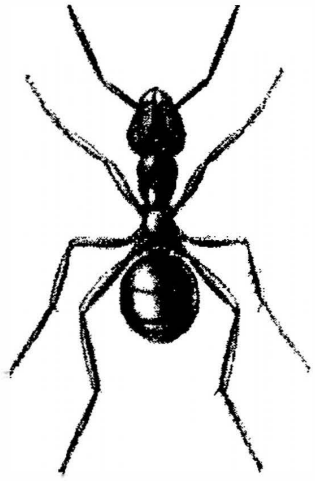
Introduction

Dr Barrie Watson of the Sussex Ornithological Society and Sussex Wildlife Trust Council and Dr Tony Whitbread, Head of Conservation at the Sussex Wildlife Trust.

At the beginning of the meeting, Dr Tony Whitbread welcomed everybody to Adastra Hall.

Attendees were invited to spend time during the breaks to look over the many interesting displays around the hall.



What data do we hold and how has it grown in the last year?

There are four main data sets:
1) The Environmental Survey Directory (ESD)
2) Species Data, held on the Recorder software
3) The Sussex Rare Species inventory, within the Recorder data set
4) Geographical Information System information

1) The Environmental Survey Directory (ESD)

ESD is a meta data-base. It holds information of information. If you are interested in a specific area in Sussex ESD is designed to show you who has surveyed that area before, when, what they were looking at (birds, lower plants, invertebrates) and where that information is held.

The number of surveys and sites we hold information on has grown in the last 12 months and is expected to continue to grow.

Data sets added:

The last year has seen a steady flow of surveys and reports coming into the Record Centre from a wide range of sources. These include not just one off surveys of sites, of which there are many, but also significant data sets like:

- 4,300 Sussex Ornithological Society (SOS) Rare breeding bird sites referring the enquirer back to SOS for species details.
- 80 detailed botanical surveys from a local botanist.

Main data sets waiting to be added:

- **Sea search information**
- Dr. Francis Rose's **Gill Woodland Survey sites** (around 1200 sites in Sussex)

2) Species information

This is held on RECORDER software that I am sure many of you are familiar with. This data has also grown dramatically in the past year.

Data sets added:

Some data sets are ongoing like Wildlife Trust reserve data, particularly Old Lodge, Ebernoe Common and Levin Down. However other significant data sets have been entered in the past year including:

- 7000 records from Hastings Borough Council
- 16 000 records from the Sussex Diptera Recorder
- 9000 Arun Valley records

Some of the data sets waiting to be added:

- 11 000 Lichen Records
- 12 000 Fungus Records
- Over 75 000 botanical Records from Dr. Francis Rose and mammal records from the Mammal Recording Society
- East and West Sussex SNCI information
- East and West Sussex notable verge data

We hope that before the next seminar we will be closer to the **Million Records** mark covering all taxonomical groups in all habitats and areas...but definitely past the half million milestone!!

Lichens in Sussex

Simon Davey (Lichen Recorder)

Biobase

Recently, the British Lichen Society has embarked on using a new software package for recording lichens. This is Biobase, and is compatible with the Recorder software.

Data on Biobase

So far, lichens from 222 sites have been entered onto Biobase, involving some 7000 species records. Of great importance are records from Francis Rose's lichen cards. Data from these cards have been added for woodland, downland and heathland. This leaves churchyards and sandrocks to be added.

Why Lichens are important

Lichens are a very important group of plants in that they are such **excellent indicators of habitat importance and health**.

It is well known that lichens have been used in the past to assess sulphur dioxide pollution from industry. The fact that many lichens intolerant of industrial pollution are flourishing at the beginning of the 21st Century is testimony to the sad state of Britain's industrial base! Unfortunately, another pollution problem has taken the place of that from industry. This new problem results from the over use of inorganic fertilisers used in agriculture. Many lichens are intolerant of high levels of these chemicals. Substrates such as oak bark, which has a relatively low pH, are enriched and the flora is subsequently altered.

Assessing ecological value using Lichens

Many lichens such as those which are intolerant of industrial pollution are extremely rapid colonisers if conditions for their survival are right. Other lichens, which are so useful in evaluating the ecological importance of sites, are extremely slow.

The ecological value of a wood can be assessed by using a suite of lichens. The British Lichen Society has developed two indices for this purpose:

1) The **New Index of Ecological Continuity** (NIEC)
2) The **Revised Index of Ecological Continuity** (RIEC). This is generally used to assess the conservation importance of a site and requires less lichen expertise to use.

The reason for the correlation between the presence of certain lichens and ecological continuity is thought to be that molluscs carry lichen propagules, such as spores and other asexual means. Although lichens relying on molluscs for colonisation may spread over a short distance, this will never ever happen where ploughed field, housing estates, roads etc separate recent woodland from ancient. No slug will take the trouble to cross a motorway simply to spread an ancient woodland lichen species!

Plantlife's *Back from the Brink* Project

Ruth Davies

1. Plantlife - The Wild Plant Conservation Charity

What do Plantlife do?

Main areas of work:

- Campaigning and public awareness raising
  Campaigns - e.g. Wildlife legislation
- Reserves acquisition and management e.g. Deepdale
- Community involvement
  e.g. Flora Guardians - looking for ground pine on the North Downs.
- Species recovery projects e.g. conservation of *Gentianella.*
- International liaison - Planta Europa proceedings from Hyeres.

2. Back from the Brink

Plantlife are lead partner under the Government's Biodiversity Initiative for 76 species of plants and fungi. The seventy-sixth plant has only just been added to the list, *Weissia rostellata,* the beaked beard-less moss.

- 24 vascular plants (flowering plants, ferns, clubmosses)
- 15 bryophytes (mosses and liverworts)
- 11 lichens
- 6 stoneworts
- 20 fungi

The Back from the Brink projects involve

- Survey - *Cephalanthera longifola*
- Research partnerships - *Gentianella anglica* at Beachy Head
- Lobbying - Shore dock
- Management work - *Filago lutescens* at Coates Common
- Advisory work - management leaflet for gentians
- Monitoring

3. How do we use plant records in our conservation programmes?

- Assessing conservation status
  Criteria for selection of Biodiversity Action Plan Species:
  - International threat e.g. species of global conservation concern (Shore dock *Rumex rupestris*)
  - International importance e.g. endemic (Early Gentian *Gentianella anglica*)
  - Decline e.g. 50-100% decline in number/range in UK in last 25 years (Deptford pink *Dianthus armeria*)
  - Localisation e.g. currently occurs in 1-5 10km squares in UK (Atlantic lejeunea *Leujeuna mandonii*)

- Prioritising areas - *Pillularia globulifera*
- Re-locating old sites *Ranunculus tripartitus,* where, when and who?
- Directing restoration efforts - Starfruit
- Understanding management history and thus ecology
- Monitoring impacts of our actions - population data

Sussex Mammal Recording Group

Simon Curson and Neil Mitchell

What does the Sussex Mammal Recording Group (SMRG) do?

The Sussex Mammal Recording Group works **to promote the recording and study of wild mammals in Sussex** because almost no-one else does - Bat and Badger Groups being notable exceptions.
We are not, as yet, a club that exists to recruit members. We do not organise newsletters, field trips and social events. We do not particularly want to raise funds. **What we want to do is generate mammal records**. In order to do this we have;

- Produced an easy to use recording form,
- Held mammal identification workshops and
- Begun the task of building up a network of recorders.

We recognise that it is just a beginning. Later we hope to;

- Produce an atlas of mammal distribution in Sussex,
- Co-ordinate major surveys
- Produce material on survey techniques.

How will this help?

Mammal Records account for 0.5 % of all the biological records held in the UK (Co-ordinating Commission for Biological Recording). On a practical level this means that estimates for the numbers of rabbits in the UK can vary by as much as 50%. For protected species under-recording is also a problem.
This means that decisions about and affecting mammal conservation (such things as development, countryside management and species' reintroduction) are being made without access to the full information.
Of course globally this under-recording is not a new phenomenon but our impoverished fauna can compare unfavourably with some of the more charismatic mammal species around the world. In addition some British mammals are alien and can be pests. Others are difficult to record and identify because of their lifestyles.

How do you record mammals?

Our aim is to convince everyone that mammal recording is worthwhile and can be as easy as tracking elephants. You don't have to actually see the mammal running around to record its presence. Mammal signs are everywhere. For example consider the following:

- **Droppings**
- **Road casualties**
- **Trackways** - these can lead to other signs such as hairs caught in barbed wire or footprints.
- **Footprints** - in mud or snow
- **Hairs** - caught on barbed wire
- **Nuts** - these are opened in characteristic ways by different species.
- **Other feeding remains**
- **Remains** - trapped in milk bottles.
- **Owl pellets**
- **Calls and other sounds**

If you want to get involved in mammal recording at any level contact us on 01273 551216 or at smrg@groupmail.com

Why involve the community?

1) Because people are interested in their own local community.

2) It gives people a sense of ownership and engenders a feeling that their records are important and have value (this can also help inform over planning issues).

3) It gives people confidence in their identification skills and generates and encourages further interest.

4) It overcomes the idea that you have to be a specialist or expert to take part in surveys or that your observations have no value.

Use of old data

It's not just the very latest data that gets used; those dusty files in the basement have their uses too, (which are now almost all entered onto computer).
For example:

1) Records dating back to 1978 for **Filsham Reedbed**, near Hastings, led to an ecological assessment of the area. This has in turn led to an ambitious programme to restore this fabulous site, and then perhaps we'll see (for instance) some of the rare birds that visit stay behind in the spring to breed.

2) Records dating back to the 19th century for **Henfield Common** show what an extraordinary assemblage of plants used to grow there, indicating both what may be possible now with the right management, and also that the site was almost certainly a little more acidic than it is now.

Now that we have Action Plan, we can look back and see what priority species used to occur in certain areas, such as pillwort at Ebernoe Common, and given the right management there is no reason why they shouldn't occur there again.

Dangers threatening our Wildlife

It used to be the case that a veil of secrecy would surround the existence of a rare species, fear of unscrupulous collectors and other shady characters prompting such nervousness. But the truth is that factors such as **development**, **pollution** and **farming practices** are now the biggest dangers that threaten our wildlife. Provided that records are lodged with the local Biodiversity Record Centre, their sensitivity is assured whilst being available for those that need to know, in order to stop that development, or change in management.

There is likely to be a huge by-pass slicing through the valley in which Filsham Reedbed sits. Only with records as proof of the wildlife value of the site can we campaign for minimal damage from this, and maybe even insist upon improvements as part of an amelioration package.

Whichever way you look at it, more records really does lead to more wildlife.

Local Authorities and Management

Hastings Borough Council manages:

3 SSSIs
3 LNRs
31 SNCIs
1 Country Park
18 Roadside verges
Ad hoc areas and Public Parks

Site Assessments using Biological Information

Example 1 - Holmhurst St Mary

- Proposed mixed housing, recreation and industrial development directly impacting an SNCI.
- Site allocation in Borough Plan.
- Planning brief for consultants set by planners.
  Consultants are required to prepare a full planning and development brief for the area, to a standard for public consultation.
  Stage 1 - An assessment of the area, including landscape topography opportunities for nature and building conservation etc.
  An appraisal of the area including defining broad developable areas.
  Stage 2 - preparation of a written planning and development brief and proposal map for the area, including nature conservation.
- Information provided to consultants;
  Site description of SNCI
  Biological records for SNCI
  Notes of protected species not currently on Recorder.

Example 2 - South Saxons SNCI

- Proposed siting of Asda supermarket adjacent to SNCI
- Site not allocated for development in Local Plan
- Consultants for supermarket requested site details and species list for SNCI
- Produced their report with constraints listing new, unrecorded species
- Recorder updated when the application was received as new list was in public domain
- Application refused as the study confirmed the importance of the reedbds and willow carr of the SNCI.
  "The loss of this area would constitute a significant ecological impact because it supports wetland species which have little alternative habitat available in the Borough."

Example 3 - Ecological assessment of the Combe Haven SSSI

- Key interested parties;
  EN as statutory agency.
  SWT as managers of Filsham Reedbed LNR
  HBC as major landowners.
- Would be first major assessment of the area since notification in 1985
- Provide a framework for future integrated management
- Highlight the biological importance of the SSSI and surrounding areas

Planning Application and Protected Species

- Species protected by law are a material planning consideration
- Where a development affects a protected species, the planning authority should draw the applicants attention to this fact and the need to obtain licences etc.
- Planning controls are additional to species protection legislation

Future for Biological Records and Centre in Hastings

Partnership of sharing, collating and using

Inform the Local BAP process

Allows us to see what areas/species we have information on...and those we do not

Allows community access and participation in collecting records

Provides the basis for informed decision making

Schools/students/community projects

Local management groups

Community input into the decision making process

Tourist/visitor/community literature

Stand alone PC with limited interactive capabilities

Helps get people interested, understanding and participating in protecting greenspace/habitats and species

Heathlands - indicator species

- **Habitat** - monitoring has been used to show extent of heathland change over time

Table showing how heathland cover has changed over time

Year	Source of Data	Area in ha
1813	Dr Francis Rose -interpretation of 1813 OS map	7505 (ex St Leonards area)
1971	WSCC air photo interpretation	870
1981	WSCC air photo interpretation	670
1991	WSCC air photo interpretation	644
1994	EN/RSPB Heathland Inventory	343.5 (cautious estimate 494 ha)
2000	EN/WSCC Heathland Inventory	1050.5

- **Species** - Woodlark monitoring

Woodlark territories in Sussex - RSPB/SOS

Year	Territories
1986	1+ (UK c250)
1994	11+
1995	28-30
1996	60-62
1997	70 (UK 1552)

- **Site** - Iping and Stedham Common – Silver Studded Blue Butterfly as an example

Graph showing how the population count of the Silver Studded Blue has changed over time