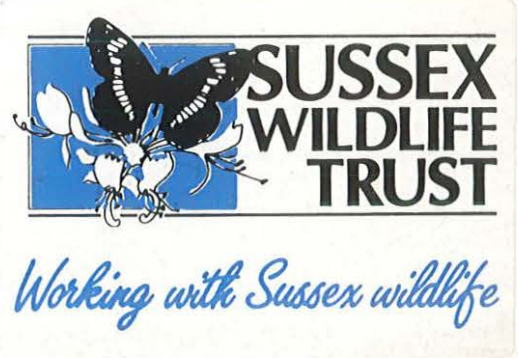
SUSSEX RECORDER

1990



Sussex Recorder

Proceedings from the March 1990 Biological Recorders' Seminar

Introduction

This Newsletter is intended to be the first of an annual series. It aims to be the first step in linking together the great number of individuals and organisations working on biological recording in Sussex.

The March Seminar brought together sixty five recorders in one room for the first time in many years and was generally held to be a success. The Newsletter contains a transcript of each presentation and includes a preliminary listing of recorders entered on a computer database here at Woods Mill. The list is currently incomplete and may contain inaccuracies, but it is the first step towards a comprehensive directory of recorders. Please send any alterations or additions to the Sussex Wildlife Trust.

In my introduction to the Seminar I asked broad questions about the nature and organisation of biological recording work in Sussex. These questions are as yet a long way from being answered, the seminar merely being the springboard for action. I am pleased to say that the Sussex Wildlife Trust Conservation Committee has now agreed to set up a Working Group on Biological Recording, which will include members from other organisations. This Group will be charged with taking forward some of the ideas from the seminar.

We at the Sussex Wildlife Trust see our rôle as the encouragement and co-ordination of recording work across Sussex, a rôle which we may have neglected in the last few years. I hope that we can now redress the balance. In our rapidly changing world, information is power, but only if it is accurate and rapidly accessible. We must all find better ways of using our collective knowledge to safeguard the wildlife of our County.

Andrew Lee , Sussex Wildlife Trust Conservation Officer

Woods Mill, July 1990

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1. SETTING THE SCENE

In considering the nature of biological recording work we should focus on five issues:

What is the purpose of our work?

I am assuming here that recording work has more relevance than merely a pastime, through that is a perfectly legitimate aim in itself. In conservation terms the main reasons for recording are:

- Mapping and Monitoring Are the ranges of species expanding or contracting? Are the populations increasing or decreasing?

- Site Protection Which areas are most important for wildlife? How can we find out?

- Ecological Studies of Species What are the requirements of a particular species? How will it respond to change?

These are extremely fundamental questions without answers to which we have no basis for nature conservation. I would ask - are our activities helping to answer them?

What is our coverage

Are we busy mapping the distribution of recorders in Sussex, and do we have people working on all the major taxonomic groups? The former questions is more insidious, as it can lead us to false inferences about the range and population of different species. The latter question should be easy to answer.

What are our rôles?

We are a tiny minority out of the million and a half residents of Sussex. We have an enormous task to carry out, therefore it is essential that we define the rôle of each individual and organisation in carrying it out. I would ask, who should be responsible for:

- Collecting data? - the actual fieldwork.

- Processing it? - producing reports, tables and maps.

- Integrating it? - combining data for all taxonomic groups.

- Using it? - converting records into conservation action.

What system should we use?

Whether manual or computerised, we do need a standard system through which all records and data can be fed. The challenge will be to find a system which is:

- Comprehensive

- Accessible (to those who need data)

- Confidential (against those who might abuse it)

With the Survey Directory and the West Sussex SNCI project, both described in this document, we have started down the road towards a biological records centre for Sussex. How do we progress from here?

How can we create a recording network?

Aside from the system used to store and access data, we must consider the links between:

Individual recorders
Recording groups
National schemes

What are the connections ?
What should they be?

Local authorities
Nature Conservancy Council
Sussex Wildlife Trust
The public

Andrew Lee
Sussex Wildlife Trust Conservation Officer

2. SITES OF NATURE CONSERVATION IMPORTANCE FOR WEST SUSSEX

Introduction

A Nature Conservation Strategy for West Sussex is currently being developed which has as two of its aims:-

1. To develop and maintain a comprehensive base of information about wildlife for proper and effective use.

2. To protect important wildlife sites and areas.

Up until now nature conservation in West Sussex has been achieved through the implementation of a variety of policy tools and land management options. The protection of sites is undertaken through legislation implemented by the NCC under the Wildlife and Countryside Act 1981/5 together with other agencies through the designation of SSSIs, the management of nature reserves and the protection of species. Local Authorities and other statutory agencies in both their planning and land managing activities also contribute, as do land managers (farmers and landowners) with advice, help, grant aid and agreement from various sources. The volunteer sector plays a major part in both landownership and management and the recording and monitoring role.

However, beyond the SSSI level (which whilst being acknowledged as the best example of certain habitats and species, have never been claimed as the only sites of importance) there is no formal recognition of the significance of sites to nature conservation, although there are many sites of high nature conservation value which firstly need to be protected and secondly need to be managed sympathetically.

The concept of defining sites of nature conservation importance in the County has developed from the need expressed in DOE Circular 27/87 'Nature Conservation' - it stresses the need not only to recognise the significance of prime sites for nature conservation in any land use planning and management, but also the significant role of the remaining wildlife resource in both town and country.

The adoption of this project through joint funding from the Nature Conservancy Council, Worldwide Fund for Nature, Sussex Wildlife Trust, the County Council and the District and Borough Councils shows both the shared objective and desire to follow the DOE guidelines. The recognition of such sites of nature conservation importance on the ground is one step. To be effective in achieving nature conservation, the concept had to be adopted in both Structure and Local plan policies for protection and implementation, and close co-operation with the farmers and landowners developed to achieve nature conservation on the ground. In addition, the adoption and promotion of nature conservation strategies recognising Sites of Nature Conservation Importance at both County and District/Borough level will be vital. Other statutory authorities will also be encouraged to recognise such areas in their own land managing activities and the promotion of environmental education will of course be fundamental at all levels.

Objectives

To conserve important wildlife habitats throughout the rural and urban areas of the County by:-

1. Identifying the important wildlife resources of the County.

2. Protection of those resources through appropriate land use and management policies.

3. Enhancing their wildlife value through sensitive management.

4. Encouraging appropriate means for the enjoyment of the wildlife resource in both rural and urban areas.

5. To develop the wildlife potential of areas.

Structure, Staff Management, Administrative Arrangements and Funding

Nature Conservation in West Sussex has traditionally been achieved through co-operative effort and the pooling of scarce resources. The SNCI project builds on the experience of this approach.

The project is proceeding in two phases:-

Stage 1 - The Compilation of an Environmental Survey Directory (already underway)

An Environmental Survey Directory Compiler (jointly funded by East and West Sussex County Councils, SWT and the NCC) has been in post since November 1989. Her role is to compile a survey of surveys and produce a directory for each County showing the areas over which surveys have been undertaken, the wildlife groups covered, who undertook the survey and where the survey information is held.

The Environmental Survey Compiler works to a Steering Group of the NCC. SWT, ESCC and WSCC and the Booth Museum. This meets every two months to review progress and assess achievements.

Stage II - The Identification of Sites of Nature Conservation Importance (to start in spring 1990)

The project will identify from existing survey information and newly gathered data Sites of Nature Conservation Importance in the County matched against a set of criteria. An Assistant Ecologist with WSCC is co-ordinating and directing this work, with a team of two Field Botanists under the Sussex Wildlife Trust. They are guided by a Steering Group, who themselves will report to the Liaison Group.

The Steering Group will comprise the NCC,SWT and WSCC who will initially meet on a monthly basis. They in turn will report to the Liaison Group comprising the NCC, SWT, WSCC and the District and Borough Councils. Close contact will also be maintained by the Assistant Ecologists with FWAG, the CLA and the NFU.

Identifying Possible Sites for Inclusion

- search through existing site survey information (liaison between Survey Directory Compiler and Assistant Ecologist) to include collection and collation of information from NCC, Local Authorities, Wildlife Trust, naturalist groups, local recorders.

- with benefit of above, the use of the 1981 WSCC habitat survey work and the 1986 WSCC air photos, together with liaison and advice from WSCC, SWT and NCC, develop a survey programme within the Districts to survey likely sites with no recent data starting with the Districts of Crawley, Adur and Arun.

- in liaison with FWAG, NFU, CLA and landowners, undertake survey work based upon permission as required for access, a systematic survey scheme and technique and a code of practice (to be developed by the Assistant Ecologist).

Site Selection

The Sites of Nature Conservation Importance will be selected on the basis of the collection and assessment of existing and recent site survey information matched against a set of criteria. It will be part of the role of the Assistant Ecologist to refine the criteria, but basic concepts along the following lines will be pursued.

Both rural and urban areas are to be included. The broad criteria adopted by the NCC for the definition of SSSIs will be used with different weighting in the urban and rural situation. Various attempts have been made to 'quantify' attributes of sites and none found to be totally satisfactory. It is felt that the weighting given to the various criteria is the preferred way to assess the importance of sites in particular situations. Many schemes have been tried, but most fall back on the NCC Nature Conservation Review broad criteria to give a framework for assessment.

These criteria include a series of factors such as size, diversity, naturalness, fragility and typicalness. They also include factors such as potential value and intrinsic appeal. These will be given a higher weighting in urban areas.

So, for example, a small isolated site in the middle of an urban area, with a public footpath alongside (such as a pond or small piece of woodland) is likely to be considered for inclusion, but a similar site in a rural area may not.

The criteria will help make subjective judgment more objective; the final judgment will rest with the Steering Group.

Publication

The final product will be the District Dossiers published by WSCC under the joint names of the contributing bodies. The Dossiers will be circulated in appropriate organisations as determined by the Steering Group. The documents will be published as 'provisional', for revision will be necessary as new information comes to light.

Revision and Updating

At the end of this specific project the Steering Group will be retained and after assessment of the situation, consideration will be given to a phased revision and updating on a cycle that is appropriate in terms of planning, strategies and other considerations for the County, District and Borough areas. Resources will be needed to achieve this.

It is recognised that Geological Sites of Importance also need to be defined and opportunity for development of this is being investigated; current funding does not include this element.

Ann Griffiths, WSCC

3. PUTTING BIRDS ON DISC

SOS COMPUTERISATION

SOS records - the problem of scale

The SOS was formed in 1963 and by the end of that year it had 333 members. Now there are about 1500 members and up to a third of these contribute records, comprising:

1. General records; members send in observations to a recorder who then validates them. At present there are about 2500 such records sent in per year.

2. Waders and Wildfowl of estuaries have been counted on a monthly basis as a separate project. Sea bird and heronry colonies have been looked at in a similar way. This has generated site/species data which has also to be stored.

3. Special surveys have been done of individual species. For example the stone curlew has been studied. Special studies have also been done on the distribution of breeding birds and surveys have been carried out to see how birds fit into different niches.

This work has produced vast amounts of data and this was causing an enormous problem. The RSPB have helped with storage but boxes of record sheets are useless unless the information is retrievable.

There was obviously a need for good computer facilities and with the development of powerful micro-computers, systems have started to become available.

BTO became interested in computers for local groups and a group in Banbury were quick to set up a practical system. The SOS earmarked a reasonable amount of money for computing in 1986 and started to examine what was available. The hardware was not seen as a problem - computers are always improving, one just has to buy the best that is available at the time. Computer software suitable for the task is also now being developed.

In August 1989 a computer was purchased and a software package acquired for Bristol University. This system was very new so there were some bugs to sort out. Overall, however, the package has been very flexible and has basically come up with the goods.

'Advanced Revelation' - the software package

This is a menu run package (ie: whenever you want to do anything you are presented with a menu of options) which allows input of multi-valued fields.

A main priority was the need to be able to input data quickly. In practice there are several ways to input:

General records require information under the following headings:

- record number
- recorder
- site code
- species code
- date of record

These records can be collated to provide kilometre square or tetrad data.

Bird lists can be entered as above but many species codes can be entered for each record/site/data field.

Tetrad data entered as above but many species codes can be entered in one record/tetrad/data field.

The computer used is compatible with others, so some recorders can put their own records onto a disc and then send this to the SOS computer to be incorporated into the main record base. When this is done the package is able to run some simple logic tests on transferred data.

The presentation of the output is very versatile. The following are some of the options:

The yearly bird report for the SOS requires simple lists of birds throughout the year. This is of limited value in any other aspect of bird research but can be easily provided by this package.

Records for individual sites can easily be produced very quickly. This has obvious repercussions in terms of site protection; a quick response to a potential threat through the production of an up to date bird list could make all the difference.

Distribution maps of individual bird species throughout the County can also be produced fairly easily and these are particularly useful.

Problems

The capital cost of the system is quite high for a voluntary organisation, but SOS has received help from the County Councils. The hardware costs about £1400, and funding for this was provided by West Sussex County Council, whilst the software cost £700 and East Sussex County Council helped with this.

Where should it be housed? Such computers are also useful to membership secretaries and the treasurer. However, it has to be kept where the record inputting can best be done. With a voluntary organisation this is bound to be someone's home, and in this case it is John Newnham's dining room.

The biggest problem, however, is the time taken inputting data. For example, with 2500 records a year and an optimistic inputting rate of 100 records per hour it will take 40 man-days to input at best. This may still be faster than organising a card system but puts a great deal of pressure on the inputter. Future systems will have to address the possibility of interfacing with individual recorders' micro-computers, or even with hand-held electronic recorders in the field. The present problem may be summed up.

Time taken for Data Input	Still less than Paper methods	DIVORCE SOCIAL ISOLATION

John Newnham (transcribed by Tony Whitbread).

4. WILDLIFE RECORDING GROUPS

A personal view

The West Sussex Wildlife Recording Group

This is a personal account of my involvement with a County and a national recording venture; there have been, and still are, other ventures about which I am not qualified to comment. The first venture was concerned with recording different 'groups' of fauna and flora, the second is concerned with one entomological group.

The West Sussex Wildlife Recording Group, which was active between 1975 and 1980, was an attempt to co-ordinate a group of field naturalists towards producing reasonably comprehensive species lists for selected habitats, or selected species. Three publications were produce, concerned with Ambersham Common the Rewell Wood, and West Sussex Butterfly distribution. Several other projects generated a lot of data, which is now filed away.

Handling this data, particularly into a retrievable or publishable form, was a never-solved task. With the advent of personal computers there has been some progress towards solving the publication problems, however handling raw data remains a very time-consuming and error-prone job. It is salutary to realise that it took me three years to enter up the data which I held on solitary wasps and bees generated mainly through my own collecting, largely in Sussex, between 1971 and 1986.

The West Sussex Wildlife Recording Group was not an informal group, but charged a membership fee to contribute to postage costs, held business and planning meetings and had fixed field meetings. Its membership was drawn from both East and West Sussex. Interests were wide-ranging, through vascular and non-vascular plants, mammals and birds, to entomology. Personal contacts, particularly amongst the entomologists, helped extend the number of groups which could be commented on.

During the existence of the group I met, and worked with, several people whom I have since had occasion to call upon for specialist help, and have also been able to give my specialist help to them. This cross-fertilization is often difficult to promote. The formal meetings, held during the winter, gave a good opportunity to develop these links.

When the group first started, the membership had a wealth of data which just seemed to need collating and publishing. This 'ready material' helped lend the early formal meetings a sense of purpose as the publications were worked up. The field meetings programme, however, never seemed to get properly off the ground. A field meeting seems bound to satisfy only some of the needs in a disparate group, consequently such meetings were often attended by a minority. The formal meetings eventually suffered from the same problem.

The group drew its membership from a wide geographical range; once the initial enthusiasm, and data, for getting publications out became used up, everybody naturally tended to want to work in their own area and in their own way, which is actually what they had always been doing. With hindsight I feel that the formal structure eventually required too much effort to maintain indefinitely; however without some structure it is doubtful whether a totally informal group would have stayed active beyond its first publication.

Whilst working within the West Sussex Wildlife Recording Group the issue of validity of records did not arise; each contributor was a specialist, and usually the only one, in the groups which they recorded. This is not to say that inaccurate records did not get made, they did, but that the scale of inaccuracy was relatively slight. The situation has been greatly different within the specialist recording group for the Bees, Wasps and Ants.

Bees, Wasps and Ants Recording Scheme

This scheme was initially launched during 1976 as a follow-up to the Bumble Bee mapping scheme and many of its initial participants were contributors to that scheme. After a highly successful initial field meeting, together with publicity which encouraged people to send in records, it proved difficult to find the necessary person, or combination of persons, to establish the scheme on a secure footing. The overall result was a non-existent newsletter, unacknowledged record cards and unchecked and unused data, all of which hastened the demise of the scheme in that form.

It was not until 1986, when a revamped steering group formed, that the scheme could be relaunched, with a much less ambitious platform than the initial one. Despite several moves to use the scheme to launch a specialist society, it remains an informal organisation, albeit with a nominated secretary and areas of special responsibility being delegated as required. Steering group meetings are open, but in practice a small group of 'regulars', many of whom were also involved in the original launch, form the mainstay of each meeting

Lessons to be Learnt

Learning from our earlier mistakes, we have looked hard and long at what we feel it is possible to achieve within a voluntary group, before advertising our presence too widely. Most of the topics are, I feel, relevant to this meeting.

Central to any recording scheme is the task of getting records. It is tempting to ask for these publicly, as part of the announcement of an initiative. However we felt that it was precisely this approach which had made the original scheme too large, too quickly. Instead we have spent time considering the following issues:-

a) What constitutes a record? - What information is essential, what is useful? How does a record fit into an historical perspective?

b) How is a record to be verified? - Can we afford the time to vet the identification of all records which are sent in? What proportion of a specialist's time could reasonably be spent in identifying material from other sources? Are there any species for which records are more critical than others? How are the locality details to be checked - both for factual accuracy and for likelihood of the species in question being there?

c) What is to happen to an individual's records? At the very least any records solicited need to be acknowledged. The format in which records are sent in is critical; handwritten lists require yet more time in translating to a standard format for inputting to any computing system; the opportunities for error at these stages are multifarious. What output can the scheme provide to give feedback and encourage the submission of further records when it needs them?

d) Although the scheme starts from a group of specialists known to each other it is important to involve and develop the expertise of new members if it is to grow. What can be done to

provide support and teaching to those with interest but little experience?

e) How does information about the activities and interests of the group reach its intended audience? Who is to be responsible for this?

Returning to recording in Sussex, I would like to illustrate some points regarding the potential of a Sussex recording organisation using some distribution maps compiled from my own collecting.

- How wide an area do I actually cover, how well?
- Do any species appear to indicate particular habitats, where else should I look?
- How important is an awareness of a national perspective in interpreting records?
- Is there any overlap between organisms or plants which I study and those which another studies?
- What help can we give each other?

Mike Edwards