

ADASTRA

2010



An annual review
of wildlife recording in Sussex

published by
The Sussex Biodiversity Record Centre

ADASTRA 2010

A review of wildlife recording in Sussex in 2010

Printed and published in February 2011

by the

SUSSEX BIODIVERSITY RECORD CENTRE

Woods Mill, Henfield

West Sussex

BN5 9SD

Tel: 01273 497553/554

Fax: 01273 494500

E-mail: sxbrc@sussexwt.org.uk

Web: <http://www.sxbrc.org.uk/>

Editor: Patrick Roper

Tel: 01424 870993

E-mail: patrick@prassociates.co.uk



2010 was the **International Year of Biodiversity** (IYB), as declared by the United Nations. Although the year has ended, the UN has launched a new **Decade of Biodiversity** from 2011 until 2020. 2011 is also the **International Year of Forests**. From 18–29 October 193 signatories to the Convention on Biological Diversity attended the Nagoya Global Biodiversity Conference to agree new biodiversity targets for 2020. Details are here: <http://www.biodiversityislife.net/?q=home>

The Natural History Museum, the UK's lead partner on the IYB, have pointed out that "Despite all the threats to the UK's biodiversity, there have been many success stories." Apart from those with some of our rarer species, "some habitats are also beginning to make a come-back. Large areas of lowland heathland have been re-established and lowland beech and yew woodland, meadows and chalk grasslands have been expanded."

"The conservation of these habitats and species involves many organisations and individuals working tirelessly to identify species, assess distribution and monitor habitats, to create protected areas, and to campaign for legislative changes."

"We have lost over 100 species in the UK during the last hundred years. However, since 2004 the UK government has been implementing the Biodiversity Action Plan that sets out the conservation approach for 1,150 priority species and 65 habitats across the country. There are currently 436 action plans for the UK's most threatened species and habitats."

"The list of species that need safeguarding includes lichens, mosses, fish, moths, birds, dormice and bats. The habitats that need protecting include coastal sand dunes, deep sea sponge communities, estuarine rocky habitats, traditional orchards, ponds, rivers and hedgerows."

The contents of this AdastrA review reflect the important and varied work on species and habitats that has been done in Sussex during 2010, work that will surely continue over the next decade. Sussex also has a large number of forests and is well-placed to make a useful contribution to the 2011 international celebrations and activities recognising the importance of this habitat (however defined).

The Sussex Biodiversity Record Centre (SxBRC) in 2010

by Henri Brocklebank, Biodiversity Record Centre Manager

There's nothing like a bit of distance to afford a fresh perspective.

Having been wrapped up in the Record Centre for the past twelve years, sometimes so involved that I can't see the wood for the trees (or should I say the trees for the lichens) the last eight months has afforded me a fresh view. As I have been on maternity leave and my time has been taken up with motherhood, reading this year's copy of *Adastra* has been a very different experience. Most of the articles are about sightings and events that I have not been aware of. It just brings home to me, more than ever the range of work that is going on around us in Sussex every day of the year and that the work of the recording community in Sussex is tenacious and fastidious and so often joyous and fun. It is great to see how biological recording and the work of conservationists in Sussex is now intricately entwined and the information being gathered is put to so many uses. There is so much to record in our county and even now whole 'new' habitats are being identified and discovered (see chalk streams article), and we can always count on Howard (and his dog), amongst others, to find some new species to Sussex.

Nick Sturt has kindly written a moving piece about our much loved VC13 BSBI/SBRS recorder Alan Knapp who so sadly died this year. Many *Adastrans* have lost a good friend, colleague and teacher. In my time at SxBRC, the Sussex Botanical Recording Society and the Record Centre have shared an excellent and co-operative relationship. Alan (and Paul) have been the backbone of this relationship their support of SxBRC has been unerring and very much appreciated. We will very much miss Alan on the Committee for Biological Recording and in every aspect of our shared work.

I hope you enjoy this year's copy of *Adastra* as much as I have.

Vascular plants

by Paul Harmes, Sussex Botanical Recording Society

This year we have been targeting recording for the new Flora of Sussex by attempting to get all of the complete tetrads with less than 250 records up to a point between 250 to 300 records. Thanks to the efforts of a number of members of the Sussex Botanical Recording Society, we now have 914 of the 1046 tetrads, with over 250 records in. In 2011, recording will focus on the few remaining squares with less than 250 records and we will move toward re-finding records for scarce and declining species, as well as under-recorded species.

We have also, more or less, completed the preparation of draft species accounts and work on the draft introductory chapters is nearing completion.

Interesting finds this year in East Sussex include corn buttercup (*Ranunculus arvensis*). 100+ plants in flower and seed. Typically 1metre in from field edge and spread over 10metres north east of Ditchling. An additional five plants were found as a relic of planting in Brighton. The blue sow-thistle (*Cicerbita macrophylla*) has been found in three locations. These were a single plant by football pitch in Hollingdean, Brighton; two plants in the Wild Park LNR, Hollingbury and on a trackside at Crawley Down. Smith's Cress (*Lepidium heterophyllum*) has been recorded from a field margin at Cuckoo Bottom, Lewes, and from waste ground at Petley. Another species thought to be diminishing is silver hair-grass (*Aira caryophylla*). This year three locations were added to the list. These were at Blackbrook Lane, Pelsham Wood and Abbot's Wood. As well as those reported by David Lang in his article below, a single spike of lizard orchid (*Himantoglossum hircinum*) was found near Ringmer. Finally, pale willowherb (*Epilobium roseum*) has been confirmed from a long-known site at Scotney Castle.

In West Sussex, coral necklace (*Illecebrum verticillatum*) was recorded for the first time. About 40 plants were found in rutted area at Grevatt's Common. This plant has long been known just over the border in Hampshire, so it is a welcome addition to our flora. Oak-leaved goosefoot (*Chenopodium glaucum*) has been found at two locations, one at Coolham and at a site near Heyshott. White-beaked sedge (*Rhynchospora alba*) and marsh clubmoss (*Lyopodiella inundata*) were both confirmed from Wheatsheaf Common, and cut-leaved bitter-cress (*Cardamine impatiens*) was discovered to the south of Copsale. The Chichester canal has yielded up a couple of patches of water chestnut (*Pistia stratiotes*) and a single colony of water hyacinth (*Eichornia crassipes*). These two alien species were probably introduced by aquarists discarding these potentially invasive plants.

Orchids in Sussex

by David Lang

The annual orchid report seems to be a continual story of gloom! Early-flowering species were once again affected by a period of intense cold in early spring, so that in many sites they failed to appear. The summer drought affected both the summer-flowering orchids and those of early autumn, with plants stunted or withering before they had been able to set seed.

Early-spider orchid (*Ophrys sphegodes*) flowered fairly well at most of its Beachy Head sites, including a new one, but did not appear at Seven Sisters Country Park, nor at Hollingbury. Once again the site at Castle Hill National Nature Reserve, Balsdean, was grossly overgrown by tussock grass and in very poor condition. Only 115 flowering spikes were counted. The authorities concerned in its maintenance have been informed and have promised to rectify the situation for what is a highly important site nationally for the species.

Green-winged orchid (*Orchis morio*) was unaffected by the weather and flowered well in most of the sites visited.

Fragrant orchid (*Gymnadenia conopsea*) fared reasonably well throughout the county.

Marsh fragrant orchid (*Gymnadenia densiflora*)¹ flowered well at Ditchling Beacon, with many pollinating five-spot burnet moths very active in the sunshine.

Musk orchid (*Herminium monorchis*). Three well-known sites were checked as part of a BSBI survey. Only 4 flowering plants could be found at a normally abundant site at Ditchling Beacon, and none elsewhere.

Man orchid (*Aceras anthropophorum*) suffered badly from the drought, the few flowers appearing at Wolstonbury Hill withering very quickly and not setting seed.

Bird's-nest orchid (*Neottia nidus-avis*) failed to appear at many of its known sites for the second year running.

Greater-butterfly orchid (*Platanthera chlorantha*) at a site near Wolstonbury was in fine form in June, with some huge flowering spikes.

Bee orchid (*Ophrys apifera*) failed to appear at many of its well-known sites. Var. *atrofusca*, previously known only from West Sussex, was found at Radipole Lake near Weymouth, Dorset.

Fly orchid (*Ophrys insectifera*) did flower sparingly, and pseudo-copulating wasps *Argogrytes mystaceus* were filmed in action during a BBC TV programme at Wolstonbury. The wasps were present in exceptional numbers, and this rarely observed phenomenon was photographed at two other sites nearby by several observers.

Lizard orchid (*Himantoglossum hircinum*) flowered again at Beachy Head and in Seaford town, but failed to reappear at Southease. A single plant flowered at a new site near Ringmer.

Lady orchid (*Orchis purpurea*) flowered again at Beachy Head.

Burnt orchid had a poor season. Numbers at The Caburn were low and the plants stunted. The late-flowering form, var. *serotina*, failed to appear at any previously recorded sites.

Pendulous-flowered helleborine (*Epipactis phyllanthus*) once again had a poor season and many roadside plants at Grafton appeared to have been eaten off by deer. One fine plant was photographed near Arundel.

Broad-leaved helleborine (*Epipactis helleborine*) suffered from drought although two sites in East Sussex produced fine clumps of flowering spikes.

Autumn ladies-tresses (*Spiranthes spiralis*) appeared in reasonable numbers at most sites, with a fine colony on the south side of The Caburn where it had not previously been recorded.

Once more it has been a year of mixed fortunes – the fourth successive poor flowering season for our Sussex orchids.

¹ Formerly *Gymnadenia conopsea* ssp. *densiflora*. Ed.

Obituary. Alan Knapp (1947-2010). Vascular plant recorder for West Sussex.

In Alan Knapp the Sussex Botanical Recording Society (SBRS) and the Sussex Biodiversity Record Centre has lost one of its leading lights. A first-rate field botanist, communicator and teacher, Alan made a major contribution to virtually every aspect of vascular plant recording in Sussex. From 1997 he assisted Mary Briggs, the Botanical Society of the British Isles recorder for vc13, taking over the lead role in 2008 when failing eyesight made it difficult for her to deal with correspondence. With highly developed IT skills, Alan soon assimilated Mapmate and he was able to write his own software to facilitate the handling of records for a number of different purposes, most spectacularly for use in the preparation of a new Flora of Sussex.

The idea of producing a new Sussex flora had been discussed by Alan and Paul Harmes at around the Millennium and before long a working group of six had been formed. To facilitate recording Alan created a special page on the SBRS website bearing a map of Sussex with a grid of tetrads superimposed. Each tetrad is tagged with a coloured symbol corresponding to the number of vascular plant species recorded in it since 2000 and, by clicking on any of these 300 or so tetrads, a window is opened containing vital information: the date of the last visit; the months in which visits have been made with an idea of the proportion of records from each month; the precise total of records; the names of the species recorded; the names of those species recorded in the Sussex Plant Atlas which have yet to be re-found; the details, with grid references, of any records of rare or scarce species so far not rediscovered; and any species regarded as common in vc13 and/or vc14 which is apparently absent. Given that Alan assiduously updated this map with the data sent in, it will be readily appreciated what an extremely valuable tool it has proved to be in co-ordinating, guiding and focusing the recording efforts of SBRS members.

Born 25th February 1947, Alan Knapp grew up in South London. At Colfe's School he encountered an inspirational chemistry teacher and Alan's direction in life was set. He went up to University College London to read the subject and stayed on to do research leading not only to a doctorate but also to the Ramsay Memorial Medal for distinguished work carried out within the Chemistry Department. While undertaking postdoctoral research at Queen Mary College, London, Alan became interested in electronics, an additional recommendation when he applied for a scientific post with Philips, the company which would benefit from his talents from 1973 until his retirement, some 30 years later.

At Philips some of his colleagues were interested in birds but Alan preferred objects of study which were not so mobile and plants appealed to his scientific mind. At the Horsham Natural History Society Alan came to know Arthur Hoare, a member of both the BSBI and the Wildflower Society who lived nearby, and helped to initiate him into the mysteries of botany.

In the Sussex Botanical Recording Society Alan's enthusiasm and expertise grew exponentially. Under the leadership of Tim Rich, he played a major part in the production of the Flora of Ashdown Forest (1996). The next project was The Sussex Rare Plant Register of Scarce and Threatened Vascular Plants, Charophytes, Bryophytes and Lichens (2001) with Alan in partnership with Paul Harmes as record editors supporting editor-in-chief Mary Briggs. All of which was excellent experience for the projected new Flora. Working in tandem with Frances Abraham, draft accounts of virtually all the species had been completed by Spring 2010 when Alan's health began to cause concern.

Alan succumbed to cancer on 29 August 2010, but the Flora which will appear within the next few years will be very much his crowning achievement, for it is his vision above all that has shaped it.

At the SBRS indoor meeting in November 2010 Alan was remembered through photographs of past field meetings. He was a hugely popular leader of such meetings, something well illustrated by the many photographs of him at the centre of a throng of earnest members, all brandishing scraps of vegetation and seeking his judgement, advice and praise. Alan invariably responded with courtesy, good humour and frightful puns.

Alan leaves a widow, Kathryn (they had met on their first day in the Chemistry Department at UCL), a son Ian and a daughter Suzanne.

N J H Sturt

New and interesting alga, bryophyte and microfungi records from West Sussex

by Howard Matcham, Sussex recorder for bryophytes.

It is World War II, high in the sky above West Sussex the crew of a German bomber prepares to bomb Tangmere airfield below. Bombe entfernt! Missed!!

Fast forward sixty years and the crater is located a cricket pitch length north of the A27 to the west of Tangmere Service Station. The resulting explosion all those years ago had displaced gravel and chalk and today a few yards of the crater perimeter supports a small colony of bee orchids (*Ophrys apifera*) and blackening waxcap (*Hygrocybe conica*). When the bomb fell the area would have been an arable field possibly growing sugar beet as 'dig for victory' had been instigated in Britain as soon as the war started. Now it is regularly mown grass where horses canter the day away.

It has been such for at least the thirty years I have lived at Strettington, just a stone's throw away. January 2010 was mean. Snow lay in the area for much of the month and the water table was exceptionally high and the crater filled with water to a depth of several feet. April saw a gradual drop in the water table and by the third week of the month the crater was dry. During the last few days of April I noticed an extensive area of wine red colouring the moribund grass and investigation proved this to be a filamentous alga. I am not a phycologist, but I know somebody who is. My weekly visits to the Natural History Museum in London meant that I was able to show the collection to Professor David John; in fact, I left it on his desk. Imagine my surprise when a few days later an e-mail informed me that I had discovered the first record from England of *Sphaeroplea soleirolii* previously known only from pools (probably temporary) lying between sand hills on the coast of Caernarvonshire in mid-Wales. The record is in time to appear in the 2nd edition of *The Freshwater Algal Flora of the British Isles*, (to include terrestrial species) due for publication in May 2011.

I have been exceptionally busy on the bryophyte front compiling a database of the post 1960 hectad and tetrad moss and liverwort records of Sussex which amounted to approximately 7,150 records, this does not of course, include all individual bryophyte records recorded from these squares. On completing the task in early October a welcome break was provided by an invitation to join Graeme Lyons, Bruce and Jacqui Middleton recording the lower plants at the recently designated Graffham Common Local Nature Reserve. At the end of the day as we approached the pond, Bruce showed me a thalloid liverwort growing extensively on exposed mud; this exclusively mud-loving species is violet crystalwort (*Riccia huebeneriana*) in only its second site for the vice-county and not seen at the former site, Hawkins Pond, for several decades.

During the middle of October I joined Rod Stern and Graham Roberts at the River Ems to try and re-locate the aquatic liverwort, fringed heartwort (*Ricciocarpus natens*) and in this we were successful, first found by the three of us and the late Francis Rose in July 1992 this site has produced the only vice-county record although it could possibly still be extant at Knepp Castle where it was found during the last century.

An added bonus was collected a liberal helping of dung from a crusty cowpat in the meadow approaching the canal which had a profuse covering of the very common orange cowpat discomycete *Coprobria granulata* and after three weeks moist chamber cultivation the *C. granulata* had disappeared and perithecia of *Schizothecium aloides* appeared, this is the first West Sussex record of a very local species with only nineteen previous records from the British Isles (BMS – Fungal Records Database of Britain and Ireland) although the distribution map from the NBN Gateway show even fewer records.

In May Rod and I had visited a local SSSI at West Wittering which has a good colony of green-winged orchid (*Orchis morio*) when I noticed what I took to be a rust fungus on the leaves of creeping buttercup (*Ranunculus repens*), however, on looking at it microscopically it appeared to be a chytrid fungus, the most primitive of fungi; the name is derived from the Greek word chytridion which refers to 'little pot' and aptly describes the structure that contains the spores. I could not identify it to species level and sent it to Kew who replied: "The fungus on the *Ranunculus repens* leaves seems to be a *Synchytrium*, rather young but quite typical of the genus in the dense, wart-like galls. It should perhaps be assigned to *S. aureum* s. lat., which has been recorded from many hosts, and is probably a species complex. It is the only one recorded from this group of *Ranunculus* (*S. anomalum* very occasionally on *R. ficaria*). However, there are very few records of it, and evidently only from *R. acris*." This species was a new record for southern England with the nearest previous record from South Wales.

I am particularly interested in fungi growing on faecal (fimicolous or coprophilous) material and as I have remarked previously, walking a succession of my canine friends has led me to discover interesting records and this year has not been an exception. A large horse midden, artificially created of course, and heaped to a height of approximately eight feet is the ideal place for an intelligent country dog to stand and take in the view. Rabbits live dangerously if they have a long way to run to safety and more than one has ended up on Barney's dinner plate. On this particular day, a fungus growing on the dung caught my eye as I was familiar with it from the New Forest which is its European stronghold. Nail fungus (*Poronia punctata*) is a Near Threatened Red Data List species and is normally confined to pony dung. This would appear to be the first record from a midden [accessed in RBGK as -K(M)166679] and none of the animals on the farm are New Forest or Exmoor ponies, so quite a surprise and the first ever record for West Sussex. The midden also had hundreds of the minute ascomycete *Sacobolus versicolor* with apothecia rarely more than 1mm in diameter. At maturity the asci protrude above the surface of the disc and the eight spores to each ascus leave firmly stuck together when projected from it. I have moist chamber dung and myxomycete cultivations all through the house which, apart from annoying my wife, produce interesting results, (and sometimes interesting aromas). One of these cultures of horse dung from the midden had the ascomycetes *Lasiobolus dilatus* [accessed in RBGK as -K(M) 165492] and *Ascobolus albidus* both with few records from the county. Deer pellets collected from the Graffham Common visit produced the rare and predominantly fimicolous saprophyte *Podospora curvicolle*, a second record for the vice-county.

I have mentioned the footpath Town Lane in previous reports; it is part of Stane Street which extends from Strettington to Boxgrove and has proved to be a hotspot of interesting fungus records; this year was not an exception and during a walk in October I spent part of a morning checking dead bramble stems for fungi. On spotting a familiar species I took it home for microscopic examination and was able to confirm the second British record for the ascomycete *Pseudotrichia viburnicola* [accessed in RBGK as -K(M)167509]. Last year I wrote how my late dog Lucy, helped me to find the first British record. Considering this second record is only approximately 800m from the first, it is reasonable to assume that it has either been overlooked by British mycologists or it is a genuinely rare species. It has very recently (2010) been discovered in Germany and is known from eight sites in France. Town Lane also had the first colony I have seen of the small brown agaric, hawthorn twiglet (*Tubaria dispersa*) which is confined to buried mummified haws of hawthorn.

Lichens

Sussex Lichen Recording Group meetings and finds in 2010.

by Jacqui Middleton, Secretary SLRG

We began the year in February with an excellent visit to Heyshott and Ambersham Commons. We were mainly investigating the heath and eroded sand banks and ruts (the latter being particularly good for *Cladonia* species²). Although Heyshott and Ambersham are becoming overgrown they are still very rich in lichens – particularly for the cladonias. Rose et al., (1991) had found in excess of 20 species in the 1970/1980s and the hope was that we could re-find most of them. We managed to find 18 cladonia species but the real rarities eluded us (e.g. *Cladonia strepsilis*, *Cladonia sulphurina* (nearby Lavington only), *Cetraria muricata*, and *Pycnothelia papillaria*). Highlights found on the day were: *Cetraria aculeata*, *Baeomyces rufus*, *Cladonia cervicornis* subsp. *verticillata*, *Cladonia ciliata*, *Cladonia crispata* var. *cetrariiformis*, *Cladonia diversa*, *Cladonia floerkeana*, *Cladonia glauca*, *Cladonia squamosa* var. *subsquamosa*, *Cladonia subulata*, *Cladonia uncialis* subsp. *biuncialis*, *Leptogium teretiusculum*. The hope is that future management will at least maintain and possibly increase the lichen-rich sites.

In April we visited a private wood near Rogate which was rather shaded and relatively species-poor. However, there were some ancient woodland indicators present on “edge” trees which suggests that opening up the woodland further might be a rewarding enterprise lichen-wise. The high-light of this trip was to find *Opegrapha vermifera*, *Thelotrema lepadinum*, *Pachyphiale carneola*, *Ochrolechia subviridis* - all on mature oak trees.

In October we were invited to survey Lullington Heath in East Sussex by the local warden. Here, we had a very good day and I am sure there is a lot more yet to find as the site is very large. We were investigating a range of habitats – but it was the scrub that proved to be richest on the day. The heath was not as rich as it could have been – but hopefully over the years, with more scrapes, an improvement may be seen. The highlights of the day included *Pseudevernia furfuracea* and *Punctelia borrii* on Slough, *Usnea ceratina* and *Fuscidea lightfootii* on hawthorn, *Lecanora carpinea* and *Opegrapha atra* on ash. The rare nail fungus (*Poronia punctata*) was also found frequently on many Exmoor pony droppings³ much to the hilarity of everyone – as common as muck it was!

² *Cladonia* species include lichens variously known as elf, fairy or pixie cups as well as reindeer moss. Ed.

³ See Howard Matcham's contribution on lower plants above.

We did not have a fourth meeting and for the time being we intend to reduce our visits to two a year.

If anyone is interested in joining our Sussex Lichen Recording Group to look at lichens and other lower plants please contact Jacqui Middleton by email (jacquiandbruce@tiscali.co.uk). We have two meetings a year and our group has all levels of identification abilities. Beginners are always welcome.

REFERENCE

Rose, F., Stern, R., Matcham, H., and Coppins, B. (1991) Atlas of Sussex Mosses, Liverworts and Lichens. Booth Museum of Natural History, Brighton.

The lichens of Parham Park

By Simon Davey, Sussex Lichen Recorder

Most of my lichen work in Sussex in 2010 has been at Parham Park between Storrington and Amberley. This is arguably the best mediaeval deer park in Sussex. Although it has lost *Lobaria pulmonaria* leaving Eridge and East Dean Parks the only sites now for this conspicuous lungwort lichen, Parham Park is still very important. Without a doubt, the best recent find was on a small, but ancient, ash tree which in the past supported *Wadeana dendritica* in its only modern Sussex site as well as the BAP species *Bacidia incompa*. In November, two small groups of fruits of *Caloplaca flavorubescens* were also found on it. It is a showy species, and there can be no doubt that its fertile state is a recent phenomenon. This tree has been studied extensively by lichenologists since the early days of Francis Rose⁴. *C. flavorubescens* is a nationally rare and endangered species and the Parham Park find was, I believe, the first English record since 2006. It was Steve Chambers from Wales who was kind enough to confirm the record, and in doing so, he noticed a small patch of infertile *Caloplaca ulerosa*. This latter species was first found in Sussex in 2004 on an ancient and hollow lime tree, this tree has now collapsed and no longer supports the lichen.

In the 1960s, Francis Rose discovered *Caloplaca ferruginea* in Parham Park on an ancient oak tree with a surprisingly basic bark. It is easy to find as it has a colony of the common golden shield lichen, *Xanthoria parietina*, towards the base. *C. ferruginea* is still on the tree, where it is now confined to very healthy colonies on the exposed roots, but the original colonies have gone. Francis Rose's original colonies were still present in 2004. This is the only Sussex site and the nearest colonies are now in the New Forest.

Parham Park still supports the rare lichen *Lecanora sublivescens*, the only other Sussex site being Ashburnham Park. *Protoparmelia oleagina* is still abundant on chestnut fencing, but *Sphinctrina anglica*, a lichen only known from Sussex in the UK and recently only from Parham, could not be refound. It is possible that the fertile state of this species is ephemeral.

The lichen flora at Parham Park seems to be undergoing change, and many of the oak trees are very old indeed. Worryingly, it seems some are suffering from a virulent fungal attack, and certainly trees that in the past supported rare lichens such as *Leidea doliiformis* in its only Sussex site are in very poor shape. Being an important county for mediaeval deer parks, it is vital that these ancient parkland trees are monitored on a regular basis and we should learn from the Dutch Elm Disease experiences. This showed that the decline of important lichen habitats can be very swift. For example, *Caloplaca flavorubescens*, though always a scarce species, suffered dramatic decline as it was one of a suite of elm species all of which are now in great danger of extinction.

Sussex Fungi

by Martin Allison

What a difference a year makes. In 2009, we were bemoaning the lack of fruiting fungi, with no more than a few isolated specimens across much of the season. This year, by contrast, fungi were in abundance, and we were falling over extensive troops of brittlegills (*Russula* spp.) and milkcaps (*Lactarius* spp.). Fungi, possibly more than any other taxa recorded in Adastrum, are wholly dependent on suitable weather conditions for successful fruiting, and the prolonged mild and damp late summer provided an ideal climate for most species to thrive.

⁴ Francis Rose, who died in 2006, was an internationally renowned botanist based in Sussex. His interests covered all groups of plants.

Strangely in 2010, and I have noticed this often during otherwise productive years, many widespread species mysteriously failed to fruit well. These include, for example, common earthball, *Scleroderma citrinum*, birch Milkcap, *Lactarius tabidus*, and brown rollrim, *Paxillus involutus*, all normally found in good numbers on most forays during the autumn. This year, they were generally replaced by other, scarcer species, especially in the genera *Cortinarius* and *Inocybe* (webcaps and fibrecaps if you prefer).

This autumn, I spent my spare time foraying in Sussex and over the border in West Kent, and am still writing up the field lists for both counties. Three major woodland sites were visited in Sussex, namely Brede High Wood, The Mens and Broadwater Warren. At Brede I led two public walks looking for fungi. The participants on one of these included a group of young Russians, down from London for the day, and hell bent on finding something for the pot. At the end of the walk I checked their basket and removed several poisonous species, despite me having previously identified the suspects lurking amongst the edible Boletes! However, one of the Russians discovered a large deep purple fungus which turned out to be one of the highlights of the year, the violet webcap, *Cortinarius violaceus*. This spectacular species is a rarity in the UK, but was found again on the foray at Broadwater Warren, and was reported from a site in Kent. Does this mean that the species is not as rare as thought, but requires strict growing conditions? Violet webcap was previously recorded from Pond Wood, Brede by Patrick Roper in 1990, only a short distance from this year's find.

I met up with my ex RSPB colleague Graeme Lyons at The Mens in mid October for an enjoyable few hours mushroom hunting. This site is well known for one species in particular – garlic parachute, *Marasmius alliaceus* – and its name is very apt, for the air in the wood was redolent with the less than subtle smell of raw garlic. This fungus is becoming increasingly rare in Britain, and The Mens and Ebernoe Common are now its stronghold. I have only ever found it in Perthshire previously, and that was many years ago. The morning produced another extremely local species, *Lactarius romagnesii*, a beautiful Milkcap with a rich red-brown felted cap, and milk turning pink when the flesh is cut and exposed to air. This fungus was recorded from Ebernoe Common in 2004, and there is an earlier record on the British Mycological Society database from The Mens in 1999, where Nick Legon described it as very abundant. I wonder if weather conditions were similar that year to 2010?

The last major site visited was Broadwater Warren, which I cover as part of my day job with RSPB. This nature reserve produces surprising fungi each season and 2010 was no exception. First, there was the violet webcap already mentioned, a fantastic find in any woodland, but especially so in a rather uninspired mixed copse of Scot's pine and birch where this specimen was discovered. Also on the same day, the beautiful jewelled amanita, *Amanita gemmata* was found with Scot's pine. This is a widespread species but only appears infrequently and can be "missing" over several years, so is a treat to rediscover. Another pine-related fungus fruiting well this year was scaly tooth, *Sarodon squamosus*, a rare tooth fungus restricted in the county to Broadwater Warren.

Perhaps the most exciting find at Broadwater was a diminutive fungus growing in moss. It was no more than 10mm in height, and a wonderful translucent shade of lilac, with gills running down the stem suggesting an *Omphalina* species. We currently believe we had found *Omphalina galericolor* var. *liladnicolor*, but this will need to be confirmed at Kew. If it is indeed this species, it will be a county rarity, being known previously in the UK only from Wales, Northern Ireland and Berkshire, with a mere 9 records on the BMS database. Another excellent find was *Gymnopilus dilepis*, an attractive alien species which grows exclusively on mulch heaps outdoors, spreading from greenhouses in botanical gardens, and is presumed to have originated from Malaysia, unwittingly imported on plant material. It was first recorded in a greenhouse in 1995, and there is a 2003 Sussex record from Iping & Stedham Common. This fungus looks very much like the common plums & custard *Tricholomopsis rutilans*, which is found on old conifer stumps, rather than woodchip piles. No doubt the *Gymnopilus* will become more widespread over future years.

I was asked to take a look at Ashburnham Meadows, near Battle, this autumn. I only managed a couple of visits but recorded seven *Hygrocybe* (Waxcap) species, and six *Entoloma* (Pinkgills). Less common species found included *Hygrocybe intermedia* and *H. citrinovirens*, and *Entoloma griseocyaneum*, *E. poliopus* and *E. ortonii*. As 2010 was considered a poor year for waxcap grassland communities, these finds indicate great potential for these extensive old grasslands and I am looking forward to revisiting next season.

Other sites visited during the season included Fore Wood, near Battle, and Friston Forest, but these two did not produce fungi in great numbers.

I have received several records of *Agaricus bernardii* from local mycologists. This species is of interest as it is one of few fungi that are increasing along roadside verges, thanks to winter salt applications. The fungus is a coastal species which is taking advantage of the saline conditions, in a similar manner to many halophytic plant species. I recorded it from verges on the Ashdown Forest this year.

Back in the office I have been (very) slowly working through the Sussex Records database to pick out rare or local fungi species for inclusion on the Sussex Significant Species Register. As there are just over 30,000 entries on the database, no doubt with more piling in as I write, this job is taking a little time. Thank goodness for the find and select facility!

Land Mammals

by Penny Green, Sussex Mammal Group Secretary

The Sussex Mammal Group's main focus in the last two years has been getting a Sussex Dormouse Network up and running. We organised a few training days for beginners in 2009, and then this year we organised and funded (thanks to the SxBRC Recording Award) a training weekend for 25 people from the Sussex Dormouse Network, so that they could get more experience as they work towards obtaining their dormouse licences and ultimately set up more National Dormouse Monitoring Programme (NDMP) sites in Sussex. 'Dormouse Fest' was held in Briddlesford Wood on the Isle of Wight which is a beautiful ancient semi-natural woodland owned by the People's Trust for Endangered Species (PTES) and has some 500 nest boxes. We had an excellent talk from Ian White of the PTES on the Saturday morning, and then we split into groups to check the boxes. We all had an opportunity to handle these magnificent creatures, and learn about the field craft of dormouse monitoring. We were also pleasantly distracted by the wood crickets, *Nemobius sylvestris*, (a species of conservation concern) and the rare narrow-leaved lungwort, *Pulmonaria longifolia*. A couple of members of the group were lucky enough to see red squirrels there and we even saw one at our campsite nearby.

As a result of the training days, and the dormouse fest weekend, we already have a few members of the Dormouse Network applying for their licences, whilst some are close to doing so. Next year will hopefully see a few more NDMP sites popping up across Sussex, helped along by initial nut hunts which help us to determine if dormice are present at a site. We have also been encouraging surveyors to go back to sites where dormice have been recorded historically, to see if they're still there.

Considering the amount of dead mammals that we see on the road, the number of mammal records each year aren't great in number. Thanks to Ines and Chris Manning, our mammal records in 2010 have been significantly boosted; they sent in a wonderful number of mammal records which they had noted down as they explored Sussex. About two thirds of our mammal records so far have been generated by Ines and Chris, so thank you to them for their significant efforts. Another year with a lack of hedgehog records though, with only three records in the database so far except for some records that we gathered at the Wild about Mid Sussex event where 30 people reported having had hedgehogs in their garden in 2010, most of these records came from the Burgess Hill area, and one lucky recorder has nine individuals visit his Hadlow Down garden regularly, including some young. Please send your records in to fill in the rest of Sussex. With 81 records of mole hills, the mole was the most recorded mammal (other than bats which are covered in another section of AdastrA), followed by 42 grey squirrels, 34 rabbit and 21 roe deer. As always, only a few brown hare records - has anyone got any hare records to send in please? A gentleman, who now lives on the Isle of Man, phoned me in the autumn with a very interesting record he'd been saving since 1964 - whilst cycling to the start of a bike race he stopped to rest in Hurstpierpoint, where he was amazed to see between 1,000 and 2,000 brown hares sitting in a field. His father hunted hares so he was very familiar with what they look like. Apart from the National Small Mammal Monitoring Scheme survey results, singletons were recorded of yellow-necked mouse, mink, stoat and harvest mouse, and only one brown rat record. Half a dozen field voles were recorded in the West Weald Landscape Project area. Fifty-eight foxes were recorded in 2010, of which 41 were in the Burgess Hill area. Only six badgers were reported in Sussex: we must have seen more than that. If you have any mammal records lurking in your notebooks for 2010, or any other year, then please send them in to pennygreen@sussexwt.org.uk

National Small Mammal Monitoring Scheme

Members of the Sussex Mammal Group have been involved with the National Small Mammal Monitoring Scheme, which entails a variety of different surveys during April/May and October/November. The surveys include small mammal trapping, harvest mouse nest search, field vole signs survey and bait tube surveys. The surveys have been running since Autumn 2009, and the idea is that the surveys will fill the gaps in our knowledge about the distribution and abundance of small mammals in the British Isles and provide long-term population trends. A total of 6 tetrads have been covered by the volunteers, they have done two harvest mouse nest searches, but have found no nests yet. We would like to persevere with the harvest mouse survey though as it is a BAP species. Three surveys for field vole signs have been done, but again not many signs have been found. Don't forget though, it's just as important to know where the species aren't doing so well as where they are. Getting more people involved will give greater coverage and might uncover field voles, or a lack of. However there have been field voles trapped.

Twelve low density trapping transects have uncovered a couple of dozen wood mice (which dominate the picture across the country), plus a few yellow-necked mice, and a healthy number of bank voles, field voles and common shrews. So there are a good range of small mammals in the tetrads that we are surveying in Sussex. Continuing on this surveying and growing the participation level will create a hub of knowledge from the Sussex region and give us great coverage. We have a load more random sites to allocate to volunteers so we're hoping to get more people involved in the survey this spring, if you have mammal trapping experience and would like to get involved please drop me a line: pennygreen@sussexwt.org.uk

Otters, water voles and wetlands

by Fran Southgate, Sussex Otters and Rivers Partnership

Otters

This year, the ten yearly national otter survey of Great Britain declared for the second time since the first survey in 1978, that otters were present in Sussex. This is great news, and although numbers are sadly still limited to a few individuals in the whole county, we can finally say that there appear to be permanent resident otters in West Sussex. Other clusters of otter sightings have occurred in the Pevensey/Cuckmere area, with a few rogue (and as yet unconfirmed) sightings on the upper Adur. We would like to extend a huge thanks to our otter spotters for their assistance with the Sussex otter surveys.

Water voles

Despite the continuing efforts of many landowners and conservation organisations in Sussex, it appears that water voles are still both a threatened and vulnerable species in the county. In Sussex there are only three remaining key areas where water voles survive in any numbers. These are the Chichester Coastal Plain, Pett Levels and Romney Marsh, and the river Arun (predominantly a population which was introduced in 2006 by the Arundel Wildfowl and Wetlands Trust). There is now very little water vole activity outside these core areas.

These last remaining core populations are critical to the survival of the species as a whole in the county. A comprehensive survey of the Arun valley has been carried out, including DNA analysis of extant populations. Although the introduced water vole population appear to have reproduced and spread widely, there are already signs that they are struggling to survive in the wider countryside. Needless to say it is critically important to continue with both mink control and wetland habitat restoration within these core areas, as part of a wetland network in the wider countryside.

Again, huge thanks to all those volunteers who have dedicated their time to surveying for these endangered creatures.

Black poplars

In a bid to find out exactly how rare our native black poplars are, the Forest Research Council recently began a DNA catalogue of all the trees found in the UK. For centuries, black poplar trees have been planted out using cuttings from parent trees, rather than being able to reproduce naturally from pollinated seed. This means that most black poplar trees are merely 'clones' of their parent, and that the remaining trees are becoming increasingly genetically isolated.

Sussex was one of the first counties to send off the genetic material from our 34 recorded mature black poplar trees. Of those 34 trees, we now know that we have only five unique clones, three males and two females. This is slightly above the national average which appears to show that the real genetic resource of black poplars is about 10% of the recorded number of mature trees. The more exciting news is that this year, for the first time in a decade, we have found four new mature black poplar trees in Sussex; which brings our total of recorded mature trees to 38 (37 still living).

Increasingly, the Sussex Black Poplar Working Group are looking for landowners who are able to plant areas of floodplain woodland – the natural habitat of the black poplar tree. If you know of any areas which might be suitable for planting then let us know as this year we have funds to help pay for floodplain woodland tree planting.

Chalk streams

Chalk rivers and streams are a UK Biodiversity Action Plan (BAP) habitat. Despite the presence of a large area of chalk geology in Sussex, prior to 2009, no chalk streams had been officially surveyed and mapped in the county.

The findings of the first Sussex chalk stream survey were way beyond what we could have hoped for. A number of sites of 'national importance' were found, including one site quoted as being one of the top three chalk spring head sites in the UK. There is potential for a number of rare aquatic and subterranean amphipods such as *Crangonyx subterraneus* or *Niphargus fontanus* to be present in these springs and streams. The presence of whorl-grass (*Catabrosa*) at one site was noteworthy, as this has not been recorded on any other chalk stream.

South Downs chalk streams are different from classic chalk rivers such as Hampshire's river Itchen, because each stream has its source much higher in the hills, and the gradients of the streams are so steep. This sets the South Downs chalk streams apart to such an extent as to justify a whole new 'chalk stream' type for the UK.

The unusual gradient of the Sussex streams gives them an almost 'northern' stream character and means that the extent of woody stream cover is much greater than with any other UK headwater chalk streams. This results in many unusual characteristics including:

- dense shade, naturally reducing vegetation cover
- chalk stream macrophytes absent
- stream channel diversity resulting from natural flow restrictions such as tree roots;
- woody debris common and influencing flow

The substrate in many Sussex chalk streams is also very different from other UK chalk streams with an absence of flints and mobile gravels, and presence of silt, sand, clay and cemented/limescale encrusted stones (tufa-like), some with natural clay waterfalls.

Fens

Sussex fens have also been put on the map this year. A full survey was carried out of over 140 hectares of potential fen. The results of the survey showed that we currently have little more than 40 ha of true fen left in the county – a worrying figure in a county which is only a little under 400 000 km².

The good news is that some of these sites were incredibly rich and rare fens. Sussex Scarce species were found at 7 sites and a Nationally Scarce species was also found at one site. One species, *Calamagrostis canescens* (Purple Small-reed), was thought to be extinct in Sussex, but this was re-discovered at Herstmonceux Park. Further surveys of other fen fragments have been completed this year.

Ancient Floodplain Woodlands

The Wetland Landscapes project is continuing its efforts to survey and map all 'valuable' wetland habitats in Sussex. As part of this process, further ancient floodplain woodlands were surveyed in 2010. The 2010 survey recorded 227 terrestrial species from 11 floodplain sites; 194 vascular plants and 33 bryophytes. Of the types floodplain woodlands present, Floodplain Levee Woodland (W8) was easily the richest, with Riparian Alder Woodland (W7a) also significant. More acid woodlands were less species rich. Significant epiphytic lichen flora was recorded at Kingspark Wood (on a single veteran tree), Old Lodge, Broadwater Warren and Pollardsland Wood at Sheffield Forest. The latter three probably represent varying degrees of survival from past pasture woodlands. Species of interest include veteran tree specialists, mainly recorded on trees on the edge of or just off the floodplain, or species of acid bark in oceanic woodlands. The example found in Pollardsland Wood at Sheffield Forest is the second best example currently known. Relic assemblages of lichens of acid bark in oceanic woodlands appear to be a feature of less disturbed alder stands in the High Weald. These are at the far east of their range in Britain.

Species-Rich Floodplain Grasslands

Species rich floodplain grasslands and washlands have sustained large but unquantifiable losses over the last 100 years, but there is very little data on the precise location or state of them in Sussex. In a bid to establish whether they were merely under-recorded, or were actually rare, the Sussex Wetland Project commissioned a detailed survey of the floodplain area of the Upper Arun valley. The results are shown below.

- Approximately 174 fields were surveyed
- Only one third of the land surveyed (excluding Pulborough Brooks) was deemed of some importance to ground nesting birds
- Just four fields outside Pulborough Brooks were considered to be suitable for wintering waders and wildfowl

- Only 28.9% of the area (excluding Pulborough Brooks) was considered important because of plants or plant communities
- The most frequent National Vegetation Classification (NVC) communities found were MG7d *Lolium perenne*-*Alopecurus pratensis* grassland at 26 out of 36 sites. MG9 *Holcus lanatus*-*Deschampsia cespitosa* grassland at 14 sites and MG13 *Agrostis stolonifera*-*Alopecurus geniculatus* grassland at 12 sites.
- The NVC communities MG7d and MG9 are widespread however, it is thought that there are less than 3000 ha remaining of the inundation grassland community MG13.
- The largest area of inundation grassland is found at Pulborough Brooks where there are significant stands of the NVC type MG13 to the north of the reserve; it forms a mosaic with other communities elsewhere on the reserve.
- The presence of a proposed additional NVC community was found at a further 13 sites; though verification of its existence requires appropriate sampling.
- The majority of the NVC communities found along the Arun are not particularly diverse which is probably due to the frequent (environmental) disturbance and the constant input of nutrients
- The most species rich field is maintained by an input of seeds from an area of higher land adjacent to the floodplain.
- Noteworthy or rare plants were found at a third of the sites surveyed, of which 5 sites supported more than one species.
- One species greater dodder, *Cuscuta europaea*, had not been seen in Sussex since 1970. It was discovered less than 2km away from this last sighting indicating a continued presence in the county.
- The invasive alien giant hogweed, *Heracleum mantegazzianum*, was found at almost one third of the survey area which are centred around Loxwood and Dedisham.
- Injurious weeds or ruderals such as creeping thistle, *Cirsium arvense*, and curled dock, *Rumex crispus*, occurring at high levels were found at 46.5% of fields surveyed.

Sussex Sea Mammals

by Stephen Savage, Sussex Country Recorder of Sea Mammals and Sea Watch Foundation Regional Coordinator

Coastal bottlenose dolphin, *Tursiops truncatus*, sightings have become fewer in the last few years and while at first this was thought to be due to inconsistent systematic monitoring there now appears to be a decline of this species locally. However, the movements of these dolphins are poorly understood. We have been monitoring bottlenose dolphins locally since 1991 and comparisons between Sussex and other Channel sites have always supported a west to east seasonal movement based around the migration of prey species. None of the Channel sites (including ours) have witnessed a reverse movement in the winter; however they may travel on a reverse journey at speed miles from shore where they pass by undetected. Studies suggest that we are observing a small group that frequent the Channel in the summer months which adds to their vulnerability. Very few studies have been done on transient dolphins. One study suggested that transient dolphins have scouts that search for food, returning to the main group if food is located. This could be what we are observing when we record solitary dolphins inshore as occasional groups of 8 – 10 dolphins are recorded offshore.

Since I started the local monitoring in 1991 there has been a great increase in the amount of coastal boat traffic in particular smaller vessels involved with water sports such as water skiing, banana boat rides and Jet Ski. These vessels generate high frequency sounds underwater which could be having an impact on coastal movements, often recorded 100 to 200m from the shore. In the early years of the study it was common to observe dolphins resting or playing near the shore between Hove and the Brighton Marina. We no longer record such behaviour. Being a coastal species they at least appear to avoid the fishing operations that take place at the western approaches to the English Channel that have resulted in the by catch of other species.

Dolphins and porpoises

Sightings this year have been restricted to a handful of observations. On 2nd May a bottlenose dolphin was observed 2 ½ miles off Littlehampton. On 17th June a solitary dolphin was reported off Selsey Bill. Three bottlenose dolphins were sighted 3rd August, 200 metres off the coast just east of Bognor Pier. The dolphins appeared to be feeding and fisherman on the pier were catching mackerel. On 3rd September a school of bottlenose dolphin was seen during a routine patrol by the Sussex Sea Fisheries vessel. The dolphins stayed with the vessel for 2 minutes riding the bow wave 3 miles off shore between Bognor Regis and Littlehampton.

We recorded three harbour porpoise, *Phocoena phocoena*, including a dead porpoise washed up on the river bank on the north side of the old Toll Bridge in Shoreham on the 3rd April. It is likely that this porpoise died at sea and was taken up river by the incoming tide. I took some measurements and sent two teeth up to the London Natural History Museum with a report of the stranding. On 10th April, three harbour porpoise were seen swimming close to shore at Beachy Head and a solitary harbour porpoise was observed near the shore at Hastings.

Pilot whale and bottlenose whale

I also received a probable sighting of a pilot whale, *Globicephala melas*, (based on description from the observer) off Hastings on the 20th October; this species has been recorded in this area in previous years. On 16th August, a northern bottlenose whale, *Hyperoodon ampullatus*, was reported off Sussex at Middleton on Sea (near Chichester). This deepwater whale is the same species that swam up the Thames and got into difficulty in 2006. Previously a northern bottlenose whale was stranded at Bournemouth in 2009 and another one stranded near Chichester Harbour in 2008. It is interesting to note that two northern bottlenose whales were recorded off The Wash area, Norfolk on 9th August during National Whale and Dolphin Watch.

National Whale and Dolphin Watch

The annual Sea Watch Foundation National Whale and Dolphin Watch, took place between 7th-15th August 2010. Members of the public visited manned watch sites around the UK to help trained observers on manned watches. No sightings were recorded this year in Sussex during the event (although the bottlenose whale was only outside the event by one day) a total of 453 sightings were recorded for the UK. This year our manned watch site at Shoreham Beach and other volunteer watches during the event were supported by a small biodiversity grant awarded by SxBRC. This also made it possible to promote the event more extensively through Sussex coastal towns and resulted in more volunteers. The event generates a snap shot of sightings across the country that can be compared annually and adds data to the ongoing monitoring programme.

Seals

Common seals, *Phoca vitulina*, have been recorded on many occasions this year and like the bottlenose dolphins many of the seal sightings, especially in East Sussex, are transient animals. The following seal reports exclude the sightings from the Solent area where animals from the small resident seal population may be seen on an almost daily basis at places such as Chichester Harbour, Hayling Island and Langstone Harbour.

First sighting of the year was a common seal on 2nd January on the River Ouse, above Lewes at the Moorings. The seal spent some of the time swimming but for much of the time it was sunning itself on a pontoon. On 31st January, a seal was reported in Pagham Harbour, probably one of the Chichester seals. On 22nd March a common seal, probably the same as above, was seen on the same pontoons on the river Ouse. On 31st May, common seal (several reports) in the river Ouse at Piddinghoe, between Newhaven and Lewes. On 22nd June a common seal was seen swimming between Rottingdean and the Brighton Marina. On 8th July a common seal was observed for about 20 minutes swimming off the beach at Lancing.

On 4th October a seal was observed on Saltdean beach, the observer originally thought it was injured, but the seal appeared fit and healthy. On 17th October two common seals were observed at Falling Sands just to the east of Beachy Head lighthouse, (two independent reports). The seals were first observed early morning and one of the seals was still present late afternoon. One of the seals was still in the area the following morning and observed again in the evening.

On 7th November I received a particularly interesting sighting of a common seal in the Cuckmere River about half mile from the sea. The seal had an orange tag on its hind flipper and the number was visible. We traced the seal to the RSPCA who told us that the seal, a yearling, was named Twinkle by its rescuers. It was taken to the RSPCA on the 13th June 2010 from Lowestoft where it was rescued weighing 21 kg. It was successfully released into the Wash on 18th August weighing 35 kg. This seal was observed again in the same river on the 20th and 22nd November. A seal reported at Seven Sisters nearby on 28th November is likely to be the same seal. We have for some time suspected that at least some of the seals we see in East Sussex come from the Wash and surrounding area, so this is a very interesting group of sightings.

I spotted another common seal off Hove Beach on 30th November and 2nd December. The last sighting of the year was a common seal in Shoreham Harbour on 10th December. It is likely that river observations are of only two or

three individual seals. We know for example that the same common seal, identified by its unique spot pattern markings, regularly visits the river Ouse.

Please report any dolphin, whale or seal sightings to 0777 361 0036 or stevep.savage@ntlworld.com

Bats

by Cath Laing, Sussex Bat Group

The exciting news of the year is that DNA analysis has yet again determined a new species of bat, *Myotis alcathoe*. Alcathoe's bat⁵ was identified as a separate species in Greece in 2001. The species, which is similar to whiskered and Brandt's bats has now been found in Britain in North Yorkshire and Sussex. Alcathoe's echolocation is apparently distinctive compared to other *Myotis* species (43-46khz). That said, *Myotis* bats are notoriously difficult to differentiate through echolocation. And the physical characteristics are difficult for even expert to determine. However, it is exciting to have a new species to claim as our own here in Sussex.

Can Sussex Bat Group again appeal for ecological consultants to submit their records to the Bat Group? Details can be found on the Group's website here <http://www.sussexbatgroup.org.uk/records>. Last year the Group only received two sets of records from consultants outside the Group itself which was very disappointing. Thank you for your help

Birds

Nick Paul, Recorder, Sussex Ornithological Society

The Sussex Ornithological Society's report for 2009

The number of records submitted to the Sussex Ornithological Society (SOS) for 2010 will not be known until April or May 2011 when observers have completed their entries onto the Society's database. The SOS received 176,388 records for 2009, slightly down on the number in 2008 but still the second highest in their history. The number of observers sending in records was 952, also a high number but again slightly less than in 2008.

Atlas and BirdTrack data helped to bolster the number of records received but were balanced with traditional recording by observers and collated records from the major birdwatching sites such as Pagham Harbour, Rye Harbour, Pulborough Brooks RSPB, Weir Wood Reservoir, Warnham LNR, Selsey Bill and Chichester Harbour. Garden Birdwatch data was not received in time for inclusion in the annual Bird Report.

Over 200 records of scarce and rare species were submitted in 2009 of which 161 were accepted by the SOS Records Committee and 19 by the British Birds Rarities Committee.

The only addition to the Sussex County list was a superb drake king eider which was on the sea off Pett Level on 11th January. It proved to be elusive but was relocated in Rye Bay on the 13th and then drifting east at Cliff End (Pett) on the 17th before finally floating east past Camber and then into Kent on the 18th January.

Other rare/scarce species seen during the year included an influx of waxwings which were seen at a number of locations from the beginning of the year until the end of March, with a peak number in the county of 32 towards the end of February. The red-breasted goose that had been seen in Hampshire and Sussex in the previous two winters returned to West Wittering for three weeks from the middle of February. In April an alpine swift spent just two hours at Pulborough Brooks RSPB on the 11th, a little bunting was on Ashdown Forest on 12th and 13th, two black kite were seen (one at Seaford Head on the 14th and another at Lancing the following day) with a third bird at Steyning Round Hill on 13th Jun and three Savi's warblers were trapped and ringed at an undisclosed location where they were heard to sing on various dates from the 26th into July. An oriental pratincole (the second county and sixth British record) was at Pagham Harbour on 28-29th May. After a quiet summer period, two icterine warblers were located at Seaford Head (one on 18th Aug and the other on 21st Sep) and five penduline tits were trapped and ringed at Pett Level in the second week of November. Also of note was a Eurasian reed warbler which was trapped at Pett Level on 25th Oct and which remained until 1st Dec, some two weeks later than the previous latest county record.

⁵ The name 'Alcathoe' comes from Greek mythology. When the women in part of ancient Greece were "revelling and ranging over the mountains in Bacchic joy" during the festival of Dionysius, Alcathoe and her sister decided to stop at home and, as a punishment, were turned into bats. Ed.

In May there was an unprecedented movement of Manx shearwaters with 248 being recorded flying west at Selsey Bill on the 16th, 216 seen at Worthing and 79 at Brighton Marina the same day.

In the autumn there was an influx into the county of glossy ibis with one or two birds being seen between 20th Sep and 3rd Nov at various sites from Pagham Harbour in the west to Pett Level in the east. This involved a total of seven different birds which probably emanated from an influx of 38 birds into Britain in the previous weeks.

The Sussex County list was 390 as of 31 December 2009.

As usual, the county's breeding birds experienced mixed fortunes. The highlight was the announcement that stone-curlews have been breeding again in the county for the past three years and that two pairs fledged three young in 2009. The last known breeding was in the late 1980's so this is very welcome news. The locations are being kept secret and the announcement was prompted only by the fact that the birds at one site suffered significant disturbance from a number of birdwatchers. The sites are being monitored by the RSPB assisted by the SOS and birdwatchers are urged not try to locate the breeding sites. There is still a long way to go before re-colonisation of the species in the county is assured.

It is evident that two other rare species bred (or attempted to breed) in the County. Savi's warbler made two attempts with at least one pair being successful (fledging one young) while it is probable that marsh warbler also bred, the first time for many years.

Other successes among the rarer breeding species included Egyptian goose (8 young), honey-buzzard (7 pairs reared 2 young each), red kite (3 pairs raised a total of 5 young), marsh harrier (4 pairs raised a total of 3 young), peregrine falcon (16 successful breeding attempts raising at least 35 young) and, for the first time for many years, goshawk (1 pair fledged 4 young). The number of nesting little egrets was at least 40 pairs, the same as in 2008. Breeding waders were again rather scarce in the county. Oystercatcher breeding pairs increased to 48 (the highest number since 2000) but avocets fared less well with only 29 pairs raising 19 young, a notable decline from the 43 pairs in 2008 and 50 pairs in 2007. Little ringed plover bred at 6 sites with 12 pairs raising at least 11 young, a considerable improvement over recent years. Only 8 pairs of common snipe were recorded as breeding but common redshank were recorded as breeding (or attempting to breed) at 12 sites, double the number of sites in 2008 and the best for several years. Northern lapwing breeding was confirmed at 39 sites with 24 having fledglings and breeding was probable at another 79 sites across the County.

Among the gulls and terns, there were at least 73 pairs of Mediterranean gulls (raising at least 64 young) and 4 pairs of great black-backed gulls raised at least 8 young. Sandwich terns and common terns fared reasonably well but little terns had mixed fortunes with none at Rye Harbour although 16 pairs at Pagham Harbour raised at least 6 young.

Barn owl numbers continued to decline especially in the west of the county and many of our summer visitors also fared poorly. There were, for example, just 21 probable breeding pairs of turtle dove although cuckoos fared slightly better this year with 7 confirmed breeding pairs and 59 probable pairs. Swifts were noted as breeding at only 11 sites and the number of breeding nightjar territories was about 88 compared to 107 in 2008. Yellow wagtails were confirmed as breeding at only 5 sites. There was only one record of wood warbler breeding but the total number of birds seen in the county improved. Spotted flycatcher numbers held steady although there was a small reduction in confirmed breeding pairs. For the second year running there were no records of confirmed breeding by willow tits and only 12 records of this species from 8 sites. Tree sparrow numbers are also in serious decline with possible breeding found in only 3 tetrads.

The full list of scarce/rare description species, record acceptances and requests by the Recorder and/or the SOS Records Committee can be found on the Society's website, along with the regularly updated Recent Sightings and other features: www.sos.org.uk

Dragonflies and damselflies

by Penny Green, British Dragonfly Society – Sussex Dragonfly Group Secretary

Thank you to all of you who sent your Odonata records in for 2009; this data will have been well-used already by the organisations and individuals that contact the Sussex Biodiversity Record Centre for information. Your records will have helped with important decision making and management of nature reserves for example.

We didn't received as many records for 2009 as we did for 2008, but we like to say that recording is more about quality rather than quantity. In 2009 1,818 records (down to species level) were submitted compared with 3,187 in

2008 . We have only received 400 Dragonfly records for 2010 so far, so I can't report back on these to you but we can look at the 2009 data in a bit more detail:

Species name	2009	2008
Azure damselfly	147	298
Banded demoiselle	51	61
Beautiful demoiselle	79	97
Black darter	6	28
Black-tailed skimmer	74	112
Blue-tailed damselfly	140	243
Brilliant emerald	34	28
Broad-bodied chaser	111	220
Brown hawker	100	109
Common blue damselfly	74	110
Common club-tail	4	2
Common darter	177	291
Downy emerald	37	87
Emerald damselfly	13	18
Emperor dragonfly	86	169
Four-spotted chaser	33	80
Golden-ringed dragonfly	16	31
Hairy dragonfly	50	98
Keeled skimmer	9	15
Large red damselfly	127	273
Migrant hawker	89	210
Red-eyed damselfly	47	84
Red-veined darter	0	1
Ruddy darter	63	106
Scarce chaser	26	75
Small red damselfly	2	11
Small red-eyed damselfly	16	15
Southern hawker	118	149
Variable damselfly	6	37
White-legged damselfly	83	87
Grand Total	1818	3187

As you can see in the summary table the number of records for some species are really down – some by 50% or more, for example the azure damselfly, broad-bodied chaser, black darter, downy emerald, emperor dragonfly and four-spotted chaser. Not many species saw a rise in the number of records from 2008, perhaps due to recorder effort. Interestingly, brilliant emerald was recorded more in 2009, perhaps from the people that came along to the Warnham field trip last year where we had excellent views of both brilliant and downy emerald, so they then had the confidence to identify them?!

Scarce chaser records were down in 2009 compared to a healthy total in 2008. You may remember reading about this in last year's Adastra, where we mention the unrelenting visits that John Luck made to the river Ouse throughout 2009 knowing that there were good numbers of scarce chaser in 2008. But none were found until a larva search in the spring of 2010, and one of John's thoughts on this was that they have a two year cycle. This may explain the drop in records for this species for 2009 – it wasn't from a lack of trying that's for sure.

As in 2008, the records are well-spread over Sussex (as you can see on the map on the following page); the main areas of recording activity were Pagham Harbour, Wiggonholt Common RSPB reserve, Southwater Country Park and quarry, Southwater LNR and Chesworth Farm, Leechpool and Owlbeech Woods, Woods Mill SWT reserve, Plumpton Pond, Isfield Place and Constantia Manor, Uckfield Golf Course and Moorlands at Friar's Gate, and Ashburnham Place to name but a few. If we have a day out looking for dragonflies, or wildlife in general, we do tend visit to the places where we know that we'll see some of the rarer species that are more habitat or site specific. So a bulk of records tends to come from the same places, usually nature reserves. In 2011 it would be great to get records in from less well-known areas. We'll publish a map in the group's spring newsletter to help pin-point the areas that we don't have many Odonata records for, and this will help focus recording effort for us all. Sign up for free membership with the British Dragonfly Society – Sussex Group, and receive two excellent newsletters a year. Email me to sign up: pennygreen@sussexwt.org.uk

In 2010, Sussex recorded the first sightings of the year in the UK of the azure damselfly and the black-tailed skimmer. Unfortunately, despite previous years of successful breeding, no signs were found of the red-veined darter at Rye in 2010 – both larvae and exuviae hunts were unsuccessful and Sam Smith, Rye warden, thinks that they were unlikely to have survived the harsh winter we experienced, while the emergent vegetation in the ponds makes the area less suitable for them.

There were another round of successful field trips in 2010, including one over the border into Kent in July; here the highlight of the day was the scarce emerald, *Lestes dryas*. In June a field trip to the river Arun and Wey and Arun Canal was enjoyed by 20 members and friends, as access to some private land was granted by the local landowner. With both still water and flowing river habitats present, twelve species were recorded, with many in tandem – copulating and egg-laying. The highlight of the day was close-up views of the elusive brilliant emerald *Somatochlora metallica*. A trip to Nymans gardens in July attracted 15 people along, and 13 species were recorded. With a variety of habitats, from dipping ponds to woodland ride, and from lake to meadow, the highlights of the day included a downy emerald *Cordulia aenea* at close-quarters. Brilliant emeralds and cream teas on the Ashdown Forest were just the ticket for 19 members at the end of July, a kind invitation to Moorlands – a private 7 acre wildlife reserve – to look at the dragonflies there, produced a list of 15 species including favourites of small red damselfly, *Ceriagrion tenellum*, golden-ringed dragonfly, *Cordulegaster boltonii*, white-legged damselflies, *Platynemis pennipes*, and no less than seven brilliant emeralds, *Somatochlora metallica*.

If you'd like to brush up on your identification skills then people of all abilities are welcomed along on our field trips. The leaders are excellent at teaching what features you should be looking for when identifying species and they help you to learn the differences between similar looking species. This will arm you with the skills you need to go out in to new areas and find your very own dragonfly hotspots.

Check out our new website: www.webjam.com/bdssx where you can add your records, download a data entry tool made especially for dragonfly recorders, and upload your pictures.

Please help make 2010 a record-breaking year by sending your records in to: pennygreen@sussexwt.org.uk Thank you.

Butterfly Recording in Sussex in 2010

Michael Blencowe, Conservation Officer, Sussex Butterfly Conservation

There may not have been an invasion of painted ladies and the Queen of Spain fritillary did not return to reclaim her throne but 2010 was a fantastic year for the county's rarer butterflies due to targeted conservation work and increased recording effort.

2010 saw the launch of The Sussex Butterfly Atlas. Over the five year period 2010-14 Sussex Butterfly Conservation hope to compile an accurate representation of the state of our county's butterflies with the intention of publishing an atlas shortly after. The project was launched at a conference held at a packed Clair Hall in April and special recording forms were posted to all our members. We have so far received 16,565 individual records for 2010 and there are many more on the way.

In the summer we encouraged our recorders to look to the tops of every elm tree and in doing so we found that most elms in the county still held colonies of white-letter Hairstreak – with records all along the elm's coastal stronghold as well as inland from Harting Down in the west to Beckley Woods in the east.

Extra searching in new tetrads provided us with new sites for wood white, silver-studded blue and the rare pearl-bordered Fritillary (the latter discovery earning Jim Steedman a bottle of Champagne!). On the Downs there was

fantastic news for one of the UK's rarest butterflies. Over the past few years Sussex Butterfly Conservation has worked with partners and landowners to improve habitats for the Duke of Burgundy in our county. 2010 saw our hard work come to fruition with our recorders reporting a veritable explosion of Dukes at some sites. Our habitat management for pearl-bordered fritillaries and small pearl-bordered fritillaries also resulted in an increase in population size and range at the carefully managed sites where these rare woodland butterflies still occur.

In the summer the branch devised and launched Britain's first butterfly recording race – 'The Sussex Butterfly Square Scramble'. Teams tore across the county on August 8th recording butterflies in 75 tetrads. It wasn't all good news though. The Grayling suffered yet another wet and windy late summer flight period. This led to a lack of activity from both grayling and grayling recorders and this declining species was only recorded at one site - giving it the undesirable title of the rarest butterfly in the county.

As the butterfly season faded we launched our 'November-Easter Egg Hunt' and encouraged our recorders to survey for the brown hairstreak. The adults are notoriously elusive but the eggs are relatively easy to find. Through targeted searching we discovered something wonderful. This species, recorded only at a few sites as an adult, is seemingly omnipresent in West Sussex. Our recorders found eggs in over 150 2km tetrad squares in November and December 2010 – more squares than the previous brown hairstreak survey held between 1970-1998. For our guide to finding brown hairstreak eggs follow the link on the 'sightings' page of our website (www.sussex-butterflies.org.uk). But be warned; it's strangely addictive.

If you'd like to record butterflies in your garden and local area, get involved with more formal butterfly surveying or just want to join us on a walk to learn how to identify the butterflies of Sussex please look for more details on our website or email our branch recording officer Clare Jeffers (clarejeffers@aol.com) for more details.

Butterfly Conservation is a registered charity dedicated to the conservation of butterflies and moths.
Visit www.sussex-butterflies.org.uk

Rare moths in Sussex during 2010

By Colin R. Pratt, F.R.E.S., County Recorder of Butterflies and Moths for East and West Sussex

2010 seems to have been a very average year for native species, the volume of moths being of the same order as last season, with a similar experience with the annual influx of immigrants from the continent. The highest number of species caught during a mobile July session this year at two generator-driven m.v. lights was attained by members of the Sussex Moth Group at Kingstanding on Ashdown Forest, this amounting to 105 macro-moths alone. A domestic garden at Walberton yielded the highest diversity of all, when two domestically-placed static traps produced 124 species. And 2010 was not without its thrills elsewhere.

The rise of the internet and of free access to comprehensive series of natural images of moths at rest, and of freely available relatively cheap and easy to use cameras, has stimulated the burgeoning interest in the identification of moths, especially the micros. Amongst the most notable small fry this year, after 160 years of hunting in Sussex, were *Aderis umbrana* near Battle and Icklesham which were the third and fourth county records, and a *Bisignia procerella* near Rye which was the first ever. The raspberry clearwing, *Pennisetia hylaeiformis*, - first discovered in this country in 2007 and in Sussex in 2009, with its exact origins unknown - was identified at Friston Forest and Lewes this year. Our county is currently amongst the very foremost in the UK for this insect.

One of the most notable events amongst the native macro-moths was the confirmation of the survival of a strong colony of the Red Data Book Class A species called the common fan-foot, *Pechipogo strigata*, at Plashett Wood. Nowadays it is anything but common, as this site holds the last remaining colony in the whole of Sussex. Then there was the surprise discovery of small *ranunculus*, *Hexatera dysodea*, caterpillars at Horsham, the first in the county since 1933, which was just as important.

Rarity or extinction is often the focus of attention but there are constant arrivals of moths from the continent, all trying to colonise. Amongst the visually splendid and currently successful colonisers are the huge blue-banded Clifden nonpareil, *Catocala fraxini*, in the far east, the pretty scarlet tiger, *Callimorpha dominula*, along the coast between Eastbourne and Worthing, the olive crescent, *Trisateles emortualis*, across East Sussex, and Blair's mocha, *Cyphophora puppillaria* and the tree-lichen beauty, *Cryphia alga* in the south-west. Several more species have also been lately making determined efforts to establish themselves. Four of the beautiful and aptly-named dark crimson underwing, *Catocala sponsa*, have been recorded in Sussex since 1970, all since 2004, including singletons at Hurst Green and Peacehaven this year. The insect is only known to have been successful in founding a settlement here on

two occasions - on the old oaks in the Shaves Wood complex of woods from 1847 to 1857, and at Petworth around the Great War years. The delightful four-spotted footman, *Lithosia quadra*, has a more regular and numbered history of travel, although the only good signs that it has been established here came from Abbot's Wood during the 1870s and episodically from Friston Forest and Walberton during the 2000s. The sprightly Rannoch looper, *Itame brunneata*, has been making the most recent fresh attempt at establishment. This moth turned up here for the first time ever in 2009 when just over a dozen were recorded, but almost 40 were counted in 2010. With returns to Walberton, Beckley, Peasmarsh, and Bexhill, these records may be heralding a further fresh residency. The oak rustic, *Dryobota labecula*, too was first seen on the Isle of Wight in 1999, was breeding in Hampshire by 2005, and the inaugural Sussex records were then made last year and in 2010, mainly on the Selsey Peninsula and at Walberton when over a dozen were counted each year. Similarly, the splendid brocade, *Lacanobia splendens*, has been identified in half a dozen moth traps situated mainly along the coast since 2006 and now seems to be established near Rye. The pale-lemon sallow, *Xanthia ocellaris*, also seems to be currently colonising both halves of the county. About a dozen of the showy orache, *Trachea atriplicis*, with a glittering metallic green overlay, have been totalled in Sussex, again all since 2003, with three in 2010, although in this case there has been no indication of subsequent breeding - so far. The flame brocade, *Trigonophora flammea* also returned to the county, at Bracklesham, Sussex having an unrivalled history for UK colonies during the Victorian era. Best of all, two marsh dagger, *Aronica strigosa* came to light traps this year, at Pagham Harbour and Woods Mill, these being the third and fourth reports since national extinction in 1933, although the very first Sussex record of a tamarisk peacock, *Chiasmia aestimaria* at Newhaven also vies for significance. The first Sussex scarce chocolate tip *Clostera anachoreta* since 1893 was logged at Icklesham, this being only our second feral record.

The result of another early summer crossing - and a perennial favourite - two full-grown examples of the UK's largest caterpillar, the death's head hawk, *Acherontia atropos*, were photographed at Steyning. The first East Sussex record of the rather bland Portland ribbon wave, *Idaea degeneraria*, was made this year, at Friston Forest, together with others at Findon and Bracklesham. Other channel-crossing scarcities of 2010 included the pyralid *Antigastra catalaunalis* at Walberton, an angle-striped sallow *Enargia paleacea* at Amberley, a gypsy moth, *Lymantria dispar*, in Friston Forest, and two pretty Jersey tiger, *Euplagia quadripunctaria*, at Peacehaven. Of the more regular migrants, the silver Y, *Autographa gamma*, was in much lower numbers than usual, a pair of striped hawks, *Hyles livornica*, were trapped at light at Hurst Green, and a dozen convolvulus hawks, *Agrius convolvuli* were detected.



Jersey Tiger

Colin R. Pratt

Looking back at this list of exceptional moths, perhaps it was not such an average period after all.

Coleoptera – beetles in Sussex, 2010

by Peter Hodge, Sussex recorder for Coleoptera

Insect recording in Sussex continues to produce interesting results and the number of beetle species recorded from the county is now very close to the magic 3,000 figure. This represents roughly 75% of the Coleoptera fauna of the British Isles.

The summer began for me on 2nd June when I spent the day recording insects in Parham Park with Sussex Wildlife Trust ecologist Graeme Lyons. The park contains a large number of magnificent oak trees and is one of the most important sites for saproxylic invertebrates in South East England. Several fragments of the variable chafer, *Gnorimus variabilis*, until recently only known in Britain from Windsor Great Park, were discovered amongst dead wood at the base of an ancient oak. Although not new to the park it has only been recorded from two other trees. From the same oak tree, Graeme netted an example of the rare click beetle *Procræus tibialis* and I was pleased to sweep a specimen of the ant-associated rove beetle *Zyras haworthi*, the last-named being a new county record.

In early June Graeme reported that he had discovered *Pseudocistela ceramboides* on an old oak at Eridge Rocks nature reserve. This reasonably large and spectacular looking beetle has been on my list of potential additions to the Sussex list for many years and I am very pleased that it has at last been recorded. The wireworm-like larvae develop in dry frass in tree cavities, especially on oak. Adults may occasionally visit tree blossom but are probably very short-lived, a factor that must surely contribute towards its apparent rarity.

Mark Telfer has been working on invertebrate surveys at Petworth Park and The Mens in West Sussex and several interesting species were recorded. The following were new to the county: from The Mens: *Cryptophagus falcozi*, *C. intermedius* and, *C. micaceus* (all small fungus beetles), the woodworm beetle, *Anobium nitidum*, and *Cicones undatus*, a species first discovered in Windsor Great Park under sycamore bark some 25 years ago, that has gradually spread in south-east England. The RDB1 *Oxylaemus cylindricus*, discovered in subterranean traps at Ebernoe Common during 2009, was present in similar traps in both The Mens and Petworth Park. Several species already known from East Sussex were recorded for the first time in the western vice county.

A few years ago *Scolytus pygmaeus*, a new species of elm bark beetle, was reported breeding in Kent. It has also been found on the north side of the river Thames in Essex, so on 5th July 2010 I carried out a brief survey of the many elm hedges in Ringmer and discovered a live adult by beating dead elm twigs in a partly dead hedge beside the main road not far from the "Green Man". As its Latin name suggests, this beetle is much smaller than its elm-feeding relatives *Scolytus scolytus* and *S. multistriatus*, being a mere 2 mm long.

The twice yearly monitoring of ditches on the Railway Land LNR at Lewes is now in its 20th year, a remarkable achievement in itself. By 1991 this small ditch system, enclosed between the railway line and the River Ouse, was reduced to a series of grassy channels that frequently became dry during the summer months and the habitat could hardly be described as "aquatic". By the end of 1991 the ditches had been restored to their former glory and in that year 29 species of water beetles were recorded, most of which must have flown from the adjacent brooks south of the A27 Lewes bypass. The total has grown steadily over the years and now stands at 94 species, but even after 20 years more new arrivals are expected. Of course there are never 94 species recorded from the site in any given year and researching how species move in and out of small sites due to ever changing ecological conditions is part of what the new Linklater Pavilion at the Railway Land LNR, a centre for the study of environmental change, is all about.

Auchenorrhyncha (leafhoppers and planthoppers)

by Alan Stewart, Sussex recorder for Auchenorrhyncha

In last year's Adastra, I predicted that some of the species that have been recorded for the first time in Britain recently would turn up sooner or later in Sussex. I expressed particular surprise that one of them, *Eupteryx decemnotata*, had not already done so. Well, now it has. Peter Hodge found it in a friend's garden in Ringmer on 16th September. It feeds exclusively on garden sage (*Salvia officinalis*). The problem is that it looks very similar to a closely-related species, *Eupteryx melissae*, which also feeds on sage and is to be found almost everywhere that this plant is grown. However, close examination reveals that *E. decemnotata* can be distinguished by the pattern of dark spots on the top of its head, or vertex. It has two pairs of spots whereas in *E. melissae* the posterior pair are fused to form a single large central spot. *E. decemnotata* was first discovered in Surrey in 2002 and has been reported in a number of locations across southern England since then, so it could well be widely distributed within Sussex. Look for a rather small pale leafhopper with irregular brown patches on its wings interspersed with bright yellow veins. Adults are often found mixed with immature stages (nymphs) and can be quite numerous. Their feeding causes a characteristic stippling on the leaves. I am not aware that they do the plant any particular damage, even when feeding at high densities, so there's no need to reach for the insecticide spray.

A second species new to Sussex was found this year, only shortly after it had been recorded for the first time in Britain. This one was found by Patrick Roper, editor of Adastra, and on the very first day of the year! It was a female of *Acericerus heydenii* which he had found hibernating in the bark of a rotten log in his garden in Sedlescombe, East Sussex. This is one of a group of three closely-related species that feed on maples and sycamores (*Acer* spp.), while other species within this rather attractive group of leafhoppers (previously combined within the genus *Idiocerus*) feed on willows and poplars. *A. heydenii* was reported from both Essex and London in 2010, so it may well be quite widespread already across southern England.

Summer 2010 was the first season of a two-year national survey of one of the seven BAP Priority Species in this group: *Doratura impudica*. This very distinctive leafhopper seems to be found almost exclusively on sand dunes, feeding mainly on sand couch grass (*Elytrigia juncea*), especially where it grows rather sparsely right on the seaward edge of the dune. There are several records from East Anglia, one from Kent and one just inside Sussex, at Rye Harbour. Sussex has very little sand dune; an attempt to find it this year at East Head, West Wittering was unsuccessful, probably because the area of suitable habitat is very small. With luck, it will be found again at Rye next year, which would help to provide a more detailed understanding of its exact habitat requirements.

The launch of the new website for the national recording scheme that I heralded last year has been slightly delayed. However, by the time you get to read this, or very shortly after, I hope that it really will be up and running. Go to

<http://www.Ledra.co.uk>. Those of you who know anything about leafhoppers will recognise the choice of domain name.

Psocoptera – bark lice and book lice. A new Psocopteran for Britain

By Graham Oldfield, Psocoptera Recorder for Sussex.

On 26th Aug 2010, a species of barkfly, *Aaroniella badonneli* (Psocoptera: Philotarsidae)⁶ new to the British fauna was found in Westdene, outskirts of Brighton, Sussex. It was only recently discovered in Latvia (1950) & has since been found in USA, Spain and now the UK. It almost certainly has been transported from Asia on trees being traded internationally. The Westdene barkflies were first noted on silver weeping lime, a tree which Kew states was originally sourced from Eastern Europe.

Barkflies are generally small, delicate creatures, prone to run, but *Aaroniella* is different. It is fat, slow and has a 'couldn't care less' air to it. It seems in fact to have lost the evolutionary escape-response entirely.

The social biology of such a bug is fascinating. It lives in large 'herds' of up to 50 individuals and usually in close proximity to human habitation, on various trees especially in residential parks and copses. Road-side, on a bus route? No problem!

They congregate in flat hollows on the surface of the bark of trees and from their mouth end spin a 'roof' of long-strand sticky silk over the top of the colony as a whole. This roof protects them from ants and other predators.

In fact, they can spin so much webbing over the bark of minor branches that they exclude almost all other invertebrates from the branch. As an adaptation to living under sheets of silk, the large wings of *Aaroniella* look are covered by long black curved spines. These, together with the wings themselves, seem to have little or nothing to do with flight but must function to protect the wing membrane from sticking to the web. Maybe the spines are 'gum-o-phobic', but the barkfly itself certainly isn't. When trying to 'pooter' this barkfly from tree trunk into a tube this, the accepted method of psocid collecting, fails. Invariably the barkfly will become almost inextricably entangled, ensnared in its own webbing and sticks like glue to the sides of the tube or anything else in the tube. In such cases, as a nice specimen, the barkfly is sadly ruined.

With such a formidable silken barrier, even a large colony of *Aaroniella*, though individually apparently utterly helpless, are relatively safe and can afford to sit back, keep quiet and eat algae all day. Which, it seems is all they do actually do. What is the point of flying, going anywhere or even getting out of bed when one has all the security, home & luxury fittings necessary - and your equally fat and elitist friends are all around you?

One of the activities they have to be employed with is that of maintaining their silk home so that it is debris free. They probably completely renew the roof and other necessary barriers every day or so since, after a colony dies out in the winter, the webbing becomes very tatty and littered with debris within a day or so.

Large trails of ants are common on *Aaroniella* trees, running up and down the trunk, but it is quickly obvious that they find the sticky silk far too akin to spider web to want to make any further investigation. (Possibly the silk has a nasty smell or taste too, as ants can be seen gingerly touching the silk then immediately turning away as though they had found something unattractive).

The herds of *Aaroniella*, surely 'sitting ducks' in any other situation, are perfectly safe just a centimetre or so from a busy four lane black ant trail.

This fascinating species has already carved out a bold new niche for itself here in Brighton and will hopefully remain a successful new British species.

Diptera – two-winged flies

by Patrick Roper, Sussex recorder for Diptera

So far relatively few fly records have surfaced for 2010 but, no doubt, more will appear as dipterists go through their notebooks and collected material. At the BioBlitz event in Brighton in June, one of the highlights was a record by Peter Hodge of the nationally scarce Tachinid *Zophomyia temula*, a black species with orange-brown wing bases. Though uncommon, this is a fairly widespread fly in Britain from North Wales and The Wash southwards. In

⁶ See picture on front cover.

Sussex it seems largely confined to calcareous grassland and coastal habitats. It is one of many members of this family of parasitoid flies whose host(s) are unknown.

In the Beckly area of East Sussex two interesting leaf miners were recorded. *Phytomyza anemones* mines the leaves of the wood anemone, *Anemone nemorosa*, and has been recorded from Flatropers Wood (2009) and nearby Swallowtail Hill Farm (2010) but is described as being generally very rare in the UK. Also from Flatropers Wood were many mines of *Phytomyza hellebori* on introduced plants of stinking hellebore, *Helleborus foetidus*. The fly was first recorded in Britain in 2000 and appears to be spreading.

The flies of winter

Unlike the more charismatic groups of insects such as dragonflies or butterflies, adults of different species of diptera can be found all the year round, even in the coldest months. Over the years I have, for example, recorded 87 species of two-winged fly in Sussex in January and a few more have been added by other hardy recorders. However, as Leather and Waters (1993) say in their book on insect overwintering, lack of records may be “the result of the understandable reluctance of entomologists to expose themselves to the rigours of the great outdoors during what is one of the more taxing times of the year.”

These winter flies fall broadly into three categories: those that are genuinely winter-flying insects; those that hibernate as adults and those that can be found in almost any month of the year.

In the first category are the appropriately named ‘winter gnats’ (*Trichocera* spp. in the family Trichoceridae). They look like small craneflies and are familiar to most people from their lazy swarms in gardens and along woodland rides on mild winter afternoons. In Britain we have 11 species and 8 have been recorded in Sussex, though some only rarely. Among the smaller swarming insects only active in winter are several non-biting midges (Chironomidae) of the genus *Micropsectra* and one *Gymnometriocnemus*. Two species of the former genus, *Micropsectra junci* and *M. atrofasciata* are very delicate green insects that look too fragile to be braving the “rigours of the great outdoors.” In the second genus *Gymnometriocnemus brumalis* (see picture right) is one of our commonest woodland insects and probably occurs in millions across Sussex. It is a small, black (male) or brown and yellow (female) creature less than 2mm long and most people would probably feel daunted by trying to work out what it was to species level, though once you know your way about the non-biting midges, there is little with which it could be confused. Despite its abundance, its early stages are unknown but almost certainly terrestrial.



These winter gnats and midges must provide an important source of food to insectivorous vertebrates and invertebrates at a difficult time of year and I think another small, black, winter-flying midge could be a factor in some of the problems birds and other creatures seem to be having. In the 1950s and 1960s I lived on a dairy farm in Robertsbridge, East Sussex. In those days cattle were not regularly treated with ivermectins and the small non-biting midge *Smittia aterrima* bred in vast quantities in the chemical-free cow-dung. On winter afternoons there would often be continuous swarms of huge numbers of these insects on the sheltered side of the field hedges, swarms that, in my experience, are no longer present though the insect is still about.

These swarms would have represented an important food resource for their predators, though from the insects' point of view there is, of course, some advantage in a winter flight period as the invertebrate-eating, spring-nesting migrant birds have yet to arrive. The larvae would also have been important in recycling the cow dung.

The hibernating diptera include many of the picture-winged flies (Tephritidae) and these can often be found by sweeping evergreen vegetation or tall grass during the coldest weather. Some of the smaller members of families like the Phoridae (coffin flies) and Hybotidae (hybotid dance flies) occur under logs, bark or even old sacking and carpets left lying about in the countryside where, in such sheltered conditions, they may be relatively continuous brooded. One little fly that always intrigues me is the phorid *Megaselia melanocephala*, yellow with a black head. Every year just one or two appear in our kitchen in the depths of winter, running about on the bread board and that sort of thing, though I have no idea where they might breed, or why there are always so few. The old wasp and hornet nests in the attic can be a source of ground floor insect rarities, so that may be where they come from.

In the third group some of the commonest and most easily identified species are the yellow dung-fly, *Scathophaga stercoraria* and the window midge, *Sylvicola cinctus*, the latter breeding in fungus and decaying wood. Because fungi tend to appear later in the year many interesting fungus gnats are on the wing in the colder months. Though they are often attractive insects with patterned wings and bodies, they are rather difficult to identify and new species seem to be added to the British list almost every year which further complicates the issue. The genus *Mycetophila* currently has over 70 British species, for example.

REFERENCE

Leather, S. R. & Waters, K. F. A. (1993) *The Ecology of Insect Overwintering* Cambridge University Press, Cambridge.

Adastra Recording Day

by Penny Green, Species Officer, Sussex Biodiversity Record Centre

Every year SxBRC organises field days in under-recorded or unusual places in Sussex. This is to help get a more complete picture for under-recorded areas, or even to get some records for areas that don't have any at all. It's a good opportunity for new recorders, or people new to the area, to meet established Sussex recorders and it's also a great opportunity for old recording chums to meet and catch up on the recording gossip for Sussex. We usually have a good mix of entomologists, botanists and birders and often find something rare and exciting.

This year we held a big recording event at Stanmer Park called "BioBlitz" over the weekend of 5th/6th June where we tried to record as many species as we could in a weekend. BioBlitz events were held all over the UK throughout 2010, in celebration of the International Year of Biodiversity, in order to get more people in to recording wildlife and attempt to record as many organisms as possible for a site in 24 or 48 hours. Here in Sussex, we are lucky enough to have been running our own BioBlitz type events since 2005 and this was our ninth such event. We deliberately coincided the recording day on Saturday 5th June with the Springwatch event at Stanmer Park the next day on Sunday 6th June. On the Saturday we had a day for the 'hardcore' recorders as we tried to record as many species as possible, day and night. Luckily it was great weather all weekend so butterflies, dragonflies, moths and so on were on the wing in good numbers. Nineteen amateur naturalists came along to join in with the recording effort so we split in to two groups - one looking at the plants in the woodland and the other investigating the invertebrates found in the dead wood and general surrounds. In the evening we set up six moth traps and had a really good haul of moths, including a beautiful Lime Hawkmoth and the twig-like Buff-tip, while the bat detectors picked up a few species of bat flying about feeding at dusk, such as Serotine and Noctule.

It was a perfect balmy night for moth trapping and with precision timing we were just packing up the last of the moth traps at around midnight, as we heard a distant rumble of thunder and felt the first drops of falling rain. We recorded just over 500 species during the recording day, of which 100 species were plant, 70 were moths and 70 were beetles. Highlights of the day were the Notable A beetle, *Drilus flavescens*, which feeds on snails and three Notable B species: the black-headed cardinal beetle, *Pyrochroa coccinea*, the weevil, *Ceutorhynchus constrictus* and the longhorn beetle, *Phytoecia cylindrica*.

The Sunday was more about getting members of the public enthused about recording, so we had a stall at the popular Springwatch event, also at Stanmer Park and we encouraged people to fill in a postcard which asked if they had seen any of the five species listed in their gardens. They could then stick labels on a huge map that we took along, and from this we gathered over 700 records and got people excited about the wildlife that can be found in their own back garden. We also ran several guided walks to different parts of the park to see what we could record and the results included many exciting species ranging from lichens through to beetles. Adults and children alike enjoyed looking among dead wood and hedgerows searching for invertebrates and other flora and fauna. Back in the marquee we had a selection of moths from the previous night's moth traps, and other beasts for children to hold - they particularly delighted in holding the maybugs as their parents recoiled in terror.

The Bees on the Beach Project at Shoreham Beach Local Nature Reserve,

By Stephen Savage and Friends of Shoreham Beach

This year on the Shoreham Beach Local Nature Reserve, we have been running a short pilot project on bees. The aim of the pilot has been to gather information to support a more in-depth survey of the bees present on the beach and the shingle plants they pollinate. The vegetated shingle habitat is a long narrow strip sandwiched between the

high tide mark and Shoreham Beach houses on a shingle spit, separated from Shoreham high street by the River Adur

Background

I had originally planned the bee project as part of our new education programme I have been developing for local schools. This would provide a focus for the terrestrial invertebrates that visit vegetated shingle which would also link with school ground development work I have been involved with. A focus on bees would increase the potential for (non-marine) school visit follow up work. Pupils can record bees on the LNR producing a profile of the bee's requirements for both the LNR and their school grounds and then compare the two sites. This would be the perfect opportunity to raise awareness about the decline of bees in general as well as the possible long term threat to vegetated shingle.

However I was unable to locate any detailed papers or publications on shingle plant pollinators that we could use as a basis for this study. Feedback I received suggested (and supported my thoughts) that the species present will be affected by the mix of plants present and the neighbouring habitats. The organisations (including the Bumble Conservation Trust) and individuals that replied were also in agreement that the decline in bees could have a long term affect on vegetated shingle habitat and were keen to see the results of our surveys at Shoreham. So the project to monitor bees is now also viewed as a management plan issue (however we still plan to involve the public and groups where feasible).

Pilot project

The long term aim will be to build up a profile for each flowering shingle plant species and the insect pollinators that visit them (to include hoverflies, butterflies, moths etc). For the pilot we focused on 4 bee species which are more easily identified, the buff-tailed bumble bee (*Bombus terrestris*) and the white-tailed bumble bee (*B. lucorum*), the red-tailed bumble bee (*Bombus lapidarius*) the honey bee (*Apis mellifera*) and the common carder bee (*Bombus pascuorum*). Guided work with secondary schools and adult groups on the LNR were also used to assess the ability of both groups to identify these species correctly.

Most of the surveys were undertaken at the western end of the LNR where there are fewer invasive species, especially silver ragwort and red valerian, both of which are becoming dominant in the mid to eastern area of the LNR. However this also reflects that fact that we work with most school visits in the western end of the nature reserve. I also undertook two half day surveys of my own (also at the western end). The general results of our surveys are shown in the table below.

Bee species information Associated Plants Frequency⁷ Other information

Bee species information	Associated Plants	Frequency ⁷	Other information
Buff-tailed bumble bee and white-tailed bumble bee	Vipers bugloss Red Valerian Silver Ragwort Tree Mallow Seaside Daisy Sea kale? Yellow horned Poppy?	Common Occasional Common Occasional Occasional Occasional Occasional	One sighting from a distance One sighting from a distance
Red-tailed bumble bee	Vipers bugloss Mallow Birds foot trefoil Red valerian Sow Thistle	Common Common Common Occasional Rare	One sighting
Common carder bee	Vipers bugloss	Rare	One sighting
Honey bee	Seaside daisy Tree mallow Silver ragwort	Numerous Occasional Occasional	

⁷ Frequency refers to the bee activity rather than numbers as it was often difficult to track individual bees and their repeat visits to the same plant.

During my surveys and work with groups I also recorded other bee species such as solitary bees and cuckoo bees - see table below).

Bee species	Associated Plants	Frequency	Other information
<u>Cuckoo Bumble Bees</u>			
Hill cuckoo bee <i>Bombus rupestris</i>	Red valerian	Rare	Seen on two separate occasions
Barbut's cuckoo bee <i>Bombus barbutellus</i>	Seaside daisy	Rare	Seen on one occasion
<u>Solitary bees</u>			
<i>Anthophora</i> ssp.	On shingle	Rare	One specimen
<i>Andrena</i> ssp.	On English stonecrop	Rare	One old specimen
<i>Andrena cineraria</i>	On shingle	Rare	

Due to vegetated shingle being only a partial habitat for bees (limited nesting and hibernation opportunities) in this project we are also studying the potential of adjacent gardens to support bee species, especially outside of the flowering period of the shingle plants. During the pilot we have enlisted the help of a few beach residents whose gardens back onto the nature reserve to monitor the bees that visit their garden and the plants that attract them. These residents were provided bee i.d. materials and a recording form. We have not yet had the chance to analyse these records properly. However, plant species visited in these gardens included fuchsia, thyme, rosemary, lavender, clematis, sedum and Michaelmas daisy. One red-tailed bumble bee nest was also recorded in an adjacent garden.

Future work

In 2011 we are planning to expand our monitoring to involve more surveys hopefully with the help of funding. This will be undertaken at different times of the year to cover the different flowering periods and to monitor the shift of some bees as favoured plant flowering periods end.

We plan to provide a general awareness session on vegetated shingle plants and pollinators followed by a more in depth training regarding the Bees on the Beach Project. We plan to explore further the potential of neighboring gardens to support bees all year round and to encourage the placement of artificial nest and hibernation boxes etc. within these gardens. Depending on the success of 2011, we hope that this will be an ongoing project to map the invertebrate/plant relationships.

Plant surveying.

During 2009 Ecologist Kate Ryland repeated her 1998 plant community survey on the Shoreham Beach LNR. During 2010, FoSB have been monitoring the beach for plant species recorded in Kate's original survey, but not recorded in 2009. Kate had noted 128 species and this year FoSB have found a further 9 out of the missing 34 listed in the original survey. The plant survey work will continue so that we have the most up to date plant records for the LNR and for the bee project.

Any recorders or individuals who are interested to help in systematic or casual recording of insect pollinators on the Shoreham Beach Local Nature Reserve can contact us for further details from stevep.savage@ntlworld.com

Monitoring on Sussex Wildlife Trust reserves in 2010

by Graeme Lyons, Ecologist for the Sussex Wildlife Trust

This was my second full year as the Trust's ecologist. Much of my time is spent on the 33 sites the Trust owns and/or manages. I plan the survey work on these sites and carry out much of it myself whilst difficult groups are contracted out to relevant specialists. Monitoring is often directed at the more speciose groups, as these are more sensitive to change and make better tools at assessing this change and providing advice that can feed back into the management planning process.

During a management discussion on Southerham in late summer around eight plants of white horehound (*Marrubium vulgare*) were discovered on a large rabbit warren and is a new record for the site. Repeat quadrat

monitoring at Leythorne Meadow showed an explosion of bog pimpernel (*Anagallis tenella*) this is thought to be a consequence of the recent grazing that is having a very positive impact on the site. A count of marsh club-moss (*Lycopodiella inundata*) at Graffham showed an increase to 29 plants (18 last year) although the quadrats showed the available habitat (bare ground) is decreasing so management will be needed soon to maintain the habitat for these plants. The land acquired in early 2009 at Graffham was surveyed for its vascular and lower plants in September by Bruce Middleton, Jacqui Middleton and Howard Matcham and of particular note were vast numbers of the liverwort violet crystalwort (*Riccia huebeneriana*) growing around the drawdown zone of the pond. A repeat lower plant survey at Eridge Rocks was carried out in the spring by Neil Sanderson. Although the full results are still to come in, the assemblage appears to be in good condition. The coral-like *Bunodophron melanocarpum*, a stunning lichen, is just one of many rare lower plants that grown on these damp sand rock cliffs. This may be the only site in East Sussex for *Bunodophron*.

Eridge Rocks is also proving to be of note for its deadwood invertebrates. During a weekend visit I stumbled across a fairly large beetle at the base of a red-rotten hollow oak tree in the car park. This turned out to be *Pseudocistella cœramboides* and after consultation with Peter Hodge, it was clear that this was a first for Sussex. Using the knowledge I have gained in the last two years from surveys carried out at Ebernoe Common and The Mens I was able to identify 20 deadwood beetle species and six of these were found to be nationally scarce. This led to a survey of the ancient trees at Eridge this winter. The results were quite surprising. There are three trees on the site with a girth at breast height greater than anything we have recorded at Ebernoe Common for example. A more involved survey of deadwood beetles is planned at Eridge Rocks in 2011.

The deadwood beetle survey at The Mens carried out by Mark Telfer in 2010 and funded by WWLP has been of great interest. The survey was very similar in format to the one carried out at Ebernoe in 2009 and relied heavily on interception and subterranean trapping throughout the season as well as a number of field visits. The results are still coming in but several species new to Sussex have been recorded (see Peter Hodges section on beetles for more details) as well as other RDB species such as *Lymexylon navale* and *Oxlyæmus cylindricus*, rediscovered (after apparently being extinct in the UK for a century or more) at Ebernoe last year.

Just minutes after recording *Lymexylon navale* under the huge Idehurst Oak at The Mens in August, an incredible sighting occurred. A badger chasing a polecat in broad daylight. Hidden by the dense holly, the animals seemed oblivious to our presence. As my binoculars are always around my neck (even when looking for beetles in a wood!) I managed to get a really good look at the polecat. There were no pale markings on the back of the animal, the mask being the only pale marking on an otherwise chocolate-brown animal.

An attempt by three Trust staff was made to bring Woods Mill into the Garden Moth Scheme but even with the three of us on the case, we only managed about two thirds of the nights as we keep such irregular hours. It did result in more trapping and recording though (my reason for entering the scheme) and when Penny Green put the trap out on the 21st July I recorded a marsh dagger (*Acronicta strigosa*) in the trap the following day, only three days after a record at Pagham Harbour. Other interesting moth records included a raspberry clearwing, (*Pennisetia hylæiformis*) caught by Mike Edwards in the Friston Forest project area during an invertebrate survey there on the 11th August.

Alice Parfitt and I set up a standardised and repeatable Common Birds Census at Filsham Reedbed and the results have just been collated. Eighteen reed warbler territories compares with nine Cetti's warbler territories. A new CBC was also initiated with the help of Mark McManus at Waltham Brooks. The site has many red and amber-listed birds and the survey is still being collated. As birds are key features on these two sites, careful annual monitoring of them is seen as a priority.

Finally, although my blog is not an official Sussex Wildlife Trust site (it's all done in my own time) I do not expect there to be any conflicts of interests on it. One of my reasons for setting it up was to feed back all the exciting findings and projects I am involved with in as close to 'real-time' as is possible. Much of my time is spent on SWT reserves and the blog reflects this. The best way to follow what is happening in terms of interesting and unusual findings on Trust reserves, pretty much as they happen, is to go here:
<http://analternativenaturalhistoryofsussex.blogspot.com/>

Sussex Beetle Group

I am going to start a Yahoo group for beetling in Sussex over the winter of 2010/11. As I have recently become captivated by beetles, I thought it would be good if an email group was set up. The aims of the group will be very similar to other groups such as the Sussex Moth Group Yahoo Group, with these broad aims: "The Sussex Beetle Group is an email based discussion group for anyone with an interest in recording beetles in Sussex. A place to post

sightings and discuss interesting records, a place to encourage and inform a new generation of beetle recorders and a place to post photographs for interest and identification'.

If you are interested in joining the Sussex Beetle Group mailing list, please send an email to me at graemelyons@hotmail.com. The group will aim to go live in the next few months and may develop into more than just an email group in time.

Blogs

There are various blogs and other sites on the Web that give a running picture of what is going in Sussex biodiversity and a selection of some is given below. If you would like to feature here next year, please get in touch with the editor.

Many organisations and groups do, of course, have their own web sites and these are given after their names and addresses below.

Graeme Lyons is the SWT ecologist and this is his own wildlife blog:
<http://analternativenaturalhistoryofsussex.blogspot.com/>

Stephen Savage: has two blogs:

Sussex Urban Wildlife <http://urbanwildlifejottings.blogspot.com/>

Sussex Marine Wildlife Jottings <http://sussexmarinejottings.blogspot.com/>

Patrick Roper has five wildlife blogs:

One about Brede High Woods north of Hastings: <http://bredehighwoods.blogspot.com/>

One about the square metre nature reserve in his Sussex garden: <http://squaremetre1.blogspot.com/>

One about the wildlife of a Sussex window box: <http://windowboxwildlife.blogspot.com/>

One about trees of the genus Sorbus: <http://rowanswhitebeamsandservicetrees.blogspot.com/>

And a general one about wildlife in Sussex: <http://ramblingsofanaturalist.blogspot.com/>

SUSSEX COUNTY RECORDERS 2010/11

If you are not already sending your records to a particular local recording scheme or Society, records of any plant or animal species can be sent to the Sussex Biodiversity Record Centre who will pass them on to the relevant groups listed below.

Sussex Biodiversity Record Centre (SxBRC)
Woods Mill, Henfield,
West Sussex BN5 9SD
Tel: 01273 497553
Email: info@sxbrc.org.uk

Sussex Wildlife Trust (SWT)
Woods Mill, Henfield,
West Sussex BN5 9SD
Tel: 01273 492630
Email: enquiries@sussexwt.org.uk

PAUL HARMES
(Sussex Botanical Recording Society
East Sussex)
Flat 7, Park View,
5 Offham Terrace,
Lewes, East Sussex BN7 2QP
Tel: 01273 474797 Mob: 07740 438306
E-mail: pharmes@btinternet.com

Sussex Botanical Recording Society
web site: www.sussexflora.org.uk

Orchids
DAVID LANG
1 Oaktree, Barcombe, Lewes,
East Sussex BN8 5DP.
Tel: (01273) 400446
davidlang446@btinternet.com

Bryophytes
HOWARD MATCHAM
21 Temple Bar, Strettington,
near Chichester, West Sussex PO18 0LB
Tel: 01243 781238
hwlmatch@yahoo.co.uk

Fungi
MARTIN ALLISON (mainly E. Sussex)
martin.allison@rspb.org.uk

HOWARD MATCHAM (mainly W. Sussex)
See under Bryophytes above.

Microfungi
HOWARD MATCHAM
See under Bryophytes above

Lichens
SIMON DAVEY
10 Cottage Homes, Common Lane,
Ditchling, Hassocks
West Sussex BN6 8TW
Tel: 01273 844436
srdavey@globalnet.co.uk

Sussex Lichen Recording Group
Jacqui Middleton
Tel: 01730 716366
Email: jacquiandbruce@tiscali.co.uk

Charophytes (Stoneworts)
FRANCES ABRAHAM
Old School House, Ebernoe, nr Petworth,
West Sussex GU28 9LD

Marine algae (seaweeds)
IAN TITTLE
Department of Botany
Natural History Museum
Cromwell Road, London SW7 5BD
Work: i.tittle@nhm.ac.uk
Home: mmit@waitrose.com

Amphibians & Reptiles
Records should be sent to
Sussex Biodiversity Record Centre (SxBRC)
Woods Mill, Henfield,
West Sussex BN5 9SD
Tel: 01273 497521
Email: info@sxbrc.org.uk

River Fish
DAMON BLOCK
Environment Agency, Southern Regional Office,
Guildbourne House, Chatsworth Road, Worthing,
West Sussex, BN11 1LD. Phone: 01903 703976
damon.block@environment-agency.gov.uk

Birds
Sussex Ornithological Society Recorder
NICK PAUL,
Old Durfold,
Warnham, Horsham,
West Sussex, RH12 3RY
01403 264762
recorder@sos.org.uk

Bird conservation enquiries:
conservation@sos.org.uk

All other enquiries:
Acting Secretary
VAL BENTLEY,
Chetsford, London Road,
Henfield,
West Sussex BN5 9JJ
01273 494723,
secretary@sos.org.uk

Mammals (see below for bats, badgers & cetaceans)
Records should be sent to the
Sussex Mammal Group
C/O Penny Green, Woods Mill, Henfield,
West Sussex BN5 9SD
Tel: 01273 497521
Email: pennygreen@sussexwt.org.uk

Bats
Sussex Biodiversity Record Centre (See above).

Badgers
Badger Trust - Sussex
Tel: 07910 198720
Badger Trust website: www.badger.org.uk

Cetaceans and Seals
STEPHEN SAVAGE (Seawatch)
45 North Road, Portslade,
East Sussex BN41 2HD
Tel. 01273 424339
stevep.savage@ntlworld.com
www.seawatchfoundation.org.uk

Otters and Water Voles
FRAN SOUTHGATE
c/o the Sussex Wildlife Trust, Woods Mill
Henfield, West Sussex BN5 9SD
Tel: 01273 497555
Email: fransouthgate@sussexwt.org.uk

Moths and butterflies
COLIN PRATT
Sussex Moth Group Recorder
Oleander, 5 View Road,
Peacehaven, East Sussex.
Email: colin.pratt@talk21.com
Tel. 01273 586780

Moths and butterflies (cont.)

CLARE JEFFERS
Butterfly Conservation recorder
Email: clarejeffers@aol.com

WENDY ALEXANDER
Moth Group Secretary
01424 212894
Email: wkalexander@btinternet.com

Glow-worms
Please send records to SxBRC

Spiders
ANDY PHILLIPS
Flat 5, 21 West Hill Road
St. Leonards on Sea
East Sussex
TN38 0NA
Tel: 01424 716919
Email: threecubes@gmail.com

Orthoptera & related orders
JOHN PAUL
Downsflint, High Street, Upper Beeding,
West Sussex BN44 3WN
Email: turbots@btinternet.com

Dragonflies
Penny Green
British Dragonfly Society – Sussex branch
C/O Sussex Biodiversity Record Centre
Woods Mill, Henfield, West Sussex, BN5 9SD
01273 497521
Records to pennygreen@sussexwt.org.uk
Web: www.webjam.com/bdssx

Coleoptera (beetles) &
Heteroptera (plant bugs)
PETER HODGE
8 Harvard Road, Ringmer,
East Sussex BN8 5HJ
Tel. 01273 812047
Email: peter.hodge@mypostoffice.co.uk

Hymenoptera Aculeata: Ants, Bees & Wasps
MIKE EDWARDS
Lea-side, Carron Lane, Midhurst,
West Sussex GU29 9LB
Tel. 01730 810482
ammophila@macace.net

Diptera (two-winged flies)
PATRICK ROPER
South View, Churchland Lane,
Sedlescombe, East Sussex TN33 0PF
Tel. 01424 870993
Email: patrick@prassociates.co.uk

Hoverflies
ROGER MORRIS
& STUART BALL
National Hoverfly Recording Scheme
7 Vine Street, Stamford
Lincolnshire PE9 1QE
roger.morris@dsl.pipex.com
Web: www.hoverfly.org.uk

Geology
JOHN COOPER
Booth Museum of Natural History, 194 Dyke
Road, Brighton,
East Sussex BN15AA
john.cooper@brighton-hove.gov.uk
Tel: 01273 552586

Hemiptera/Homoptera
(Auchenorrhyncha: Leafhoppers &
planthoppers)
ALAN STEWART
31 Houndean Rise, Lewes,
East Sussex BN7 1EQ
a.j.a.stewart@sussex.ac.uk
Tel: 01273 476243

Molluscs
MARTIN WILLING
14 Goodwood Close, Midhurst,
West Sussex GU29 9JG
martinwilling@godalming.ac.uk
Tel.: 01730 814790

Pseudo-scorpions
GERALD LEGG (National Recorder).
Booth Museum of Natural History, 194 Dyke
Road, Brighton,
East Sussex BN15AA
gerald.legg@brighton-hove.gov.uk
Tel: 01273 292777

Psocoptera (Bark lice and book lice)
MARCUS OLDFIELD
Booth Museum of Natural History, 194 Dyke
Road, Brighton,
East Sussex BN15AA
Email: gerald.legg@brighton-hove.gov.uk
Tel: 01273 552586

Marine Records - (see also Cetaceans)
GERALD LEGG
Booth Museum of Natural History, 194 Dyke
Road, Brighton,
East Sussex BN15AA
Email: gerald.legg@brighton-hove.gov.uk
Tel: 01273 292777

Other useful addresses

Ashdown Forest
The Conservators of Ashdown Forest
The Ashdown Forest Centre
Wych Cross, Forest Row
East Sussex RH18 5JP
Tel: 01342 823583;
www.ashdownforest.org
conservators@ashdownforest.org

East Sussex County Council
Kate Cole
kate.cole@eastsussex.gov.uk
Tel: 01273 481621

Natural England (formerly English Nature)
Sussex and Surrey Team,
Phoenix House, 33 North Street,
Lewes, East Sussex BN7 2PH
Tel: 01273 476595
Email: enquiries.southeast@naturalengland.org.uk

Environment Agency
Environment Agency, Southern Regional Office,
Guildbourne House, Chatsworth Road, Worthing,
West Sussex, BN11 1LD.
Phone: 08708 506506
Email: enquiries@environment-agency.gov.uk

Forestry Commission
South East England Forest District,
Bucks Horn Oak, Farnham,
Surrey GU10 4LS
Tel: 01420 23666
Email: enquiries.seefd@forestry.gsi.gov.uk

High Weald AONB Unit
Woodland Enterprise Centre,
Hastings Road, Flimwell,
East Sussex TN5 7PR
Tel: 01580 879500
Email: info@highweald.org

National Trust
South East Region, Polesden Lacey,
Dorking, Surrey RH5 6BD Tel: 01372 458203

Otters and Rivers Partnership
See Otters & Water Voles above.

RSPB
South East England Regional Office
2nd Floor, 42 Frederick Place,
Brighton BN1 4EA
Tel: 01273 775333

South Downs National Park Authority
Rosemary's Parlour, North Street, Midhurst, West
Sussex, GU29 9SB.
Tel: 0300 3031053
South Downs National Park Authority
<http://www.southdowns.gov.uk/>

South East Water
3 Church Road, Haywards Heath
West Sussex RH16 3NY
Tel: 0845 301 0845
Email: contactcentre@southeastwater.co.uk

Southern Water
Environment & Product Quality
Southern House, Lewes Road
Falmer, Brighton BN1 9PY
Tel: 0845 272 0845
customerservices@southernwater.co.uk

Sussex Amphibian & Reptile Group
Henri Brocklebank, Chair
Sussex Biodiversity Record Centre (See above)

Sussex Bat Group
www.sussexbatgroup.org.uk
Email: contact@sussexbatgroup.org.uk

Sussex Botanical Recording Society
<http://www.sussexflora.org.uk/>

Sussex Lichen Recording Group
Jacqui Middleton at jacquiandbruce@tiscali.co.uk

Sussex Wildlife Trust
Woods Mill, Henfield, West Sussex BN5 9SD
Tel: 01273 492630
enquiries@sussexwt.org.uk

Weald Meadows Initiative
High Weald Landscape Trust
<http://www.highwealdlandscapetrust.org/projects.php?id=15>

West Sussex County Council
Environment and Heritage Team, First Floor,
Northleigh, County Hall, Chichester, PO19 1RH
Tel: 01243 777273
E-mail: env.dev@westsussex.gov.uk

Woodland Trust
The Woodland Trust, Kempton Way, Grantham,
Lincolnshire, NG31 6LL
Tel: 01476 581111
Email: enquiries@woodlandtrust.org.uk

Publications from the Sussex Biodiversity Record Centre

The Sussex Biodiversity Record Centre has a growing library of publications, papers and reports available as hard copies or on line from <http://sxbrc.org.uk/documents/> Copies of this Adastra Review from 2001 are also available on line.

The Record Centre has paper copies of the following: The Dragonflies of Sussex, Sussex Wild Flowers, Sussex Rare Plant Register, Sussex Botany, Wild Orchids of Sussex, The Trees of Sussex.

The following are available on line: Sussex BAP Species Inventory (BAPSI), Sussex Invasive Alien Species Report (SIASR), Sussex Bird Inventory, Lichens of Sussex checklist, Great Nut Hunt, Big Biodiversity Butterfly Count, Bat Surveyors Wanted in Brighton, West Weald Recording Day - May 2009, Burgess Hill Green Circle Network, Harassed by the Rattle of the Steam-Plough, A Major Milestone, Dormouse and Field Vole Surveys, Ninfield Recording Day.

Further details here: <http://sxbrc.org.uk/biodiversity/publications/>

Occasional papers available on line

OP01 *Geranium x monacense* nothovar *anglicum*. The Sussex cranesbill.
G. x monacense nothovar *anglicum* was described from a plant found growing in a hedgebank in East Sussex and this paper gives an account of the species and its varieties.

OP02 Bat flies and fleas at Ebernoe.
A brief note on some of the ectoparasites of bats at Ebernoe Common in West Sussex.

OP03 Anophelic mosquitoes in Sussex.
A brief note on malaria-bearing mosquitoes in modern Sussex. This account may have to be expanded if climate change exacerbates the problem.

OP04 The polecat in Sussex.
After many years of absence due to persecution by gamekeepers and others, the polecat *Mustela putorius* is now returning to Sussex. This paper covers the story so far.

OP05 The ivy bee, *Colletes hederæ* in Sussex.
An account of an attractive, late-flying solitary bee that has colonised much of Sussex along the coast in recent years.

OP06 Japanese knotweed, *Fallopia japonica*. An account of this problematic invasive alien plant and the legislation that applies to it.

OP07 Green seafingers, *Codium fragile*, in Sussex. Information regarding the seaweed *Codium fragile* ssp. *tomentosoides*. It is found on the Priority List of Problem Species in Need of Control and is one of several taxa known as green seafingers. Other vernacular names are dead man's fingers, green fleece, oyster thief and Sputnik weed.

OP08 Sussex stoneflies (Plecoptera).
An account of the stoneflies (Plecoptera) recorded in Sussex.

OP09 Sussex lacewings and their allies.
An account of the Neuroptera, Mecoptera and Megaloptera recorded in Sussex.

OP10 Blackflies (Diptera: Simuliidae) in Sussex. An account of the blackflies so far recorded in Sussex based mainly on the work of Roger Crosskey and Rory Post.

OP11 Sussex special species (in preparation). Short descriptions of species that have a particular Sussex dimension.

OP12 Extinct or formerly extinct species in Sussex (in preparation). Species in Sussex that are extinct, almost extinct, thought to be extinct, or formerly extinct.

