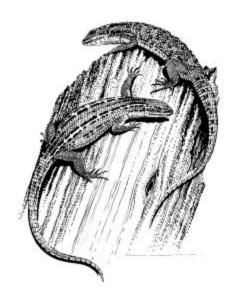
An annual review of wildlife recording in Sussex

Editor: Patrick Roper



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FROM THE EDITOR

This is the second year of this ADASTRA review and, judging by the comments that have come in to me, or to the Sussex Biodiversity Record Centre, the publication is welcome.

In addition to our recorders and those associated with recording work. ADASTRA has had a wider circulation through, for example, the West Sussex County Library Service. The more people who know the magnificent contribution that is being made to understanding and conserving our biodiversity by recorders, the more successful we shall be in achieving our aims of living in a sustainable way in the environment we share with such a wide range of animals and plants.

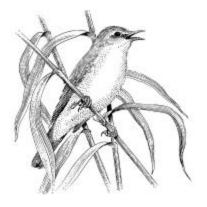
I was very struck by the value of recording during a recent visit to Eridge Rocks, a reserve managed by the Sussex Wildlife Trust. Some of the great sandstone faces carry sheets of rare lichens or ferns and our guides on that occasion noticed that some of these species were growing in different places than they were a few years ago. It appears that what had been regarded as rather static, slow-growing plant assemblages are more dynamic than anyone realised. It needs careful, accurate records over long time scales to show that.

ADASTRA was first published in 2002 with the aim of reviewing biological recording activity during the year prior to its publication.

The name is taken from Adastra Hall, Hassocks, where the annual Sussex recorders' meeting takes place.

Ad astra is Latin for 'to the stars' and it is appropriate to dedicate this publication to our stars, those who put in so much work every year recording our flora and fauna and to the members of the Sussex Biodiversity Record Centre who succeed in coordinating it all and making it accessible for a wide range of important uses.

This year the number of contributions has grown slightly and it is good to see features on dragonflies, charophytes and other groups not previously covered. There are still many gaps and it is unlikely that we shall cover all recorded organisms every year. Nevertheless, if you do feel the urge to put forward something for next year's ADASTRA, do not hesitate to let me know. As recorders, this is your publication; your chance to let others know what joys and sorrows each year has produced on the recording front and to encourage others to take an interest in your group and thereby support the overall effort.



Most of the illustration in this review are by courtesy of English Nature.

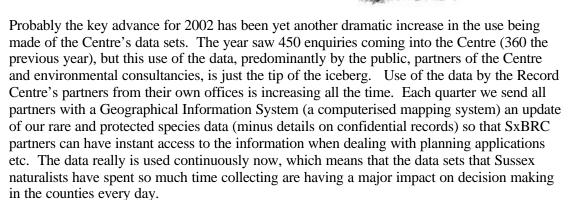
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REPORT FROM THE RECORD CENTRE FOR 2002

The range of subjects in this year's ADASTRA is superb, from dolphins off our coastline to leafhoppers on rhododendron leaves. This publication is a great signpost for what to go and look for and where, as well as a fascinating insight into the work of naturalists working in areas that we would otherwise know little about.

The Record Centre year always starts and closes with the annual Biological Recorders' Seminar, so this publication is the perfect place to look back at the past year and see what changes have taken place.



Another great new development in the Centre's output is our website. We have talked about getting this off the ground for many years and finally, through the hard work of Nadine Russell, it was launched in 2002. It is by no means complete, but the potential for developing this site is enormous. All ideas are very welcome. Please visit it at:

www.sxbrc.org.uk

We are looking to put in pages on behalf of each recording group in Sussex (or on behalf of individuals if there is not a recording group representing a particular taxonomic area). Now that we have the main pages in place it is (apparently) a simple process to update and change it.

As always the subject of recording software has been high on our agenda. The long awaited RECORDER 2000 did not have all of the functionality that we had anticipated and after a further wait RECORDER 2002 has been delivered. This version is said to be a vast improvement on R2K and we anticipate conversion of the Record Centre's data in the next six months. We then hope that we will be able to support Sussex naturalists that use recording software with data transfers from and to RECORDER 3.3, Map-mate and Biobase.

Reading the fascinating articles in this 2002 Adastra is a far cry from some of the technological bugs that we work with in the Record Centre. It has been, yet again, an inspiring read. It has given me a very long list of 'to dos' for 2003. Looking for imported bush crickets, re-finding slender stonewort, and hunting down the long-stalked orache. I can see that it's going to be a busy year!

Henri Brocklebank, Biodiversity Records Officer, Sussex Biodiversity Record Centre

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VASCULAR PLANTS

by Paul Harmes and Alan Knapp, Sussex Botanical Recording Society

The highlight of the vascular plant recording year was the publication of the *New Atlas of the British and Irish Flora*¹ which presents the results of the Atlas 2000 Project. This joint venture between the Botanical Society of the British Isles (BSBI) and the Department for Environment, Food and Rural Affairs (DEFRA) is the culmination of many years of hard work by botanical recorders across the country. We offer our sincere thanks to all those who contributed records for Sussex. This work has enabled the Sussex Botanical Recording Society (SBRS) to learn much about recent changes to the flora of our county.

One topic that has been explored in depth in 2002 has been the *Atriplex* or Orache group. In the north and west of Britain there occurs a species called *Atriplex longipes* (long-stalked orache). This plant, typically found in the drier, areas at the back of salt marshes and on tidal riverbanks, had recently been found in Hampshire but has not yet been recorded from Sussex. However, this year we have discovered two hybrids of this species. The occurrence of these hybrids in the absence of *Atriplex longipes* is well known.

The first of these, *Atriplex* x *gustafssoniana*, is the hybrid with *Atriplex prostrata* (spear-leaved orache). It was found in a salt marsh at Fishbourne during a search for *Atriplex longipes*, a first record for Sussex. Since then it has been found nearby at Itchenor and in a number of other places across the county: the River Cuckmere, Rye Harbour Nature Reserve and, unusually, in three places some way from the sea in and around Brighton. We conclude that it has certainly been overlooked in the past.

The second is *Atriplex* x *taschereaui*, the hybrid with *Atriplex glabriuscula* (Babbington's orache), for which we have a single pre-1970 record from Chichester Harbour. In October of this year it was found in a totally new site on the shingle at Brighton.

There is still much to learn about this group of plants and additional searches are planned for 2003. It is hoped that we may also find *Atriplex longipes*².

Several members of the Society are undertaking work on other specific species or species groups. These include, *Limonium* (sea lavenders), *Cardamine bulbifera* (coralroot bittercress), rare and threatened species, and alien and adventive species.



In 2003/04 one of our main tasks will be to participate in a BSBI recording scheme which will re-record a series of tetrads recorded in 1987/88 during the BSBI 'Monitoring Scheme'. This was a survey of three specific tetrads (2km x 2km squares) in one in every nine heptads (10km x 10km squares). The tetrads chosen were A, J & W, using the 'DINTY' system.

¹ **Preston, C. D., Pearman, D. A. & Dines, T. D.** (2002) New Atlas of the British and Irish Flora. Oxford University Press

² An interesting article developing this theme "*Atriplex longipes* hybrids in Sussex" by Alan Knapp and Tony Spiers has been published in BSBI News 92 (January 2003): 32-33.

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These selected squares were thoroughly surveyed over a two-year period, with a minimum of three visits throughout the year. For the whole of Sussex this represents 17 tetrads in SU80, SU83, TQ10, TQ13, TQ40, TQ43 and TQ70. The results will provide a comparison by which it will be possible to identify fluctuations and changes to the flora in these areas over the intervening years. The BSBI also want to use this project to encourage greater participation by its members in recording.

ORCHIDS

by David Lang

author of Wild Orchids of Sussex (Pomegranate Press, Lewes, 2001)

Very cold north-east winds were a feature of much of the late winter and early spring, and I am convinced they had a profound effect on the subsequent flowering of some orchids. One particular downland site occupies a long, south-facing slope, and in most years the ends of the slope have dense flowering stands of orchids. This year they were extremely sparse at the ends of the slope exposed to the north-east winds, but even better than usual in the middle. It would seem that those species that are maturing the potential flowering spike in March are affected by the cold, and the process is aborted, presumably until the following season. Those species already fully prepared by March appear unaffected and flower normally.

White Helleborine, Cephalanthera damasonium. In Friston Forest the maturation of the beech trees, coupled with removal of the conifers and routine forestry work, has resulted in a marked increase in this species, one small area having over 3000 very large flowering spikes. Even more encouraging is the increased number of sites within the forest.

Sword-leaved Helleborine, *Cephalanthera longifolia*. Searches of several historic sites in East Sussex failed yet again to locate any plants.

Marsh Helleborine, *Epipactis palustris*. A fairly good showing in the Rye area, but no plants found in the Sussex Wildlife Trust reserve at Balcombe. There is some improvement in the condition of the small area involved, and the species could still reappear.

Violet Helleborine, *Epipactis purpurata*. The bizarre achlorophyllous plants seen previously in two sites in West Sussex failed to reappear.

Pendulous-flowered Helleborine, *Epipactis phyllanthes*. A potentially disastrous season. The population at Swanbourne Lakes, Arundel which had been strimmed off in 2001 was covered to some depth in the chalk rubble used to strengthen the banks of the lake after necessary dredging operations. The contractors were apparently unaware of the presence of this rare species on the site. Prompt action by English Nature led to the removal of the material – this was in May – and subsequent flowering was recorded. However, the species flowered poorly in most other sites in West Sussex, plants shriveling up before maturing, failing to produce any ripe seed capsules.

Autumn Lady's-tresses, *Spiranthes spiralis*. An unusually fine flowering season across the county. A large colony at Black Rock, Brighton was mown off in its prime. The City Council had been informed of its presence and had, with commendable promptness, e-mailed the contractors employed to mow the area and road verges. Their e-mail machine was out of order, with the inevitable consequences. The Council have taken firm steps to ensure that it does not happen again.

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Common Twayblade, *Listera ovata*. Some massive plants flowered on the downs below Ditchling Beacon.

Bird's-nest Orchid, *Neottia nidus-avis*. A good flowering season recorded, especially in the chalk woodlands of West Sussex.

Musk Orchid, *Herminium monorchis*. Small numbers in most of its normal locations. This species has never recovered from the summer drought of 1976.

Frog Orchid, *Coeloglossum viride*. Not an outstanding season, but reasonable numbers in most of its traditional haunts.

Fragrant Orchid, *Gymnadenia conopsea*.

Populations overgrazed during 2001 because of foot and mouth restrictions have still not recovered to their usual numbers. Elsewhere it was a marvelous season, with impressive showings on The Caburn, at Beeding, Plumpton Downs and many other downland sites. Seventeen plants of ssp. *borealis* flowered on Ashdown Forest, in the site they have occupied for over 20 years. Despite the creation of apparently perfect habitat all around them, they show no inclination to spread.



Greater Butterfly-orchid, *Platanthera chlorantha*. Several woodland sites below the downs are suffering from encroaching scrub and would benefit from clearance.

Lesser Butterfly-orchid, *Platanthera bifolia*. No flowers appeared at East Hoathly this year, and no reports of flowering plants in West Sussex have been received.

Bee Orchid, *Ophrys apifera*. Overall a good year for this species, with reports of respectable numbers of flowering plants from many sites. Var. *chlorantha* appeared as usual around Beachy Head, and some huge plants with up to 10 flowers on a spike bloomed near Beeding.

Early Spider-orchid, *Ophrys sphegodes*. Phenomenal numbers were reported from Samphire Hoe in Kent and from the Purbeck limestone of Dorset, while the Castle Hill population kept the flag flying for Sussex. One population near Beachy Head was the cause for some concern. Plants had been detected in bud, but no one recorded any flowering, despite a number of visits by interested botanists. Small excavations had been attributed to rabbits, but could be the result of people digging up the plants as the site is well-known and accessible.

Fly Orchid, *Ophrys insectifera*. Reduced numbers in sites which also hold Greater Butterfly-orchids indicate scrub encroachment as a cause.

Lizard Orchid, *Himantoglossum hircinum*. The Amberley plant did not reappear in 2002. At Camber 48 rosettes were counted.

Burnt Orchid, *Orchis ustulata*. This was one of the species that did well overall. Cold weather had some effect in reducing numbers of the early-flowering form, although the

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reappearance of flowering plants on the south face of The Caburn, after an interval of some years, was most welcome. Most exciting was the discovery of the late-flowering form at three new sites in East Sussex, one producing 91 spikes, and another the astonishing total of 964. Small flies were highly active around the flowers and a good proportion of ripe seed capsules were recorded later. Fourteen sites are known for this form in East Sussex, with two in Hampshire and four in Wiltshire. It has never been recorded in Kent. I would be most grateful for notes on populations of both forms in Great Britain, as a paper on the two forms is in preparation.

Green-winged Orchid, *Orchis morio*. A good season with excellent numbers recorded from a number of sites.

Early-purple Orchid, *Orchis mascula*. Also did well, although the spotted flowered form found last year at Beachy Head did not reappear.

Common Spotted-orchid, *Dactylorhiza fuchsii*. Overall numbers appear to be down on those recorded in 2001.

Heath Spotted-orchid, *Dactylorhiza maculata* ssp. *ericetorum.* Among the records was one from Parham Park, where a single 'clump' produced 59 flowering spikes.

Early Marsh-orchid, *Dactylorhiza incarnata*. Good numbers were reported from Ferring, and 44 ssp. *pulchella* flowered at one of the sites on Ashdown Forest.

Southern Marsh-orchid, *Dactylorhiza praetermissa*. No unusual records have been received.

Man Orchid, *Aceras anthropophorum*. This appeared to have suffered from the cold winds of early spring. Only one flowering spike could be found on Wolstonbury Hill, and numbers at the other site were reduced to one flowering and three blind plants. Encroaching scrub is also a problem.

Pyramidal Orchid, *Anacamptis pyramidalis*. This was one species which really flourished, with spectacular displays at many places on the Downs. However, it also suffered from the cowboy activities of verge mowers who, at one site, carefully mowed around the 'wild flower verge' sign and then decapitated the entire population.

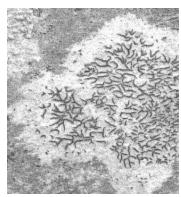
If it serves no other purpose, this report goes to show how important records are, and how important it is for recorders to keep a constant eye on sites at risk. Poor communication is usually the excuse when sites are damaged, but it is an excuse which should not be tolerated. It is no help for contractors to plead that "We were not told!"

David C. Lang, 1 Oaktree, Barcombe, Lewes, East Sussex BN8 5DP

LICHENS

by Simon Davey, lichen recorder for East and West Sussex

By far the most important event to have happened during the past year was the formation of the Sussex Lichen Recording Group. This group met twice in 2002. The first was an inaugural meeting to introduce the subject of lichens. This



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took place at Dell Quay and consisted of talks in the morning followed by visits to sites in the area in the afternoon.

The second meeting was our first full field meeting, and it took place on a blustery December day at Pagham Harbour. We saw the rich and varied assemblage of lichens on the shingle in the morning, but all agreed a more sheltered venue should be chosen for the afternoon as it had turned windy and raw. We spent the afternoon looking at lichens on the scrub close to the Pagham Harbour Visitor Centre. Fourteen members attended this meeting and all felt this, in view of the rather unpromising weather, to be hugely encouraging.

Further meetings are scheduled for early 2003 and include a visit to Eridge Rocks Reserve and a second to Parham Park. Due to the enthusiasm and energy of Dr Jacqui Middleton who has been the prime mover behind the formation of the group, there has been an emphasis on the west of the county. Jacqui lives in Chichester. Considerable interest has been shown in the formation of a similar group for East Sussex which it is hoped will be centred on Rye Harbour.

It is most encouraging to be able to report this enthusiastic interest in lichens in Sussex. Lichens are a group with huge potential as indicators of environmental and ecological health, and it is hoped that this burgeoning interest in the lichens of Sussex will continue to grow, and flourish in the years to come.

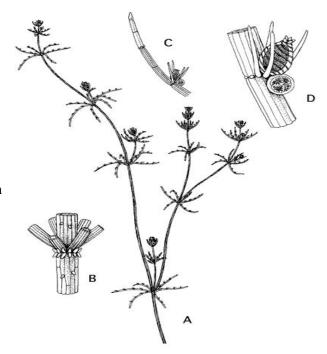
Membership of the Sussex Lichen Recording Group is £2 per annum. Contact Henri Brocklebank at the Sussex Biodiversity Record Centre for details..

STONEWORTS IN SUSSEX

by **Frances Abraham**, Charophyte recorder for East and West Sussex

Illustration: *Chara vulgaris* (from the useful website: www.kranswieren.nl/Resources)

Stoneworts, also known as Charophytes, are large submerged green algae of fresh or slightly brackish water, and are now sometimes assigned to their own algal phylum. The thought of algae may not make your spirit soar, but stoneworts are fascinating. Chara-like fossils are known from around 400 million years ago, and fossils resembling modern species date from about 170 million years ago. They have a more complex structure than other algae, and are



thought to constitute an early branch off the evolutionary trail which later led to flowering plants. A single stonewort cell can be 20cm long - the largest plant cells known. There are around 400 species worldwide, with 34 recorded from the British Isles, of which five are extinct, and thirteen from Sussex, of which four are probably extinct.

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Stoneworts often occur in calcareous water, and become so encrusted with lime that they have a scrunchy texture - much of the so-called 'shell-marl' which was formerly used as an agricultural fertilizer is derived from stonewort deposits along with their limy crusts. One of the rarest species, *Chara intermedia*, only occurs in a few of the Norfolk Broads. Sometimes it appears in such quantity that it has halted 15hp motor boats, and has been said by the disgruntled of Norfolk to have the consistency of a 'giant Brillo pad'. This comment is especially resonant since it is said that the word *Chara* may derive from a local name for the people of Lyon, who used stoneworts for scouring their pots.

In Sussex we have two Red Data Book species: foxtail stonewort, *Lamprothamnium papulosum*, and great tassel stonewort, *Tolypella prolifera*. The former is known from brackish water at Thorney, and the latter occurs in two or three ditches in the Arun Valley. In fact the Arun Valley ditches are stonewort-rich from Arundel to Amberley, with recent records for six species, and with three varieties of Common Stonewort *Chara vulgaris*. Ditches are the major Sussex habitat, but there are also a number of records from ponds, and it is unfortunate that so many downland dewponds have been lost. Most stoneworts compete poorly with other vegetation and they tend to appear following ditch or pond clearance, only to vanish a year or two later. *Tolypella prolifera* behaves in this maddening fashion, but is remarkably faithful to its few metres of ditch, appearing at intervals in the same places, then disappearing until the next ditch cleaning. It seems to have minimal ability to colonise new sites, but its spores must be long-lived.

Stonewort recording has languished over the years, partly because the ever-changing taxonomy has exasperated botanists, but we now have user-friendly books and an authoritative list of species names, and recording has picked up again. New records, and new research into early records, have already rendered the account given in *The Sussex Rare Plant Register* (2001) out-dated.

All stonewort records are of interest, even of the commonest species, so please send either confirmed records or pressed specimens to me or to one of the Sussex Vice-county Recorders. Press them lightly in loo paper and do it soon, as after a few days in a plastic bag they may suddenly melt into green soup. It would be especially exciting to re-find the 'probably extinct' species: surely the wondrous bristly stonewort *Chara hispida* still lurks in some Sussex wetland, awaiting a visitor with sharp eyes, a grapnel and a plastic bag? It used to be known in a number of sites from Aldingbourne across to Camber, but has not been recorded since 1910. And how about re-finding slender stonewort *Nitella gracilis* in St. Leonard's Forest, the type locality of the species, no less, where it was first recorded in 1809, but has not been seen for over 100 years?

FURTHER READING

Briggs, M. ed. (2001). *The Sussex Rare Plant Register*. Sussex Wildlife Trust for Sussex Botanical Recording Society & Sussex Biodiversity Record Centre

Bryant, J. A., Stewart, N. F. & Stace, C. A. (2002). A checklist of Characeae of the British Isles. *Watsonia* **24**: 203-208.

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Stewart, N. F. & Church, J. M. (1992). *Red Data Books of the Britain & Ireland: Stoneworts.* JNCC. (Easy key to *all* the British species).

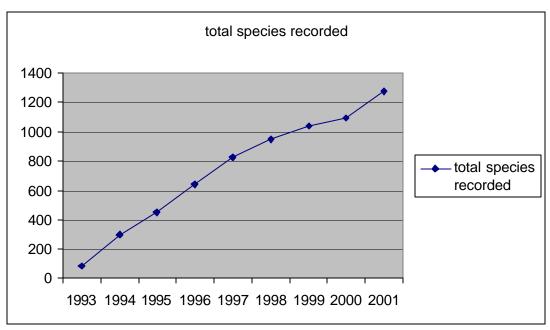
FUNGI

by **Peter Russell** recorder for fungi for East and West Sussex.

The West Weald Fungus Recording Group (WWFRG) have been foraying in Sussex since 1993. One of the original aims of the group was to build up a picture of the mycota by continually recording sites selected to represent different habitats found in the county. These sites originally included Houghton Forest, Ebernoe Common, The Mens, and Iping & Stedham Common, but more recently we have added St Dunstan's Farm and the Monastery Wood at Crawley Down

How successful we have been to date can be construed from the graph below that plots the total number of species found year on year. If we had recorded all the fungi there was to record at these sites, there would be no increase in the total number of species after a certain time, however each year we have been recording about 200 new species we have not found before.

This illustrates the difficulty with recording fungi. Whilst a few very common species might fruit under a wide range of environmental conditions, many seem to require quite specific conditions. As recording depends on identifying the fruiting bodies, we are very dependent upon the right environmental conditions preceding the foray. Experience at other sites suggests at least 25 years is required to adequately record a mycota.



Eight forays were held by the WWFRG in Sussex during 2002. However the prolonged drought during August, September, and October when most of these forays were held meant that it was one of the worst years for recording fungi, with the only abundant species seeming to be the wood rotting species.

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One notable exception was *Boletus parasiticus* which is parasitic on *Scleroderma* (dirtballs); we rarely record this species but it was abundant in 2002. One other interesting record which came via the Record Centre was the fungus *Hericium coralloides* found at The Mens.

The WWFRG continued it's survey of those fungi that tend to be found only in old undisturbed unfertilised grassland (commonly called 'waxcap grasslands' by mycologists after the brightly coloured *Hygrocybe* species that are found growing on them). Although these were also affected by the autumn drought, the lack of heavy frosts meant that many of the late fruiting species were being recorded into the middle of December.



Sixteen new waxcap grasslands were surveyed bringing the total number of sites recorded in Sussex to 99. What was encouraging was some rich sites outside the usual sanctuary of churchyards. These included Beauport Park Hotel outside Hastings, Henfield cricket pitch and Bolney Cricket pitch. A new waxcap was also recorded in Sussex for the first time (*Hygrocybe conica* var. *chloroides*) growing on the golf course at Camber Sands.

However along with finds go some losses. The fifth richest site recorded in Sussex to date was the Isle of Thorns conference centre on Ashdown Forest. Although the playing fields were fertilised twice a year they contained a remarkable 19 species of waxcap. However since the sale of this site the playing fields have not been maintained and the

grassland has deteriorated, to the detriment of the waxcaps. Another site that may suffer a change in management is North Chailey churchyard, the only site where *Hygrocybe ovina* has been recorded in Sussex.

News of any other potentially rich waxcap sites would be appreciated.

BIRDS

by **John Hobson**, Sussex Ornithological Society

The Sussex Ornithological Society (SOS) receives records for the whole of Sussex, currently in excess of 50,000 annually, from various sources. They are entered into a database (COBRA) employing purpose-made software.

- Members send in their casual records of observations made on field trips and during other activities either to the recorder on records forms or, increasingly, directly to the IT manager either on disc or as attachments to emails in a format that can be read directly into the database. Records of species scarce in the county are considered by the Society's Records Committee, while species scarce nationally are considered by the British Birds Records Committee for acceptance and publication. In 2001, 292 records were considered in this way of which 83% were accepted and included many exotic rarities such as Cattle Egret, Great White Egret, Black Brant, Green-winged Teal, Collared Pratincole, Sociable Plover, Semi-palmated Sandpiper, Pectoral Sandpiper, Little Auk, Bee-eater, Golden Oriole and Rose-coloured Starling.
- Records from particularly important areas in the county are collected and collated locally, often by a warden for that area, before forwarding in electronic format to the IT Manager. These include the Chichester Harbour complex, Pagham Harbour,

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Pulborough Brooks RSPB Reserve, Weir Wood Reservoir, Ashdown Forest, Bewl Water and Rye Harbour LNR. These reserves generate a large number of records each year, which provide valuable information on the fluctuating fortunes of different species.

Surveys are carried out annually, either of specific areas or of one or more species.

These may be organised by the Society for its own purposes or in co-operation with national organisations such as the British Trust for Ornithology (BTO). Area surveys may be either ad hoc or, as in the case of the BTO's Breeding Birds Survey (BBS), annual and covering a number of specified 1 km squares. Species surveys may be organised in a similar way and are usually repeated at longer time intervals, e.g., 10 years. Many members also participate in the BTO's Garden Birds Survey (GBS). These latter records, however, are not returned to the Society by the BTO due to their statistical nature.



All such surveys provide valuable information on changes in population numbers.

Other records come from dedicated groups of sea-watchers and the national Wetlands Birds Survey (WeBS) counters. In 2001 the former put in over 2,600 hours of watching at five main coastal observation points from Selsey Bill to Bexhill. They provide information on migration and coastal movements of seabirds. Of particular note in 2001 was the unprecedented numbers of auks seen, including the scarce Little Auk, especially early in the year. The year's total for Guillemots exceeded the aggregate of the totals for the last six years, and for Razorbills, that aggregate of the totals for the last five years. The national WeBS survey, co-ordinated by the Wildfowl & Wetlands Trust (WWT), makes counts of all wetlands species—ducks, swans, geese and waders—on designated wetlands outside the summer breeding season.

All records need to be submitted in the following year in time for entry into the database by 31st March. The systematic list in the Annual Report is produced by a team who analyse the records and write descriptions of the status and any unusual features of every species seen. The Annual Report also includes summary tables of migration dates and breeding records, a ringing report and various special articles. The 2001 report, which will run to over 220 pages, will reflect the impact on recording of the foot & mouth disease restrictions and include, in particular, a paper on seabirds. The Report also contains a section on escaped and feral birds seen during the year.

John Hobson, 23 Hillside Road, Storrington, West Sussex RH20 3LZ

CETACEANS AND OTHER MARINE MAMMALS

by Stephen Savage, Sea Watch Foundation, Sussex Regional Co-ordinator

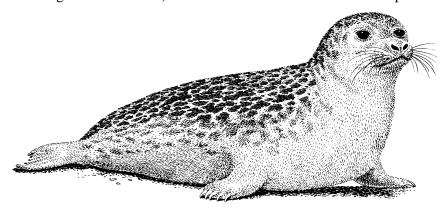
Another eventful year for cetacean watching. The year began (same as 2001) with a number of stranded small cetaceans off Sussex. It is thought that these were the result of by-catch in the western channel and that strong winter storms washed them eastwards, some as far as

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Sussex. These incidents mainly involve common dolphin *Delphinus delphis* and Harbour porpoise *Phocoena phocoena*.

As part of my joint role as area coordinator for Southern Marine Life Rescue we attended strandings and worked closely with the London Natural History Museum. Two other unusual stranding incidents occurred in Sussex. The first involved a baby harbour porpoise stranded near Pagham Harbour in West Sussex on 2nd May. Even stranger was that a similar event occurred on the French coast a few days earlier. Both baby porpoises still had the umbilicus attached. A rare visitor to the English Channel, an Atlantic white-sided dolphin *Lagenorhynchus acutus* was stranded at Newhaven on 15th June. A dolphin, probably the same one, had been seen for two days before the stranding event.

The earliest bottlenose dolphin *Tursiops truncatus*, sighting in 2002 (the most commonly observed species off Sussex) occurred in February and was from the Brighton Marina by one of our trained volunteers. Fewer inshore sightings were recorded, which is probably at least in part due to poor sea conditions and reduced visibility. This was particularly evident during May to July when there is usually a peak in recorded inshore sightings. These range from 50 to 200 metres from the shore. Systematic watching (the majority of which takes place between Worthing and Peacehaven) increases confidence in the value of reported sightings.



Along with the usual bottlenose dolphin sightings between Brighton and Worthing, we have also received a mixture of inshore and offshore sightings at various parts of the Sussex coastline. These include three sightings reported at Hastings in March and various sightings reported at Selsey and Chichester mainly September and October. Some observations reported dolphins interacting with people and boats including a sighting at Shoreham of a dolphin following a windsurfer back and forth. We were geared up for a possible visit by Georges the sociable 'friendly' dolphin from Channel Islands and French Coast, but he only reached Bognor Regis before heading west again.

We received several seal reports again in 2002, most identified as common seal. The first sighting occurred 3rd January and two other sightings were reported further west a couple of days later. We received 3 sightings of a seal at Lancing during August. It was close to the beach and showing curiosity towards lone bathers. A juvenile seal was reported within the mouth of Shoreham Harbour in October and was later reported in the lower section of the river between the harbour and the footbridge. We were also on the alert due to the possible spread of the seal virus to Sussex and it became doubly important that reports of seals were followed up and passed on to relevant groups.

The National Whale and Dolphin Watch Weekend 27th & 28th July, organised by the Sea Watch Foundation was a great success. The event aimed to raise awareness and provide a

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snapshot of cetacean activity during the weekend. By the end of the weekend 373 cetacean sightings had been logged around the UK involving common, bottlenose, white-beaked and Risso's dolphin, as well as harbour porpoise, long-finned pilot whale, minke and killer whale. Three watches were organised for Sussex. Two separate watches at the Brighton Marina one on the Saturday and another on the Sunday. Another watch took place at Eastbourne on the Sunday. Two sightings were made by a trained volunteer at the Brighton Marina on the Sunday of a small group of six harbour porpoise that came in close to the marina to feed (again an unusual occurrence). A further report for Sussex involved bottlenose dolphins observed from a yacht at Chichester Bar Beacon.

Further information on the sightings recorded during the National Whale and Dolphin Watch Weekend can be found on the Sea Watch Foundation Website under 'Events' or at www.seawatchfoundation.org.uk/events.htm.

The Sussex regional group took part in various other events throughout the year with the Sussex display, which includes information about UK cetaceans locally and nationally, plus artefacts and interactive educational activities. Events included Low Tide Day, World Oceans Day and Marine Week. With the funding provided by English Nature I was able to visit 20 local schools with our activity-based 'UK Whale and Dolphin Education Programme' which includes a life sized inflatable bottlenose dolphin made by Whale Workshop. Children not only got the chance to learn about cetacean biology but also had the opportunity to work with actual Sussex dolphin sighting data, producing graphs and maps.

Cetaceans are one of the harder animals on which to maintain a systematic monitoring coverage. There are various factors outside of the control of the watchers that range from people's varying commitments throughout the year, the fact that cetaceans spend more time under the water than at the surface, and sea conditions/visibility. 2002 saw one of the biggest leaps forward in our monitoring. We now have an acoustic pod, which has under gone extensive field trails in Cardigan Bay. The pod will provide constant effort data and will be able to record the presence of bottlenose dolphins even when sea conditions are poor and at night. The pod can be set to recognise several cetacean species.

As dolphin movements are not affected by day and night but by the natural rhythms of the sea, it will be interesting to discover the level of nocturnal activity. Based on the last 10 years of our sighting data, we have been able to come up with three possible sites for the pod and we are currently in discussion with local authorities regarding the pod's deployment next year. The pod will not replace visual monitoring, (as with the visual method there are limitations as to what it can record) but the use of both methods together will help to build up a more accurate picture of cetacean movements locally.

Stephen Savage, Sea Watch Foundation, Sussex Regional Co-ordinator, 51 Eastbrook Road, Portslade, East Sussex. BN41 1LN 01273 424339 Hotline for reporting sightings or strandings 07773610036

E-mail: ALLSAVS@aol.com

Website: www.seawatchfoundation.org.uk (Includes postings of UK sightings)

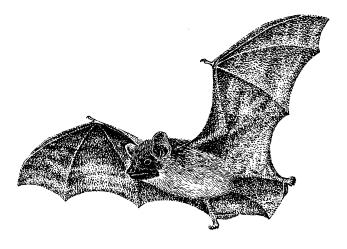
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BATS

by Martin Love, Sussex Bat Group, Recorder & Membership Secretary

Monitoring Sussex Bats

On the face of it having only 16 species of bat to worry about would seem to make bat monitoring and surveying a simple process. If we could only get them to show themselves in the daylight it would be. Most bat monitoring involves crawling about in house lofts, or perhaps staring up into the heights of a barn trying to decide if the marks on a beam are from the oily



secretions of the bats' coats or just staining from a leaky roof. Or standing about in a garden, or the middle of a lonely wood in the pitch dark, listening to the sounds emanating from a bat detector and hoping to be able to

distinguish the subtle nuances of the clicks and beeps that might give a clue to the species that made them and just how many there are.

We have fifteen species of bat recorded from East and West Sussex, the only defaulter is the lesser horse-shoe bat which is really confined to the West Country and Wales. However we may have to rethink the total species count for Sussex. In April 2001 an old female greater mouse-eared was found in a garden, the bat was very weak and died shortly after being found. This was the first probably native example found since the species was declared extinct in Britain. The last known British record was in the winter of 1991. Until last December 2002 when a single turned up in the same hibernation site. This male bat appeared to be about one year old, possibly born in 2001. The previous female had not had any babies and in any case had died too early to have been this latest bat's mother, so it would seem there was at least a pair of these bats somewhere in the county.

Surveying and monitoring of bats is getting more sophisticated. With the advent of affordable equipment it is possible to record the bat calls and to analysis the various acoustic components of the bats ultrasound spectrum on a personal computer. This makes it much easier to determine many of the different species but is by no means infallible, many of the calls particularly those made by the *Myotis* group of bats are still extremely difficult to separate. Most bat records are the result of calls to private

houses with a bat roost. Some are the result of active monitoring by bat group members and also from counting the bats roosting in the various tunnels and cellars they are using for hibernation.

All bats and bat roosts are protected and an English Nature license is required for such activities as entering a roost for monitoring purposes. This is particularly important with regard to hibernacula because disturbing these bats may prevent them from surviving until their insect prey is plentiful in the spring.

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MOTHS

MOTH RECORDING IN SUSSEX

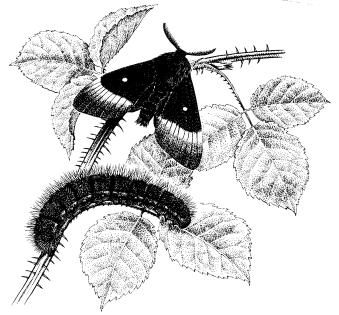
by Colin R. Pratt, FRES, County Recorder of butterflies and moths for East and West Sussex

The recording of moths in Sussex has an exceptionally long tradition, stretching back for more than 200 years - the earliest known record concerns a discovery of the scarce woodboring caterpillar of the goat moth beneath oak-bark which was being stripped for the local tanning industry at Catsfield near Battle on May 8th 1800. While Victorian enthusiasts beat larvae from trees and shrubs, and dug up pupae from the ground, most specimens were obtained during the old collecting era by luring the adult stage to sugary sweetmeats or to light. Starting with candles in bottles and then oil-lamps, enthusiasts progressed to frequenting gas-lit street-lamps and then, during the early 20th century, to electric-powered tungsten light-bulbs. Nowadays the modern moth recorder almost exclusively uses a mercury vapour bulb in a trap built on lobster-pot principles. Recording in domestic gardens is a mainstay and the light from each trap can lure hundreds of moths during an evening. It is true that some species are drab-coloured, but many are subtly beautiful or simply spectacular.

Much is known about moths in Sussex; thousands of references exist in the scientific literature and several books have been published. The considerable importance of our local moths is now becoming more widely realised, as recent intensive research has revealed their quantity and quality in many different habitats. For example, contemporary surveys have already proved that the moths resident at Rye Harbour LNR and Pagham Harbour LNR are of national significance, making these the most important shingle beaches in the county. The management of these two nature reserves is currently being carefully organised to maximise the potential of their moths. Our county is also particularly well placed to receive migrating

species from mainland Europe, the arrival of which always creates excitement amongst chroniclers of colonisation.

The collectors of the past left a great legacy of learning and reference but many of today's local insect photographers and recorders of Lepidoptera belong to the Sussex Moth Group. The association was founded in 1996 and members receive one to two newsletters per annum. Several indoor meetings are held at the Booth Museum of Natural History in Brighton each year and half a dozen field meetings are also organised. For example, in 2002, dedicated field trips with light-sourced moth-traps were held



at Pulborough Brooks RSPB Reserve, Rye Harbour LNR, Powdermill Wood near Battle, at Newtimber Hill and Devil's Dyke near Brighton, and at Iping Common near Midhurst, while a number of members also supported further multi-disciplined events.

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For more information on the group, and its aims and activities, 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, David Bridges at 2 Field Place Cottages, Byfleets Lane, Broadbridge Heath, Horsham RH12 3PB. Telephone 01403 250569, or e-mail: dbridges@butterfly-conservation.org

For information on Sussex moths contact Colin R. Pratt, F.R.E.S, County 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

BUTTERFLY RECORDING IN SUSSEX 2002

by Joyce Gay, recorder for the Sussex Branch of Butterfly Conservation

Many thanks to the members of Butterfly Conservation and other interested parties who throughout this year have been so active in carrying out our two main activities namely conservation and recording. We have co-operated with many organisations, landowners and private individuals throughout East and West Sussex not only to maintain and increase the populations of the rarer species but also of the so-called widespread common ones as well. This is often best achieved by the judicious management of the habitat which of course has greatly altered during the past twenty years or so.



The rare Duke of Burgundy is giving us some concern as it is a butterfly of transitory habitats e.g. recently coppiced woodland and lightly grazed grassland. It is very difficult to provide a large

enough area of suitable habitat as it does not prosper on short sheep grazed grassland. On the other hand both the Wood White (restricted to small areas in the north of West Sussex) and the Silver-spotted Skipper (mainly in East Sussex) are doing well and their numbers and distributions are expanding.

The rarer species such as Silver-studded Blue, Pearl-bordered Fritillary, Wood White, and Silver-spotted Skipper are monitored by **butterfly transects**; this is a time-consuming method that needs a large commitment from the volunteer as the same route is walked weekly from April through to September and needs to be repeated every year. We are also continuing with **general butterfly recording** which enables us to locate favourable butterfly areas, keeps the distribution maps up to date and enables us to monitor the population density of different species from year to year. All this recorded data underpins the conservation work that benefits butterflies and their habitats and influences government at all levels and many other organisations.

Our recording year began in January! Following an exceptional number of Red Admirals seen late in 2001 perhaps it was not surprising that there were at least 5 reported sightings of these migrants during January 2002. February saw Brimstone, Peacock and Small Tortoiseshell recorded which seemed to promise a good year. The warm spring continued and

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between April 23rd and 25th Duke of Burgundy, Pearl-bordered Fritillary and Wood White had all emerged and recorders had to be hastily organised to begin surveys. The following months were not as kind and many species suffered from the damp conditions. The numbers of the increasingly rare Pearl-bordered Fritillary were down in their East Sussex stronghold but did well in Forest Enterprise woods near Arundel. There has been much coppicing and clearing here which recreated the optimum conditions for this demanding species.

It was good to see the Small Tortoiseshell back to its usual numbers as the population had slumped to a very low level in 2001. Small Copper which is usually considered to be a common butterfly was not seen in any great numbers until August and September when they were reported from all corners of the two counties with higher numbers seen on the Downs.

Clouded Yellows were seen throughout the two counties the numbers peaking in August when Barry Collins recorded 26 on Thorney Island. As October and early November were mild there were records of Clouded Yellow from the Beachy Head area as late as November 11th. Several var. *helice* were also reported, one at Nyewood on Aug 10 another at Telscombe on Nov 4th. Painted Ladies were widespread although as usual the majority were seen near or at the coast; notable sightings were 18 seen at Castle Hill on June 14 and 41 around Thorney Island on August 18th.

Several unusual migrants were reported during the season. There were two sightings of the Camberwell Beauty, in Lewes on Aug 16, and on Aug 22 at our butterfly reserve at Park Corner Heath near Laughton. A Swallowtail was seen at Emsworth on July 20th and a Longtailed Blue at Bishopstone on August 17th.

During autumn the warm weather saw unusually late records: Meadow Brown still active on September 25th and in October Holly Blue on 6th (on Thorney Island, surely a third brood?), Common Blue and Small Heath on 21st at Cuckmere Haven, Small Copper at Nyewood on 27th. Then the November sightings of Clouded Yellow, Red Admiral, Painted Lady, Small Tortoiseshell and Peacock, with Brimstone being the last reported sighting of the year on November 13th at Pound Hill.

All our records made since 1999 are going towards an update of the Millennium Atlas. In order for Sussex to be fully recorded do keep the information coming in. Recording forms are available from me. (See back pages for address etc.)

ORTHOPTERA

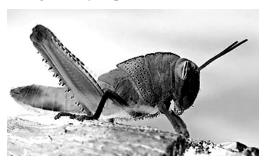
By John Paul

In 2001 a new bush-cricket was added to the British list: Roger Hawkins beat a male example of the southern oak bush-cricket, *Meconema meridionale* from a tree in Thames Ditton, Surrey. The living specimen was exhibited at the Annual Exhibition of the Amateur Entomological Society in October 2001. Later in 2001, a population of *M. meridionale* was located in a garden in Surrey, several miles from the Thames Ditton site and another record was confirmed from Berkshire. *M. meridionale* used to be thought of as a southern European insect but in recent years populations have been found at Caen in Normandy and near Rotterdam in the Netherlands. The circumstances of these finds prompted speculation that southern oak bush-crickets were hitching rides on top of lorries but the discovery of the species in suburban gardens in Britain suggests that the insect was imported on garden shrubs from southern Europe. There is a strong possibility that *M. meridionale* is already established as a garden insect elsewhere in southern Britain. The purpose of this article is to encourage readers to examine critically any green bush-cricket found in a garden, especially if there is a recent history of planting with imported shrubs. Oak bush-crickets mature fairly late in the

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season and both the native species, *Meconema thalassinum* and the southern species, *M. meridionale*, should be sought from late August to October. Another species, speckled bush-cricket, *Leptophyes punctatissima*, commonly occurs in gardens.

Discussion with the manager of a nursery in West Sussex makes it clear that large quantities of shrubs are being imported from southern Europe and especially from Italy. I asked the manager if any imported insects could be kept for examination and soon received a living



example of a three inch long Egyptian grasshopper, *Anacridium aegyptium*, found among plants imported from Spain. It is quite likely that less conspicuous orthopteroids have found their way into gardens in Sussex and in addition to the southern oak bush-cricket, several orthopteroid species (including bush-crickets, cockroaches and earwigs) could probably form temporary or permanent populations in our climate. Readers are encouraged to photograph

or retain specimens of unidentified orthopteroids, especially from gardens.

There is also a possibility that new species of Orthoptera will make their way here under their own steam. In recent years there have been one or two unconfirmed reports (not so much sightings as hearings) of the tree cricket, *Oecanthus pelluscens*. This mainly southern European insect occurs as close to us as the Normandy coast and there is a suspicion that it may be becoming more widespread in northern Europe. Tree crickets are inconspicuous small brown insects that may found by beating branches or by sweeping, but if tree crickets do turn up in the UK it is most likely that

they will be detected because of their characteristic song which sounds rather like some kinds of telephone ring.

DRAGONFLIES

Sussex Dragonflies and the oft unsung influence of the recorder

by Phil Belden, British Dragonfly Society (Sussex Group)

It is a privilege, spending time with the world's oldest flying insects. Going back in time twice as far as birds, surviving through the dinosaur era and their extinction, these beautiful, highly coloured insects have evolved over some 300 million years to become the aerobatic masters of our time. Now they rely on us for their survival. Dragonflies need wetlands; and, they are effective pollution indicators – dirty water means death to dragonflies. The humble recorder is playing a vital part in helping to conserve these ancient creatures.

Pevensey Levels provides an excellent example. This is an impressive wetland habitat of extensive grazing meadows, with a myriad of ditches and some major watercourses draining the land. It is also a hidden, relatively inaccessible landscape, which had been at best forgotten, at worst badly abused by drainage, ploughing, development and pollution.

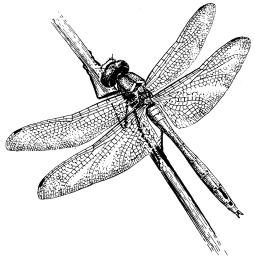
In 1984 I carried out a dragonfly survey of the area, which provided, for the first time, a comprehensive picture of the status of dragonflies on the Levels. The Nature Conservancy Council (now English Nature) had provided some protection, with its Site of Special Scientific Interest status, but this did not address positive management. The only incentives were agricultural support, which promoted more intensive farming. It took a few years for

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English Nature and the National Rivers Authority (now Environment Agency) to look into the

problems. When they did, they brought together environmentalists and recorders from many different groups, whose combined energies provided much fundamental data on the past wealth, present problems and future potential of the area.

This culminated, in 1991, in a national pilot Wildlife Enhancement Scheme for Pevensey Levels run by English Nature and encouraging sympathetic grazing and water levels management. Much more work has followed, including vital monitoring and recording and on the 2nd February 1999, World Wetlands Day, Pevensey Levels was declared a "Wetland of International

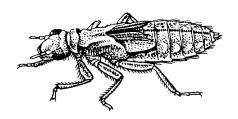


Importance" under the international Ramsar convention. Time will tell how this accolade will affect the area, but thanks to the work of recording naturalists, Pevensey Levels has had its profile raised and action taken to help conserve one of South East England's last remaining wetland wildernesses.

That activity covered a 10km by 10km square of Sussex: what of the non-Pevensey Levels part of the county – that's some big country to survey for information and conservation action. In 1989 a dragonfly survey was launched and a merry little band of amateur dragonfly spotters began tramping round the far-flung reaches of Sussex to put distribution dots on maps. Over the years we have been slowly filling in the 1000 or so tetrads (= 4000 1km grid squares of the county). The down-side has been keeping the interest going and we have lost recorders. The up-side is that we now have a pretty good idea of the distribution of our Sussex dragonfly species.

The wealth of data poses some interesting questions, like what to do with it. Over the years we have used it in habitat surveys, to help fight threatening developments and for positive conservation management. We now aim to further raise the awareness of dragonflies and recording by publishing this data in an easy-read, attractive book. The core dragonfly team are fast becoming writers, fund-raisers, design- and publishing-aware. The Record Centre is playing an essential role, having collated all the records (no mean feat – and here we should acknowledge another great group of volunteers), they are now producing the digital maps. The draft of the book has been written, we are now into serious fund-raising. Given a fair wind, we'll have the book out this summer.

The future presents the real challenge. Once the book is published, we must turn our attention to the records and their interpretation. Only then can we really have some effect – in protecting, conserving and enhancing dragonfly habitat and the well-being of these long-term survivors. Our recording marked the start, the book will be the end of the beginning.



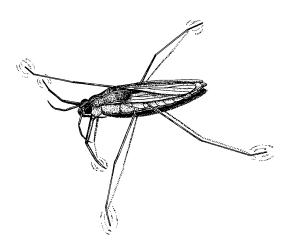
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HEMIPTERA-HETEROPTERA

Recording bugs in Sussex

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

Bugs (Hemiptera) belong to one of several insect orders that develop by a series of nymph stages. Growth is accomplished by shedding the outer skin which nymphs have outgrown and eventually, after several such



changes, the adult bug emerges. This is quite different from the early stages of butterflies, moths, beetles or flies, which all have three distinct immature stages: egg, larva (or caterpillar) and pupa (or chrysalis). All bugs have sucking mouth parts which consist of a sharp piercing instrument that is used to prod into fleshy plant stems, or sometimes the skin of soft-bodied creatures, from which they extract nutritious fluids.

Hemiptera are a diverse group that are divided into two sub-orders: Heteroptera and Homoptera (which are not dealt with in this article). Heteroptera (or het-bugs) are a relatively well studied group of insects with a little over 550 British species. Included within this sub-order are various groups of species, examples being: shield-bugs, bed-bugs, capsid-bugs and a variety of water bugs, including pond skaters, saucer bugs, water boatmen, water crickets, water measurers and water scorpions.

Capsid-bugs are the most species-rich family of bugs occurring in the British Isles. Many species of these soft-bodied elongate bugs are bright green, others have a different ground colour and are brightly marked with yellow or red spots. Unfortunately the colours of capsid-bugs are not easily preserved when dried and identification by comparison with museum specimens often requires a little imagination.

A word of warning should be given regarding several species of water bugs. The common saucer bug, *Ilyocoris cimicoides*, and species of water boatmen (*Notonecta glauca* being the most common) have the power to inflict a painful "sting" if handled carelessly. This is achieved by injecting fluid into the skin through their proboscis (not by a sting in the tail like a wasp). The largest and most abundant group of water bugs are the Corixid bugs. These superficially resemble small water boatmen but are harmless and are quite safe to handle.

Identifying bugs, especially het-bugs, has been rendered difficult in recent years because the standard modern work, *Land and Water Bugs of the British Isles* by Southwood and Leston is virtually unobtainable and extremely expensive. This is because there are insufficient second-hand copies available to satisfy the "Wayside and Woodland" series book collectors' market. However, for those who are computerised there is now a replica of this book available on CD, available from Pisces Conservation. Their website is: www.pisces-conservation.com.

Although there are no recently published check lists of bugs recorded from Sussex, sufficient information already exists to enable a county inventory to be compiled. Species recently discovered in Sussex include the large and impressive squash-bug *Gonocerus acuteangulatus* which used to be confined to box bushes growing at Box Hill in Surrey. It has also been found

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in several other sites in Surrey in recent years, on shrubs other than box, and its appearance in Brighton is perhaps not too surprising. Several species of bugs thought to be migratory or recent colonists have been recorded from Sussex in recent years and it is possible that species such as the rhopalid bugs *Stictopleurus abutilon* and *Liorrhyssus hyalinus* might have already established breeding colonies in the county.

Finally, has anyone observed the water stick-insect, *Ranatra linearis*, in flight? This large aquatic bug certainly possesses wings, but little is known about its ability to fly.

LEAFHOPPERS AND RELATED GROUPS (AUCHENORRHYNCHA)

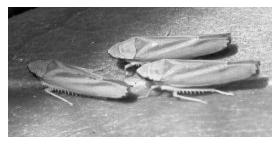
by Alan Stewart, Sussex Recorder for these groups

Many people will not have heard of the Auchenorrhyncha, so a brief introduction is called for. This rather cumbersome name refers to the part of the Hemiptera (bugs) that includes the leafhoppers, planthoppers, froghoppers, treehoppers and cicadas. They are classified with other so-called Homoptera by virtue of the fact that their wings have a uniform texture, contrasting with the Heteroptera (see Peter Hodge's report on this group above) in which the fore wings are divided into two distinct parts, a stiff leathery base and a membranous tip, separated by a neat straight line.

The Auchenorrhyncha are a purely herbivorous group, extracting plant sap by inserting their needle-like mouthparts into the plant's tissue. There are approximately 375 species in Britain, including some that may already be familiar to the casual observer. The striking black and red *Cercopis vulnerata* can often be seen in May or June feeding on hedgerow plants like willowherb. It is one of the froghopper family, so-called because the bulbous head is thought to resemble that of a frog. Some people refer to these insects as spittlebugs, because their juvenile stages (nymphs) surround themselves in 'cuckoo-spit', a frothy foam that is thought to protect them from predators and from drying out. Other less colourful species in this family, such as *Neophilaenus lineatus* and the variably-patterned *Philaenus spumarius*, are some of the most abundant insects in grassland and on waste ground.

The family with the greatest number of species in this group is the Cicadellidae (leafhoppers).

Some of the largest species may again be familiar to non-specialists. The rhododendron leafhopper, *Graphocephala fennahi*, is handsomely striped green and magenta on its upper side and bright yellow underneath. As the name suggests, it feeds on rhododendrons and can reach population densities which protective gardeners regard as alarmingly high, although it is unclear as



to whether or not such infestations do the plant any harm. Searching through marshy vegetation often reveals the equally striking *Cicadella viridis*, a large green/blue and yellow leafhopper that feeds on rushes (*Juncus* spp.).

This brief account would not be complete without reference to the two families with fewest species. The bizarrely shaped treehoppers (Membracidae) have thorn-like processes projecting out of their thorax. They are mainly a tropical family but there are two species in Britain both of which occur in Sussex: *Centrotus cornutus* and *Gargara genistae*. Finally, the very largest species in the group belongs to the cicada family, a group of insects whose penetrating trilling calls will be annoyingly familiar to holidaymakers visiting Mediterranean countries in summer. There is only one species in Britain, the New Forest Cicada *Cicadetta*

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montana, which does not occur in Sussex and, sadly, has not been recorded for several years at its few remaining Hampshire sites.

As national recorder for this group of insects, I receive records for the whole of Britain, but I have maintained a particular interest in the Sussex fauna since moving here ten years ago. A lot of historical information for the county exists, but rather little for the last 40 years. Some 22 Nationally Notable and 3 Red Data Book species have been recorded in the county, nine of which are species recorded either by myself or Peter Hodge in the last five years. Many of these are species that have strongly southern distributions within Britain. I have recorded all three species of the tiny but beautifully coloured genus *Ribautodelphax* in Sussex, all of which are very rare: *R. pungens* and *R. imitans* on chalk grassland at Castle Hill and *R. angulosus* on its host plant, sweet vernal grass, *Anthoxanthum odoratum*, at Burgess Hill and Falmer. Other chalk grassland specialist species include *Eurysa douglasi*, *Ulopa trivia* and *Tettigometra impressopunctata*.

Ulopa trivia is an interesting species that has been recorded in the county from three very different habitats: several chalk grassland sites, on vegetated shingle at Rye Harbour and on a steep south-facing embankment of the A27 dual-carriageway between Falmer and Lewes. In other parts of the country, it also inhabits maritime cliffs and cliff-top grassland; perhaps the sparsely-vegetated road embankment provides a similar sort of micro-habitat for it.

A number of important rarities have been recorded recently at Rye Harbour. They include the sand-dune specialist *Doratura impudica*, otherwise known only from dunes around the East Anglian coast, *Oliarus panzeri*, an unusual planthopper that lives underground feeding on roots for at least part of its life, the tiny planthopper *Struebingianella dalei* and *Calligypona reyi*, a species that feeds in stands of grey club-rush, *Schoenoplectus tabernaemontani*, around small pools and wet depressions in the shingle.

One of the most exciting developments in recent years has been Peter Hodge's discovery of the Red Data Book leafhopper *Macrosteles cyane* living on its food plant, floating pond weed, *Potamogeton natans*, in a small pond near Heathfield. This is a particularly important record, since the species had been known from only four other localities in southern England, with no records for the last 40 years. The dark blue-green adults (about 5mm long) can be seen from a distance resting on the upper surfaces of the floating leaves; the species would be worth looking out for in other small undisturbed ponds during the second half of the summer.

DIPTERA (TWO-WINGED FLIES)

by Patrick Roper, recorder for Diptera for East and West Sussex

The recording year saw the publication of Roger and Margaret Crosskey's (2002a and 2002b) work on the blackflies (Simuliidae) of South East England. Over a period of many years an astonishingly large number of the faster flowing streams in the area were surveyed for the larvae and pupae of these little flies. Although they are more common than most people suppose and many are capable of biting *Homo sapiens*, the adults rather seldom seem to turn up in the field and do not reach the nuisance proportions that they do in other parts of the world. Sussex is a stronghold for several British species, the streams of the central Weald, for example, being the main habitat for *Prosimulium tomosvaryi*.

There is a national Stilt & Stalk Fly Recording Scheme run by Darwyn Sumner under the auspices of the Dipterists Forum. This group involves about 40 species spread across six families. In a map of all British records published by the scheme in September 2002 there is excellent coverage for Kent and south east London, a few records from East Sussex and none

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at all from West Sussex. I am sure West Sussex is just as good, if not better, than elsewhere in south east England for these flies and the map, once again, plots recording effort rather than insect distribution and is far from comprehensive. Indeed, *Chyliza nova*, a 'notable' species thought to be associated with old trees and sap runs, was recorded by J E Collin (who also described the species) from Three Bridges, West Sussex, in the earlier part of the 20th century.

New test keys to the Trichoceridae (winter gnats) and Ptychoperidae (fold-winged craneflies) were circulated by the national Cranefly Recording Scheme in 2002. These have already led to the possibility that we have an additional, as yet unrecorded, winter gnat in Sussex and highlights the benefits that can flow very quickly from up-to-date material on identification.

In December a female meniscus midge, the 'notable' *Dixella attica*, was found among our only native patch of shrubby sea-blite, *Suaeda vera*, on the coast near the county boundary with Kent. This brings the Sussex total for this small family of flies up to 12 out of 15 British species, many of the records being due to the work of Dr Kathleen Goldie-Smith in the Rye area in the late 1980s and early 1990s.

Several locations were also found in the Hastings area for trickle midges (Thaumaleidae), a family with only three members in Britain. *Thaumalea testacea* has been recorded a couple of times (Ashdown Forest and Robertsbridge) but *Thaumalea verralli* is new to South East England. Like blackflies, they prefer small, faster flowing streams and are often commoner in the north and west as are a number of species of flora and fauna from the Hastings valleys.

Once again I would like to make an appeal to those who study birds, bats and other beasts for any parasites, flies or otherwise, as our knowledge of their distribution in Sussex remains poor. In summer 2002 Barry Yates found that the occasional sheep nostril fly, *Oestrus ovis*, was positioning itself on the walls of his house on the Rye Harbour Nature Reserve. This is an RDB3 species that seems not to have been recorded from either of our vice-counties recently (fortunately for sheep). The curious thing about the flies at Rye Harbour is that they were some considerable distance from their nearest hosts and those observed seemed to prefer to stay motionless in the same place for many days, perhaps waiting in vain for a sheep to pass.

In March the formal description of Yates's scuttle fly, *Megaselia yatesi*, was published (Disney, 2002). This remarkable insect with a 1.5 mm wing length (see right) which appears to spend its whole life some way beneath coastal shingle, has been found at a second shingle site further inland at Rye Harbour but identical traps run on the shingle at Pagham Harbour have produced no examples so the species, for the present, remains an East Sussex endemic.

Pagham has, however, produced some good things including *Muscidideicus praetextatus*, a distinctively-marked dolichopodid previously known from West Wittering and two coastal dung flies (Scathophagidae), *Scathophaga litorea* and *Ceratinostoma ostiorum*, neither of which appears to have been recently recorded from the county.

References

Crosskey, R. W. & Crosskey, M. E. (2002a) A breeding site survey of Simuliidae (blackflies) in South East England. Part 1: Sampling sites and species distribution records. *Dipterists Digest* **9** (2): 25-60

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Crosskey, R. W. & Crosskey, M. E. (2002b) A breeding site survey of Simuliidae (blackflies) in South East England. Part 2: Broad distributional findings. *Dipterists Digest* **9** (2): 137-147

Disney, R. H. L. (2002) A new species of maritime scuttle fly (Dipt., Phoridae) from East Sussex, England. *Entomologist's Monthly Magazine* **138**: 19-22

BEES WASPS & ANTS

Two very useful reports on these families of Hymenoptera were published during 2002:

Archer, Michael & Edwards, Mike (2002) The Aculeate Hymenoptera of Ambersham and Iping (with Stedham) Commons in West Sussex, including statistical procedures for estimating species richness. *British Journal of Entomology and Natural History* **15** (2): 91-103

Beavis, Ian C. (2002) Aculeate Hymenoptera of Tunbridge Wells and the Central High Weald. *Entomologists Gazette* **53**: 97-129

Further volumes in the *Provisional atlas of the aculeate Hymenoptera of Britain and Ireland* series have been published by the CEH/NERC Bees, Wasps and Ants Recording Society. There are now five volumes in this series and they show Sussex records for the various species in the national context at 10k square level as well as giving useful biological data.

OTHER INSECTS

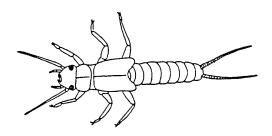
By Patrick Roper

Some of our commonest insects and, indeed, some of our rarest are found in orders or families that are too small to warrant an 'official' recorder. Others belong to groups that have seldom had much of a popular, or even an expert, following often because there is no readily available up-to-date literature that enables them to be identified. Examples of the first group are the scorpion flies from the order Mecoptera with only four representatives in the British Isles or the alderflies, Megaloptera, with only three species. Larger groups include creatures like fleas (order Siphonaptera), springtails (order Collembola) and the vast armies of Hymenoptera Parasitica – the ichneumons, braconids, chalcids and their allies, as well as the sawflies, Hymenoptera Symphata, gall wasps, Cynipidae, and others.

Some new 'neglected groups' records for 2002 include the mayfly *Paraleptophlebia submarginata* (order Ephemeroptera) from Marline Wood, Hastings and our largest lacewing, *Osmylus fulvicephalus* (order Neuroptera) from the headwaters of the river Tillingham, Ewhurst Green and Old Roar Gill, Hastings. The last species often flies in the daytime or early evening and, with its shimmering flight, looks not unlike some of those Victorian illustrations of gossamer-winged fairies. Indeed, I sometimes wonder if this is where the idea arose.

Our Sussex ghylls are also rich in stoneflies (order Plecoptera) with aquatic larvae and both the local *Leuctra geniculata* and *Nemoura cambrica*, as well as the common *Nemoura cinerea* were recorded in 2002.

A new flea record was that of the hen or bird flea, *Ceratophyllus gallinae gallinae*, from a



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Rye Harbour blue tit's nest. It is a common species and it would be good if any recorders involved with birds or mammals could send more examples of these and other parasites to me for identification.

The list of Sussex springtails (Order Collembola) shows modest growth and many species can be identified fairly readily by their body pattern. An example is *Orchesella cincta* with a distinctive whitish belt around the middle of its otherwise dark body. It is common in damp places while another distinctive species, *Entomobrya nivalis*, is common everywhere throughout the year. The closely related *E. multifasciata* seems to replace it in grass tussocks on vegetated shingle. The local sea bristle-tail, *Petrobius maritimus*, (Order Thysanura) more familiar on the beach, was recorded high above the sea on the walls of Hastings Castle during a wet and windy moth-trapping evening.

There are a few more records of psocids (or book lice) and I was interested to find *Pteroxanium kelloggi* (which I am tempted to call the cornflake psocid) in my garden. It has reduced, but scaled, wings making it look a little like a tiny female winter moth and, though widespread, is thought to be introduced.

The insect groups which do not seem currently to be covered by other recorders include:

Collembola (Springtails),

Diplura (Two-pronged bristletails),

Ephemeroptera (Mayflies),

Hemiptera/Homoptera (several families

not covered),

Hymenoptera (most families other than

bees, wasps and ants),

Mecoptera (Scorpion flies),

Megaloptera (Alderflies),

Neuroptera (Lacewings),

Phthiraptera (Sucking lice),

Plecoptera (Stoneflies), Protura (Proturans).

Psocoptera (Psocids or booklice),

Siphonaptera (Fleas)

Strepsiptera (Stylops or twisted-wing

parasites),

Thysanoptera (Thrips),

Thysanura (Silverfish & firebrats),

Trichoptera (Caddis flies)

I am happy to look after records for these families for the present, and will be interested in any new records for 2003. If anyone else wishes to take any of them over please let me know.

MOLLUSCS

by Martin Willing, Sussex recorder for molluscs

Rare Molluscs and Sussex Hanger Woodlands – An Introduction and two Challenges!

Illustrations: *Helicodonta obvoluta* from Adam (1960); *Ena montana & E. obscura* from Kerney & Cameron (1979). See below for full references.

Hanger woodlands are a striking and dominant feature of the Sussex Downs. They are so named because they appear to 'hang' from the steep, mainly north facing, scarp slopes that they clothe. At their western end, close to Petersfield, the hangers merge with the Hampshire Hangers and then run eastwards, almost unbroken until they nearly reach the river Arun. East of the Arun the hangers become increasingly fragmented, occurring in blocks, until they give way to almost continuous grassland towards Beachy Head. Some of the hangers consist of comparatively recent secondary woodland, which has developed on former grassland, whilst others have been converted to conifer plantation; such areas are generally species-poor.

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Substantial areas are, however, believed to consist of ancient woodland, parts of which are likely to be secondary, although some is probably relict primary woodland. Many of these ancient, semi-natural woodlands are of great ecological importance although not all are protected with SSSI status.

These Sussex Hangers support about 50 species of mollusc including a suite of rare or local ones, some of which are considered in more detail below. Associated with these species is a wide variety of native trees including, in some of the western hangers, the rare large-leaved lime *Tilia platyphyllos* and notable herbaceous plants a such as Solomon's seal, *Polygonatum multiflorum*, and herb Paris, *Paris quadrifolia*.

1. The Cheese Snail, *Helicodonta obvoluta* (see illustration on next page)

The Sussex hangers support a substantial proportion of the British population of the, the cheese snail (a UK Red Data Book, category 3, rare). This snail is named due to its flattened disc-shaped appearance that bears a superficial resemblance to a cheddar cheese! The shell is



covered in stiff white hairs, which are easily rubbed off and may be absent in older snails. It is usually found under fallen logs, although it may emerge to crawl on stumps in wet weather. In Britain *H. obvoluta* is restricted to the South Downs in a narrow band that stretches from near the river Arun to a few woodlands close to Winchester. In this range it is largely confined to old woodlands, which appear to have ancient origins and in West Sussex the snail is almost entirely confined to hanger woodlands. There is strong evidence that *H. obvoluta* is only present in the oldest blocks of woodland, avoiding rather younger woods close by. Thus

on the Duncton to Bignor Escarpment SSSI *H. obvoluta* has not been found in Left Hanger, but is present in Bignortail Wood and Lamb Hanger that lie to the south and north of it respectively. It would seem that Left Hanger is a more recent plantation than the two woodlands abutting upon it and *H. obvoluta* has failed to colonise this younger woodland. Recent survey work, undertaken by Frances Abraham and Martin Willing for English Nature, has discovered many new populations of the snail between the Hampshire border and the river Arun. The snail appears to have become extinct to the east of the river Arun, last being reported in woodlands at Springhead, near to Amberley over thirty years ago. Thus the **first challenge** is to rediscover the snail in hanger woodlands east of the river Arun.

2. The Lapidary Snail, Helicigona lapicida

In western parts of southern Britain this is a species of limestone rocks, quarries and walls, but in Sussex it is more typical of deciduous woodlands on well-drained calcareous soil. This is a declining species and it has become extinct at many former sites particularly in eastern and south-eastern England.

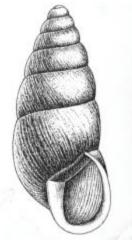
The lapidary snail is a very local species in Sussex where it appears to be confined to small pockets of old or ancient woodland on the scarp slopes. It is quite a large snail with a distinctive sharply keeled shell. In dry weather it hides in crevices in stumps and old tree trunks, making it very difficult to locate, whereas after rainfall it may be easily located climbing on tree trunks.

3. The Point Snail, Acicula fusca

The point snail has a tiny pointed shell with a maximum length of about 2.5mm and a noticeable chestnut-red colour. It is exceedingly difficult to find in the field without the use of a nest of sieves and a magnifying glass to scan sievings. In the Sussex hangers this snail is largely confined to old undisturbed woodland where it lives in deep moss in the dampest hollows, usually at the bottom of the scarp. It is a species intolerant of human disturbance.

4. The Mountain Bulin Snail Ena montana

This snail is listed in the UK Red Data Book as a Category 3 (Rare) species. The mountain bulin snail is distributed in a broad band across central southern England with scattered populations in Suffolk and most populations in the Cotswolds and Mendips. It is typically found in old beech and ash woods on calcareous soils. During the recent English Nature 'Abraham/Willing' survey of hanger woodlands *E. montana* was discovered living in woodlands close to the Hampshire border. The snail was present in





very low numbers with only three specimens located in two hours of field searching. This species has not been recorded in Sussex for many years; A. E. Ellis last mentioned the snail's presence in the county (at Harting Coombe and Slindon) in 1926, (British Snail, OUP). The **second challenge** is to find further populations of the snail associated with the Sussex hanger woodlands. Beware! *Ena montana* (above left) d distinctive shell, but it is possible to confuse it with the smaller (and much commoner!) lesser bulin *Ena obscura* (above right)

5. The Ash-black Slug *Limax cinereoniger*

This, our largest native slug (maximum extended length 200mm), is a local species found throughout Britain in old and partially replanted woodlands. Kerney (1999) notes that the species is a good indicator of ancient woodland, even if it has been substantially modified by forestry practices. This slug has been found, usually beneath partially rotted fallen timber, in many of the Sussex hangers. It is always scarce and during a recent five day hanger woodland survey, only one of these slugs was found. *L. cinereoniger* is readily distinguished from the very much commoner large black slug *Arion ater* as the former species has a noticeably central keel on its tail and the surface of its foot has distinctive black margins either side of a pale central band.

Please: If you plan to visit any hanger woodlands to look for molluscs then:

- 1. ensure that you have access permission;
- 2. try to minimise habitat disturbance (e.g. return turned logs to their original positions);
- only remove dead shells. If you make a possibly important discovery sketch or photograph your find it and report to the county recorder giving at minimum a 6 figure grid reference.

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Further information:

- 1. An excellent reference book is:
 - **Kerney, M.P.** (1999) Atlas of the Land and Freshwater Molluscs of Britain and Ireland. Harley Books, Colchester
- 2. For extra information, help or to report records please contact Martin Willing at molluscs@willing.fsbusiness.co.uk
- 3. If you would like to learn more about molluscs then please visit the Conchological Society's web site: www.conchsoc.org

REFERENCES

Adam, W. (1960) *Mollusques Terrestres et Dulcicoles*. Faune de Belgique. Institut Royal des Sciences Naturelles de Belgique, Brussels.

Kerney, M. P. & Cameron, R. A. D. (1979) A Field Guide to the Land Snails of Britain & North-west Europe. Collins, London.

BIODIVERSITY SURVEYS FOR THE NATIONAL TRUST. 2001-2

by Kate Ryland, Dolphin Ecological Surveys

In 2001 I was lucky enough to be asked to carry out a "biodiversity audit" for the National Trust in East Sussex and Kent. The audit covered more than 50 NT properties including historic houses, gardens, farms and semi-natural habitats and was designed to investigate and summarise what is known about the habitats and species of the properties and to highlight any gaps in the biological data. Henri Brocklebank and her team at the SxBRC were, of course, a vital source of information for the audit.

Following on from the 2001 audit, NT funded a pilot biodiversity survey project in 2002 in an attempt to fill some of the most important information gaps.

The 2002 pilot project was a team effort with contributions from specialist surveyors and further input from the Record Centre, overseen by Dolphin Ecological Surveys. During the year we undertook both species and habitat surveys on selected properties across East Sussex and Kent. Time and money were inevitably limited so we had to restrict our studies to just a few of the many sites for which more biological data is needed. The hope is that in future years NT will continue to run a programme of biodiversity surveys to cover all their properties.

We decided to focus our surveys on certain protected species that are reasonably straightforward to look for and for which we believed the NT could be a key landowner.

Surveying bats at NT properties was an easy choice – there were quite a few previous records of various bats at NT properties and the number of old buildings in NT ownership, combined with some extensive areas of ancient woodland, open water and farmland, suggested that they should have plenty of bat species on their properties. Twenty two properties in the two counties were surveyed by Sheila Wright and her team from the Sussex Bat Group.

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Great crested newt was our second protected species on the list and Barry Kemp undertook the search for them at 9 properties that have suitable ponds.

The preliminary audit also turned up some old records of water vole on NT properties, so a search for this fast declining mammal was another priority. I visited 10 sites to survey for water voles, based on previous records and the presence of likely habitat.

One of the most obvious "gaps" that needed to be filled for many NT countryside properties was the lack of written conservation management plans to guide their long term management. Four properties were chosen to have plans written for them and this, of course, involved site assessments as well as consultation with the wardens responsible for their management.

The NT owns sizeable amounts of farmland, most of which is managed by tenant farmers, and although some of the farms are in agri-environment schemes such as Countryside Stewardship and ESA, there is huge scope for them to enhance the wildlife on their farms. FWAG officers Paul Ling and Alex Harper took on the task of preparing whole farm conservation plans for four NT farms. These plans identify the best habitats on the farms, highlight where there is existing good practice and make suggestions for enhancements to farming practices.

Formal gardens are a distinctive feature of many NT properties but to date there has been little work done on the wildlife found in them. Some gardens are home to rare and protected species, including great crested newts, dormice, mason bees and various lower plants and all of them have the potential to support a variety of wild plants and animals. The gardens can also be an important part of the foraging habitat for the bats that live in the buildings. In order to highlight the potential importance of NT gardens for wildlife, and encourage the gardeners to adopt wildlife friendly techniques wherever possible, I undertook garden wildlife surveys at four NT gardens. A large part of the garden wildlife survey was testing out a new methodology that will produce short, concise reports with annotated maps to help NT gardeners identify important habitats and features in their gardens and illustrate where improvements can be made.

A very important part of the pilot project was to develop a strong link between the NT and SxBRC so that data coming from the various surveys could be fed into the Record Centre and then be available to NT staff. Establishing a mechanism whereby NT staff can retrieve data about individual properties quickly and easily will help NT to make well-informed management decisions in the future. Hopefully when the Kent Record Centre is operational this arrangement will be extended there too.

All this survey work has of course yielded a considerable amount of data – too much to list here, but some Sussex highlights include the great crested newts breeding in ponds in the farmland around Batemans, five (possibly six) species of bats at Sheffield Park Gardens (including a brown long-eared maternity roost), unimproved grassland with over 100 plant species recorded at Sheffield Park and, perhaps most excitingly, a strong colony of water voles at one of the NT farms near Winchelsea.

There were some disappointments too, notably the fewer than expected number of bat roosts in buildings and also the apparent lack of great crested newts on sites where they really should be present! It may be that this has been a generally poor year for them and further surveys in future years are definitely needed.

Above all the 2002 pilot survey was really good fun – it was a privilege to spend a good proportion of the field season in some fantastic and famous settings such as Sheffield Park

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Gardens, Chartwell and Sissinghurst. I also visited some of the less well known but still delightful properties such as Monks House in Rodmell, Smallhythe Place near Tenterden, St Johns Jerusalem near Dartford and Stoneacre near Maidstone.

It was also great to meet so many helpful and enthusiastic NT staff on whom the success of the biodiversity project will depend in the long term. Involving all the NT staff, from gardeners to wardens to property managers, in nature conservation issues was an important part of the project.

In Sussex the NT has a significant landholding that covers a variety of habitats across different parts of the county – from grazing marsh at Winchelsea to chalk downland at Crowlink and Frog Firle Farm, to a typical mixed farm of the High Weald at Batemans. They have a unique opportunity to make an important contribution to biodiversity in Sussex through direct land management and educating visitors to their properties.

Setting an example of how to integrate the management of built properties, gardens and the surrounding countryside to benefit wildlife whilst still maintaining viable farms, beautiful formal gardens and historic buildings is a huge challenge for the NT, not just in Sussex but across the country. Let's hope that in a small way the 2002 biodiversity pilot survey has helped them in this process.



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SUSSEX COUNTY RECORDERS 2002/2003

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

Woods Mill, Henfield, West Sussex BN5 9SD

sxbrc@sussexwt.org.uk Tel: 01273 497553/554

FLORA

Higher Plants

MARY BRIGGS

(Sussex Botanical Recording Society West Sussex)

9 Arun Prospect, Pulborough RH20 1AL Tel: 01798 873234

PAUL HARMES

(Sussex Botanical Recording Society East Sussex) 10 Hillcroft, Mile Oak Road, Portslade BN4 2QD Paulharmes@netscape.net Tel. 01273 880258

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 pjrthe1st@yahoo.com

VERTEBRATES

Amphibians & Reptiles

GLYNAN BARHAM (Sussex Amphibian & Reptile Group) 7 High Trees, Hunston, Chichester, W. 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

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JOHN GOWERS

10, West point, Newick, East Sussex. BN8 4NU conservation@susos.org.uk j-bgowers@supanet.com Tel. 01825 723296

ALAN PERRY

West Sussex County 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) www.seawatchfoundation.org.uk 51 Eastbrook Road, Portslade, East Sussex BN41 1LN ALLSAVS@aol.com 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 pier - 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

Area covered: Hampshire border - Surrey border - Rudgwick - Billingshurst -Pulborough - Littlehampton. Recorder: Jaine Wild, 1 Sutton Close, Felpham, Bognor Regis PO22 8EY Tel. 01243 82580

MID SUSSEX BADGER PROTECTION GROUP

Area covered: Littlehampton - Storrington - Henfield - Ditchling Beacon - Kemptown. Rudgwick - Pulborough - Ditchling Beacon - Golden Cross - Cowbeech - Heathfield - Bewl Bridge - Kent border - Surrey border - Rudgwick. 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).
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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

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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 0NA Tel: 01424 465705 encore01@genie.co.uk

Orthoptera & related orders

OHN 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

Ants, Bees & Wasps

MIKE EDWARDS Lea-side, Carron Lane, Midhurst, West Sussex GU29 9LB Tel. 01730 813785

Diptera (two-winged flies)

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

Hoverflies

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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

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JOHN COOPER
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Marine Records- (see also Cetaceans)

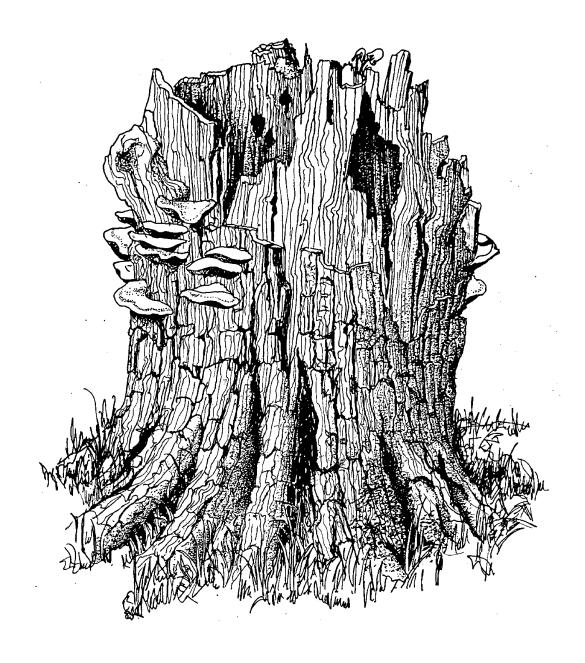
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SOME VACANT GROUPS

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

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. sxbrc@sussexwt.org.uk



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