

THE SUSSEX RECORDER

**Proceedings from the
Biological Recorders' Seminar
held at
the Adastra Hall, Hassocks
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Introduction

Tony Whitbread - (Sussex Wildlife Trust)

It is a great pleasure to welcome everyone to our annual Biological Recorders Seminar and, once again, I am delighted to see so many people here. In particular I would like to thank all those who have brought along displays.

This seminar, as with previous seminars, aims to make the link between the good work that is being done on the ground by naturalists and some of the key issues that are affecting us in conservation. One such is the concept of Biodiversity Action Planning.

For several years we have tried to bridge the gap between ecological information and conservation action and I would suggest that we have actually been quite successful. Ecological information is increasingly being used in planning decisions, there is a well-administered system of Sites of Nature Conservation Importance which are given real consideration in Structure and Local Plans, and systems are generally improving for putting conservation managers in touch with the information they need to make good decisions.

Biodiversity Action Planning is the next step. It makes the jump from ensuring that wildlife is considered in other peoples' work, to actually setting out our own agenda for environmental enhancement. The principle is to identify environmental elements - the species and habitats that we all know - and then present targets for the conservation, enhancement, restoration and expansion of these elements. A principle behind this might be that some of us feel that our local environment has gone beyond the limits of acceptable change. We are beyond the time when fire-fighting is enough - we no longer wish to simply preside over the decline over the few surviving remnants of our restricted wildlife. The objective of Biodiversity Action Planning, I would suggest, is to turn the graph upwards - to put back into the environment, to encourage its enhancement, rather than just to try to reduce damage.

It is therefore an optimistic agenda, stressing that improvement is possible. For Sussex it was perhaps first articulated in this way in the Sussex Wildlife Trust's *Vision for the Wildlife of Sussex* (available from Woods Mill - £7.00 for non-members, £5.00 for members, plus 50p postage). However, this approach is now spreading much wider than the Trust, or even than nature conservation organisations.

In the last few years several organisations have been working on Biodiversity Action Plans. Nationally we now have plans for many of our habitats. These national plans now need to be translated into local terms. There is also a list of nationally recognised rare or threatened species which need to be considered in action planning. Some organisations are very advanced in the process. For example Plant Life have written several national plans for individual flowering plants and Butterfly Conservation have developed plans at National, Regional and Local level. It is also important that much of this work is moving out from the preservation of special sites. With action plans for some species, especially the broad-ranging species, we have to

look at what is happening to the wider countryside, look at evolving landscapes and put in place the processes by which wildlife can thrive over an area rather than just in a special site.

Many of you will already have spotted that this approach leaves many questions open, and to be honest we may often have to progress with the best approximation of the truth. However, we have gone beyond the time when lack of knowledge can be an excuse for inaction. Nevertheless a few questions to get us thinking might include:

- How abundant are our key species and habitats?
- What is their quality?
- What targets for enhancement/expansion can we come up with and what is the justification for them?
- How do we avoid a reductionist approach - where we spend all our time producing lots of plans whilst losing sight of the bigger picture?
- How do we balance possibilities for expansion against the fact that much of what we value is irreplaceable and so has no possibilities for expansion?
- How do we measure progress towards targets?
- How do we set up systems so that ecological information can be fed into action planning?

And so on..

Perhaps the most important point about Biodiversity Action Planning is that the action is not limited to conservation organisations and naturalists - very far from it. There are now very many people and organisations who are very sympathetic towards the conservation of biological diversity but they know little about it and are looking to people like us to provide the positive agenda. So we have an opportunity to feed into this process. Targets alone will not be sufficient. An essential part of the process is to promote action towards these targets. In most cases this action, and the mechanisms to achieve change, will be in the hands of other people or organisations.

The Sussex Biodiversity Partnership: A Local Biodiversity Action Plan for Sussex

Claire Burwood - (English Nature)

Where did *biodiversity* come from?

The international stage for biodiversity action was set by the United Nations Conference on the Environment and Development (UNCED) - at the Earth Summit, Rio 1992. Over 150 countries signed the convention on Biological Diversity. On a national scale, the British Government has since published *Biodiversity: The UK Action Plan* 1994, and in response *Biodiversity: The UK Steering Group Report*.

Both reports emphasise the importance of delivering biodiversity targets at a local level. A local Biodiversity Action Plan is a mechanism to ensure that national targets for habitats and species are delivered in a consistent manner. It is essential to develop effective partnerships to ensure this delivery in the long term. In turn the "ownership" of local BAPs is crucial to their overall success. In essence "the purpose of Local Biodiversity Action Plans is to focus resources to conserve and enhance biodiversity by means of local partnership, taking account of both national and local priorities" (Biodiversity: UK Steering Group Report).

Local BAPs will be key documents in guiding the work of everyone involved in nature conservation to ensure that national concerns are met but at the same time reflecting local priorities and concerns. Biodiversity action planning is an opportunity to create a common agenda; to undertake joint action; to set agreed targets; and to establish more efficient resource use - all to enhance wildlife.

Acting Locally: a Biodiversity Action Plan for Sussex

Acting locally depends on the development of a strong working partnership between the voluntary sector, local authorities, statutory agencies and departments, as well as landowners and managers. In Sussex, a Biodiversity Partnership was established in 1996. The Partnership has since formalised existing working relationships and set a common agenda.

Aims of the Partnership:

- To encourage participation, particularly from landowners, businesses, community groups and local authorities, but to make sure that all interested groups can get involved.
- To promote BAPs for Sussex priority habitats and species and to encourage conservation action.
- To ensure that biodiversity is central to the thinking of decision makers from Parish Councils to Westminster.
- To act as a focus for the biological recording activities necessary to monitor changes in biodiversity
- To promote understanding of the links between people and their environment.
- To promote action towards a common agenda.

Current partnership members include English Nature (Chair), Environment Agency, West Sussex County Council, East Sussex County Council, Farming and Wildlife Advisory Group, The Sussex Wildlife Trust and the Royal Society for the Protection of Birds. Affiliated with the Partnership are the Country Landowners Association, Brighton and Hove Unitary Authority, NFU representatives and Sussex Enterprise.

The Sussex Biodiversity Action Plan aims to set out the action plans for the key habitats and species within the counties. Sussex key habitats have been identified, based upon both national and local priorities, through a consultative process. A programme for Habitat Action Plan production has subsequently been published. The programme sets out the priorities, the local lead organisation/ individual who will take forward the production of individual Habitat Action Plans, the consultation group who will comment/ contribute to its formation and the time scale for production.

An “approach” for species

The Partnership hopes to establish a similar programme during 1998 for taking species forward. However, it needs to establish a clear basis for prioritising species first, as it is clearly impossible to prepare biodiversity action plans for the 1,200 species listed on the UK Steering Group's report *Long list of Globally threatened/ declining species*. So what criteria are needed to establish which species should be the subject of individual biodiversity action plans?

Why do certain species warrant their own plans?

Establishing a set of criteria - factors which need to be considered

- Identify those species which can be treated as a component of a habitat action plan
- Choose species which have general requirements for a particular habitat and so act as a flagship for a habitat BAP
- Identify those species which have specific habitat requirements, hence management requirements
- Choose a range of species with different detail requirements within the same micro-habitat
- Select a range of indicator species
- Select species on basis of their high public appeal - i.e. PR and community involvement
- Choose awkward species which cover a diversity of habitats
- Choose species which draw in environmental issues
- Choose species which have an international element
- Choose species which have local character/ distinctiveness
- Produce plans for assemblages of species

Bat Recording and BAPs - The National Situation

A.M. Hutson (The Bat Conservation Trust)

Introduction

The UK bat fauna consists of 16 resident species, about a third of our native mammal fauna. There is also one species recently extinct in the UK, four recorded vagrants from Europe, and one from North Africa.

Action planning is nothing new, but might be regarded as a current growth industry. The process is evolving and improving (and one hopes will continue to do so) and it is a development that should be taken seriously as a major opportunity to be used both for the planning process and for the product. Biodiversity Action Plans (BAPs) are being developed "To conserve and enhance biological diversity within the UK and to contribute to the conservation of global diversity through all appropriate mechanisms" (*UK Action Plan, 1994*). The plans aim 1) to develop strategies for the conservation of threatened fauna, flora and habitats (and to maintain non-threatened species and habitats at a favourable conservation status) and 2) to meet interests and concerns, obligations and commitments. At the local level "The purpose of Local Biodiversity Action Plans is to focus resources to conserve and enhance biodiversity by means of local partnerships, taking account of both national and local priorities" (*UK Steering Group Report 1995*). This can be achieved by negotiation between interested parties and those whose activities can affect the conservation status of species and habitats.

Such action plans are of value to 1) those concerned for wildlife conservation, e.g. conservationists, public, industry, 2) those whose activities affect the status of wildlife e.g. local authorities, agencies, industry. This is a very important opportunity and we should ask as much as we dare ("realistic, but ambitious"). Most plans will have an initial 10-15 - year remit, to be reviewed along the way and revised accordingly. Plans are prepared at international, national, regional and local levels (including parish). Local plans are essentially a 'bottom-up' process for implementing the national plan.

Obligations similarly arise at international, national, regional and local levels. For bats, international obligations exist under the Convention on Biological Diversity (Rio, 1992) (with its Convention on Climate Change, Agenda 21, Statements of Principles re sustainable management of forests and sustainable development), the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979) plus certain of its subsequently agreed Recommendations, the Convention on Conservation of Migratory Species of Wild Animals (Bonn, 1980), including its Agreement on the Conservation of Bats in Europe (London, 1994), the Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC, 1992) and the Pan-European Biological and Landscape Diversity Strategy (Council of Europe, 1995) Nationally, all bats are protected under the Wildlife & Countryside Act, 1981 and the Conservation (Natural Habitats, etc) Regulations, 1994. At a local level their conservation is to be considered under Planning Policy Guidance: Nature

Conservation (PPG, 1994) and implicitly in Local Agenda 21 initiatives of planning for sustainable development - for the harmonising of environmental, economic and social concerns.

According to *Guidance for Local Biodiversity Action Plans, Guidance Note 1, An Introduction* Local Biodiversity Action Plans are intended:

1. To ensure that national targets for species and habitats, as specified in the UK Action Plan, are translated into effective action at the local level
2. To identify targets for species and habitats appropriate to the local area, and reflecting the values of people locally
3. To develop effective local partnerships to ensure that programmes for biodiversity conservation are maintained in the long-term
4. To raise awareness of the need for biodiversity conservation in the local context
5. To ensure that opportunities for conservation and enhancement of the whole biodiversity resource are fully considered
6. To provide a basis for monitoring progress in biodiversity conservation, at both local and national level

The Action Plan process consists of

1. The *audit*: what have we got, what is important (nationally, locally), what are the issues (conservation problems)
2. The *evaluation and setting of priorities*
3. The action plan *compilation*: to include quantifiable targets and timetables - "appropriate...not solely on the basis of current resource availability"
4. The *Partnership*: of the doers, advisers, managers and funders of the implementation, including its Vision Statement
5. The *launch*
6. The *implementation, monitoring and revision* - the next plan
7. The *database*

Guidance on prioritising the choice of species has been published. For bats this will partially depend upon

1. *Status of species*: including whether it is on the government's 'short list' (published 1994), 'middle list' (to be published by the end of 1998), 'long list' or another species that might meet given criteria. At the local level species of local concern but outside national priorities may be selected, but this should only be done with good reason.
2. *Practicality*: how much can be achieved and by whom.
3. *Impact*: on conservation of target species and its contribution to national/local biodiversity conservation, on conservation of related species, on conservation in general (and relationships to other species or habitats), on local opportunity and community participation, and on relationship to the National Plan, to plans of statutory bodies (e.g. EA, FC), to local authority Structure Plans, Nature Conservation Strategies, to other local plans, e.g. water catchment plans (LEAPs).

Species Action Plans (SAPs) have more or less agreed format of

1. *Current status*: basic biological statement of relevant ecology, status protected status, reference to national status. Might include basic management requirements
2. *Current factors causing loss or decline*

3. *Current action*
4. *Action plan objectives and targets*: to reflect national objectives and targets
5. *Proposed action with lead agencies*: to include
 - Policy (and legislation if appropriate)*
 - Site safeguard and management*
 - Species management and protection*
 - Advisory*
 - Future research and monitoring*
 - Communications and publicity*
6. The plan may also list the *Responsible bodies, References, essential definitions*

Bat Species Action Plans

National bat SAPs are published for greater mouse-eared bat (*Myotis myotis*), greater horseshoe bat (*Rhinolophus ferrumequinum*) and for pipistrelle bat (*Pipistrellus pipistrellus*). This may seem a curious list since the first is extinct in the UK since 1990 (last seen in West Sussex), the horseshoe bat is a threatened species comprising of about 14 local 'populations' totalling about 4000-5000 individuals in south-west England and south Wales, and the last is our most common bat species (although now considered as comprising two distinct species). A second tranche of species to be published later this year will include lesser horseshoe bat (*Rhinolophus hipposideros*), Bechstein's bat (*Myotis bechsteinii*) and barbastelle bat (*Barbastella barbastellus*). These latter are all rare species, internationally recognised as threatened. The last two are recorded in Sussex, but at present there are so few records and so little is known about them that it is difficult to devise appropriate action for their conservation.

The pipistrelle is clearly the most appropriate of these species for an action plan in Sussex. It is also the species that allows the widest of participation in implementation and impact. Information is currently being obtained on barbastelle bat and so it may be possible to develop an effective action plan for this species within the next few years.

All other UK bat species are included in Annex IV of the EU Habitats and Species Directive, included in Appendix II of the Bonn Convention and its Agreement on the Conservation of Bats in Europe and are hence included in the government's current 'long list'. National action plans have been part drafted for some of these.

As bats are animals that range widely in the countryside and have changing seasonal requirements for roosts and foraging sites it is especially important that their interests are also considered in Habitat Action Plans.

With regard to local/regional BAPS, we have given encouragement to concentrate on national target species, but there has naturally been some divergence from that to other individual species, such as serotine (Kent), Natterer's (Herts), lesser horseshoe (Brecknock), Daubenton's (Aberdeen), noctule (Staffs), or to cover all species, with some specific recommendations (e.g. Leicestershire).

The Bat Conservation Trust has been involved in the drafting of national species plans and been consulted on others, including on key habitats; and it produced its

own Action Plan for the Conservation of Bats in the UK in 1993 (which is now desperately in need of update). The BCT has been appointed as Lead Partner for the pipistrelle bat and has to establish a partnership to investigate the implications of recognising two species, to review the plan, develop a full plan, identify actioners and funders and to implement the national plan. It should also liaise with local plans and other plans that influence the success of this species plan. It has been consulted on many local or regional plans, but seen few final products yet. For local plans, the national Lead Partners or other specialist organisations can help the plan contribute to national objectives, can contribute to local priorities, develop some common approaches and assist in species selection and action plan drafting. It is hoped that such organisations can also help with guidance in implementation and in the longer-term monitoring of success. From a national perspective, we are somewhat worried about the diversity of approaches being taken for local plans, but it is an evolving process and we recognise that local plans must reflect local concerns.

Bat recording

Nationally, there are various current recording schemes, including English Nature (and the other country agencies) for roosts notified to them under the Wildlife & Countryside Act, BCT for particular categories (e.g. churches, rare species, tree roosts, the current government-funded National Bat Monitoring Programme), Institute of Terrestrial Ecology and others. We look forward to the day when there will be a central database for all UK records (?with the BCT).

Locally, the situation is also very variable, with some well-established local recording centres, local bat group (whose 'filing' system may vary from scraps of paper to modern technology) or with the local trust, field or natural history society. Some local groups have published recent local atlases, some with more or less annual updates. The Sussex Bat Group holds the counties records (with its recorder Jessa Battersby). The group can contribute records to the BCT and others on request.

The computer package Biobase is a recording package that has been adapted for local bat recorders, including data on habitats, types of record (e.g. specimen, direct observation, roost, bat detector). Its distribution has been subsidised by the Mammal Society and the BCT. As with many wildlife groups there is the proposal to develop a UK Millennium atlas for records acquired during the 1990s.

Monitoring

Nationally there has been a certain amount of monitoring over the years, particularly of hibernation sites and summer maternity colonies. At the beginning of the 1990s a National Bat Habitat Survey showed that volunteers were now available and with growing competence able to undertake field surveys of bats using bat detectors which translate the ultrasonic calls of the bats into something audible and identifiable. Population monitoring has been largely erratic and not well co-ordinated. In 1996 the UK government (DETR) initiated funding of a five-year project to establish integrated species monitoring of bat populations and distribution, and to attempt to relate population changes to environmental factors. Depending on the bat species targeted, techniques can include two or more of summer maternity colony, winter hibernation site and bat detector field monitoring. Some field projects will attempt to monitor several species together. This should help in the development of national land use and other policy and should be invaluable in assessing the impact of initiatives such as the Biodiversity Action Plan process. This National Bat Monitoring Programme is being run by the BCT with the participation of a wide range of local bat group members, householders who have bats and others.

Internationally, the Agreement on the Conservation of Bats in Europe has developed a conservation and management plan which has led to the development of proposals for Europe-wide monitoring of selected species, species migration studies and wider transboundary projects (such as projects related to conservation of bats in underground habitats and in forests, both key habitats for European bats). All these projects require the compilation and assessment of records on a Europe-wide scale. This intergovernmental Agreement has the backing of a network of NGO organisations and individuals through a Co-ordinating Panel for the Conservation of Bats in Europe, a regional subgroup of the Chiroptera (bat) Specialist Group of IUCN. In another initiative, the European Mammal Society has recently completed the compilation of an Atlas of European Mammals, including all 30 (or so!) European bat species.

Accumulating data on a world-wide scale has been key to the development of an action plan for the 170 tropical and subtropical species of Old World fruit bats, published by IUCN in 1992. This highlighted existing monitoring of threatened fruit bat populations and encouraged the survey and monitoring of many other species. Currently, the Chiroptera Specialist Group is finalising a overview action plan for the other 820 world bat species with strong recommendation for national recording, survey and monitoring, and international collaboration in the use of the results.

Sussex Ornithological Society

Leonard Manns

Founded in 1962

Growth when upsurge in interest in birds with:

- Improvements in optical equipment
- Publication of first field guides
- People more mobile

Membership now ca. 1400

Advantages of birds as a subject:

- Reasonable size
- Majority are diurnal
- Generally readily identifiable
- Although highly mobile, many tend to:
 - Be reasonably conspicuous in breeding sites
 - Gather together in wintering areas
 - Move in and out of the county via recognised sites
- Fairly limited number of:
 - Breeding species
 - Major wintering species
- Pursuit and identification of rarities
 - fun, but records of little value in conservation
- Rare and scarce breeding species
 - often important in relation to habitats
 - e.g. Woodlarks and Dartford Warblers on heathlands
- Collection of records of little value, unless made available and used;
 - too many records only exist in notebooks, or, worse, in people's heads

S.O.S.

- Historical (paper files) - pre 1976 (from ca. 1964)
- Current (computerised):
 - 1976-1988:
 - Records extracted from paper files
 - Input to computer database
 - 1989 to date:
 - Records input via several PCs to database
 - Computer database now holds over 310,000 records

General Records:

- Species records from individual observers
- Species records from small and major sites

Survey Data:

Species:

- SOS (full county)
- BTO (sample)
- RSPB

Sites:

- Habitats:
Heathlands, reedbeds, etc
- Major areas:
Chichester, Pagham & Rye Harbours, Ashdown Forest, etc
- Wetland Bird Survey (WeBS):
Coastal and inland sites
- Nature reserves:
Ebernoe Common, Burton Mill Pond, Woods Mill, etc
- Other sites:
BTO Common Bird Census, BTO Breeding Bird Survey, etc

Over 900 observers have contributed since 1989. About 350 in each year

Holding Records on a Computer:

- Needs a well-organised system
- County Bird Recording Aid (COBRA) developed
- Input to PCs by helpers (ca. 50 to date)
- Transfer of data on floppy disks
- Checks on data before input to database
- Database - Advanced Revelation (AREV)
- Allows for data selection and extraction
- Mapping routine DMAP (species data plotting, etc)
- Much data also held in spreadsheet format

S.O.S. RECORDING SYSTEM

Advantages:

- Easy and rapid access to records which can be sorted, mapped or graphed in a variety of ways.
- Facilitates the free flow of records between local databases, members and the Society's database.

- Potential for database or record lists to be held at several sites, i.e. with Society Officers, for use and security.
- Potential for reducing paper and saving storage space of paper records.
- System requires data collection to be organised, but rapidly highlights flaws and gaps in the record collection; it forces the 'recording team' to **THINK** about the records.

Problems:

- Capital expenditure on PC(s), printer(s) and software. SOS now purchased 6 PCs (include. 4 capable of running Windows, AREV and Microsoft Office) and has loaned a number of older machines for data (record) input. Can be helped by grants, etc.
- Recurring expenses of software upgrade, servicing costs and consumables.
- Time needed for:
 - Educating observers - Newsletter articles, etc
 - Redesigning and encouraging use of standard recording forms
 - Sorting and highlighting paper records for keyboard input, liaison with computer operators, refreshing software and methods
 - Record capture - a rate of ca. 100 records/hr.
 - Database managing, program writing and updating
 - Record extraction and report production: success at meeting requests breeds more
- Power failure at main computer - problems
- Confidentiality and record ownership
- Duplication of records (on database)

Selection and Extraction of Data:

Site data

Data by geographical area (including grid reference-based)

Species distribution mapping

Uses of Data:

Production of annual Sussex Bird Report:

Species listings for authors

Tabular and graphical data

systematic list 1996 : 147 pages

Total report 1996 : 201 pages

Production of "Birds of Sussex" - county avifauna

Not possible without wealth of database records

Species data (over 370 species)

County distribution maps (110)

Tabular and graphical data

Responses to Enquiries:

Over 200 in last five years

Commercial, e.g.:

- Large development proposals, such as:
Newhaven Harbour and Tidemills
- Barn conversion proposals
- Felling applications

Conservation-related, e.g.:

- WSCC for SNCI work
- Arun Valley project (ca. 16,000 records)
- Lower Ouse Valley (extensive data for contract survey)
- Cuckmere records for EA and Cuckmere Society
- West Sussex Heathland Survey (past records)
- Kingley Vale (records for Reserve Warden)
- Beachy Head (records for Countryside Centre)
- Pett Pools (records for Reserve Manager)
- Research on identification of prime biodiversity areas - 1.4 megabytes of data relating to West Sussex downland

All these responses used existing information.

Need to look forward - target our data gathering.

Conservation and Surveys Strategy

Major current emphasis on Biodiversity action.

S.O.S. has links with:

- Sussex Wildlife Conservation Liaison Group
- Sussex Biodiversity Partnership

Involvement in preparation and implementation of Biodiversity Action Plans (BAPs).

Two approaches to these:

- Key habitats
- Key species

Key Species:

- Birds of Conservation Concern:
 - Red List
 - Amber List
- Species of local (Sussex) importance
- In addition, species selected for inclusion in Rare Species Inventory held by SWT.

Key Habitats:

- 12 identified in which birds would be a significant component
- Many of these birds would be:
 - Species of conservation concern, subjects of Species Action Plans

Targeted surveys and monitoring will be needed.

Paper "Towards a Surveys Strategy", relating to breeding species, to S.O.S. Scientific Committee.

Wintering species and passage migrants are to be considered separately.

Priorities for the future:

- Continue participation in national studies (BTO and RSPB)
- Undertake survey work relating to Biodiversity Action (habitats and species)
- Tackle problem of monitoring common species
- Undertake full county surveys of selected species

It is necessary to:

- Improve forward planning
- Make better use of resources
- Give more support to our 10km Square Stewards
- Encourage more members to submit records and help in surveys

In order to produce a firm foundation for monitoring the health of our breeding bird populations.

The Sussex Biodiversity Record Centre

Louise Clark - (Sussex Wildlife Trust)

It makes a pleasant change this year, not to be giving a presentation on Sites of Nature Conservation Importance. However, habits die hard and I felt I could not let the occasion pass without briefly mentioning them.

The main survey and identification phase of the project has now been completed. Last summer, the districts of Rother & Wealden formally recognised or declared their SNCI's, so that now, all D & B in both East and West Sussex have identified their most important wildlife habitats. They are marked as such on their development plans and all have adopted planning policies which seek to protect them from development and encourage their appropriate management.

West Sussex sites were identified some time ago now. Last year the County Council undertook a review of SNCI's in the county as numerous additional sites of great importance had since come to light/been discovered, and various boundary changes recommended. Many of these sites were valuable and extremely important unimproved grassland meadows which have now also been classified as SNCI's. A good number of these were brought to the attention of the appropriate authorities and organisations by a talented Sussex naturalist. So please, if you come across an important site with a fine assemblage of your particular species group you think is particularly significant in the Sussex context, please do check up with Sussex Wildlife Trust or County Council to make sure we are aware of it, or that it has some measure of protection or recognition.

Follow-up work providing advice to owners of SNCI's has and is being undertaken by countryside staff employed by the Local Authorities, Sussex Downs Conservation Board, the High Weald Countryside Project and FWAG. Owner/occupier information is of course constantly changing as properties are inevitably sold and bought. WSCC are presently updating this information for their SNCI's.

SNCI classification does not always ensure complete protection from development and our more urban sites are of course most vulnerable. Over the years, a small number of sites have been lost. Many professionals (such as County Ecologists) are involved in SNCI protection and are asked to help defend sites through the planning process, sometimes at Public Enquiry.

So, now we have good information regarding the whereabouts of some of the prime wildlife habitat and sites in Sussex. However, we are still unable to report on the status or health of our wildlife. We have heard, this morning, that for Biodiversity Action Planning to be successful, we must have access to good information on all aspects of wildlife. Such information often exists, but it is scattered amongst us and occurs in a variety of forms. There is therefore, a very real and urgent need for a Biodiversity Record Centre in Sussex, which might coordinate all this information. For the last year, I have been working on a project which aims to develop such a Centre.

We have set up a partnership comprising:-

1. Sussex Wildlife Trust
2. West Sussex County Council
3. East Sussex County Council
4. Sussex Downs Conservation Board
5. Environment Agency
6. English Nature
7. Brighton & Hove Unitary Authority
8. Booth Museum

All of these organisations hold and indeed gather huge amounts of ecological information. Most are in the process of digitising it. For example, Sussex Wildlife Trust has been entering wildlife records for its reserves (mainly by the use of Volunteers) onto RECORDER as well as Rare Species in the whole of Sussex. West Sussex County Council has digitised wildlife records for all SNCI's in West Sussex. Both County Councils have and are digitising wildlife information re their LNR's. The Booth now holds digitised information for SNCI's in Brighton and Hove, for geologically important sites (RIGS) and has recently set up a Marine data-base etc. The partnership has produced various project briefs, plans and budgets for a BRC in Sussex, according to varying levels of funding which might be achieved.

We have been promoting the project internally to our own organisations enlisting support and backing and we have also been contacting Local Authorities in East and West Sussex as well as other organisations such as FA, MAFF, RSPB to bring them on board too. We have been seeking funding to develop the BRC with mixed success.

Work is also being undertaken at a national level. A national consortium of conservation organisations known as the National Biodiversity Network was established a number of years ago. Their aim is to establish and help fund the development of a network which would link all local record centres in the country, to piece together a national Biodiversity picture. A couple of years ago, they applied for grant aid to fund the development of this such network through the Millennium Fund, but sadly this bid failed. They are now apparently revising these plans and hope to submit a bid to the Heritage Lottery Fund this time (which has since changed their criteria) so that their bid now qualifies and might be successful. The NBN has acquired some funding already and this is being used to develop three pilot Local Record Centres (LRC) to help develop RECORDER software so that it better services the needs of LRC's, and to develop national protocols and standards for the use of LRC's

So, some progress is being made at a national level, but back to our local situation:-

- The exact funding scenario for next year is still very uncertain and has not yet been confirmed. However we anticipate sufficient funding to be able to continue the work of a BRC.
- Don Baker has been newly appointed as Biological Records Officer during my absence on maternity leave, and Bryan Michie will be appointed as Business Manager dealing with the business side of the project including fund-raising.
- We will be offering a service to our funders and anyone else who wants ecological information and is in a position to pay. We will not be selling data, but will be charging for the time involved in answering enquiries.

The data we can provide at the moment is information from:-

- The Sussex Environmental Survey Directory and the Sussex Rare Species Inventory. We will continue entering data onto these systems in the hope of keeping them up to date.
- We hope also to start merging and collating data with/from our project partners and funders.
- We hope to capture/digitise valuable wildlife information, not already computerised (such as for SSSI's and NNR').

We are shortly re-launching Sussex RECORDER User Group which is a forum for all those using this software.

We recognise that many of you hold immensely valuable and important information which is necessary in piecing together a comprehensive picture of the Biodiversity of Sussex. Such a comprehensive picture is essential if we are to be able to lobby effectively for the protection of our wildlife and countryside. It is also valuable for protecting habitats and species through the planning process and of course, is necessary for effective Biodiversity Action Planning.

In conclusion

The future for a Biodiversity Record Centre in Sussex looks bright even though the funding situation is still very tight.

The SBRC partnership and staff look forward to working with many of you in the future to develop a system/Centre so that we might accurately and efficiently report on the status of all wildlife in Sussex, and eventually contribute to a wider national picture. Such wildlife reporting is only made possible through the valuable work many of you undertake often in a totally voluntary capacity. Your biological records are at last being recognised as of immense value.

The Sussex Rare Species Inventory Progress since February 1996

Harry Montgomery - (Volunteer, Sussex Wildlife Trust)

In view of the time elapsed since the last progress report it was decided to recapitulate the potential applications of the Inventory, as follows -

Monitoring long-term changes in species

Monitoring the changes in the occurrence and abundance of species is essential to measuring the success or otherwise of conservation work and, in the long term, the health of the environment. Insofar as rare species can be regarded as indicators, or as important in their own right, the Inventory will enable such monitoring to be done using a single database instead of by different organisations for different taxa, as at present.

The national context

As an extension of the previous application, the Inventory will help to set the rare species of Sussex in a national context.

Selecting species for special conservation measures

The Trust's Vision for the Wildlife of Sussex sees the Inventory as a database for the selection of species for special conservation.

Identifying areas of prime biodiversity

Another example of the use of the Inventory as a database for planning possible action to conserve or enhance biodiversity. Unlike the previous application, it depends on detailed data on the locations of rare species, something on which the historical phase of the Inventory is relatively weak.

Defence of habitats

The original reason for starting the Inventory in 1993. Since that time, the Trust has largely given up this role which is now carried out by staff of the County and District Councils. However, they have the same need for data at short notice and will use the Inventory accordingly. Hedgerow Protection is a typical example. Lack of detailed locations hampers this application.

Advice on management

Knowledge of the presence of rare species will help the Trust to give appropriate advice on conservation to landowners and public bodies.

Raising public awareness

It is intended to use the Inventory as a basis for publications designed to inform the public and hence (it is hoped) raise their interest and pride in their county's wildlife. This in turn should improve their motivation and support for the conservation and enhancement of wildlife in Sussex.

Understanding local ecology

A possible application of the Inventory in research.

Since 1996 the lower plants, the micromoths, and the molluscs have been updated, and the following groups have been added to the Inventory -

1989-1997	Macromoths.....	without records
	Dragonflies.....	2km tetrad records grouped for
	Diptera.....	partial records
	Birds.....	without records
	Bats.....	partial records

Current summary statistics are as follows -

Taxa	Number of spp.	Approximate number of relevant records
Lower Plants (incl. Stoneworts)	482 (9)	1140 (22)
Higher Plants	430	2350
Reptile & Amphibian	3	87
Bugs	85	146
Beetles	1349	756
Butterflies	14	159
Dragonflies	12	490
Micromoths	173	328
Macromoths	192	Trust Reserve records only
Diptera	181	60
Molluscs	23	163
Bats	12	48
Birds	66	Trust Records only

Previous presentations have stressed the need for full 6-figure NGRs, if the Inventory is to be an effective working tool. Some progress has been made in this direction and the proportion of 6-fig. NGRs is gradually increasing.

We have had another look at the criteria of rarity, shown below -

- All species in the national Red Data Books which have ever occurred in Sussex, whether extinct or not,
- All Notable fauna and Nationally Scarce flora which have ever occurred in Sussex, whether extinct or not,
- All taxa endemic to Britain,
- Internationally rare taxa cited in the Bern Convention, IUCN Red Data lists, or EU Habitats Directive which are not covered by any of the above (provisional criterion; other lists may be added later),

- County Rarities, defined as species additional to those in the above four categories, i.e. they are rare in Sussex but relatively common elsewhere in Britain. They are species which have occurred wild in either East Sussex or West Sussex (Watsonian) since an arbitrary date, and now occur in 3 or fewer sites in that vice-county. A site is defined as an area not exceeding 1km square in extent (i.e. a movable 1km square) or a single continuous habitat.

The first three categories of rarity are straightforward and we are now looking at the international categories. The Bern Convention includes many birds which are very common in Sussex, so we are not entering records for them, and the Habitats Directive has produced some bats which were not previously included. County Rarities are quite a headache; in the fauna, few groups have enough records to judge whether a species is or is not a County Rarity, and in the vascular plants we have recently switched from 1950 to 1986 as the retrospective deadline for assessing rarity and that has thrown up many anomalies.

Although the Inventory is still incomplete and is not yet being actively promoted, enquiries are already being received, some relating to Hedgerow Protection. Due regard is paid to the confidentiality of certain records when enquiries are answered.

There are now thousands of records from the Trust's reserves on the computer, some being of rare species additional to the records given to us by the experts who supply data to the Inventory. Only a few such records are labelled for the Inventory, preference being given to the most recent. The Inventory is designed to be comprehensive for rare species but only representative for the records of such species, otherwise it would be swamped with data such as 166 records of Adonis Blue at Malling Down. The intention is to include all sites of recent occurrence but not repetitive records.

We are glad to announce that Volume I of a book on rare species, covering both higher and lower plants, is being prepared jointly by the Trust and the SBRS with support from West Sussex County Council. It is hoped to publish in time for the Millennium. Volume II on fauna will take longer; indeed, several animal groups have yet to be supplied to the Inventory.

Acknowledgments are due to the Biological Recorders Working Group which steers the project, to the experts who supply the data, and to Louise Clark who has been a powerful ally to the speaker in his weekly battles with the computer.

Recorder - Sussex Branch of Butterfly Conservation

Joyce Gay

The past

Butterfly recording has been taking place in Sussex for at least 150 years. At first entomologists were concerned with collecting specimens and aberrations for pleasure and also for naming the species. The many Natural History Societies in Sussex continue to take an interest in butterflies today. During the 1970s the West Sussex Wildlife Recording Group recorded more systematically and in 1980 published a booklet showing the distribution of our 45 species butterfly species on a tetrad basis. (Using the Ordnance Survey grid reference system a tetrad is an area 2km x 2km, each of which is defined by 2 letters and 4 numbers e.g. TQ 1246). The Sussex Branch of Butterfly Conservation set up in the early 1980's also distributed recording sheets to their members. The design of these was based on the Biological Record Centre and there was space for information on habitat, management etc. As this was a paper- based system it was very time consuming to produce distribution maps for each species.

At the end of the 1980s there was a need for more detailed information for all species throughout East and West Sussex. A simple recording card was produced, distributed to members and the results entered on computer using a data base devised by one of our members. Thus maps could be produced relatively easily showing where things were and also the parts of the two counties which were very under recorded. The aim was to have a firm base from which to influence and carry out conservation work in both counties to benefit the habitat and the butterfly species most at risk. Recording took place from 1989-1994 and the results were published in the Atlas of Sussex Butterflies in Feb. 1996 . We chose a 5 year interval as this was enough time to carry out the survey and short enough for all records to be relevant. We achieved 99% coverage so now had an up to date over-view of the distribution of all species in both counties.

The Present

Since 1995 we have continued recording using sheets devised by Butterfly Conservation and have details from over 800 tetrads. All records are entered on computer using Levana, a programme written by Jim Asher the national recorder of Butterfly Conservation. We have concentrated on site recording as this yields more detailed information to help with conservation work.

During the 1990s talk has been of Biodiversity and Action Plans which has concentrated people's minds on declining species and endangered habitats. Using up to date information on distribution and habitats our branch has produced an Action Plan for Butterflies in Sussex. We aim to conserve all our wild butterfly species and to increase their range and abundance mainly using appropriate habitat management.

We have identified two main categories, although the others have not been forgotten and we continue to record all species.

1. **High Priority species** Silver-spotted Skipper, Wood White, Duke of Burgundy, Small Pearl-bordered Fritillary, Pearl-bordered Fritillary, Grayling.
2. **Medium Priority species** Brown Hairstreak, Silver-studded Blue, Adonis Blue, Dark Green Fritillary.

During the 1996 and 1997 seasons our society investigated each high priority species more fully using data from the three sets of maps and other historical data. We took into account different factors such as duration of the surveys, area covered etc.

Nearly all species appear to have increased in area from the first survey (1980) to the Atlas (1989-1994). This apparent increase is probably explained by the extra numbers of recorders and the time spent in the field when working on the Atlas. Adonis Blue illustrates this point. However some species e.g. Marbled White have increased in numbers in the Weald making it more likely that they will be seen and recorded there. This is a species that does seem to be spreading.

It seems as if the Essex Skipper has also dramatically enlarged its distribution. However it is difficult to separate the Small and Essex Skippers in the field so the Essex Skipper is usually under recorded although its range has undoubtedly expanded since 1980.

Two important Priority species that are giving cause for concern in Sussex and the rest of the UK are the Small Pearl-bordered and Pearl-bordered Fritillaries. These both show a large decrease in the numbers of their recorded populations from 1980 to 1994. In Sussex they are both found in actively managed woods such as coppice. The larvae feed on violets which thrive in disturbed ground and it was often said that the butterflies followed the woodsman's axe. The Forestry Authority runs the Biodiversity challenge fund scheme which encourages coppicing, and this together with organisations as SWT and BTCV means there is more coppiced woodland now which has enabled the Pearl-bordered especially to increase in numbers. It is encouraging that several of these colonies are increasing but there are still some small populations that are only just holding on because of lack of management. The Small Pearl-bordered prefers damper areas and seems to have suffered a much greater decline than the Pearl-bordered.

The Pearl-bordered Fritillary has several strongholds which our branch has monitored: Rewell Wood nr Arundel, Verdley wood nr Fernhurst, West Dean woods all in West Sussex and the Vert Wood complex, Beckley Wood and Plashett Wood in East Sussex. These are all (apart from Beckley Woods) managed woodlands and last year there were high numbers of Pearl-bordered in all these areas. We are still concerned with the smaller populations as if there is no management of the woodlands then this butterfly is at risk of becoming extinct there. The Wood White which can still be found in West Sussex is also dependent on coppicing and active management is taking place to prevent it dying out in Sussex.

There are some species which have the ability to make a come back if the habitat is managed sympathetically. e.g. the Silver-studded Blue at Iping and Stedham Commons and Ashdown Forest. Adonis Blue numbers have also increased where the downland is kept short by grazing animals e.g. SWT reserve at Malling Down.

During 1997 the Dark Green Fritillary had a very good year especially over the East Sussex Downs. A couple of hot and sunny summers has meant it did as well as in the early 90s This good weather also ensured that Silver-spotted Skipper and Grayling numbers were well up.

The Future

Having written a plan for the Branch we are now undertaking the action that will ensure the status of our Sussex butterflies and all their different habitats. We thank all those individuals and organisations who have helped us in the past in so many ways and look forward to the future with confidence.

Improving Co-Ordination Between Recorders and Workers in Conservation

Tony Whitbread - (Sussex Wildlife Trust)

The very reason for the existence, and continued popularity, of this seminar is the fact that we are all keen on ensuring that the information that is gathered is put to good use in conserving and enhancing the wildlife of our county. Of course we may all have different reasons for our interest in wildlife. The most important to many of us is that it is fun - to enjoy the countryside and study a particular interest. Also some of us make a living from ecological survey, or make a living from using data. But underlying these, I would suggest, is the desire to see the lot of our wildlife improved.

To this end we have an excellent record in the County. Year after year we come here and hear reports on the different systems for storing, analysing and using information. However, I would not like to leave the impression that we spend all our time developing systems and not enough time using it to conserve wildlife. Although this has been done for several years on less than a shoe-string, the credibility of ecological information has improved considerably in the minds of decision makers.

All three County Councils (including Brighton and Hove) employ ecologists through whom ecological information is inputted into planning decisions. On top of this the planners themselves are now more aware of conservation and most District Councils have people who are well-briefed in conservation matters. One effect of the active use of information is the fact that there are relatively few cases of confrontation because damaging developments are put off at an earlier stage.

Furthermore information is routinely used when giving advice on site management, on targeting grant aid to important sites and in informing the management of conservation sites like nature reserves. At a more strategic level, information is often gathered together and fed into larger area plans - like the Environment Agency's local plans (LEAPs) or plans for a valley or for the South Downs.

As we have said earlier today, Biodiversity Action Planning requires good information, without which robust plans for a species or cannot be made. The compilation of the *Vision for the Wildlife of Sussex* relied on good information, and it would not have had the impact it did if soundly researched statistics could not be fed in.

Nevertheless, although the current situation is good (and improving) there could be huge gains to nature conservation if there was better co-ordination of information. Making a particular case for conservation, writing action plans, informing strategic decisions, are all interdisciplinary in their requirements. One piece of specialist knowledge can easily be dismissed alongside other considerations, but if a co-ordinated mass of ecological data is presented then not only is it more difficult to ignore, but it also gives a more rounded view of environmental quality which is easier to put across to the public.

Well co-ordinated data will also be of value to biological recorders themselves. The ability to analyse data and compare information from different specialisms may be achievable in ways that might be impossible for an individual recorder.

Against all this of course, is the fact that information is power, and we can be sure that people will be using information to support objectives other than nature conservation. We therefore need to constantly improve our information co-ordination in order to continue to make the case for wildlife.

This is why a constant theme of this seminar is to improve the co-ordination of data and we now have some thoughts on how we can continue to improve matters. We currently have a Biological Recorders Working Group (a sub-group of the SWT's Conservation Committee). This has evolved out of a group whose main task was the organisation of this seminar. Recently it has helped co-ordinate other work, such as the rare species inventory.

What is proposed is that we re-launch this Working Group to provide a key forum for recorders to communicate and provide advisory input into the developing Biodiversity Record Centre. As the BRC moves forward I feel that we need to ensure that we keep and improve links with the specialist recorders. This will be done by day to day liaison, but the approach of developing the Working Group to help as an advisory committee should add an extra opportunity for influence.

Hopefully we can all agree on the principle. The next paper, and the subsequent discussion, will address some of the detail of what we could do, how to do it and the service a Working Group could provide.

HOW WOULD A NEW COMMITTEE HELP BIOLOGICAL RECORDING?

Introduced by Matthew Thomas

1. Recruit new members and make new contacts:

- Organise the annual **Seminar**
- Organise an annual **Field Meeting**
- Produce a **Newsletter**. Contents could include:
 - local reports on species groups (ref. 'British Wildlife')
 - reports on Sussex recording groups - outings, events
 - appeals for help with surveys, etc
 - updates on Sussex & national recording initiatives
 - include excerpts in SWT magazine

Qu: Do we need a field meeting?
Do we need a newsletter?
Annual/biannual/quarterly?
Other ideas?

2. Ensure local conservation initiatives benefit from recording:

- Input into **Sussex BAP** process:
 - advice on species and habitat action plans
- Input into Sussex **Local Record Centre**:
 - representation on Steering Committee

Qu: Do biological recorders want more say on local conservation initiatives?

3. Allow Recorders to comment on new development:

- Consultation on:
 - major/significant **development proposals**
(could include field meetings)

Qu: Do recorders want to comment on development proposals?

4. Setting up a Recorder's Committee:

Suggest:

Chair

Secretary

One representative from each recording group

Others could attend occasionally (EN, SWT officers, etc.)

SWT to adopt as sub-Committee of SWT Conservation Committee

- allows secretarial and admin. support from SWT

Other members?

Role of SWT?

5. A New Name?

Sussex Association of Biological Recorders

FORMAL

Committee for Biological Recording

Sussex Natural History Society

Biological Recorder's Committee

Sussex Naturalist's Society

Natural History Advisory Group

Sussex Naturalists Club

Informal

Group of Naturalists Advising the Trust

(GNAT)

Biological Recording Advisory Group

(BRAG)

Any other ideas?

An open discussion then followed at which no definite conclusion was reached