

# TWIC Autumn Conference Report, November 2014

By Natalie Harmsworth

53 wildlife enthusiasts from across the region gathered for The Wildlife Information Centre (TWIC) 2014 Autumn Conference in Edinburgh. The conference theme was 'The under-recorded and obscure – addressing gaps in species recording'. The idea behind the conference was to provide a platform for experts of some of the less well recorded species groups to promote the study of their taxa. **Graeme Wilson**, Manager at TWIC, welcomed everyone to the event. TWIC Directors, **Sarah Eno** and **Ian Young** chaired the morning and afternoon sessions respectively.

**Dr Stephan Helfer**, Royal Botanic Garden Edinburgh, spoke first on microfungi. Microfungi are fungi having small (microscopic) sporocarps (Ainsworth, 2008). There are around 10,000 species in Britain. This number of species may seem like a daunting proposition for the would-be mycologist. However, it is worth remembering that some fungi, for example smuts and rusts, occur on specific plant hosts, thus narrowing down the identification options. Moreover, as Stephan's presentation demonstrated, there are some readily identifiable species that can be recorded by the novice. These species will hopefully whet the recorder's appetite for a more in-depth knowledge of this fascinating and varied group of organisms. One distinctive and wonderfully named slime mould is the 'Dog's vomit fungus' (*Fuligo septica*), so called because of its yellowish bile-coloured appearance. It can be found throughout the year on dead wood and mulch. Stephan's presentation covered in some detail the main groups of microfungi, where they sit in the tree of life and their ecology. Stephan also touched on some of the economically important fungi that cause plant and animal diseases. One of the most famous is the *Phytophthora* group. *Phytophthora infestans* was responsible for the late (potato) blight in the 1840s and 1850s that had a devastating effect on the Irish population. More recently the related *Phytophthora ramorum* has been responsible for Sudden Oak Death in America, a highly damaging tree disease. Closer to home, *Phytophthora ramorum* ('Ramorum') is prevalent in south west of Scotland and is causing extensive damage to Larch trees and other plants. Recognition of these species is clearly of great importance both for identifying new outbreaks and for preventing further spread of these diseases.

The next speaker was **Keith Bland**, who provided a fascinating talk on recording leaf-mining insects (or how to add another 500 species to your recording repertoire). While macro-moths are usually relatively easy to identify, the smaller ones are more difficult and the smallest species may require the use of a microscope or the examination of their genitalia! However, many phytophagous moths, i.e. moths that feed on plants, are small enough as larvae to live within the plant leaf they are feeding on. The leaf-mines produced by these moths are often characteristic and frequently more readily identifiable than the insect itself. Keith used photographs to show how a larva would hatch out from its egg, then start forming a tunnel as it feeds within the leaf. As the larva grows, the tunnel expands until eventually the larva emerges. The pattern of the mines produced by the larvae can give a clue to the identity of the leaf-mining insect. Some mines are distinctive, while others are host-specific, which can significantly narrow down the options for species identification. One of the easier species to identify is *Stigmella regiella* (pictured), which mines Hawthorn (*Crataegus monogyna*). The mines of this species contain reddish coiled frass (excreta) and are visible between August and November. Another readily identifiable species is *Amauromyza labiatarum*. This is the only leaf miner found on Hedge Woundwort (*Stachys sylvatica*) in the UK. Keith indicated that leaf-mining is not restricted to moths (Lepidoptera) and has been adopted by several families of Flies (Diptera) as well as some Hoverflies (Syrphidae) and Dungflies (Scathophagidae). Distinguishing between fly and moth mines can be problematic, but differences can be found once you get your 'eye in'. Other orders of insects employing leaf-mining, but to a much lesser extent, include Beetles (Coleoptera) and Sawflies (Hymenoptera). It was clear from Keith's talk that an existing knowledge of the UK flora would be helpful in recording leaf-mining insects. For further information on leaf-miners visit the [British Leafminers website](#), which includes details of how to contribute records to the National Leafmining Lepidoptera Scheme.



Leafmine of *Stigmella regiella*. Photograph © Keith Bland.

During the open mike session, **Graeme Wilson** of the Lothians and Borders Mammal Group (LaBMaG) spoke

about mammal recording and highlighted the need for records for this under-recorded group. Records can be submitted to The Mammal Society [online](#), or via [TWIC](#). TWIC shares data with The Mammal Society, so there is no need to submit the same data to both organisations. **Natalie Harmsworth**, TWIC Ecologist, thanked the recorders for attending the excursions this season and indicated that to date 3339 species records for 26 different taxonomic groups have been submitted to TWIC for 9 different sites. She indicated that there would be a further 3 outings over the winter period, the first on Saturday 29<sup>th</sup> November to Cobbinshaw Main Reservoir in West Lothian. Details of forthcoming outings can be found on the recording events page of the [TWIC website](#). **Cathy Hooper**, Ranger at Penicuik Estate, introduced the new ranger service and invited recorders to get in touch with her if they are already undertaking recording activities on site. There are plans for some surveys, for example BioBlitz type events, at the estate in the future.

During lunch, the **Annual General Meeting** was held for TWIC Members. Delegates also had a chance to browse the displays and to network with other recorders.

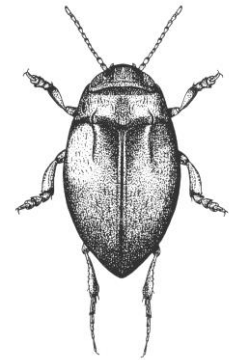
After the break was the presentation of the **Bob Saville Award**. The recipient was **Rod Corner** of the Botanical Society of Britain and Ireland (BSBI) and British Bryological Society (BBS) and was awarded for a lifetime's dedication to biological recording. Rod was unfortunately not able to attend the conference to collect the award. On presenting the award, Sarah Eno said: *"Rod's interest in botany dates back to his teens. He was extremely important for informing the Borders Special Sites of Scientific Interest (SSSI). In 1956 he and Arthur Smith wrote a letter to the Nature Conservancy Council (NCC) about a certain wetland's importance for rare species and this became Whitlaw Mosses National Nature Reserve (NNR) and eventually was designated an Special Area of Conservation (SAC) along with Slaidhills Moss near Hawick, which Rod had identified much more recently, for the Slender Green Feather-Moss (Hamatocaulis vernicosus)... [Rod is] always a gentleman, sharing his knowledge and skills, organising botanical recording events and patiently identifying samples sent from enthusiastic recorders."* Rod is also one of only a handful of botanical recorders in the UK to have served as vice-county recorder for over 40 years.

**Katty Baird**, regional coordinator and area organiser for the British Arachnological Society (BAS) spoke about spider recording. In light of the plethora of negative media coverage regarding spiders, Katty first set out to debug the many myths regarding the UK's arachnids. The main body of her talk covered the arachnid diversity in the UK, the basics of spider anatomy, how one might set out to look for and identify spiders and information on a few 'easy' species to record. In Scotland, the arachnids include Spiders (Araneae), Harvestmen (Opiliones), Pseudoscorpiones and ticks and mites (Acari). The great thing about recording spiders is that they are ubiquitous and there relatively few UK species to get to grips with (not counting the Acari, which may number into the tens of thousands)! There are also real opportunities to fill recording gaps because many species are not well recorded. For example data from the Spider Recording Scheme shows few Scottish records for the Daddy Longlegs spider (*Pholcus phalangioides*), despite the species being considered widespread in buildings throughout the country. Thus, even the casual observer could help address gaps in recording. Katty also detailed what resources would be needed for individuals wanting to take recording further. One key message was that it is necessary to obtain mature (adult) specimens for a positive species identification. For larger species, i.e. not money spiders, it should be possible to ascertain whether your specimen is mature by looking for the presence of enlarged palps, which resemble boxing gloves, in adult males and an epigyne on the underside of females. Features that might help with identification include details of the spider's eyes, body shape and web structure. Colour is not a reliable identification feature, as it is often variable. Katty concluded her presentation by showing slides of the various recording methods available. These ranged from simple netting and vegetation beating techniques to the high tech Bugvac method! Katty would welcome photos of specimens with date and location details. Her contact details can be found on the [TWIC website](#). For news on local outings, why not consider joining the [South Scotland Spider Group Facebook page](#). There is further information on all aspects of spider recording on the [BAS website](#).



Four-spot orb weaver (*Araneus quadratus*).  
Photograph © Chris Cathrine.

**Garth Foster**, spoke next on Water Beetles. Garth has been involved in water beetle conservation in Britain for over 30 years. He is the key contact for the national water beetle recording scheme, a scheme jointly managed by the Balfour-Brown Club and The Aquatic Coleoptera Conservation Trust (ACCT). The subtitle to his talk was “The Which Lothian question” and he revealed that Midlothian vice-county (VC) 83 is the most under-recorded Lothians vice-county for water beetles based on the records. (Note that water beetles are generally better recorded in the Scottish Borders). The best recorded VC is East Lothian (VC82). However, Garth emphasised that records for East Lothian are restricted to a few key sites such as Aberlady. Garth then moved on to describe in more detail the groups covered by “water beetles” and illustrated examples of species found in each group. Water beetles are diverse and include everything from diving beetles to whirligigs (the Gyrinidae), from weevils that live on the surface of duckweeds to subterranean species, and include ectoparasites such as the Beaver Beetle (*Platypsyllus castoris*), which was recently discovered on wild Scottish Beavers. With around 400 species known to the UK, the group provides a challenge for the recorder. It is also fairly easy to make a new record and contribute to the recording scheme. Water beetles can be recorded at any time of year, another plus point for studying the group. The down-side to recording is the kit needed, which includes a binocular microscope, and the difficulties associated with identifying larvae. Not all kit needed for studying water beetles is specialised however. Like Odanatists, who use a colander for surveying for dragonfly and damselfly larvae, Coleopterists have adopted another common kitchen implement for surveying purposes – a tea strainer!



ACCT

A tea strainer is essential when searching through water-filled holes in the buttressed root systems of isolated Beech trees for the larvae of *Prionocyphon serricornis*. Garth is happy to identify specimens or photographs for free (within reason). Samples should be put in labelled plastic tubes and posted to him. Alternatively photographs – showing both the underside and upper side of the beetle – can be sent to his [email](#). Note that record details should be supplied ‘up front’ and samples should be sent in batches, rather than singularly. Further information on water beetle recording and conservation can be found on the [ACCT website](#) and on the [Balfour-Browne Club Facebook page](#).

The final speaker of the day was **Dr. Clare Scanlan** of the British Phycological Society (BPS). BPS is a charity dedicated to the study of algae and was founded in 1952. Clare’s talk was titled ‘Seaweeds – more than just slime: seaweed biodiversity and uses in a changing world’. Clare started with some definitions, explaining that algae are ‘lower plants’ – photosynthesising like plants, but lacking root systems. Seaweeds are a subset of algae occurring in brackish and marine environments. Clare explained that three colour groups of seaweeds are recognised – the browns, greens and reds. Seaweeds have quite complicated sex, reproducing sexually, asexually and vegetatively. Seaweeds grow in a range of habitats, from open coastline, intertidal and subtidal habitats through to river estuaries. Seaweed diversity decreases as you move from the coast to estuarine waters; a change linked to salinity factors. Worldwide some 10,000 species of seaweeds are recognised, with the reds being the most diverse group. In Scotland we have a more modest number of species (420). On a clean, diverse habitat in open shore conditions one might expect to find an average of between 50 and 90 species. In the Outer Forth Estuary, there are between 60 and 128 species of seaweed. Seaweeds display a variety of forms, as Clare demonstrated through the inclusion of photographs in her slides. There is a zonation of seaweeds on the shore. The top zone of seaweeds is set by physical factors (wave action), whereas at the bottom of the shoreline, grazing and competition affect distribution (as well as physical factors). Seaweeds are important because they add to shoreline biodiversity, provide habitat for animals and foodstuff for invertebrates and animals. They are also used in a range of human products, from food to cosmetics. There are concerns about the effects of climate change and non-native species on the seaweed flora. Recording is key to understanding and managing these effects. Records can be submitted to the BPS [online](#). The BPS also have a Facebook page, which can be viewed [here](#).

**Sarah Eno**, TWIC Chair, summed up the event. She said that the speakers’ talks had provided the inspiration that was needed for more people to take up recording of these taxonomic groups. She said that everyone could record some of the easier species highlighted by the speakers when out in the field (or even in the home in the case of the Daddy Longlegs spider) as an add-on to recorders’ main interest. Sarah added that the speakers had really demonstrated that support for recorders is ‘out there’. She finished by thanking everyone for attending the event.