, aided by Ian Green of the BSBI, revealed fifteen *Gagea lutea* populations in the surrounding area along the River Findhorn, but without further signs of the smut. You can read about the find in Stewart's blog [here](#).

Paul A. Smith has also reported no smut in a small population of *G. lutea* in North Hampshire vc12.



Xenotypha aterrima ([species page](#) and [map](#))

John Winterbottom and Bryan Edwards have been surveying and monitoring *Xenotypha aterrima* (the host of *Dencoeliopsis johnstonii*) in Studland, Dorset. Thirty four colonised trees are now known from the site, making it one of the best surveyed sites of the ~13 localities known for this species in the UK. Hopefully this is an indication of suitable habitat for *Dencoeliopsis johnstonii* in a few months time...



Xylaria crozonensis ([species page](#) and [map](#))

Pauline Penna has reported two new sites for this *Xylaria* with sessile black stromata in Cornwall, bringing the number of known sites in GB up to eleven, all within Cornwall.

Although we now have a fair understanding of the distribution of *X. crozonensis* distribution in Cornwall, we have no idea whether this newly described but distinctive fungus is a recent arrival or an overlooked long-time resident, or if it's confined to Cornwall or present elsewhere in the UK. Please keep an eye out for this unusual sessile *Xylaria*!

Species to look out for

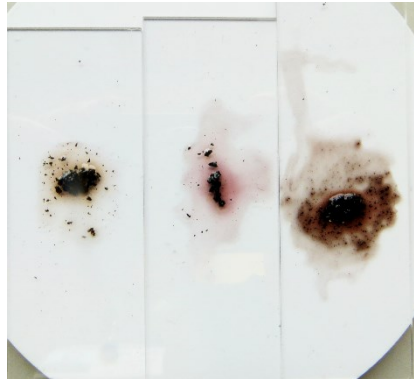
There are at least 26 on our Top 100 Target Species list which have been recorded fruiting in May, so please check out the details on the “Species to look out for this month” link on our [homepage](#), and bear these species in mind if you’re out in the field. There’s lots to look for, and if no historic records have been made in your vice counties, why not check out our habitat pages in case there are suitable unsurveyed habitats near you? Most of this month’s species also continue at least until June.

Daldinia petriniae and *Hypoxyylon fuscoides*

If you have alder woods nearby, it is well worth taking a look for [Daldinia petriniae](#) (a *D. concentrica* lookalike) and [Hypoxyylon fuscoides](#) (a *Hypoxyylon fuscum* lookalike). Both occur on *Alnus* (alder), can be surveyed for at the same time, and can be readily differentiated from their lookalikes by coloured pigments produced when a small fragment of stroma is placed in 10% potassium hydroxide solution (more details on the species pages). Any *Daldinia* on *Alnus* would be a good candidate, but *Hypoxyylon fuscum* also occurs on *Alnus* so may take more collections to find it. We’d be very grateful to receive specimens of either species, even if only provisionally identified. Roy Anderson’s key to *Hypoxyylon* and *Annulohypoxyylon* can be found [here](#), and Gernot Friebes’ excellent illustration of the differences in *H. fuscoides* and *H. fuscum* can be found [here](#).



Daldinia petriniae.
Image © L. Large



D. petriniae: variable stromatal pigments in 10% KOH. Image by B. Douglas



Hypoxyylon fuscoides.
Image © R. Anderson

Urocystis colchici

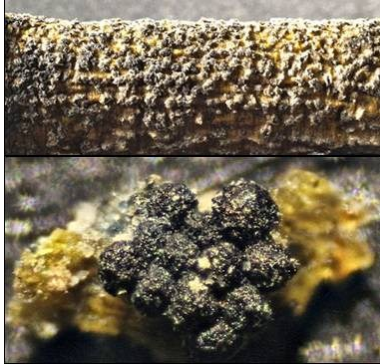


Urocystis colchici. Image
© R.G. Woods

The smut [Urocystis colchici](#), found on leaves of *Colchicum autumnale*, should be fruiting now and until towards the end of June, when the host’s leaves die back. Larger populations of the host, especially those which are being conserved under traditional hay meadow management practices, may be well worth a visit to see if the species is present.

U. colchici is considered a species of principal importance for the conservation of biological diversity’ in England and Wales, and listed in accordance with Section 41 and 42 of the Natural Environment and Rural Communities Act 2006. However, like most rare fungi it’s not yet officially Red-Listed and could well be overlooked. Any new finds or unsuccessful survey data would be extremely important in formally Red Listing this species towards the latter part of the LAFF project.

Interesting rarely recorded species



Images © M. Stroud

The *phaeobotryosphaeria* state of *Sphaeropsis visci*

Ted Blackwell of the [Hereford Fungus Recording Group](#) informed us of the first UK record of the teleomorph of *Sphaeropsis visci*, fruiting on *Viscum album* (mistletoe) stems on fallen *Tilia* sp. (lime) branches, in North Herefordshire VC36. The teleomorphic state also has a name (*Phaeobotryosphaeria visci*), in use prior to the ending of the system of dual nomenclature. The species has been recorded in Britain only 26 times, and until now only as the *Sphaeropsis* anamorph stage on *Viscum* leaves. The find was made by Jo Weightman, determined by Ted Blackwell, and confirmed by Brian Spooner. Keep an eye out for it in the field, and in the HFRG's forthcoming news-sheet (previous issues [here](#)).



[Image](#) by "Ar rouz", CC-BY-SA-4.0

Stigmidium ascophylli

Gary Easton from Aberystwyth kindly pointed me to Chris Yeates' thread on the [Fungi.org.uk](#) forums regarding the very interesting fungus *Stigmidium* (formerly *Mycosphaerella* and *Mycophycias*) *ascophylli* (see [here](#)). Gary suggested that I could mention it as one of the UK's rarely recorded or overlooked species which in truth is probably everywhere around the coast of the UK. We can't prove better images than those already present in the thread, but here's a little background detail on the species...

Stigmidium ascophylli (Mycosphaerellaceae, Capnodiales, Ascomycota) is a systemic mutualistic symbiote of the seaweed *Ascophyllum nodosum* ("Knotted or Egg Wrack"), which extensively colonises the whole seaweed thallus intra- and inter-cellularly in the same way that some fungal endophytes can colonise some plants. It also produces barely-visible perithecia (producing ascospores), imbedded in the receptacle surfaces. It's very rarely recorded in GB, which is almost certainly a case of people not being aware of it and not looking, because it is reportedly "universally present in *A. nodosum* plants in nature as well as in the related furoid *Pelvetia canaliculata*" (see [Garbary et al. 2005](#)). The ubiquitous occurrence of the symbiosis is probably because the fungus offers numerous benefits to the algae (protection from dessication and parasitism from other seaweeds), and both reproduce vegetatively together. Keep an eye out for it down on the seashore!

I think that's all for now!

Best regards,

Brian Douglas

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