Wildlife Report 2018

Fungi

Tony Leech

New fungi for Norfolk

The possibility of a 'new for Norfolk' is a stimulus for many naturalists to submit records to their County Recorder. Logic suggests that new species will become fewer with time but this does not seem to be true for fungi. This may, in part, due to genuine immigration of species into the county but there are other reasons. First, we are dealing with a whole Kingdom with over 10000 species recorded in Britain, many of them microfungi which are under-recorded. Secondly, new recorders with different areas of expertise are contributing. In addition, the understanding of species boundaries is changing all the time.

Ascobolus crenulatus. A small yellowish cup fungus on incubated rabbit dung collected by James Symonds at Weeting Heath NWT (TL757882) in June and identified by Tony Leech. Quite widely recorded in Britain, but like many dung fungi, not hitherto in Norfolk.

Figure 1. *Ascobolus crenulatus.* Weeting Heath. *Allan Archer.*

Ascochyta philadelphi A leaf-spot fungus on Mock Orange *Philadelphus* sp. found and identified by Stewart Wright near Northrepps (TG2538) in October. Three previous UK records: Fife (1910), Suffolk (1984) and Hampshire (2009).

Figure 2. *Bartholetia paradoxa* on Maidenhair Tree leaf. Earlham Cemetery. *James Emerson.*

Bartheletia paradoxa On the fallen leaves of Maidenhair Tree *Ginkgo biloba* but a Basidiomycete and therefore unrelated to most leaf-spot fungi (Figure 2). First found and identified in Norfolk by James Emerson (Earlham Cemetery, Norwich (TG2108), January) but additionally found soon after by Stewart Wright (Hoveton Hall (TG313202) and Repps-with-Bastwick (TG423176)) and by Jeremy Bartlett (Norwich (TG214076)). The fact that this conspicuous fungus on fallen leaves has been recorded fewer than a dozen times from Britain (although from England, Wales and Norther Ireland) suggests that it might be a relatively recent arrival. The first record is from 1978 but most are much more recent.

Beauveria felina On incubated rabbit dung collected at East Hills, Wells-next-the Sea in May by Tony Irwin. Described in Welch & Owens (2018).

Chaetomium bostrychodes Tiny black spiky spheres on incubated rabbit dung collected by James Symonds at Weeting Heath NWT (TL757882) and by Tony Leech at Gun Hill (TF8545) both in June. Widely, but not commonly, recorded throughout Britain.

Coprinopsis candidata A delicate white inkcap collected by Neil Mahler in grass under hawthorn at Grimes Graves (TL8190) in October. Identified by Yvonne Mynett and later confirmed by Derek Schafer (national expert). Known from only nine other UK sites.

Entoloma jahnii Growing stalkless on wood and only one centimetre across, this pinkgill looks more like an oysterling. It was found (and identified) by Yvonne Mynett at Lound Lakes (TG5100) in September. Known from three other British sites (near Preston, Sheffield and in Suffolk).

Galerina subclavata Small brown agarics have the reputation of being difficult to name but Yvonne Mynett found and identified this one in moss on Beeston Common (TG1642) in February. Widespread but not often recorded in Britain.

Inocybe lacera cf. var. ***helobia*** This scarce fibrecap was found at Sutton Fen (TG3722) by Neil Mahler, identified by Yvonne Mynett and confirmed by Penny Cullington (national expert).

Lophiostoma arundinis A black ascomycete embedded in the dead stems of Reed *Phragmites australis* at Mannington. (TG143322). Collected by Tony Leech in April. Recorded mainly from the Midlands.

Mycena aciculata A tiny agaric quite widely recorded in Britain but not hitherto from Norfolk. Collected from moss on bark from Beeston Common (TG1641) in February and identified by Yvonne Mynett.

Mycopan scabripes A mycena-like agaric also found and identified by Yvonne Mynett. One of three species new to the county found during an October foray by the Norfolk Fungus Study Group at Templewood (TG2538) near Northrepps by kind invitation of Eddie Anderson. Only about a dozen British records.

Mycosphaerella depazeiformis A leaf-spot fungus found by Stewart Wright on a living leaf of Wood Sorrel *Oxalis acetosella* at Guybon's Wood, Swanton Novers (TG008333) in November. The only other two records from the British Isles are from SW Ireland

Mycosphaerella pteridis On what was a good day for Stewart, he also found and identified this leaf-spot on a dead Bracken *Pteridium aquilinum* frond at Guybon's

Figure 3. ***Pseudaleuria fibrillosa*****. Beeston Common.** *Mark Joy.*

Wood, Swanton Novers (TG008333). The only other four UK records for this species are geographically widely spaced

Phaeobotryosphaeria visci A leaf-spot on senescent Mistletoe *Viscum album* leaves which may be getting commoner as it is not described in Ellis & Ellis (1985). Found in his garden at Catfield (TG3821) by Andy Beaumont in April and identified by Tony Leech.

Phyllosticta opuli. A leaf-spot on Guelder Rose *Viburnum opulus.* Recorded by Stewart Wright at Wood Green (TM2091) in October but not strictly 'new to Norfolk', as it was recorded by Ted Ellis in 1940 at Upton Broad. Included here, however, because the only other UK record is from Warwickshire in 1971. Curiously, the Upton Broad record (on the Fungus Record Database for Britain and Ireland) is not on the Norfolk Fungus Database.

Pilobolus umbonatus A rare, or at least under-recorded, 'dung cannon', On incubated rabbit dung collected at East Hills, Wells-next-the Sea in May by Tony Irwin. Described in Welch & Owens (2018).

Pseudaleuria fibrillosa This bright orange cup fungus, spotted by Chris Kelly on soil during a Norfolk Fungus Study Group foray on Beeston Common (TG1641) in February, resembles a number of other species (Figure 3). All 16 sites at which this fungus has previously been recorded are south of central London.

Puccinia convolvuli Despite the abundance of its host, Hedge Bindweed *Calystegia sepium*, this rust fungus is very rare. James Emerson was stimulated to search for it (and found it in Norwich (TG225087)) by Jeremy and Vanya Bartlett's recent record from Suffolk, apparently only the second British record.

Ramularia centranthi Another rare leaf-spot fungus (the three other UK records are all in the west of Britain) found by Stewart Wright on a relatively common host Red Valerian *Centranthus ruber*. His first find of the year was at Hoveton Hall (TG2538) in May and in October he found it again at Templewood, Northrepps.

Hoof Fungus on the move

In the 2010 fungus report I asked whether the Hoof Fungus *Fomes fomentarius* was spreading (Leech 2011). It is now clear that the answer is yes. This distinctive bracket (Figure 4) is usually found on birch *Betula* sp. trees, which it kills. The first recent Norfolk record was from Roydon Common in 2008, but Ash Murray recalls that that it had been known from the wooded parts of Dersingham Bog for some time before that. Since 2008 it has been found at over 25 sites in Norfolk – indeed it is probably present in all Norfolk birch woods, at least in the west and north of the county.

Figure 4. *Fomes fomentarius* on birch. Roydon Common, 2008. *Tony Leech.*

Although records exist for Hoof Fungus over much of Britain, it is apparent from the distribution map generated by the National Biodiversity Network that the majority of these are from Scotland (north of the central lowlands), and from Leicestershire/North Lincolnshire/Yorkshire. In addition, there are smaller 'clusters' of records from Surrey/West Kent and increasingly from west-central England. It is virtually unrecorded from west Wales and the south-west peninsula.

Although birch is the usual host in Britain, by far the next most frequent host is Beech

Figure 5. A second bracket of Hoof Fungus has developed after the Beech tree fell and has grown to ensure that the tubes remain vertical for spore release. Knole Park, Kent. 2014. *Tony Leech.*

Fagus sylvatica. Some particularly large brackets, up to 50 cm across, are found on mature Beech trees in Knole Park, Sevenoaks (Figure 5) which are steadily succumbing to the attack. Other hosts recorded in Britain are *Acer*, *Aesculus*, *Alnus*, *Populus*, *Prunus*, *Quercus*, *Sorbus*, *Ulmus*, and even *Picea*. Although some of these may be misidentifications, others are unlikely to be. In Norfolk there is only one record of Hoof Fungus on any tree other than birch; a bracket was found on a fallen oak branch on Snettisham Common in 2016.

In Europe, birch is the main host in the north and Beech in the south. The first record from anywhere in Britain specifying the host as birch was in 1933 from W. Perthshire, although the fungus was known in Britain on other hosts before that. Unfortunately, many of the early records do not specify host but it is possible that a strain of Hoof Fungus with a preference for birch arose, or arrived, in Scotland in the early part of the 20th century and spread southwards, whilst strains capable of attacking other species remained rare. There are numerous records of *F. fomentarius* on birch from Yorkshire and Lincolnshire in the middle of the 20th century, the earliest from 1945. Richard Shotbolt reports that it has become widespread in Cambridgeshire and Huntingdonshire since the beginning of this century (pers. comm. 2014). It appears subsequently to have 'turned left' into Norfolk and has now been recorded in Suffolk and increasingly frequently in the Home Counties. It seems unlikely, however, that Hoof Fungus will significantly reduce the abundance of birch trees; it has not appeared to do so in Scotland. Birch trees are often short-lived and are frequently attacked by the (still) much commoner Birch Polypore *Piptoporus betulinus (Fomitopsis betulina).*

Early record

The 2008 Roydon Common record is not the first for Norfolk! On display in the Castle Museum, Norwich, is a subfossil identified (by Nigel Larkin) as *Fomes fomentarius* (Figure 6). It was found by Fiona Beatty during an excavation at Shropham Pit, Norfolk (TL9994) in 1999 at the base of a diamicton layer deposited during the Ipswichian interglacial period approximately 111,000 years ago.

Figure 6. Subfossil Hoof Fungus. Access kindly provided by David Whitehouse, Keeper of Natural History, Castle Museum, Norwich. *Tony Leech.*

References

Leech, T. 2011. Wildlife Report 2010: Fungi. *Trans. Norfolk Norwich Nat. Soc.* 44(1): 100.

Welch, M. & Owens, N. 2018. Field studies at East Hills, Wells-next-the-Sea. *Trans. Norfolk Norwich Nat. Soc.* 51(1): 60-75.

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