ADASTRA
2003

An annual review
of wildlife recording in Sussex
**Introduction and editorial**

This is the third edition of the annual Adasta report and, once again, we are grateful to all recorders for their contributions and the work they and others have done over the past twelve months to improve our knowledge of the distribution and status of Sussex flora and fauna.

Our aim is to cover, if we can, the major groups every year; smaller or less popular groups from time to time and to include one or two general articles on special projects, or areas of interest within the two counties.

The schedule, for those intending to contribute to the next edition, is that the editor puts out a call for reports in early October, then reminds contributors from time to time if their material has not been received. The copy deadline is early to mid-January depending on the date of the recorders’ annual conference in February or March. This allows time for general editing and for the text to be checked through SxBRC, laid out, indexed and illustrated.

The finished production is collated and printed at SxBRC’s offices. As well as being distributed to recorders and those attending the annual conference, it is circulated widely elsewhere and the text is also posted on our website at: www.sxbrc.org.uk

**Is the ‘species status’ system going to change?**

You may have heard occasional rumblings suggesting that our current system of categorising many, but not all, British animals and plants according to the ‘Red Data Book System’ as RDB1, 2 or 3, Notable, Local or Common is going to change.

Suggestions for such a change have indeed been made at international level by the IUCN who are, broadly speaking, recommending a system based on an estimation of level of threat rather than rarity or number of records. Our SxBRC Committee for Biological Recording is currently looking at these to work out the most appropriate way forward.

For the moment recorders should continue to use the system they are currently using. We will keep people up to date with any developments on this topic as they occur.

*Patrick Roper, editor*
*South View, Churchland Lane,*
*Sedlescombe, East Sussex TN33 0PF*
*Tel: 01424 870208*
*e-mail: patrick@prassociates.co.uk*
REPORT FROM THE RECORD CENTRE FOR 2003

I think we can finally say that the Record Centre is in the 21st Century! It has taken a while, and has been an arduous, slow and often hair-raising experience, but we are finally there. My heart-felt thanks go out to all of you who have patiently waited for us to overcome some monumental issues with software and data transfer from the 'old RECORDER' software to the 'new RECORDER' software. For those of you who know what I am referring to I can almost hear an involuntary groan as you read the word 'RECORDER', but we now have all the Sussex data set safely transferred into the new system, which is allowing us to develop our reporting systems, data entry and validation considerably. Particular thanks need to go to Mike Widelli, who has contributed a staggering amount of time to helping us redevelop our reporting, a process which turned out to be far more complicated than anyone could envisage.

The year has seen a great deal of change in the Record Centre, with new staff and new office space within Woods Mill. However the greatest departure for the Centre was Harry Montgomery's retirement from the Sussex Rare Species Inventory (RSI), which he had created and managed for over ten years. Many of you will have been contacted by Harry in the past decade regarding different issues of rarity. He developed a system that has been emulated in several other counties as the RSI provides such a strong link between the data held by the Record Centre and the local recording community. This link is crucial to ensure the quality of the information that is being presented by 'us' from 'your' data. I am extremely pleased to say that Harry's work on the Rare Species Inventory has been taken on by none other than our editor Patrick Roper. Patrick is extremely well qualified for this role not only as a county recorder, but also as an ecologist with very wide ranged recording interests. He has been taking a close look at the data that we hold and an overhaul is now in progress...watch this space!

The output of the Centre has diversified slightly this year with the Record Centre being involved in some exciting new publications. There are whisperings of a Sussex Red List, outlining all species of conservation 'significance' in the County with notes on their status. This work has obviously already been started by the excellent work of the Sussex Botanical Recording Society in their Scarce Plant Register, but can be extrapolated out to other species groups. It would be an ambitious and long term project, but one that is already gathering considerable support.

As pressure on the Sussex natural environment continues to grow it is reassuring that the demand for information on the environment also grows. This is reflected by yet another dramatic increase in the use of the Record Centre’s data. I really feel that the information that Sussex Recorders provide to the Record Centre is being taken very seriously now and consultation of this sort of information has become increasingly fundamental to the planning process. We hope you feel that we are putting your data to good use and as always would value any feedback or ideas that you have.

Henri Brocklebank
Biodiversity Record Centre Manager
THE RECORD CENTRE SURVEY UNIT

As many of you may know, the Record Centre Survey Unit has been up and running since June 2003. It is undertaking and managing ecological surveys on behalf of the partners of the Record Centre, acting as an agency by subcontracting the fieldwork to other surveyors. To date, one major survey of the Lower Ouse Valley has been completed and four other surveys are in progress.

Anyone who has not yet filled in a Surveyor’s Details form and who would like to be on the Survey Unit database, please contact Theresa Greenaway on 01273 497506 or theresagreenaway@sussexwt.org.uk

VASCULAR PLANTS

by Paul Harmes, BSBI Flora Recorder for East Sussex

The principle work undertaken by the membership of the Sussex Botanical Recording Society (SBRS) on the recording of vascular plants in Sussex during 2003, was the Local Change recording, instigated by the Botanical Society of the British Isles (BSBI). This project proposes to revisit the tetrads recorded by the BSBI Monitoring Scheme in 1987/88.

It aims to visit one in nine of the 10km squares in the British Isles, with specific focus on the tetrads A, J & W as identified by the ‘DINTY’ system. In East and West Sussex, this amounts to 17 tetrads in seven 10km squares. The project is scheduled for a two year period, 2003 and 2004. When these recording seasons are completed next winter, the Monitoring Scheme data and the new data will be analysed and compared and the results published.

In 2003 survey work was undertaken in East Sussex at Monkyn-Pyn Common, Wilmington Green & Arlington Reservoir. The Wilmington Green survey identified the presence a fine colony of adder’s-tongue Ophioglossum vulgatum in two separate locations. During the Arlington Reservoir survey a small pond near the reservoir yielded a colony of the scarce small pondweed, Potamogeton berchtoldii. An intensive survey of shingle in the Rye Bay area has produced a huge quantity of data. Of particular interest were sheep-s-bit, Jasione montana, extensive colonies of narrow-leaved bird’s-foot-trefoil, Lotus glaber, and spiral tasselweed, Ruppia cirrhosa. It also increased the known distribution of least lettuce, Lactuca saligna and re-confirmed the presence of a flourishing stand of shrubby sea-blite, Suaeda vera. In West Sussex a survey of woodlands on Gault clay has greatly increased the number of records for Solomon’s-seal, Polygonatum multiflorum, and thin-spiked wood-sedge Carex strigosa.
ORCHIDS

by David C. Lang, 1 Oaktree, Barcombe, Lewes, East Sussex BN8 5DP
(David is author of Wild Orchids of Sussex published in 2001)

Late winter and early spring featured some hard frosts, and cold winds once again acted as a check on the flowering of many early orchids in exposed sites. The exceptional sunshine and high temperatures of summer resulted in some spectacular displays, which “went over” with the rapidity to be expected. The drought conditions did not favour the late summer flowering helleborines, which withered quickly, many flowers failing to open properly before they shrivelled.

**White helleborine** *Cephalanthera damasonium*. Another good season in Friston Forest. Elsewhere there were reduced numbers in some sites due to encroachment by scrub.

**Narrow-leaved helleborine** *Cephalanthera longifolia*. No records have been received from East Sussex, where it appears to be extinct, and records for West Sussex had not been sent in by the end of the year.

**Marsh helleborine** *Epipactis palustris*. No plants have been recorded this year from the Sussex Wildlife Trust reserve at Balcombe. Flowering at Rye Harbour was satisfactory, with 55 spikes at one accessible site.

**Broad-leaved helleborine** *Epipactis helleborine*. An average season. Plants on Ashdown Forest at several sites were examined, after a report that they were atypical. Unfortunately they were too withered for any comparison to be made, but merit a revisit in 2004.

**Violet helleborine** *Epipactis purpurata*. No abnormal plants were recorded in West Sussex or elsewhere.

**Green-flowered helleborine** *Epipactis phyllanthes*. A poor season in West Sussex, where flowering plants were few in number and suffered from the drought. The Swanbourne Lakes, Arundel, site was in poor condition, overgrown with small teasel, *Dipsacus pilosus* which flourished after the rubble dumped on the helleborines had been cleared. Only one flowering plant could be found. Eleven other flowering plants were found nearby. A new locality has been described at Tilgate Park near Crawley.

**Autumn lady’s-tresses** *Spiranthes spiralis*. Despite the dry year, it proved quite a good flowering season in most places, with several new sites recorded in East Sussex.

**Common twayblade** *Listera ovata*. This species enjoyed a good flowering season everywhere, with a fine show on the Downs east of Ditchling Beacon. Woodland sites near Wolstonbury are now severely overgrown with scrub.

**Bird’s-nest orchid** *Neottia nidus-avis*. No unusual records were received, but as is usual the species was far more numerous in the chalk woodlands of West Sussex.

**Musk orchid** *Herminium monorchis*. Despite the dry conditions it flowered in small numbers in most of its known sites.

**Frog orchid** *Coeloglossum viride*. Numbers were low, but it was recorded in several new locations, probably because the short vegetation made the flower spikes more easy to see. The hybrid with *Dactylorhiza fuchsii* flowered again on Harting Downs.
Fragrant Orchid *Gymnadenia conopsea*. Once again it had a splendid season, with very large numbers in many downland sites. Nineteen plants of ssp. *borealis* flowered on Ashdown Forest.

Greater butterfly-orchid *Platanthera chlorantha*. This had suffered in many sites by the encroachment of scrub and the maturation of woodland trees, failing to appear in several traditional sites. More than 25 flowered at Heyshott Down and four at Ebernoe.

Lesser butterfly-orchid *Platanthera bifolia*. No records at all in Sussex in 2003, and we may have lost it to the county flora. Records for 2004 are urgently requested.

Bee orchid *Ophrys apifera*. Not an exceptional year. Small numbers in most areas where it has previously been recorded.

Early spider-orchid *Ophrys sphegodes*. Did quite well in several sites around Beachy Head, with better numbers than had been recorded in the previous five years. Numbers for Castle Hill not known.

Fly orchid *Ophrys insectifera*. Few records in East Sussex and only scattered individuals in most West Sussex sites. Like the greater butterfly-orchid, it is suffering from overgrowth of scrub in many of its haunts.

Lizard orchid *Himantoglossum hircinum*. No records from West Sussex. Forty-nine rosettes were counted early in the season at Camber and flowering was satisfactory.

Burnt orchid *Orchis ustulata*. Numbers at the main Caburn site were down, despite the excellent state of the sward, and probably reflecting the cold spring. The late flowering form did well, although with lower counts than the astronomical records for 2002. The site near Firle, where three were found in 2002, boasted eleven flowering spikes.

Green-winged orchid *Orchis morio*. An excellent season with more than ten thousand at Bosham and more than five thousand at Beeding.

Early-purple orchid *Orchis mascula*. A good season, but none of the unusually coloured flowers could be found near Beachy Head.

Common spotted-orchid *Dactylorhiza fuchsii*. An exceptional year, with some superb displays on downland at Willingdon, Alfriston, Firle and Wolstonbury.

Heath spotted-orchid *Dactylorhiza maculata* ssp. *ericetorum*. Nothing unusual reported. The huge clump at Parham Park again produced forty or fifty spikes.

Early marsh-orchid *Dactylorhiza incarnata*. No count received for Ferring. The subspecies *pulchella* on Ashdown Forest did well, with 34 flowering plants.

Southern marsh-orchid *Dactylorhiza praetermissa*. More than 150 were found at Springhead near Haslemere in the extreme north-west of West Sussex. In East Sussex at East Chiltington 60 plants flowered in a field which had been ploughed 20 years ago. None had been seen in the interim and the field has just been reseeded for horse pasture. The new owner was delighted and most protective of the orchids.
Man orchid *Aceras anthropophorum*. Sixteen plants flowered on Wolstonbury – the best for some years. The other site in East Sussex urgently needs scrub clearance, which is promised by the authorities concerned.

Pyramidal orchid *Anacamptis pyramidalis*. Did well everywhere, with a superb show at Anchor Bottom near Beeding. Thousands, including four albinos, flowered in a small field inside the town boundary of Eastbourne. Var. *emarginata* was recorded in Caburn Bottom – a new site.

**LICHENS**

*by Simon Davey, Sussex lichen recorder*

2003 was an excellent year for lichenology in Sussex, with much progress made. Especial thanks must go to Jacqui Middleton for all her hard work in setting up the Sussex Lichen Recording Group and organising an eventful field programme during the year. Visits have included Parham Park, Eridge Rocks SWT Reserve, Uppark and Old Lodge in the Ashdown Forest. In the future it is hoped to arrange a varied programme of six visits a year. The group has proved very popular, and has usually attracted at least ten people including lichenologists from outside the county.

Highlights among lichens found include a species which had not been seen in Britain for forty years. This is *Sphinctrina anglica*, which was shown to be abundant as a parasite on *Protoparmelia oleagina* at Parham Park. In Britain, this species has only ever been found by Brian Coppins, and only in Sussex. On the same day Neil Sanderson, a visiting lichenologist from Hampshire found *Lecidea doliiformis*, new to the County and *Bacidia incompta*, a BAP species which has suffered as a result of Dutch elm disease, was also found inside an ancient ash tree.

On our visit to Eridge Rocks at the beginning of the year, we found *Chaenothecopsis parasitaster* growing on abundant *Cladonia incrassata*. This is the first record for this species outside Scotland, and its host is also nationally scarce. Other species recorded which are new to Sussex include *Bacidia saxenii*, on a piece of wave rolled wood at Rye Harbour. On the same day, *Usnea wirthii* was found on shingle. This rare, West Country lichen is new to south eastern England, and more usually grows on ancient thorn scrub. *Lecanora barkmanniana*, found on wooden fencing at Camber Castle by Vince Giavarini was also new, as were several others too numerous to mention. Churchyard work has proved that *Lecanographa grumulosa* is far more common than originally thought. This species was formerly considered to be distinct, and was named *Lecanactis* (*Lecanographa*) *hemisphaerica* (the **churchyard lecanactis**). It is still treated as a BAP species. Recent work by Vince Giavarini has proved that it is only an ecological variation of *Lecanographa grumulosa*, which is still nationally scarce however. This year has proved that there is still much more work to be done, and new species to be found in Sussex.

Several other species new to the County have also been recorded during lichen surveys by both resident and visiting lichenologists.
FUNGI

by Peter Russell

The West Weald Fungus Recording Group held 15 forays in 2003 and 2 workshops on dung fungi and Agaricus. Only eight of the forays were held in Sussex, reflecting the slow drift of the membership into Surrey.

The season started well from June to early August, with good records for russulas at Ebernoe and Spey House (including the very rarely recorded Russula vinosobrunnea); several records for Boletus rubellus and Boletus satanoides and several clumps of Dendropolyporus umbellatus (= Grifola umbellata) in St. Leonards Forest.

However the very dry summer and autumn (similar to the 2002 season) meant that for the peak of the season, very few species were recorded in very small quantities. The lack of frosts and wet conditions later on meant that the best foray of the year was in December.

How bad a season 2003 was can be seen if we look at the average finds per foray since the WWFRG started recording in 1993:

<table>
<thead>
<tr>
<th>Month</th>
<th>2003 Finds</th>
<th>1993-2002 Finds</th>
<th>Stddev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun</td>
<td>15</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Jul</td>
<td>17</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>Aug</td>
<td>26</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>Sep</td>
<td>28</td>
<td>63</td>
<td>32</td>
</tr>
<tr>
<td>Oct</td>
<td>65</td>
<td>77</td>
<td>48</td>
</tr>
<tr>
<td>Nov</td>
<td>45</td>
<td>79</td>
<td>34</td>
</tr>
<tr>
<td>Dec</td>
<td>90</td>
<td>32</td>
<td>23</td>
</tr>
</tbody>
</table>

However the above data hides a lot of variation. Some groups such as the grassland fungi seemed to be badly affected by the drought; even in the richest sites there was very little fruiting.

In the woodland the wood-rotters such as Mycena and Pluteus were widely recorded, but perhaps the most noticeable absence after the initial flush, were the mycorrhizal species such as the russulas and boletes. Again this can be seen if we look at the average finds per foray for two of the largest mycorrhizal groups, the Russulas and Lactarius:

<table>
<thead>
<tr>
<th>Month</th>
<th>2003</th>
<th>1993-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Jul</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Aug</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Sep</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Oct</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Nov</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Dec</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>
BIRDS

by John A. Hobson, Hon. Recorder, Sussex Ornithological Society

The Sussex Ornithological Society (SOS) maintains the only comprehensive database of bird records for the combined counties of East & West Sussex. The database currently holds in excess of 600,000 records. These comprise records comprehensively for all years since 1989 and for selected species for years back to 1962. The current rate of entry exceeds 50,000 per annum (2002 = 60,000).

Records are received from members of SOS, major national surveys (e.g., Wetlands Birds Survey (WeBS), Breeding Birds Survey (BBS)), national & county single-species and habitat surveys (e.g. heathlands, nightingales, nightjars (2003)), local sea-watching counts, major recording centres (e.g., Rye, Pagham & Chichester Harbours, RSPB, WWT, etc.), non-member birdwatchers and members of the general public.

Records may be submitted in various ways: on the Society’s recording forms, by electronic entry and direct transmission (using either the Society’s ‘Cobr-aid’ system or other approved software) and by e-mailed messages. Occasional records are sometimes accepted by ‘phone. Records of species defined as scarce in the county or rare nationally should be submitted with a written description of the bird(s) for consideration by the relevant records/rarities committee for acceptance and publication.

The Society maintains a web page (www.susos.org.uk) of information about the Society and its activities and matters ornithologically pertinent to its objectives. It includes a means for submitting reports of sightings for display on the ‘Recent Sightings’ page (but such records cannot be captured for entry to the database unless they are submitted by an e-mail, which is forwarded to the Recorder). There is also a page of ‘Guidelines for the Submission of Records’ to assist observers in the submission of their sightings.

The Society answers a considerable number of requests for ornithological data from ecological consultants and other responsible organisations (e.g., local government). These are usually prompted by the requirements of planning legislation arising from land use changes.

The major single-species survey for 2004 will be of nightjars.

REPTILES AND AMPHIBIANS

The Sussex Amphibian & Reptile Group (SARG) – recording and conserving the native reptiles and amphibians of Sussex

by Barry Kemp

2003 was another busy year for the Group. We attended several key events through the year including an Amphibian & Reptile Day at Drusilla’s Zoo in April which was very well attended by both children and adults, many of which had never seen any of the native herps that we had on display. SARG also attended the Uckfield Environmental Conference and gave several talks at other local events.

The Group undertook numerous surveys during last year including one at Lancing College. Following advice from SARG the college will be creating a new great crested newt pond

The Sussex Biodiversity Record Centre Tel: 01273 487553 E-mail sxbre@sussexwt.org.uk
and overhauling an existing pond which will contribute towards the great crested newt Species Action Programme target in Sussex.

We also gave advice and held an open day for members at a private woodland in Mayfield (read all about this in the forthcoming book – Portrait of a Woodland, Biodiversity in 40 Acres by Charlotte de La Bedoyere). Louise Bardsley, another SARG member has also recently written The Wildlife Pond Handbook in association with the Wildlife Trusts.

Once again we did lots of press reports and editorials for the local press to cover the toad migration but, despite all the, we still found numbers of toads to be low and sites generally to continue to show a decline, a trend that appears to be particular to Sussex even at sites that have been managed the same way for many years.

2003 saw the results of the Garden Pond Survey initiative sponsored by West Sussex County Council. Four thousand leaflets were sent out to horticultural and gardening groups. The leaflets contained colour identification photos with a tear off questionnaire. 268 forms have been returned and the data passed on to SxBRC.

The results of the Great Crested Newt Pilot Monitoring Scheme were also published in 2003. The scheme was a joint venture between Froglife, the Environment Agency, the Countryside Council for Wales, English Nature, the Joint Nature Conservancy Council, Southern Water and the Herpetological Conservation Trust. Froglife trained 150 volunteers to carry out a standardised survey of ponds within randomly selected 1 km squares in Sussex, Glamorgan, Hampshire and Kent. Although SARG members were involved in the study, 86% of the trainees had little or no previous experience of amphibian surveys. Over half of the volunteers trained went on to complete their survey and return data. Hopefully these surveyors will continue to feed records back to SARG and SxBRC. Great crested newts were found in 14% of randomly selected survey squares and in 32% of squares for which there were existing records. The low detection rate of newts in the latter squares may be due to a variety of reasons, including the relatively low-powered torches used.

East Sussex County Council’s Ouse Estuary Project at Newhaven was completed in June 2003. SARG has been involved in this project from the beginning and hopes to play a part in the future management programme.

SARG’s understanding is that the site is due to be notified as an LNR although English Nature is not supporting this action for several reasons including the lack of a management committee. The site is apparently subject to a Countryside Stewardship scheme although unusually English Nature have not been consulted.

The site is an SNCI for birds, but both SARG and EN believes the site deserves to achieve SSSI/SAC status primarily for it’s great crested newt population which has been found to be exceptionally large and fairly specialised due to the brackish condition of the breeding ponds.

TERRAPIN AND TURTLE RECORDS

During the past year we have been hearing about odd records from ponds where terrapins and/or freshwater turtles have been seen. It has been agreed that these sightings should be formally recorded so if any actions are required we know of their locations. The Sussex Biodiversity Record Centre at Woods Mill will hold these records in a separate file. Could those of you who have seen a terrapin or turtle basking in or near to a pond or lake please send the data onto SxBRC sxbrc@sussexwt.org.uk.

Data required:

Species (if known)
Date of sighting
Grid reference of water body
Name of pond or lake if known
and ditches. SARG is concerned that unless monitoring is undertaken of the newt population and water quality, and a sympathetic management regime adopted, the delicate balance of the site may be altered to the detriment of amphibians.

SARG is recommending that the OEP area and the adjacent Tide Mills should be included in the proposed South Downs National Park. Land on the other side of the A259 is already included.

We have recently arranged for all SARG members to be covered by free public liability insurance during SARG events, surveys and toad crossing patrols. Members receive the Newsletter three times a year and are encouraged to participate in all events. We are currently working on a handbook to give to members and other interested parties with useful contacts, FAQs, information on pond creation, wildlife gardening and dealing with the planning system.

SARG will be hosting the 2004 south east regional HGBI meeting in November. For details of this, or any other enquiries, contact Jenny Bacon on 01825 890236, or at jenny@baconjjgw.fsnet.co.uk.

Any sightings of reptiles or amphibians in Sussex should be sent to the SARG recorder, Glynnan Barham at 7 High Trees, Hunston, Chichester, West Sussex PO21 1PG

FRESHWATER LIFE

The Sussex Ouse Conservation Society

by Robin Pepper

The Society is concerned with all aspects of conservation in the entire Ouse catchment area but, due to limited resources, most effort is concentrated in the area around Barcombe and on the Bevern stream. Sea trout, Salmo trutta, are taken as an indicator species and records of fishermen’s catches are used as a guide to the health of the system. The year 2002 was the best for more than two decades with 176 fish captured (102 of them were released) but in 2003, due to the very low flow in the river, catches were running at about half of the previous year. Wherever possible, scale samples are taken and we now have extensive records of scale readings, which can be used to determine the age of the fish and the length of time spent at sea. Some records are also kept of migratory movements and of the spawning (redd) sites. The evidence so far collected suggests that the river Ouse sea trout may even be a distinct sub-species with exceptional growth rates compared to those from other river systems.

The health of the river is monitored by means of chemical analyses (for ammonia, phosphate and dissolved oxygen). These results are conveyed to the Environment Agency who investigate pollution incidents uncovered in this way. More recently we have started monitoring the diversity of invertebrates in the Bevern stream. Samples are taken in a
standardised way (so called ‘kick’ samples), which are then examined and the invertebrates identified to the level of genera. These are given a score from 1 to 10, which is dependant on their ability to tolerate low dissolved oxygen levels, to produce a BMWP (Biological Monitoring Working Party) score and an ASPT (Average Score Per Taxon). High scores indicate a population intolerant of pollutants. The level of dissolved oxygen is measured at the time the sample is taken and the location recorded using a GPS meter. Small fish have also been caught with these samples including bullheads, Cottus gobio, stone loach, Noemacheilus barbatulus and minnows, Phoxinus phoxinus. Bullheads are named in the EU Species and Habitats Directive (92/94/EEC) as being threatened on an international scale and requiring special conservation measures to ensure their survival.

Long stretches of the Bevern stream have been found to be devoid of submerged aquatic vegetation, perhaps due to eutrophication. These have been replanted with extensive colonies of water crowfoot, Ranunculus fluitans, as well as some unbranched bur-reed, Sparganium emersum and starworts, Callitriche spp. all taken from the local area. Greater water-moss, Fontinalis antipyretica, and some curled pondweed, Potamogeton crispa, were the only other submerged species found. The EU Habitats and Species Directive specifies that waters supporting R. fluitans and Callitriche spp. should be designated as Special Areas for Conservation but we have not been able to get that measure adopted by English Nature.

CETACEANS AND OTHER MARINE MAMMALS

by Stephen Savage, Sussex Regional Coordinator, Sea Watch Foundation.

A generally disappointing year for bottlenose dolphins with only a few confirmed sightings reported. This includes information from our trained volunteers and various other organisations and groups that send us details, such as Sussex Sea Search, Sussex Sea Fisheries, Sussex Ornithological Society, Sea Front Office/Life Guards and members of the public. It is thought however that this lack of sightings is probably due to natural reasons and occasionally we do have years where very little is seen, often followed by a very good year. This is not unexpected when you consider that the cetaceans we are monitoring travel the length of the English Channel and there can be many reasons (such as localised prey abundance) that can influence this. There have been a great number of sightings in other parts of the UK such as Cornwall. While disappointing this ‘negative’ data is important in regards to the long term monitoring programme not just of Sussex sightings but also of UK species in general. Looking at the larger picture our data is included on the Sea Watch Foundation national computer database of cetacean sightings and also shared with other organisations such as Durlston Marine Project. Locally information is shared with organisations including the Booth Museum of Natural History and Sussex Biodiversity Record Centre. Information is also posted on several websites.

The latest sighting for Sussex was a small group of bottlenose dolphins 9 miles off Eastbourne in September 2003. This was recorded by the Eastbourne Sea Watch Foundation group (coordinated by David Rowlinson) and originally reported by a local charter boat. David has also recorded very few dolphins this year. We have however had an increase in the number of harbour porpoise sightings particularly off Hastings this year, which have most likely come from the eastern end of the Channel, where bottlenose dolphins are recorded travelling west to east.

As usual we participated in a variety of local events to help raise awareness of Sussex Cetaceans including Lowtide Day in Brighton, Adur World Oceans Day Event, the launch of the West Sussex Coastal Marine Project and the Sussex Wildlife Trust’s Mammal Magic
Event. We also took part in the Sea Watch Foundation National Whale and Dolphin Watch Event in August. We had no sightings recorded at the Brighton Marina Watch, but harbour porpoise were recorded at Hastings.

Two exciting developments are set greatly to increase the quality of data we are able to record. First, a GPS purchased with a Sussex Biodiversity Recording Award, has made it possible to record locations much more accurately. This is especially useful when providing records for the SxBRC, the Sea Watch Foundation National monitoring scheme and our work with stranded cetaceans with the London Natural History Museum. The latest stranding locally was a dead bottlenose dolphin washed ashore on the Brighton/Hove border in October 2003. Most of the stranded cetaceans locally are offshore species such as common dolphin and harbour porpoise, rather than the more coastal bottlenose.

The second development will hopefully provide an opportunity to make great leaps forward in our monitoring programme. We have been chosen by the Sea Watch Foundation as a site for a cetacean data-logger, for Sussex. This year we have been running a pilot for this exciting acoustic monitoring project in the coastal waters around Brighton. This will supplement our visual recording scheme and the data collected by both methods will complement each other. The pod has been offered to us because of the problems of maintaining annual systematic watches with volunteers. This pilot acoustic project has been funded as part of the Wildlife Trusts’ South East Marine Programme. This 2003-04 project, entitled ‘Marine biodiversity and aggregates in South East England’, is supported by English Nature, through DEFRA’s Aggregates Levy Sustainability Fund.

The device and analytical software have been designed for the purpose of cetacean monitoring and have undergone field trials in Cardigan Bay in Wales, however the device behaves differently under various conditions. Therefore this year we have been testing the equipment to find the best location for monitoring as well as a safe site where it will be protected from extreme sea conditions.

The data from the pod will provide the following:

1. Consistent effort data (essential in annual and site to site comparison).
2. While most inshore dolphin sightings are confirmed as bottlenose dolphin, the pod will make it possible to confirm the identify of casual sightings and ascertain if other cetacean species visit inshore waters near Brighton. (e.g. porpoise)
3. Discover if cetaceans are active inshore at night.
4. Record in poor sea conditions where visibility is limited.

This has also made it possible to encourage local people to report sightings, as the pod can be used to verify species etc. However, the pod cannot determine the number of dolphins seen and other data that needs to be recorded visually so the opportunity is there to develop a project supported by local enthusiasts. We have already contacted a variety of seafront establishments in the area to report sightings. In the past a great deal of time has been taken up each year training volunteers to ensure reliability of data.

The pod will make it possible for a wider sector of the public to get involved and hopefully this will also help raise awareness of Sussex marine biodiversity. We have had help and advice from a variety of sources which includes Nick Tragenza who gave us initial training on the pod, Booth Museum, Sussex Sea Fisheries who have given advice on deployment sites and Sussex Sea Search who have shown a lot of enthusiasm in the project and helping to overcome deployment problems. Working with them and their team will make it possible to sustain the project into 2004 and beyond.
BATS

by Martin Love, Recorder, Sussex Bat Group

Sussex can now boast recent records for all 17 British bat species! In case you didn't hear, two specimens of the greater mouse-eared bat, *Myotis myotis* have been found in West Sussex, one old female in Bognor Regis which sadly could not be resuscitated and more recently a young male during one of the regular hibernacula counts over the winter of 2002/3. These finds suggest that there could be a small resident population still managing to hang on in Sussex. This is all a bit tentative because, during the summer of 2003 a number of Bat Group members undertook a series of searches in likely habitats close to the hibernacula and in the area where the greater mouse-eared bat was last known to have a small population. Sadly no evidence of these bats were found so perhaps it is a little early to return the greater mouse-eared to the British list. However searches will continue during the summer of 2004 and we hope to see the young male back in the hibernacula perhaps with some friends.

The other rare find for Sussex was a single lesser horse-shoe bat, *Rhinolophus hipposideros*, which turned up in garage near to Brighton. It is hard to know where this tiny bat came from (they weigh only about 5 grams) as they are mainly known from the West Country and Wales. There was apparently a small colony of these bats in Kent many years ago, so could there be small group still surviving in South East England? Or was it blown in from Cornwall on the strong westerly winds: we will probably never know. Because these bats are apparently very difficult to maintain it was put into suitable winter quarters in the hope that it could pass the hibernation period in peace and emerge find its friends in the spring.

The third interesting bat that we have is Nathusius' bat *Pipistrellus nathusii*, we often get these reported as grounded or injured animals but very rarely do roosts turn up anywhere in Britain. The summer of 2003 produced a roost of five in a house just south of Chichester. The house was being re-roofed and the builders were absolutely correct in stopping work and asking English Nature for help.

The above occurrences raise at least one question. Is it just chance that we manage to find, or have reported, the only examples of these species that exist in Sussex? It seems unlikely that this is the case, therefore it must be that there are other individuals of these rare species awaiting discovery. What about Leisler's bat *Nyctalus leisleri*? We rarely hear about this.

DRAGONFLIES

by Phil Belden, British Dragonfly Society (Sussex Group)

The book on the Dragonflies of Sussex

Last year's article on dragonflies highlighted the need to raise the awareness of dragonflies and recording. A book was promised on their known distribution in the county and this is by way of an update. An attractive flyer was produced at the end of last year to capture the hearts and wallets of potential sponsors. To date, well over half of the funds needed to publish the book have been received. There is every confidence that over the spring of 2004 the remainder will be found. This means that it may be available in time for this dragonfly season, early summer, when these spectacular aerobic insects are on the wing.

Armed with this book, plus a decent field guide, the naturalist or casual observer will have all he or she needs to find and record local dragonflies. The distribution maps will help pinpoint
what species are around in various localities, an invaluable aid to discovery and assisting in identification.

It is anticipated that the book, with around 100 pages, plus colour photos and maps (latter courtesy of the SxBRC), will retail at around £10, inclusive of post and packing. Final details are still to be confirmed, but there should be a pre-publication offer to enthusiasts and others keen to snap up an early copy. This publication needs wide dissemination as the aim is to both spread awareness and help protect, conserve and enhance dragonfly habitat and the well-being of these ancient survivors. The collective recording to date has enabled this book to be put together, which in turn should stimulate more interest and, hopefully, some more detailed study to understand the nature of dragonfly distribution in Sussex and the conservation requirements of these beautiful angels of the air.

**BUTTERFLIES**

*by Joyce Gay, Sussex Butterfly Recorder*

Two-thousand and three was the year of weather records! Even January was warm and on the 27th five species were recorded: **brimstone**, Gonepteryx rhamni, **peacock**, Inachis io, **red admiral**, Vanessa atalanta, **small tortoiseshell**, Aglais urticae, and **comma**, Polyommatina c-album. In March **speckled wood**, Pararge aegeria, and **small white**, Pieris rapa, were seen, but the real surprise was the **pearl-bordered fritillary**, Boloria euphrosyne, out in Rewell Wood (West Sussex) on April 13th. By the third week in April, **wood white**, Leptidea sinapis, **dingy** and **grizzled skippers**, Erynnis tages and Pyrgus malvae, **orange-tips**, Anthocharis cardamines, and **green-veined whites**, Pieris napi, had all been seen.

There are three main ways of recording. Many of our members send in their garden sightings, others record a site regularly throughout the season, whereas a few walk a transect weekly from April until the end of September. All these records are entered onto our database and sent to our central coordinator. They will contribute to the national Butterfly Conservation’s update of the Millennium Atlas to be published at the end of the 2004 season. This will show the distribution trends which have taken place during the previous five years. To get an up-to-date picture we decided to concentrate on a few specialist species such as the blues, wood white and the fritillaries.

Most known blue colonies were visited and it was confirmed that the populations, especially of **Adonis blue**, Lysandra bellargus, **common blue**, Polyommatus icarus, and **small blue**, Cupido minimus, were thriving due to good management of the chalk grassland and the settled hot summer weather. Several new small blue colonies were found and adults were recorded in the middle of September in at least three areas. This means there was a second generation.

Iping Common continues to support a thriving **silver-studded blue**, Plebejus argus, population, but a few of the very small sites for this butterfly in West Sussex are causing concern. We would like to thank the Sussex Downs Conservation Board rangers for all their help and encouragement. Heathland restoration should benefit this species.

The wood white numbers of both broods were very encouraging. They emerged early in April and were seen over a wide area of Forest Enterprise woodland in north west Sussex. Our hope is that sympathetic management will enable this species to spread back into the surrounding woodland where it was found in the 1970s and there is some evidence that this is already happening. **Silver-washed fritillaries**, Argynnis paphia, did well in West Sussex, but
are not so widespread in the East. We will try to target the many small East Sussex woods in 2004.

Small pearl-bordered fritillaries, Boloria selene, and pearl-bordered fritillaries, Boloria euphrosyne, have declined in numbers and area of distribution since the late 1990s. They are both still found in parts of the Vert Wood complex near Laughton, East Sussex, though there have been no small pearl-bordered seen in West Sussex for several years. The pearl-bordered can still be found in Verdley and Rewell Woods, West Sussex, and we hope to cover the western part of the county with its large estates more thoroughly in 2004. This area supported large numbers of this species in the late 1990s. The pearl-bordered fritillary is one of our target species for 2004. To do well it needs a warm and settled spring so May 2003 did not favour it and we are hoping for better conditions in 2004.

Despite the large numbers of migrant moths mentioned in the report on moths by Colin Pratt (see below), there were relatively few clouded yellows, Colias croceus, reported until late summer.

MOTHS

by Colin R. Pratt, Recorder of Butterflies & Moths for East and West Sussex

The 2003 season was particularly noteworthy for the quantity and quality of migrant moths from the Continent. Of the European hawk moths, the day-flying humming-bird hawk, Macroglossum stellatarum, was the most noticeable, with almost every observer of natural history enjoying an encounter. Well over 200 sightings were made at Woodingdean by one recorder alone, and larvae were also discovered. The last year when similar numbers were seen in Sussex was 1996, although these years do not approach 1947 when ten times these levels were counted. Adults of the great convolvulus hawk, Agrius convolvuli, were widespread, as usual, especially when feeding at dusk from tobacco plant flowers, Nicotiana spp. But more than a dozen caterpillars and pupae were also reported - an all-time record. With a 4 ½” wingspan, three adults and three larvae of our largest moth, the death’s head hawk, Acherontia atropos, were reported – the most since 1991. Seven striped hawk, Hyles lineata, were also noted in the county: at Walberton (2), Crowborough, Kingsham, Rye, and at Pagham Harbour (2). Just one bedstraw hawk, Hyles gallii, was found, at rest at Hassocks. But the rarest migrant species seen last season were not hawk moths, they were the first ever Sussex records of the great dart, Agrotis crassa, trapped at West Chiltington, of Clancy’s rustic, Platyperigea kadenii, at Walberton, of the orache, Trachea atriplicis, at Middleton-on-Sea to actinic light and Crambus silvella, a pyralid moth, noted at Walberton. The very rare olive crescent, Trisateles emortalis, was also noted at Beckley – just five Sussex specimens are known, the last at Pease Pottage in 1971. A red-headed chestnut, Conistra erythrocephala, was also noted on Bonfire Night at Peacehaven, the fourth apparently migrant county record since its extinction in Sussex after 1932.

Of the native species, the continued presence of several important moths was confirmed: the metallic green day-flying cistus forester, Adscita geryon, at Devil’s Dyke, the triangle, Heterogenea asella, and white-banded carpet, Spargania lutuata, at Beckley, the tissue, Triphosa dubitata, and Channel Island pug, Eupithecia ultimarita, at Pagham Harbour, the chimney sweeper, Odezia atrata, near Tunbridge Wells, the northern rustic, Standfussiana lucerna, at Eastbourne, the square-spotted clay, Xestia rhomboidea, at Arundel, the southern chestnut, Agrochola haematidea, at Amberham, the rush wainscot, Archanara algae, at Horsham, and the marsh mallow, Hydraecia osseola, at Rye. Of the pyralid moths, Evergestis limbata is still breeding at Portsplace, Sitochroa verticalis at Beckley, and Nascia cilialis was discovered at Amberley Wildbrooks. One of the most exciting records of all
concerned the pale lemon sallow, Xanthia ocellaris, near Bognor, a perhaps still native species last seen in the same area in 1901. Four examples came to mercury vapour light within about five miles of the traditional Victorian site during 2003. Colonies of the toadflax brocade, Calophasia lunula, are nationally scarce but the insect remains established in suitable spots all along the Sussex coast, with hundreds of larvae being counted at Pagham Harbour.

The Sussex Moth Group successfully continued its recording program during 2003. A nocturnal gathering near Beckley on July 12th was the most successful field meeting ever. Ninety nine species of the larger moths were totalled to ten mercury vapour lights before 2am. It was confirmed that the now rare white-banded carpet, Spargania luctuata remains resident in the county. And the following national scarcities were also identified: several festoon, Apoda limacodes, and satin beauty, Deileptenia ribeata, came to the lights, along with white-line snout, Schrankia taenialis and the waved black, Parascotia fuliginaria, and nine triangle, Heterogenea asella, were counted - the highest number ever seen together in Sussex.

For more information on the Sussex Moth Group and its aims and activities, visit our website at www.sussexmoths.org.uk or contact the Chairman, Sarah Patton, at Eastern Cottages, 2 Watery Lane, Kingsham, Chichester PO19 2XH. Telephone: 01243 641508, or e-mail: house.mouse@btopenworld.com

To join the Sussex Moth Group contact the secretary, Tony Davis at Butterfly Conservation, Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP. Telephone (work): 01929 400209, e-mail: tdavis@butterfly-conservation.org

For more information on Sussex Lepidoptera contact Colin R. Pratt F.R.E.S, Recorder of Butterflies & Moths for East and West Sussex at 5 View Road, Peacehaven, East Sussex BN10 8DE. Telephone 01273 586780, or e-mail: colin.pratt@talk21.com

MICROLEPIDOPTERA

by Sarah Patton

In the autumn of 2003, I decided to go ahead with the long-planned idea of starting a recording scheme for the micro-moths in Sussex. Although these insects are shunned by many as too difficult to identify, there are some excellent books now available covering virtually all British species and many of the larger ‘micros’ are no more tricky than the rather more popular macro-moths. Folks with a botanical leaning may be interested in searching for leaf mines and there is a wealth of fieldwork which can be done collecting the early stages and breeding them through.

Everyone who traps moths, even casually, in Sussex must have noticed the abundance of the migrant micros the rush veneer, Nomophila noctuella, and rusty-dot pearl, Udea ferrugalis, in 2003, the latter appearing well into the winter. Other, rarer, migrant micros were also found – I trapped the first vice-county (West Sussex) record of the beautiful black and white Ethmia bipunctella at Chichester. This viper’s-bugloss feeder is found in East Sussex, but my specimen was probably from the mainland Europe. It has been given the ‘common’ name of bordered ermel, and this raises the interesting issue of whether giving micro-moth vernacular names encourages people who may otherwise be frightened off by too much scientific jargon.
The new scheme will cover all micros, including the pyralids and plumes. Over 13,000 records are already on the database and I am happy to receive others in (virtually!) any format (the scheme is using MapMate). An occasional newsletter will be sent to contributors.

Sarah Patton, Eastern Cottage, 2 Watery Lane, Kingsham, Chichester, West Sussex, PO19 8XH. E-mail: house.mouse@btopenworld.com

GRASSHOPPERS AND RELATED INSECTS

by John Paul

One of the more interesting finds of 2003 was a mole cricket. The insect was discovered near Ashington by a nurseryman after watering the roots of a tree imported from Italy in 2001. Mole crickets have quite a long life cycle and it is possible that the insect was introduced as an egg or early instar. The specimen was referred to me for identification. Italy is the home of several species of mole cricket and the morphology of the Ashington specimen is compatible its identification as the widespread European species Gryllotalpa gryllotalpa. G. gryllotalpa is common in Italy, but is also the mole cricket native to Britain. There have been very few records from Sussex in recent decades although it is just possible that other populations exist somewhere.

The long hot summer encouraged Orthoptera to turn up in unusual places. In August, examples of the slender ground-hopper, Tetrix subulata, and the long-winged cone-head, Conocephalus discolor, appeared in my back garden. Although, the weather was good for Orthoptera, numbers of individuals were generally not great. It takes a succession of hot summers for populations to build up and for Orthoptera to become really abundant.

COLEOPTERA – BEETLES

by Peter J. Hodge, recorder for coleoptera in East and West Sussex

One of the beetle highlights was the publication, in the December 2003 issue of The Coleopterist, of the first British record of the Whitehawk soldier beetle, Malthodes lobatus. This minute insect is less than 2 mm long and to the untrained eye looks nothing like a soldier beetle. It was found in June 2003 by Max Barclay who was commissioned to carry out a survey of grassland earmarked for a housing development. Thankfully, because this and other rare species were breeding at this site, the habitat has been saved from destruction, for the time being at least.

Also in the December Coleopterist is a report by Martin Love, describing the discovery of the first Sussex specimen of the rove beetle Velleius dilatatus, found drowned in bath water in a house in Bignor. This rare species is associated with hornets’ nests and, with its curiously serrate antennae, cannot be confused with any other British rove beetle.

Jonty Denton has recently published a splendid list of beetles found at Petworth Park in 2001 and 2002. Three species not previously recorded from Sussex are reported, including the tiny histerid Plegaderus dissectus which lives under bark of ancient trees, mainly beech, in ancient woodland and parkland.

A few examples of the tiny weevil, Smicronyx coecus, were found in a tangle dodder, its host plant, growing amongst heather beside a sandy track on Iping Common in early September.
2003. This species has only been recorded from a few counties in southern England and is new to the Sussex list.

As part of a detailed survey of the lower Ouse valley wetlands, the Nationally Scarce whirligig beetle *Gyrinus paykulli* was discovered in a former river course near South Heighton. This species has only previously been found in Sussex at Rye Harbour and is a welcome addition to the Ouse valley. It is also worth noting that the levels marshes of the tidal part of the Ouse catchment (i.e., south of Barcombe Mills) have a far greater number of water beetle species recorded than any other marsh system in Sussex, even beating Pevensey Level by a considerable margin.

The discovery of the ground beetle *Acupalpus maculatus* in a grassy ditch on East Guldeford level on 30th May 2003 is perhaps not an unexpected record. It was discovered new to Britain several years ago on the banks of gravel pits at Dungeness and this is the first sign that it may be starting to spread.

For those who are excited by facts and figures the list of beetles recorded from East and West Sussex currently stands at 2,945 species.

HEMIPTERA HETEROPTERA & AUCHENORRHYNCHA

*by Peter J. Hodge and Alan Stewart*

The box bug, *Gonocerus acuteangulatus*, was formerly only known in Britain from Box Hill in Surrey and its immediate surroundings. Then about 15 years ago it started to spread and is now widespread and common throughout Surrey. In Sussex it has been recorded from Brighton and in late August 2003 several nymphs were beaten off a large fruiting hawthorn bush at Sullington Warren, followed by an adult on 3 September. The species has several recorded host plants, including box, hawthorn and wild rose, feeding on the fruits.

Two specimens of the rare and elusive lygaeid bug *Nysius helveticus* were swept off bell heather, *Erica cinerea*, at Weavers Down on 24 August 2003. On the following day this species was swept off the same plant at Lord’s Piece in large numbers and a single example was found at Stedham Common on 7th September. Is this an example of yet another insect that is spreading due to the recent run of warm summers?

The capsid bug *Deraeocoris flavilinea* is a recent colonist from mainland Europe and was added to the Sussex list on the strength of two males beaten off an overgrown blackthorn and hawthorn hedge at South Heighton on 14 June 2003. Recent experience with the species in north and east London indicates that the preferred habitat is sycamore trees infested by aphids.

A specimen of the scarce vagrant *Liorhyssus hyalinus* was swept off ruderal grassland at South Heighton on 8th July 2003. This species appears to be spreading and may be in the process of establishing itself in Britain.

Two uncommon pond skaters, *Aquarius paludum* and *Gerris argentatus*, were found in a former course of the river Ouse at South Heighton on 16th September 2003. Although neither are new to Sussex they are found only infrequently.

Amongst the Auchenorrhyncha (leafhoppers and planthoppers), two interesting finds were made in the Newhaven area in 2003. The rare leafhopper *Macropsis mendax* was swept off elm foliage near Paradise Park, Denton on 1 August 2003. This is a species that feeds
exclusively on elms and may have suffered somewhat from the decline in the number of these trees due to Dutch elm disease. A single individual of the distinctive and local cixiid planthopper *Oliarius panzeri* was swept off creeping thistle *Cirsium arvense* at Riverside Park, Newhaven on 8 July 2003. This rather enigmatic species has a very scattered distribution and its precise habitat requirements are unclear. However, it has frequently been reported from fields and other open spaces where the soil is dry and cracks open in summer; these cracks may allow the adult females to penetrate the soil to lay their eggs on or near plant roots on which the nymphs ultimately feed.

**DIPTERA (TWO-WINGED FLIES)**

*by Patrick Roper, diptera recorder for East and West Sussex*

Diptera records continue to grow steadily but there is still a long way to go to understand the distribution across East and West Sussex of even the commonest flies, so all records are welcome.

Much work was done in 2003 on areas of saltmarsh, vegetated shingle and saline lagoons at Pagham Harbour in the west and Rye Harbour and Lydd Ranges in the east. The RDB2 BAP cranefly *Geranomyia bezzii* was rediscovered at Pagham after a gap of some 30 years. The larvae live in *Enteromorpha* algae in saline pools as do those of the RDB3 saltmarsh horsefly, *Atylotus latistriatus*, also found at Pagham. Neither of these species has been recorded from similar habitats in the east.

The rare tachinid fly, *Erynnia octypterata*, was found on Lydd Ranges as was the lauxaniid *Minetitia longiseta*, both not apparently previously recorded from East or West Sussex.

Also on the coast were records from Peter Hodge of the picture-winged fly *Paroxyna lhommei*, swept from hoary ragwort, *Senecio erucifolius*, its supposed foodplant, at two sites in Newhaven. This RDB1 species was first recorded in the British Isles in East Kent the 1970s and appears to be spreading.

The hornet robberfly, *Asilus crabroniformis*, was reported by Jim and Judith Steedman from Lullington Heath and we now have an encouraging number of sites for this species in Sussex. This striking BAP insect is one of many invertebrates that like the warm dry conditions found on both heaths and downs so, as a downland heath, Lullington presents the best of all possible worlds and the fly should be well protected as it is in a National Nature Reserve here.

Two of the more interesting inland records were those of the pediciine cranefly *Pedicia rivosa*, found by Alan Gillham at the Old Lodge Reserve in Ashdown Forest and the tiger cranefly *Nephrotoma dorsalis*, several of which turned up in my garden north of Hastings. *P. rivosa* was mentioned from Sussex in the Victoria County History nearly 100 years ago, but is generally a species of northern and western Britain. It is easily distinguished by the broad, dark, angled chevron across the otherwise clear wings. Apart from a few records from the New Forest, the *Nephrotoma* is mainly known from sandy riversides in hilly areas of Scotland, Wales and Ireland. There is, however, one record from dry woodland in Kent and these Sussex records were also from dry woodland in the High Weald.

Recording in reed beds has shown that there is a very uneven distribution of *Lipara lucens*, a chloropid fly that causes cigar-shaped galls in the upper part of the reed stem. These easily-spotted galls are common at Pagham in the west and the Filsham Reed Bed near Hastings in the east, but seem to be absent from the extensive beds at Rye Harbour and on the Lydd Ranges. As well as containing early stages of the flies that cause them, *Lipara* galls have a
number of inquilines that use them either during, or after, the original inhabitants have gone. Records of these galls away from the areas where they are already known would be very welcome.

HYMENOPTERA

Ants, bees and wasps in Sussex 2003

by Mike Edwards, recorder for ants, bees and wasps in East and West Sussex, and Andrew Grace

2003 has seen the re-run (from 1993) of the West Sussex Heathland Insect Survey, or at least the first part of it, the job is too big to complete in one year. A report from the first year’s results and what it tells us about the state of our heathland insect fauna will form a contribution to the 2004 Heathland Conference, which is being held in Sussex.

Aculeate Hymenoptera feature strongly in heathland faunas, and, as we have a major proportion of the European heathland resource, it should not be a big surprise that some of our heathland bees and wasp populations are of international significance. That some of these significant populations are insects which we consider common in their appropriate habitat may come as something of a surprise, however.

Two bees which gather pollen only from heathers are cases in point- *Andrena fuscipes* and *Colletes succinctus*. These bees are slightly smaller than honeybees and have more strongly marked bands of fine hairs running across their abdomens. Both species can be found right into Highland Scotland. In mainland Europe however, they are very restricted.

They seem to turn up wherever there has been a continuity of heathers flowering within a radius of several miles. They are very good at finding new areas of heathers which grow in disturbed patches within heathy woods, as well as the larger areas created by clear-felling of conifer plantations on former heathland and consequently make a very good base-line indicator for heathland insect assemblages.

A more restricted insect, but one with a very close association with the driest, hottest heathlands, is the large, red and black sand wasp *Ammophila pubescens*. This species is only found in Sussex on the heather-dominated heaths of the Folkestone Beds in West Sussex, it also occurs on the same beds in Surrey, in the Dorset Basin (on a different geological stratum, but hot and dry) and in the Sanderlings of Suffolk, which are very like the Folkestone Beds heaths of West Sussex in a number of ways. We do not know exactly why it is so restricted to heather-clad places, but it is likely that it only preys on the caterpillars of a number of heather-feeding moths. It is the host of the large, mottled-wing beefly *Thyridanthrax fenestratus* which, inevitably, is also restricted to the same heathlands, although it does not occur in the Sanderlings.

Its slightly larger relative, *Ammophila sabulosa*, occurs in a number of habitats, including sea cliffs, especially if the soil is a bit sandy, as well as heaths. It is known to prey on a wide range of moth caterpillars.

This current survey is giving us a picture of the typical fauna of our West Sussex Heaths and how well conservation efforts are managing to conserve their internationally important fauna. We are hoping soon to be able to carry out a similar survey of the East Sussex heaths, starting with the largest block, the Ashdown Forest. Any records of ants, bees or wasps from East
Sussex heathland areas would be very welcome, as this information forms the background against which we can judge specific surveys.

Andrew Grace has added the following on some East Sussex bees:

Further survey and monitoring of the bees of the shingle habitats of Rye Bay was carried out. It is becoming apparent that this high-energy environment has distinctive features of pollination wildlife, complementary to the specialised floral communities. The golden-fringed mason bee, *Osmia aurulenta*, replaces the red mason bee, *Osmia rufa*, along this coastal area. *O. aurulenta* is a snail-shell nester and may have other ecological advantages in utilising exposed coastal landscape with relatively shifting substrates. Another snail shell user, *Hoplitis spinulosa*, was also found to be widespread.

The community of yellow-faced bees in the genus *Hylaeus* are very well-represented in the shingle environment. These bees are stem nesters and warm themselves on pebbles on breezy days. They have nesting aggregations right up to the beach shingle crest.

The handsome and large leafcutters *Megachile maritima* and *M. wilughbiella* had a good year, but a pleasant surprise was the discovery of small numbers of *M. ligniseca*, the wood-carving leafcutter, using weather-worn stiles and stock fencing as nesting habitat.

Shifts and changes in the coastal ecosystem were especially marked by the expansion in range of the beautiful two-spotted flower bee, *Anthophora bimaculata*. This bee was much more common on the shingle than the silvery leaf-cutter, *Megachile leachella*, usually one of the most populous species at Rye Bay. This may reflect cyclical patterns of relative abundance and decline in species attempting to occupy the same niches.

The stag beetle and the hornet: a request for information

Both of these magnificent creatures have volatile status histories in Sussex. The hornet, *Vespa crabro*, has been colonising the county for a number of years. The wasp’s geographical progress, and the reasons for its increase in status, are currently being researched. The stag beetle, *Lucanus cervus*, also colonised a large part of the county during the 20th century but over the past few years its local range has decreased. Any records of these two species, from any era, are therefore of some importance. If you have seen either of these species, please contact Colin R. Pratt, F.R.E.S. by post at 5 View Road, Peacehaven, East Sussex BN10 8DE, by e-mail at colin.pratt@talk21.com, or via the telephone on 01273 586780.

OTHER INVERTEBRATES

Using Steve Hopkin’s test key from the Field Studies Council, the list of Collembola (springtails) continues to grow slowly. It has been shown, for example, that *Entomobrya multifasciata* is one of the commonest species among decaying vegetation on stable shingle, but does not seem to be so common elsewhere.

One example of the small, but distinctive, thrip, *Rhipidothrips brunneus*, (see picture right) was found at Rye Harbour. Feeding on barren brome grass, *Bromus sterilis*, the RES Handbook says of the
British records of this species “collected four times near the coast in Sussex between 1915 and 1930”.

Psocids or booklice included the less-frequently encountered *Mesopsocus unipunctatus* from Pagham, apparently not previously noted from West Sussex, and *Elipsocus hyalinus* from Camber. The largest British caddis fly, the local but rather rarely recorded *Phryganea grandis*, turned up in a moth trap on Lydd Ranges in the far east of East Sussex as did *Holocentropus picicornis*, *Oecetis ochracea* and other species.

During 2004 we hope to make a start on improving our knowledge of Sussex sawflies and wood wasps (Hymenoptera: Symphata). There are currently very few records from either East or West Sussex. This is an interesting group with day-flying, often colourful adult insects and caterpillar-like larvae many of which feed openly on rather unusual plants like ferns, skullcaps or horsetails. The wood wasps are among our most dramatic looking insects and well-known to foresters but, apparently, largely overlooked by recorders.

The Record Centre is always looking for recorders for the numerous vacant groups of invertebrates. If you are interested in one or more of these, do get in touch with Henri Brocklebank at Woods Mill.

**MOLLUSCS**

**Two Sussex Invaders!**

Since approximately Roman times non-native molluscs have been introduced into Britain by man, both deliberately and by accident. These ‘aliens’ include some of our most widespread and familiar species such as the garden snail, *Helix aspersa*. The tide of new additions continues and within only the last 150 years a further 5 or 6 species have become established in Sussex. Two of the most recent non-native invaders that seem to be clearly ‘on the move’ in the county are considered here.

The girdled snail *Hygromia cinctella* is a native of central and southern France and the Mediterranean region. It has a fairly distinctive shell about 7mm high/10-16mm across with a distinctive light coloured keel around the edge of the whorls (see right). The first British record was reported in south Devon over 50 years ago living amongst stones, nettles and open vegetation on sea cliffs in the Paignton/Torquay areas. The species is now well established over a large area of Devon and Cornwall and is advancing steadily elsewhere. By the mid-1990s it appeared in many new areas throughout southern Britain and there have been records from south Wales and as far north as Yorkshire. The first East Sussex records came from gardens in the Lewes area over ten years ago. In West Sussex the first finds came later, with the discovery of a population in a garden in Midhurst in 2000. It would be useful to discover how widely this species is now distributed in Sussex. If you think that you may have located a new population and wish to confirm identification then you can check illustrations in Kerney (1999) or visit the National Museums & Galleries of Wales SCAN (Schools & Communities Agenda 21 Network) website at www.scan-online.org. This provides a simple
identification guide to assist non-specialists in separating \textit{H. cinctella} from other similar garden snails.

In Britain there are two native freshwater limpets, the \textbf{river limpet} \textit{Ancylus fluviatilis} and the \textbf{lake limpet} \textit{Acroloxus lacustris} (see fig. 2). A third introduced species, \textit{Ferrisia wautieri} (no English name!) was first recorded in Britain from hothouse tanks in Glasgow in 1931 and discovered in the wild in 1976. The first East Sussex population was discovered by David Holyoak in 1977 (Holyoak 1978). It was 23 years later, in 2000, that the first West Sussex \textit{F. wautieri} were recorded from a tidal (but freshwater) ditch close to the river Arun near Pulborough. \textit{F. wautieri} lives in still or slow flowing waters attached usually to the stems and leaves of aquatic plants such as water lilies. This limpet has a small shell about 4mm in length, rather similar to the native \textit{A. lacustris}. Confusion is, however, easily avoided as \textit{A. lacustris} has an apex that points towards the right whereas in \textit{F. wautieri} the blunt apex points towards the left. \textit{F. wautieri} is easily separated from \textit{A. fluviatilis} as the latter species has a larger shell (5-8mm), with fairly course ribbing radiating from the shell apex which is easily observed at low (\textit{x}5) magnification. It seems likely that \textit{F. wautieri} occurs more widely throughout Sussex. Those working in freshwater habitats in the county might locate further populations by carefully examining the surface of submerged vegetation. If further assistance is required with identification then please contact me at the e-mail address below.

New Sussex records of both \textit{H. cinctella} and \textit{F. wautieri} would be of considerable interest. If sent to me they will (with your permission) be sent to the Sussex Biodiversity Record Centre and added to the Conchological Society’s non-marine molluscan national data base.

REFERENCES:


\textit{Martin Willing (Conservation Officer), Conchological Society}

martinwilling@godalming.ac.uk
SPIDERS

by Andy Phillips, recorder for spiders and some other invertebrate groups for East and West Sussex

The most significant discovery of the year was the crab spider *Xysticus ulmi* found by Nick Steer at Old Lodge Nature Reserve in Ashdown Forest. This was the first record of this wetland species in Sussex. Although quite common in southern Britain, the species appeared to be absent from the extreme south-east having not been found in either Sussex or Kent until now. The spider was found by sweeping *Molinia caerulea* in one of the sheltered marshy areas on the reserve. Also found in the same *Molinia* bed was the nationally scarce jumping spider *Evarcha arcuata*.

Other records of note in 2003 included a new location in Sussex for the nationally rare jumping spider *Pseudeuophrys obsoleta*. It was found on the small vegetated shingle beach at Seven Sisters Country Park in identical habitat to its only other Sussex location at Rye Harbour Nature Reserve. On the salt marsh at Seven Sisters Country Park the nationally scarce meshweb spider, *Argenna patula* was found. This species has only been previously recorded in Sussex in Rye Bay and at Chichester Harbour and is threatened in Britain due to the loss of salt marsh to land reclamation.

A new location for the nationally scarce orb weaver *Araniella inconspicua* was found on the cliff-top at Hastings Country Park. It was on heather which is a newly recorded habitat for the species which is usually only found on the lower branches of trees such as oaks and pines.

Two new locations of the introduced comb foot spider *Steatoda nobilis* were found this year by members of the public, one of which had the misfortune of discovering the species via a painful bite. This species has gained a certain notoriety due to its exotic origins, its large size and sensational reports of the very rare occasions on which it bites. The species is closely related to the *Latrodectus* genus which includes the infamous black widows but the bites of the *Steatoda* genus are usually no worse than a bee sting, or any other large native spider bite. The spider has now been found in Littlehampton, North Lancing and Chichester.

The national spider atlas published in 2002 showed East and West Sussex to be important for the conservation of a number of rare and scarce species, although the information on many of these species is very scant especially in West Sussex. I have picked a couple of species to focus on recording this year due to their ease of identification so even non-arachnologists should be able to help out.

*Marpissa muscosa* and *Sitticus inexpectus* are both large, diurnal, and nationally scarce jumping spiders. *Marpissa muscosa* is our biggest jumping spider in Britain growing up to 10mm long. It lives on old fence posts and the trunks of large trees on the edge of woods or in hedgerows. The map shows that the species appears to be restricted to the north of Sussex and absent from the coast. It is larger than the common zebra jumping spider, *Salticus scenicus*, and much longer and thinner. It is dark grey-brown with a black outlined irregular pale stripe running down the length of its abdomen. It can usually been found running around openly on old fence posts. It is quite bold if approached, usually lifting its head up to have a closer look at you.
Small farms with old hedgerows and large wooden fence posts are the best places to look for this species. If possible a photograph or description of the spider would be adequate to confirm the identification if found.

*Salticus scenicus* is restricted to sparsely vegetated shingle and has been found from such habitat in a number of locations along the Sussex coast. Again it is larger than *Salticus scenicus* to which it is similar in appearance, although is much fatter and rounder. The pale patches on the top of its abdomen appear as large dots rather than stripes and it has a broad pale band at the front and around the sides of the abdomen. It can sometimes be quite common in suitable habitat and is conspicuous as it methodically searches the shingle for prey. It will occasionally jump almost vertically a few inches above the ground as if trying to get a better look at its surroundings. Its main prey appears to be flies which use the warm shingle stones to thermoregulate. Vegetated shingle adjacent to freshwater marsh or estuarine habitats is probably its optimum habitat type with most records coming from coastal shingle in southern Britain and large river valleys in central and eastern Europe.
Any records of these species are important and should be sent either to me or the Record Centre. Particularly important is at least a six figure grid reference and a short description of the habitat. For those who use MapMate my CUK is 5d3.

I would like to thank everyone who sent me records of the wasp spider, *Argiope bruennichi*, in 2003. I think we can now assume that the species is an abundant and almost ubiquitous species in Sussex found in almost every type of habitat.

**WEALDEN ANCIENT WOODS SURVEY: A PROJECT IN THE MAKING**

*by Chris Hannington, Wealden District Council*

Wealden District, in the heart of the High Weald in East Sussex, is one of the most heavily wooded landscapes in the country. The main characteristics of large parts of the High Weald were essentially established in the 13th Century and this tapestry of fields hedges woodlands and river corridors has, unlike much of Sussex, remained substantially unchanged since World War II. By definition these woodlands are ‘Ancient Woodlands’ but the original English Nature (EN) Ancient Woodland Surveys of the late 1980s did not, for logistical reasons, take into account any woodlands under 2ha in size. Due to the geology, topography and land-use of the Sussex Weald, many of its woodlands are both ‘Ancient’ and under 2ha.

When development is proposed, sites are generally inspected by planners with no background in ancient woodland assessment. Thus the accuracy of the 1989 Ancient Woodland Inventory is not generally questioned as it is accepted as the defining document on the subject. For this reason many of the district’s woodlands are afforded no policy protection, a fact that developers often use as an argument for clearance.

In light of this problem a range of organisations (English Nature, Wealden District Council, East Sussex County Council, Forestry Commission, High Weald AONB, Sussex Wildlife Trust and the Sussex Biodiversity Record Centre) have been developing a project to resurvey all woodlands in Wealden District. Unlike the original Ancient Woodland Survey this project will survey ALL woods, including those smaller than 2 ha in size.

It is an ambitious project, one that will look at both the ecology, land-use history and archaeology of the sites.

*In the original (1989) Ancient Woodland Inventory, ancient woods were defined as: “Woods that have had a continuous woodland cover since at least 1600 AD and have only been cleared for underwood or timber production”.*

The following is therefore recommended as a development of the definition used in the 1989 Ancient Woodland Inventory.

**An area of land thought to have had a continuity of woodland habitat since at least 1600 AD including:**

- Areas with continuous woodland cover
- Areas managed or periodically cleared for timber or underwood production
- Areas regenerating following woodland management.
- Open grazed areas within the woodland site (at least 20% woodland over 80% of the site).
- Temporary or permanent open habitat within the woodland complex.
- Temporary clearings that may have been created within the woodland complex but which have regenerated, or are regenerating, back to woodland.
This project therefore aims to re-examine the available information for ancient woodland in Wealden District and use this to present a reviewed Ancient Woodland Inventory for the District to use as a tool in the planning process.

At present the funding has been secured to dedicate an officer to the project for two years. The project will be broken down into two phases, the first establishing base line information and the second building up information from field work and further historical research. It is anticipated that the resulting ‘enhanced’ Wealden District Ancient Woodland Inventory will serve as a better tool to protect our local woodland resource and possibly act as a model that can be used elsewhere.

References and Further Reading:

- Biodiversity: The UK Action Plan (1994/95)
- **Land Use Consultants** (2001) Threats to Ancient Woodland, The Woodland Trust and WWF-UK
- Planning Policy Guidance Note 9, Nature Conservation (Department of the Environment, 1994)
- The Habitats Directive (Council of European Communities, 1992)
- The Secretary of State’s letter to England’s Chief Planning Officers – 15 March 1999 (regarding the amendment to Circular 9/95)
- Wealden Local Plan 1998

**SUSSEX COUNTY RECORDERS & OTHER USEFUL CONTACTS 2003/4**

Any records of any plant or animal can be sent either to the Record Centre or to the relevant recorder listed below.

**Sussex Biodiversity Record Centre (SxBRC)**

Woods Mill, Henfield, West Sussex BN5 9SD
Tel: 01273 497553/554
sxbrc@sussexwt.org.uk

**SxBRC Survey Unit**

Theresa Greenaway
Sussex Biodiversity Record Centre Survey Unit
(Address as above)
Tel: 01273 497506
theresagreenaway@sussexwt.org.uk

**FLORA**

**Higher Plants**

MARY BRIGGS
(Sussex Botanical Recording Society)

**Bryophytes**

HOWARD MATCHAM
(British Bryological Society: www.britishbryologicalsociety.org.uk)
21 Temple Bar, Strettington, near Chichester, West Sussex PO18 0LB
Lichens

SIMON DAVEY
Stable Flat, Downsland Court,
115 East End Lane, Ditchling,
West Sussex BN6 8UR
srdavey@globalnet.co.uk
Tel: 01273 843375

British Lichen Society
www.argonet.co.uk/users/jmgray

Charophytes

FRANCES ABRAHAM
Old School House, Ebernoe, nr Petworth,
West Sussex GU28 9LD
frances.a@solutions-inc.co.uk

Fungi

PETER RUSSELL
64 Graham Avenue, Patcham,
Brighton BN1 8HD
pjrh1st@yahoo.com

VERTEBRATES

Amphibians & Reptiles

GLYNNAN BARHAM
(Sussex Amphibian & Reptile Group)
7 High Trees, Hunston, Chichester,
West Sussex PO21 1PG.

River Fish

RICHARD HORSFIELD
Area Fisheries Officer, Environment
Agency, Rivers House,
3 Liverpool Gardens, Worthing,
West Sussex BN11 1TF

Birds

JOHN HOBSON County Recorder
Sussex Ornithological Society
23 Hillside Road, Storrington, Pulborough,
West Sussex RH20 3LZ
recorder@susos.org.uk
Tel. 01903 740155

Sussex Ornithological Society:
www.susos.org.uk
ROBIN PEPPER

East Sussex County Conservation Officer
Scobells Farm, Barcombe, Lewes,
East Sussex BN8 5DY
conservation@susos.org.uk
Tel. 01273 400393

JOHN GOWERS
East Sussex SOS Conservation Officer
10, Westpoint, Newick,
East Sussex BN8 4NU
j-b-gowers@supanet.com

ALAN PERRY
West Sussex SOS Conservation Officer
Edgehill Barn, Byworth,
Petworth GU28 0HR
aperry@grayswood.co.uk

Mammals

SIMON CURSON (Please send all records
to the Sussex Biodiversity Record Centre)
scurson@yahoo.com
Mobile tel.: 07813 139440

Cetaceans and Seals

STEPHEN SAVAGE (Seawatch)
51 Eastbrook Road, Portslade,
East Sussex BN41 1LN
ALLSAVS@aol.com
www.seawatchfoundation.org.uk
Tel. 01273 424339

Bats

MARTIN R.T. LOVE
4 The Cherries, Rookwood Rd,
West Wittering,
West Sussex PO20 8LT
halcon@globalnet.co.uk
Tel. 01243 513650

Badgers

SOUTHDOWN BADGER PROTECTION
GROUP
Area covered: Brighton - Ditchling -
Herstmonceux - Pevensey.
Recorder: Mr. Carr,
7 Bowden Rise, Seaford,
East Sussex BN25 2HZ
Tel. 01323 895742
HASTINGS BADGER PROTECTION
GROUP
Area covered: Hastings Borough - Rother District.
Recorder: Don Wise, 304 Bexhill Road, St. Leonard's-on-sea, East Sussex TN38 8AL
Tel. 01424 439168

WEST SUSSEX BADGER PROTECTION GROUP
Recorder: Jaine Wild, 1 Sutton Close, Felpham, Bognor Regis PO22 8EY
Tel. 01243 82580

MID SUSSEX BADGER PROTECTION GROUP
Recorder: Jan Spooner, 4 The Marts, Rudgwick, West Sussex RH12 3HH
Tel. 01444 417822

WEALD AND DOWNLAND BADGER PROTECTION GROUP
Area covered: Horsham - Burgess Hill - Rudgwick.
Recorder: Bob Darting, 55 Nightingale Lane, Burgess Hill, West Sussex
Tel. 01444 454085

INVERTEBRATE RECORDERS
Moths and Butterflies
COLIN PRATT
(County recorder for moths and butterflies).
Oleander, 5 View Road, Peacehaven, East Sussex.
colin.pratt@talk21.com
Tel. 01273 586780

JOYCE GAY (British Butterfly Conservation Society - Sussex Branch)
Wellbrook, High Street, Henfield, West Sussex BN5 9DD
Tel. 01273 492279
www.butterfly-conservation.org

SARAH PATTON
(Microlepidoptera Group)
Eastern Cottages, 2 Watery Lane, Kingsham, Chichester PO19 2XH. Telephone: 01243 641508, or e-mail: house.mouse@btopenworld.com

Glow-worms
ROBERT and JULIE HOWARD
(Sussex Glow-worm Recorders)
Tulip Tree Cottage, Spinney Lane, West Chiltington, West Sussex RH20 2NX
Tel. 01798 812141

Spiders
ANDY PHILLIPS
58b West Hill Road
St Leonards On Sea
East Sussex TN38 0NE
Tel: 01243 716919
andy.phillips6@btopenworld.com

Orthoptera & related orders
JOHN PAUL
Downsflint, High Street, Upper Beeding, West Sussex BN44 3WN
tetrix@pavilion.co.uk

Dragonflies
No Current Recorder (Oct 2002). Please send all records to SxBRC

Coleoptera (beetles) & Heteroptera (plant bugs)
PETER HODGE
8 Harvard Road, Ringmer, East Sussex BN8 5HJ
Peter.J.Hodge@tesco.net
Tel. 01273 812047

Hymenoptera

ANTS, BEES & WASPS
MIKE EDWARDS
Lea-side, Carron Lane, Midhurst, West Sussex GU29 9LB
mike.edwards@bwars.com
Tel. 01730 810482
**Diptera (two-winged flies)**

PATRICK ROPER  
South View, Churchland Lane,  
Sedlescombe, East Sussex TN33 0PF  
patrick@prassociates.co.uk  
Tel. 01424 870208

**Hoverflies**

ROGER MORRIS (National Recorder).  
English Nature. Bullring House,  
Northgate, Wakefield,  
West Yorkshire  
humber.pennines@english-nature.org.uk  
Tel: 01924 334500

**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  
molluscs@willing.fsbusiness.co.uk  
Tel. 01730 814790

**Pseudo-scorpions**

GERALD LEGG (National Recorder).  
Booth Museum of Natural History, 194  
Dyke Road, Brighton,  
East Sussex BN15AA  
boothmus@pavilion.co.uk  
Tel. 01273 292777

**Geology**

JOHN COOPER  
Booth Museum of Natural History, 194  
Dyke Road, Brighton,  
East Sussex BN15AA  
boothmus@pavilion.co.uk  
Tel. 01273 552586

**Marine Records- (see also Cetaceans)**

GERALD LEGG  
Booth Museum of Natural History, 194  
Dyke Road, Brighton,  
East Sussex BN15AA  
boothmus@pavilion.co.uk  
Tel. 01273 292777

**SOME VACANT GROUPS**

Ephemeroptera (Mayflies), Neuroptera, Mecoptera and Megaloptera, (Lacewings, Scorpion-flies, Alderflies and Snake-flies), Coelenterata, Nemertea (Nematode worms), Oligochaeta (Oligochaete worms), Bryozoa, Annelida (Flatworms), Myriapoda (Millipedes).

If anyone is interested in becoming county recorder for any of these, or any other vacant group, please contact Henri Brocklebank at the Sussex Biodiversity Record Centre:  
01273 497553 or sxbrc@sussexwt.org.uk

**INDEX**

Abraham, Frances .........................35  
Aceras anthropophorum .................8  
Acherontia atropos ....................20  
Acoustic monitoring .................15  
Acroloxus lacustris ..................30  
Acupalpus maculatus .................24  
Adder's tongue ........................3  
Adonis blue ............................18  
Adscita geryon ..........................20  
Adur World Oceans Day ..............15  
Aggregates Levy Sustainability Fund  
.........................................16  
Aglais urticae .........................18  
Agrius convolvuli ....................20  
Agrochola haematidea ..............20  
Agrotis crassa .......................20
Alfriston ..............................................7
Amberley Wildbrooks.......................21
Ambersham.......................................21
Ammophila pubescens....................27
Ammophila sabulosa ....................27
Amphibians & reptiles
recorder details..............................36
Anacamptis pyramidalis .................8
Anacamptis pyramidalis var. emarginata ......8
Anchor Bottom, Beeding ....................8
Ancient woodland..........................23, 33
Ancient Woodland Inventory......33, 34
Ancylus fluviatilis .....................30
Andrena fuscipes ...............................26
Anthocharis cardamines ....................18
Anthophora bimaculata ....................28
Ants, bees and wasps ........................26
recorder details..............................37
Apoda limacodes ................................21
Aquarius paludum ................................24
Arachnida (see Spiders)..................31
Araniella inconspicua .....................31
Archanara algae ..............................21
Argennia patula ................................31
Argiope bruennichi .....................33
Argynnis paphia ..............................19
Arlington Reservoir .........................3
Arun, river .....................................30
Arundel ............................................5, 20
Ashdown Forest ...5, 6, 7, 8, 26, 27, 31
Ashington ...........................................22
Asilus crabroniformis .....................25
Atylotus latistriatus .......................25
Auchenorrhyncha ..............................24
recorder details..............................38
Autumn lady’s-tresses.......................6
Bacidia incompta ..............................8
Bacidia saxenii .................................9
Bacon, Jenny .....................................13
Badgers
Hastings Protection Group.............36
Mid-Sussex Protection Group.............37
Southdown Protection Group ..........36
Weald and Downland Protection Group ................................................37
West Sussex Protection Group ...36
Balcombe SWT reserve .................5
Barcombe...........................................13
Barcombe Mills ...............................23
Bardsley, Louise .......................11
Barham, Glynnan ......................13, 36
Barren brome grass ......................28
Bats
general account ..............................16
recorder details..............................36
Beachy Head ...............................6, 7
Beckley ..............................................20, 21
Bedstraw haw.............................20
Bee orchid ...........................................6
Beeding .............................................7
Beetles (Coleoptera)
general account ..............................23
Belden, Phil ......................................17
Bell heather ......................................24
Bevern stream .........................13, 14
Bignor ..............................................23
Bird’s-nest orchid .........................6
Birds
Breeding Birds Survey...............10
genral account ..............................10
Nightingale ...................................10
Nightjar ...................................10, 11
recorders' details ...........................36
Wetlands Birds Survey...............10
Bognor ..............................................21
Bognor Regis ......................................16
Boletus rubellus ...............................9
Boletus satanoides ...........................9
Boloria euphyoseyne .......................18, 19
Boloria selene ..................................19
Booklice ..........................29
Booth Museum of Natural History15, 16, 38
Bordered ermel moth .....................22
Bosham ..............................................7
Botanical Society of the British Isles..3
Bottlenose dolphin .......................14, 15
Box.................................................24
Box bug ..............................................24
Box Hill, Surrey .............................24
Briggs, Mary .................................35
Brighton ..................................15, 16, 17, 24
Brighton Marina Watch .................15
Brimstone ......................................18
British Bryological Society .............35
British Dragonfly Society (Sussex Group)........................................17
British Lichen Society ........................................35
Broad-leaved helleborine .........................................5
Bromus sterilis ..................................................28
Bryophytes ...................................................35
Fontinalis antipyretica ........................................14
Greater water-moss ..............................................14
recorder details ...............................................35
BSBI Monitoring Scheme ........................................3
Bullhead ..........................................................14
Burnt orchid .....................................................7

Butterflies
Adonis blue ...................................................18
Aglais urticae ..................................................18
Anthocharis cardamines .........................................18
Argynnis paphia ................................................19
Boloria euphrosyne .............................................18, 19
Boloria selene .....................................................19
Brimstone ..........................................................18
Clouded yellow ...................................................19
Colias croceus ...................................................19
Comma ...............................................................18
Common blue .......................................................18
Cupido minimus ...................................................18
Dingy skipper .......................................................18
Erynnis tages ...................................................18
general account ...............................................18
Gonepteryx rhamni ..............................................18
Green-veined white ..............................................18
Grizzled skipper ..................................................18
Inachis io ..........................................................18
Leptidea sinapis .................................................18
Lysandra bellargus ..............................................18
Millennium Atlas update ......................................18
Orange-tip .........................................................18
Pararge aegeria ..................................................18
Peacock ...........................................................18
Pearl-bordered fritillary ..........................18, 19
Pieris napi ........................................................18
Pieris rapo ........................................................18
Plebejus argus ...................................................19
Polygongia c-album ............................................18
Polyommatus icarus ............................................18
Pyrgus malvae ...................................................18
recorders' details ...............................................37
Red admiral .......................................................18
Silver-studded blue ..............................................19
Silver-washed fritillary .......................................19
Small blue .........................................................18
Small pearl-bordered fritillary ............19
Small tortoiseshell ...........................................18
Small white .......................................................18
Speckled wood ...................................................18
Vanessa atalanta ................................................18
Wood white .......................................................18, 19
Butterfly Conservation ..............................18, 21
Caburn Bottom ..................................................8
Caddis flies .......................................................29
Callitriches spp ..................................................14
Calophasia lunula ................................................21
Camber ............................................................7, 29
Camber Castle .....................................................9
Carex striigosa ....................................................4
Castle Hill ..........................................................7
Cephalanthera damasonium ..............................5
Cephalanthera longifolia .......................................5
Cetaceans
recorder details ...............................................36
Cetaceans and other marine mammals
.................................................................14
Chaenothecopsis parasitaster .........................9
Chalk grassland ...............................................19
Channel Island pug .............................................20
Charophyta
recorder details ...............................................35
Chichester ......................................................17, 22, 32
Chichester Harbour .........................................10, 31
Chimney sweater moth ..................................20
Churchyard lecanactis ......................................9
Cirsium arvense .................................................25
Cistus forester ...................................................20
Cladonia incrassata ............................................9
Clancy’s rustic ...................................................20
Clouded yellow ...................................................19
Coelogyne viride ...............................................6
Coleoptera
Acupalpus maculatus .........................................24
general account .................................................23
glow-worm records .......................................37
Gyrinus paykulli .................................................23
Lucanus cervus ..................................................28
Malthodes lobatus .............................................23
Plegaderus dissectus .........................................23
recorders' details ...............................................37
Smicronyx coecus ..............................................23
Stag beetle .......................................................28
A review of wildlife recording in East & West Sussex in 2003
Published by the Sussex Biodiversity Record Centre Tel: 01273 487553 E-mail sxbrc@sussexwt.org.uk

Velleius dilatatus..........................23
Whitehawk soldier beetle..............23
Calles croceus...............................19
Collembola.....................................28
Entomobrya multifasciata..............28
Colletes succinctus........................26
Comma butterfly............................18
Committee for Biological Recording..1
Common blue..................................18
Common dolphin............................15
Common spotted-orchid...............7
Common twayblade.........................6
Conchological Society....................30
Conistra erythrocephala.................20
Conocephalus discolor.....................23
Convolvulus hawk.........................20
Cooper, John.................................38
Coppins, Brian...............................8
Cottus gobio.................................14
Country-side Council for Wales.......12
Country-side Stewardship...............12
Crambus silvella............................20
Creeping thistle...........................25
Crowborough.................................20
Cupido minimus.............................18
Curled pondweed...........................14
Curson, Simon...............................36
Dactylorhiza fuchsii.........................7
Dactylorhiza fuchsii x Coeloglossum
viride.................................6
Dactylorhiza incarnata....................7
Dactylorhiza incarnata ssp. pulchella7
Dactylorhiza maculata ssp. ericetorum
........................................7
Dactylorhiza praetermissa..............7
Davey, Simon.................................8
Davis, Tony..................................21
de La Bedoyere, Charlotte.............11
Death’s head hawk.........................20
DEFRA........................................16
Deileptenia ribeata.........................21
Dendropolyergus umbellatus............9
Denton, Jonty.................................23
Deraeocoris flavilinea....................24
Devil’s Dyke, Brighton...............20
Dingy skipper...............................18
Dipsacus pilosus............................5
Diptera
Asilus crabroniformis ....................25
Atylotus latistriatus.......................25
Erynnia octoptyrata.......................25
General account............................25
Geranomyia bezzi..........................25
Hornet robberfly...........................25
Lipara lucens................................26
Minetitia longiseta........................25
Mottled-wing beefly.....................27
Nephotoma dorsalis.......................26
Paroxyna lhommei..........................25
Pedicia rivosa...............................26
record details............................38
record details (hoverflies)..........38
Saltmarsh horsefly.......................25
Thyridanthrax fenestratus..............27
Ditchling Beacon.............................6
Dodder.................................23
Dragonflies
dragonfly book for 2004..................17
record details............................37
Drought in 2003............................10
Drusilla’s Zoo.................................11
Durleness......................................24
Durlston Marine Project.................15
Dutch elm disease.........................8, 25
Early marsh-orchid.......................7
Early spider-orchid.......................6
Early-purple orchid.......................7
East Chiltington............................8
East Guldeford...............................24
East Sussex County Council...........12, 34
Eastbourne.................................8, 20
Eastbourne Sea Watch Foundation
 group.......................................15
Ebernoe........................................6, 9
Edwards, Mike...............................37
Elipsocus hyalinus..........................29
English Channel..............................14
English Nature ...12, 14, 16, 17, 33, 34
Enteromorpha algae.......................25
Entomobrya multifasciata..............28
Environment Agency, The...............12
Epipactis helleborine......................5
Epipactis palustris.........................5
Epipactis phyllanthes.....................5
Epipactis purpurata.......................5
Erica cinerea.................................24
Eridge Rocks.................................9
Eridge Rocks SWT Reserve..............8
### Flora

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erynnia octypterata</td>
<td>25</td>
</tr>
<tr>
<td>Erynnia tages</td>
<td>18</td>
</tr>
<tr>
<td>Ethmia bipunctella</td>
<td>22</td>
</tr>
<tr>
<td>Eupithecia ultimaria</td>
<td>20</td>
</tr>
<tr>
<td>Evarcha arcuata</td>
<td>31</td>
</tr>
<tr>
<td>Evergestis limbata</td>
<td>21</td>
</tr>
<tr>
<td>Ferring</td>
<td>7</td>
</tr>
<tr>
<td>Ferrisia wautieri</td>
<td>30</td>
</tr>
<tr>
<td>Festoon moth</td>
<td>21</td>
</tr>
<tr>
<td>Field Studies Council</td>
<td>28</td>
</tr>
<tr>
<td>Filsham Reed Bed</td>
<td>26</td>
</tr>
<tr>
<td>Firle</td>
<td>7</td>
</tr>
</tbody>
</table>

### Fish

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>bullhead</td>
<td>14</td>
</tr>
<tr>
<td>Cottus gobio</td>
<td>14</td>
</tr>
<tr>
<td>Minnow</td>
<td>14</td>
</tr>
<tr>
<td>Noemacheilus barbatulus</td>
<td>14</td>
</tr>
<tr>
<td>Ouse catches</td>
<td>13</td>
</tr>
<tr>
<td>Phoxinus phoxinus</td>
<td>14</td>
</tr>
<tr>
<td>Salmo trutta</td>
<td>13</td>
</tr>
<tr>
<td>Stone loach</td>
<td>14</td>
</tr>
</tbody>
</table>

### Fish (river)

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>recorder details</td>
<td>36</td>
</tr>
</tbody>
</table>

### Flora (vascular plants)

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceras anthropophorum</td>
<td>8</td>
</tr>
<tr>
<td>Adder's tongue</td>
<td>3</td>
</tr>
<tr>
<td>Anacamptis pyramidalis</td>
<td>8</td>
</tr>
<tr>
<td>Anacamptis pyramidalis var. emarginata</td>
<td>8</td>
</tr>
<tr>
<td>Autumn lady's-tresses</td>
<td>6</td>
</tr>
<tr>
<td>Barren brome grass</td>
<td>28</td>
</tr>
<tr>
<td>Bee orchid</td>
<td>6</td>
</tr>
<tr>
<td>Bell heather</td>
<td>24</td>
</tr>
<tr>
<td>Bird’s-nest orchid</td>
<td>6</td>
</tr>
<tr>
<td>Box</td>
<td>24</td>
</tr>
<tr>
<td>Broad-leaved helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Bromus sterilis</td>
<td>28</td>
</tr>
<tr>
<td>Burnt orchid</td>
<td>7</td>
</tr>
<tr>
<td>Callitriche spp</td>
<td>14</td>
</tr>
<tr>
<td>Carex strigosa</td>
<td>4</td>
</tr>
<tr>
<td>Cephalanthera damasonium</td>
<td>5</td>
</tr>
<tr>
<td>Cephalanthera longifolia</td>
<td>5</td>
</tr>
<tr>
<td>Cirsium arvense</td>
<td>25</td>
</tr>
<tr>
<td>Coeloglossum viride</td>
<td>6</td>
</tr>
<tr>
<td>Common spotted-orchid</td>
<td>7</td>
</tr>
<tr>
<td>Common twayblade</td>
<td>6</td>
</tr>
<tr>
<td>Creeping thistle</td>
<td>25</td>
</tr>
<tr>
<td>Curled pondweed</td>
<td>14</td>
</tr>
<tr>
<td>Dactylorhiza fuchsi x</td>
<td></td>
</tr>
<tr>
<td><em>Coeloglossum viride</em></td>
<td>6</td>
</tr>
<tr>
<td><em>Dactylorhiza incarnata</em></td>
<td>7</td>
</tr>
<tr>
<td><em>Dactylorhiza incarnata</em> ssp. pulchella</td>
<td>7</td>
</tr>
<tr>
<td><em>Dactylorhiza maculata</em> ssp. ericetorum</td>
<td>7</td>
</tr>
<tr>
<td><em>Dactylorhiza praetermissa</em></td>
<td>8</td>
</tr>
<tr>
<td><em>Dipsacus pilosus</em></td>
<td>5</td>
</tr>
<tr>
<td>Dodder</td>
<td>23</td>
</tr>
<tr>
<td>Early marsh-orchid</td>
<td>7</td>
</tr>
<tr>
<td>Early spider-orchid</td>
<td>6</td>
</tr>
<tr>
<td>Early-purple orchid</td>
<td>7</td>
</tr>
<tr>
<td>Epipactis helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Epipactis palustris</td>
<td>5</td>
</tr>
<tr>
<td>Epipactis phyllanthes</td>
<td>5</td>
</tr>
<tr>
<td>Epipactis purpureata</td>
<td>5</td>
</tr>
<tr>
<td>Erica cinerea</td>
<td>24</td>
</tr>
<tr>
<td>Fly orchid</td>
<td>7</td>
</tr>
<tr>
<td>Fragrant Orchid</td>
<td>6</td>
</tr>
<tr>
<td>Frog orchid</td>
<td>6</td>
</tr>
<tr>
<td>general account for 2003</td>
<td>3</td>
</tr>
<tr>
<td>Greater butterfly-orchid</td>
<td>6</td>
</tr>
<tr>
<td>Green-flowered helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Green-winged orchid</td>
<td>7</td>
</tr>
<tr>
<td>Gymnadenia conopsea</td>
<td>6</td>
</tr>
<tr>
<td>Gymnadenia conopsea ssp. borealis</td>
<td>6</td>
</tr>
<tr>
<td>Heath spotted-orchid</td>
<td>7</td>
</tr>
<tr>
<td>Heather</td>
<td>31</td>
</tr>
<tr>
<td>Herminium monorchis</td>
<td>6</td>
</tr>
<tr>
<td>Himantoglossum hircinum</td>
<td>7</td>
</tr>
<tr>
<td>Hoary ragwort</td>
<td>25</td>
</tr>
<tr>
<td>Jasione montana</td>
<td>3</td>
</tr>
<tr>
<td>Lactuca saligna</td>
<td>3</td>
</tr>
<tr>
<td>Least lettuce</td>
<td>3</td>
</tr>
<tr>
<td>Lesser butterfly-orchid</td>
<td>6</td>
</tr>
<tr>
<td>Listera ovata</td>
<td>6</td>
</tr>
<tr>
<td>Lizard orchid</td>
<td>7</td>
</tr>
<tr>
<td>Lotus glaber</td>
<td>3</td>
</tr>
<tr>
<td>Man orchid</td>
<td>8</td>
</tr>
<tr>
<td>Molinia caerulea</td>
<td>31</td>
</tr>
<tr>
<td>Musk orchid</td>
<td>6</td>
</tr>
<tr>
<td>Narrow-leaved bird's-foot trefoil</td>
<td>3</td>
</tr>
<tr>
<td>Narrow-leaved helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Neottia nidus-avis</td>
<td>6</td>
</tr>
<tr>
<td>Ophioglossum vulgatum</td>
<td>3</td>
</tr>
<tr>
<td>Ophrys apifera</td>
<td>6</td>
</tr>
<tr>
<td>Ophrys insectifera</td>
<td>7</td>
</tr>
<tr>
<td>Species</td>
<td>Pages</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Ophrys sphegodes</td>
<td>6</td>
</tr>
<tr>
<td>Orchis mascula</td>
<td>7</td>
</tr>
<tr>
<td>Orchis morio</td>
<td>7</td>
</tr>
<tr>
<td>Orchis ustulata</td>
<td>7</td>
</tr>
<tr>
<td>Platanthera bifolia</td>
<td>6</td>
</tr>
<tr>
<td>Polygonatum multiflorum</td>
<td>4</td>
</tr>
<tr>
<td>Potamogeton berchtoldii</td>
<td>3</td>
</tr>
<tr>
<td>Potamogeton crispa</td>
<td>14</td>
</tr>
<tr>
<td>Pyramidal orchid</td>
<td>8</td>
</tr>
<tr>
<td>Ranunculus fluitans</td>
<td>14</td>
</tr>
<tr>
<td>recorders' details</td>
<td>35</td>
</tr>
<tr>
<td>Ruppia cirrhosa</td>
<td>3</td>
</tr>
<tr>
<td>Senecio erucifolius</td>
<td>25</td>
</tr>
<tr>
<td>Sheep's-bit</td>
<td>3</td>
</tr>
<tr>
<td>Shrubby sea-blite</td>
<td>4</td>
</tr>
<tr>
<td>Small pondweed</td>
<td>3</td>
</tr>
<tr>
<td>Small teasel</td>
<td>5</td>
</tr>
<tr>
<td>Solomon's-seal</td>
<td>4</td>
</tr>
<tr>
<td>Southern marsh-orchid</td>
<td>7</td>
</tr>
<tr>
<td>Sparganium emersum</td>
<td>14</td>
</tr>
<tr>
<td>Spiral tasselweed</td>
<td>3</td>
</tr>
<tr>
<td>Spiranthes spiralis</td>
<td>6</td>
</tr>
<tr>
<td>Starworts</td>
<td>14</td>
</tr>
<tr>
<td>Suaeda vera</td>
<td>4</td>
</tr>
<tr>
<td>Sycamore</td>
<td>24</td>
</tr>
<tr>
<td>Thin-spiked wood-sedge</td>
<td>4</td>
</tr>
<tr>
<td>Unbranched bur-reed</td>
<td>14</td>
</tr>
<tr>
<td>Violet helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Viper's-bugloss</td>
<td>22</td>
</tr>
<tr>
<td>Water crowfoot</td>
<td>14</td>
</tr>
<tr>
<td>White helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Fly orchid</td>
<td>7</td>
</tr>
<tr>
<td>Folkestone Beds</td>
<td>27</td>
</tr>
<tr>
<td>Fontinalis antipyretica</td>
<td>14</td>
</tr>
<tr>
<td>Forest Enterprise</td>
<td>19</td>
</tr>
<tr>
<td>Forestry Commission</td>
<td>34</td>
</tr>
<tr>
<td>Fragrant Orchid</td>
<td>6</td>
</tr>
<tr>
<td>Freshwater life</td>
<td></td>
</tr>
<tr>
<td>eutrophication</td>
<td>14</td>
</tr>
<tr>
<td>river health</td>
<td>14</td>
</tr>
<tr>
<td>Sussex Ouse Conservation Society</td>
<td>13</td>
</tr>
<tr>
<td>Friston Forest</td>
<td>5</td>
</tr>
<tr>
<td>Frog orchid</td>
<td>6</td>
</tr>
<tr>
<td>Froglife</td>
<td>12</td>
</tr>
<tr>
<td>Fungi</td>
<td></td>
</tr>
<tr>
<td>Boletus rubellus</td>
<td>9</td>
</tr>
<tr>
<td>Boletus satanoides</td>
<td>9</td>
</tr>
<tr>
<td>Dendropolyporus umbellatus</td>
<td>9</td>
</tr>
<tr>
<td>general account</td>
<td>9</td>
</tr>
<tr>
<td>Grifola umbellata</td>
<td>9</td>
</tr>
<tr>
<td>recorder details</td>
<td>35</td>
</tr>
<tr>
<td>Russula vinosobrunnea</td>
<td>9</td>
</tr>
<tr>
<td>West Weald Fungus Recording Group</td>
<td>9</td>
</tr>
<tr>
<td>Galls</td>
<td></td>
</tr>
<tr>
<td>Lipara lucens in reeds</td>
<td>26</td>
</tr>
<tr>
<td>Garden Pond Survey</td>
<td>12</td>
</tr>
<tr>
<td>Gault clay woodlands</td>
<td>4</td>
</tr>
<tr>
<td>Gay, Joyce</td>
<td>18, 37</td>
</tr>
<tr>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td>recorder details</td>
<td>38</td>
</tr>
<tr>
<td>Geranomyia bezii</td>
<td>25</td>
</tr>
<tr>
<td>Gerras argentatus</td>
<td>24</td>
</tr>
<tr>
<td>Giavarini, Vince</td>
<td>9</td>
</tr>
<tr>
<td>Gillham, Alan</td>
<td>26</td>
</tr>
<tr>
<td>Girlded snail</td>
<td>29</td>
</tr>
<tr>
<td>Glow-worm recorders</td>
<td>37</td>
</tr>
<tr>
<td>Golden-fringed mason bee</td>
<td>27</td>
</tr>
<tr>
<td>Gonepteryx rhamni</td>
<td>18</td>
</tr>
<tr>
<td>Gonocerus acuteangulatus</td>
<td>24</td>
</tr>
<tr>
<td>Gowers, John</td>
<td>36</td>
</tr>
<tr>
<td>Grace, Andrew</td>
<td>27</td>
</tr>
<tr>
<td>Grasshoppers &amp; related insects</td>
<td>22</td>
</tr>
<tr>
<td>Great crested newt</td>
<td>11, 12</td>
</tr>
<tr>
<td>Pilot Monitoring Scheme</td>
<td>12</td>
</tr>
<tr>
<td>Great dart</td>
<td>20</td>
</tr>
<tr>
<td>Greater butterfly-orchid</td>
<td>6, 7</td>
</tr>
<tr>
<td>Greater mouse-eared bat</td>
<td>16</td>
</tr>
<tr>
<td>Greater water-moss</td>
<td>14</td>
</tr>
<tr>
<td>Greenaway, Theresa</td>
<td>3</td>
</tr>
<tr>
<td>Green-flowered helleborine</td>
<td>5</td>
</tr>
<tr>
<td>Green-veined white butterfly</td>
<td>18</td>
</tr>
<tr>
<td>Green-winged orchid</td>
<td>7</td>
</tr>
<tr>
<td>Grifola umbellata</td>
<td>9</td>
</tr>
<tr>
<td>Grizzled skipper</td>
<td>18</td>
</tr>
<tr>
<td>Gryllotalpa gryllotalpa</td>
<td>22</td>
</tr>
<tr>
<td>Gymnadenia conopsea</td>
<td>6</td>
</tr>
<tr>
<td>Gymnadenia conopsea ssp. borealis</td>
<td>6</td>
</tr>
<tr>
<td>Gyrisus paykulli</td>
<td>23</td>
</tr>
<tr>
<td>Hannington, Chris</td>
<td>33</td>
</tr>
<tr>
<td>Harbour porpoise</td>
<td>15</td>
</tr>
<tr>
<td>Harmes, Paul</td>
<td>3, 35</td>
</tr>
<tr>
<td>Harting Downs</td>
<td>6</td>
</tr>
<tr>
<td>Hassocks</td>
<td>20</td>
</tr>
<tr>
<td>Hastings</td>
<td>15, 26</td>
</tr>
<tr>
<td>Hastings Country Park</td>
<td>31</td>
</tr>
<tr>
<td>Heath spotted-orchid</td>
<td>7</td>
</tr>
</tbody>
</table>
Heathland ..........................................26
Heathland Conference, 2004.............26
Heathland restoration ....................19
Heathy woods ..................................27
*Helix aspersa* ................................29
Hemiptera Auchenorrhyncha
  general account ...........................24
  *Macropsis mendax* .......................25
  *Oliarus panzeri* ..........................25
Hemiptera Heteroptera
  *Aquarius paludum* .......................24
  Box bug ....................................24
  *Deraeocoris flavilinea* ...............24
  General account ..........................24
  *Gerris argentatus* .......................24
  *Gonocerus acuteangulatus* ............24
  *Liorhyssus hyalinus* ....................24
  *Nysius helveticus* .......................24
  recorder details ........................37
*Herminium monorchis* ....................6
Herpetological Conservation Trust...12
*Heterogenea asella* .....................20, 21
Heyshott Down ................................6
High Weald .................................26, 33
High Weald AONB ...........................34
*Himantoglossum hircinum* ............7
Hoary ragwort ................................25
Hobson, John ...............................10, 36
Hodge, Peter ...............................23, 24, 25, 37
*Holocentropus picicornis* ............29
Holyoak, David ..............................30
Hopkin, Steve ..............................28
*Hoplitis spinulosa* .......................27
Hornet .......................................23
Hornet robberfly ...........................25
Horsfield, Richard .........................36
Horsham ......................................21
Hove .........................................15
Howard, Robert & Julie ....................37
Humming-bird hawk .........................19
*Hydraecia osseola* .......................21
*Hygromia cinctella* ......................29
*Hyles gallii* ...............................20
*Hyles lineata* ..............................20
Hymenoptera
  *Ammophila pubescens* ....................27
  *Ammophila sabulosa* ....................27
  *Anthophora fuscipes* ....................26
  *Anthophora bimaculata* ................28
  *Colletes succinctus* ......................26
  General account ..........................26
  Golden-fringed mason bee .............27
  *Hoplitis spinulosa* ......................27
  Hornet .....................................23, 28
  *Hylaeus* spp ..............................27
  *Megachile leachella* ....................28
  *Megachile ligniseca* ....................28
  *Megachile maritima* .....................28
  *Megachile wilughbiella* ...............28
  *Osmia aurulenta* .........................27
  *Osmia rufa* ...............................27
  recorder details ........................37
  Red mason bee .............................27
  Silvery leaf-cutter .......................28
  Two-spotted flower bee .................28
  *Vespa crabro* ............................28
  Wood-carving leafcutter bee ...........28
  Yellow-faced bee ........................27
*Inachis io* ................................18
Iping Common ...............................19, 23
IUCN ..........................................1
*Jasione montana* .........................3
Joint Nature Conservancy Council ...12
Kemp, Barry ..................................11
Kingsham ....................................20
*Lactuca saligna* ...........................3
Lake limpet ..................................30
Lancing College .............................11
Lang, David. C ...............................5
Leafhoppers and planthoppers .........24
  Recorder details .........................38
  Least lettuce ..............................3
  *Lecanactis (Lecanographa)*  
    *hemisphaerica* ........................9
  *Lecanographa grumulosa* .............9
  *Lecanora barkmanniana* ...............9
  *Lecidea doliiformis* ................. 8
  *Lecidea doliformis* .....................8
  Legg, Gerald ..............................38
  Leisler's bat ..............................17
  *Lepidoptera*  
    Butterflies ..............................18
    Microlepidoptera .......................22
    Moths ...................................19
  *Leptidea sinapis* .......................18
  Lesser butterfly-orchid ...............6
  Lesser horse-shoe bat ..................17
  Lewes .....................................30
  *Lichens* ..................................
A review of wildlife recording in East & West Sussex in 2003
Published by the Sussex Biodiversity Record Centre    Tel: 01273 487553    E-mail sxbrc@sussexwt.org.uk

Bacidia incompta ...........................................8
Bacidia saxeni ...........................................9
Cladonia incrassata ...........................................9
Churchyard lecanacis ......................................9
Sphinctrina anglica ...........................................8
Sussex Lichen Recording Group ................................8
Usnea wirthii ..............................................9
Limpets (freshwater) ........................................30
Liorhyssus hyalinus .........................................24
Lipara lucens ..............................................26
Listera ovata ..............................................6
Littlehampton ..............................................32
Lizard orchid .............................................7
Local Change recording .....................................3
Long-winged cone-head .....................................23
Lord's Piece ..............................................24
Lotus glaber .................................................3
Love, Martin ..............................................16, 23, 36
Lowtide Day in Brighton .....................................15
Lycanora barkmanniana .....................................9
Lecidea doliformis .........................................8
Protospermia oleagina .....................................8
recorder details ...........................................36
Girdled snail ..............................................29
Helix aspersa ..............................................29
Lymnaria bellargus .........................................18
Macroglossum stellatarum ..................................19
Macropsis mendax ..........................................25
Malthodes mendax ..........................................23
Mammals ......................................................36
bats .........................................................16
Bottlenose dolphin ........................................14, 15
cetaceans ....................................................14
Common dolphin ..........................................15
Greater mouse-eared bat ...................................16
Harbour porpoise ..........................................15
Leisler's bat ................................................17
Lesser horse-shoe bat ....................................17
Myotis myotis ..............................................16
Man orchid ..................................................17
MapMate .....................................................8
Marsh helleborine ..........................................5
Marsh mallow moth .......................................21
Matcham, Howard ..........................................35
Mayfield .....................................................11
Megachile leachella .......................................28
Megachile ligniseca .......................................28
Megachile maritima .......................................28
Megachile wilughbiella ...................................28
Mesopsocus unipunctatus ...................................29
Micro-moth Recording Scheme .............................22
Minnow .......................................................14
Mole cricket ..................................................22
Molinia caerulea .............................................31
Molluscs
Acroloxus lacustris ..........................................30
Ancylus fluviatilis ..........................................30
Ferrisia wautieri .............................................30
Garden snail ..................................................29
Girdled snail ..................................................29
Hygromia cinctella .........................................29
Lake limpet ....................................................30
Limpets (freshwater) .......................................30
recorder details ...........................................38
Monkyn-Pyn Common ......................................3
Montgomery, Harry .........................................2
Morris, Roger ..............................................38
Moths
Acherontia atropos ..........................................20
Adscita geryon ..............................................20
Agrius convolvuli ..........................................20
Agrochola haematidea ....................................20
Agrotis crassa ..............................................20
Apoda limacodes ..........................................21
Archanara algae ..........................................21
Bedstraw hawk .............................................20

37
Bordered ermel.................................22
Calophasia lunula..............................21
Channel Island pug...........................20
Chimney sweeper..............................20
Cistus forster.................................20
Clancy’s rustic.................................20
Conistra erythrocephala....................20
Convolvulus hawk............................20
Crambus silvella................................20
Death’s head hawk............................20
Deileptenia ribeata............................21
Ethmia bipunctella............................22
Eupithecia ultimaria............................20
Evergestis limbata.............................21
Festoon........................................21
general account................................19
Great dart......................................20
Heterogenea asella............................20, 21
Humming-bird hawk...........................19
Hydraecia osseola.............................21
Hyles gallii.....................................20
Hyles lineata....................................20
Macroglossum stellatarum....................19
Marsh mallow..................................21
Micro-moth Recording Scheme..............22
Nascia cilialis..................................21
Nomophila noctuella............................22
Northern rustic................................20
Odezia atrata..................................20
Olive crescent..................................20
Orache........................................20
Pale lemon sallow.............................21
Parascotia fuliginaria.........................21
Platypergea kadenii............................20
record details................................20
Red-headed chestnut..........................20
Rush veneer....................................22
Rush wainscot................................21
Rusty-dot pearl...............................22
Satin beauty....................................21
Schrankia taenialis............................21
Sitochroa verticalis............................21
Southern chestnut.............................20
Spargania luctuata............................20, 21
Square-spotted clay...........................20
Standfussiana lucernea.......................20
Striped hawk...................................20
Tissue...........................................20
Toadflax brocade..............................21
Trachea atriplicis..............................20
Triangle.........................................20, 21
Triphosa dubitata..............................20
Trisateles emortualis..........................20
Udea ferrugalis.................................22
Waved black....................................21
White-banded carpet..........................20, 21
White-line snout...............................21
Xanthia ocellaris...............................21
Xestia rhomboidea.............................20
Mottled-wing beefly...........................27
Mount Caburn....................................7
Musk orchid.....................................6
Myotis myotis..................................16
Narrow-leaved bird's-foot trefoil..........3
Narrow-leaved helleborine...................5
Nascia cilialis.................................21
Nathusius' bat..................................17
National Museums & Galleries of Wales Schools & Communities
Agenda 21 Network.............................30
National spider atlas..........................32
National Whale & Dolphin Watch...........15
Natural History Museum, London..........15
Neotia nidus-avis..............................6
Nephrotoma dorsalis............................26
Newhaven......................................12, 25
Nightingale.....................................10
Nightjar........................................10, 11
Noemacheilus barbatulus.....................14
Nomophila noctuella............................22
North Lancing..................................32
Northern rustic...............................20
Nyctalus leisleri...............................17
Nysius helvicicus..............................24
Odezia atrata..................................20
Odonata.........................................20
dragonfly book for 2004......................17
Oecetis ochracea...............................29
Old Lodge, Ashdown Forest..................8, 26, 31
Oliarus panzeri................................25
Olive crescent..................................20
Ophioglossum vulgatum.......................3
Ophrys apifera.................................6
Ophrys insectifera..............................7
Ophrys sphegodes..............................6
Orange-tip butterfly..........................18
Orchids
general account...............................5
Orchis mascula ........................................7
Orchis morio ........................................7
Orchis ustulata ........................................7
Orchideae

Conocephalus discolor ..................23
general account ..........................22
Gryllotalpa gryllotalpa ........22
Long-winged cone-head ..............23
Mole cricket ..................................22
Slender ground-hopper ..............23
Tetrix subulata ..................23

Orthoptera & related orders
recorder details............................37

Osmia aurulenta ...................27
Osmia rufa .................................27
Ouse Estuary Project ..................12
Ouse valley ......................................23
Ouse valley wetlands .................23
Ouse, river ........................................13, 24
Pagham ...........................................26, 29
Pagham Harbour ........10, 20, 21, 25
Pale lemon sallow moth .........21
Paradise Park, Denton ..............25
Pararge aegeria ......................18
Parascotia fuliginaria .................21
Parham .............................................7
Parham Park ............................8
Paroxyna lhommei .....................25

Plebejus argus .................................19
Plegaderus dissectus .................23
Polygonatum multiflorum ............4
Polygonia c-album ......................18
Polyommatus icarus ....................18
Ponds ..........................................12
Garden Pond Survey ..................12
Wildlife Pond Handbook ............11
Portraits of a Woodland (book) ....11
Portslade ......................................21
Potamogeton berchtoldii ..............3
Potamogeton crispus ....................14
Pratt, Colin R. .....................19, 21, 28, 37
Protoparmelia oleagina ..............8
Pseudoephryrs obsolata ..............31
Pseudo-scorpions ...........................38
recorder details .........................38
Psocids or booklice ......................29
Elipsocus hyalinus .................29
Mesopsocus unipunctatus ..........29
Pulborough ......................................30
Pyramidal orchid .............................8
Pyrgus malvae .............................18
Ranunculus fluitans .....................14
Rare Species Inventory (RSI) .......2
Record Centre
see Sussex Biodiversity Record Centre ........................................2

RECORER
RECORER software developments ........................................2

Recorders
Contact details ..................................35
Recorders (names and addresses) ....35
Red admiral .................................18
Red List for Sussex .........................2
Red mason bee ...............................27
Red-headed chestnut .....................20
Reed beds ...................................26
Reptiles and amphibians
General account ................................11
Great crested newt .......................11, 12
Toad ..........................................11
Rewell Wood ................................19
Rhinolophus hipposideros ..........17
Rhipidothrips brunneus ...............28
River limpet .................................30
Riverside Park, Newhaven ...........25
Roper, Patrick .......................2, 25, 38
Rowlinson, David .......................15
Ruppia cirrhosa ..................................3
Rush veneer moth ...............................22
Rush wainscot .....................................21
Russell, Peter ..................................9, 35
Russula vinosobrunnea ..........................9
Rusty-dot pearl ...................................22
Rye ..............................................10, 20, 21
Rye Bay ...........................................3, 27, 28, 31
Rye Harbour..........................5, 9, 25, 26, 28
Rye Harbour Nature Reserve ........31
Saline pools .......................................25
Salmone trutta ......................................13
Saltmarsh ...........................................31
Saltmarsh horsefly ..................................25
Sanderlings, The. Suffolk .................27
Sanderson, Neil ....................................8
Satin beauty .........................................21
Savage, Stephen ............................14, 36
Sawflies (Hymenoptera
Symphata) .....................................29
Scarce Plant Register ..............................2
Sea trout ...........................................13
Sea Watch Foundation ..............................14, 15
Seals
 recorder details..............................36
Seawatch ...........................................36
Senecio erucifolius ..................................25
Seven Sisters Country Park .....................31
Sheep's-bit .........................................3
Shingle ..................9, 27, 28, 31, 32, 33
   flora survey ............................3
Shrubby sea-blite ..................................4
Silver-studded blue .............................19
Silver-washed frilltary ..........................19
Silvery leaf-cutter ...............................28
Sitticthra verticalis ...............................21
Sitticus inexpectus ...............................32
Slender ground-hopper .........................23
Small blue .........................................18
Small pearl-bordered frilltary ..............19
Small pondweed ..................................3
Small teasel .......................................5
Small tortoiseshell ..............................18
Small white .......................................18
Smicronyx coecus ..................................23
Solomon's-seal ......................................4
South Downs National Park ...............13
South East Marine Programme .............15
South Heighton .................................23, 24
Southern chestnut ..............................20
Southern marsh-orchid ..........................7
Southern Water ..................................12
Sparganium emersum .........................14
Species status
 proposed changes .............................1
Speckled wood butterfly ......................18
Spey House .......................................9
Sphinctrina anglica .............................8
Spiders
 Araniella inconspicua .........................31
Argennia patula .................................31
Argiope bruennichi .............................33
Evarcha arcuata ..................................31
general account ...............................31
Marpissa muscosa ...............................32
Pseudeuophrys obsolenta ....................31
recorder details...............................37
Salticus scincus .................................32
Sitticus inexpectus ..............................32
Steatoda nobilis ..................................31
Wasp spider ......................................33
Xysticus ulmi ......................................31
Spiral tasselweed ..............................3
Spiranthes spiralis ..............................6
Spooner, Jan .....................................37
Springhead, Haslemere .................8
Square-spotted clay ............................20
St. Leonards Forest .............................9
Stag beetle .........................................9
Stanodussiana lucerna ............................20
Starworts ..........................................14
Steatoda nobilis .................................31
Stedham Common ...............................24
Steedman, Jim & Judith .......................25
Steer, Nick .......................................31
Stewart, Alan ..............................24, 38
Stone loach .......................................14
Striped hawk ......................................20
Sulaeda vera ......................................4
Sullington Warren ...............................24
Survey Unit (SxBRC) ......................3, 35
Sussex Amphibian & Reptile Group 36
Sussex Bat Group .............................16
Sussex Biodiversity Record Centre 15,
34, 35
Report for 2003 ..................................2
Sussex Biodiversity Recording Award ...............................................................15
Sussex Botanical Recording Society 2, 3, 35
Sussex Downs Conservation Board ..........................19
Sussex Lichen Recording Group ..........................8
Sussex Moth Group ........................................21
Sussex Ornithological Society .... 10, 14
Sussex Ouse Conservation Society ...........................................13
Sussex Reptile and Amphibian Group (SARG) ...........................11
Sussex Sea Fisheries ...............................14, 16
Sussex Sea Search ................................14, 16
Sussex Wildlife Trust ........................................34
Swanbourne Lakes, Arundel ..........5
SxBRC ........................................12, 15
Sycamore ...........................................24
Tetrix subulata ........................................23
Thin-spiked wood-sedge ............4
Thyridanthrax fenestratus ...........27
Thysanoptera
Rhipidothrips brunneus ..................28
Tide Mills, Newhaven ..................13
Tilgate Park, Crawley .................5
Tissue moth .....................................20
Toad ..................................................11
Toadflax brocade ..................................21
Trachea atriplicis ...............................20
Tragenza, Nick ..................................16
Triangle moth .................................20, 21
Trichoptera .........................................29
Holocentropus picicornis .............29
Oecetis ochracea ...............................29
Phryganea grandis .............................29
Triphosa dubitata ...............................20
Trisateles emortualis ........................20
Tunbridge Wells .........................20
Two-spotted flower bee ..............28
Uckfield Environmental Conference 11
Udea ferrugalis .................................22
Unbranched bur-reed ...................14
Uppark ..............................................8
Usnea wirthii .....................................9
Vacant groups – recorders needed ...38
Vanessa atalanta ................................18

Vascular plants in 2003 .................3
Velleius dilatatus ..............................23
Verdley Wood ....................................19
Vert Wood, Laughton ..........................19
Vespa crabro ......................................28
Violet helleborine .............................5
Viper’s-bugloss .................................22
Walderton .........................................20
Wasp spider .......................................33
Water crowfoot .................................14
Waved black ......................................21
Wealden Ancient Woods Survey .......33
Wealden District Council ............33, 34
Weavers Down ..................................24
Website
Sussex Ornithological Society .......(11
SxBRC ............................................1
West Chiltington ..............................20
West Sussex
Gault woodland survey .................4
West Sussex Coastal Marine Project 15
West Sussex County Council ......12
West Sussex Heathland Insect Survey
............................................................26
West Weald Fungus Recording Group 
.................................................................9
White helleborine .............................5
White-banded carpet ..........................20, 21
Whitehawk soldier beetle ...............23
White-line snout .................................21
Widelli, Mike ....................................2
Wilt, Jane .........................................37
Wildlife Pond Handbook ...............11
Willing, Martin ...............................31, 38
Willingdon .......................................7
Wilmington Green ............................3
Wise, Don .........................................36
Wolstonbury .................................6, 7, 8
Wood wasps .................................29
Wood white .......................................18, 19
Wood-carving leafcutter bee ...........28
Wooldingean ..................................19
Xanthia ocellaris ...............................21
Xestia rhomboidea ............................20
Xysticus ulmi .....................................31
Yellow-faced bee ..............................27