

Fungi

Tony Leech

Fresh eyes – new species

Finding new fungi for the Norfolk list, now over 3250 species, is largely a matter of the right person being in the right place at the right time. Fresh eyes often notice species which although not nationally rare have escaped local attention. Yvonne Mynett, recently arrived from Lancashire, has drawn our attention to *Flammulaster carpophila*, a small brown mushroom sprouting from beech fruits in leaf litter, finding it at Emily's Wood (TL7989) near Brandon. Later in the year it was also found at Brett's Wood, Thursford (TF9632). Yvonne enjoys the challenge of tiny agarics in leaf litter and has added *Mycena polyadelpa*, on a dead oak leaf at Winterton (TG4920) and *Hemimycena mauretanica* on a cone scale at Sandringham (TF6929). A rather more showy find of Yvonne's was the delicate orange waxcap *Hygrocybe coccineocrenata* which she found, with Stephen Pinnington, at Catfield Fen (TG3721). Her final contribution was *Lasiobelonium variegatum*, a small but very attractive fringed cup fungus on dead wood at Damgate Wood, Acle (TG4010).

Neil Mahler, Suffolk County Fungus Recorder, is a frequent attendee at Norfolk Fungus Study Group forays and has introduced us to *Camarops polysperma*, known 'officially' as Thick Tarcrust but often referred to as the slug fungus from its long black appearance on the trunks of dead Alder trees. His first Norfolk record for this species was also at Catfield Fen (TG3721). This fungus, long considered rare, is now being recorded quite frequently in Britain. His second contribution to new Norfolk fungi in 2015 was the small bracket-like fungus *Plicatura crispa* at Mousehold Heath (TG2410) on a public foray and later

at Winterton (TG4920). Finally, on a very productive December foray at Sandringham (TF6929), he found *Postia placenta*, a soft pink encrusting bracket, on the cut end of a conifer log. In case you were wondering, 'placenta' is Latin for cake.

The largest new find of 2015 was probably *Rubinoboletus rubinus*, a sturdy bolete with rose-pink pores and stem, collected by Niall Traynor (NWT) under oak in a remote part of the Hickling Broad reserve (TG4220). Much less impressive (but much rarer with fewer than eight national records) was *Entoloma phaeocyathus* found in bare sand (its preferred habitat) on dunes at Titchwell (TF7444) by TL who also recorded *Inocybe aghardii*, a small brown fibrecap, under willows at Cranwich Pits (TL7795).

Adding new coprophilous fungi to the Norfolk list is made easier by the fact that few Norfolk mycologists have looked at herbivore dung. TL added *Arnium leporinum* from deer dung collected at Catfield Fen (TG3721) and *Ascobolus elegans* and *Trichobolus zukalii* from rabbit dung collected on a National Trust bioblitz at Blakeney (TG0344). Both are tiny cup fungi with the former having been recorded only eight times in Britain.

A star is born

Some of us get excited when a new fungus is added to the Norfolk list, and even more so when it is also new to Britain. But adding a 'new to science' is quite exceptional and although Norfolk can't quite claim that, Jonathan Revett played a significant part in the discovery of a new earthstar. In 2000, he collected what he described as a 'fleshy form of *Geastrum quadrifidum*' at Cockley Cley (TF7804). He sent specimens to the Royal Botanic Gardens Kew and to L. Jalink



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1 *Flamulaster carpophila*, Emily's Wood.

2. *Gastrum britannicum*, Lyng (col. Peter Lambley).

3. *Postia placenta*, Sandringham.

4. Crimped Gill *Plicatura crispa*, Winterton.

5. *Baranowskiella ehnstromii* (beetle) on *Phellinopsis conchata*, U.E.A. Photo: Neil Mahler. Photos: Tony Leech unless otherwise stated.

at Leiden but was assured that it was a known variant. Trevor Dove had also sent a specimen with similar characteristics, which he had collected at Surlingham (TG3107), to Kew in 2002, and in 2009 Don MacNeil found a similar earthstar at Rushford (TL9281), near Thetford.

In 2014, the Kew Fungarium was asked to submit three specimens of the Rayed Earthstar *G. quadrifidum* for a DNA sequencing study of European earthstars. They sent the three most recently acquired (including the Cockley Cley and Surlingham specimens) but when the results came back these three were identical but did not match any other European specimens of *G. quadrifidum*. This suggested that a new species was involved and careful examination revealed that all three were morphologically distinct from *G. quadrifidum*. Zamora *et al.* (2015) named the new species *Geastrum britannicum* and designated Jonathan Revett's Cockley Cley specimen as holotype and Trevor Dove's Surlingham specimen as a paratype. These events and outcomes were described by Henrici (2015).

Geastrum britannicum has smaller spores (4-4.5 µm including ornament), lacks the pale 'saucer' round the peristome and has a spore sac which is typically broader than high. The first British record, recognised retrospectively, was from Abergavenny in 1995. Now that it has been described it is proving to be quite widespread and has been recorded from thirteen counties in England and Wales, with about half of the records coming from churchyards.

Europe's smallest beetle

In this story, the ptiliid beetle *Baranowskiella ehnstromi* is the principal, with the bracket fungus *Phellinopsis conchata* playing a supporting role. Andrew Duff had heard that this smallest beetle ever recorded from Europe had recently been found in France, Belgium, Denmark and Luxembourg and suspected that it might occur in Britain.

As it had hitherto been found only in the fungus *Phellinus conchatus* (now known as *Phellinopsis conchata*) he contacted TL to see whether the fungus had been recorded in Norfolk. The bracket occurs mainly on willow but is generally uncommon, with only a handful of records from Norfolk. One of the most recent was from the grounds of the University of East Anglia to which Neil Mahler was able to take Andrew Duff in August 2015. Within minutes, the tiny beetle had been found in the pores of the fungus – for the first time in Britain. A few days later, James Emerson photographed an adult beetle and numerous larvae on a bracket of *P. conchata* taken from a willow at Whitlingham Marsh (TG2808). A full account of the beetle and its discovery has been given by Duff *et al.* (2015).

References

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- A.R.Leech** 3, Eccles Road, Holt, Norfolk NR25 6HJ. tonyleech3@gmail.com