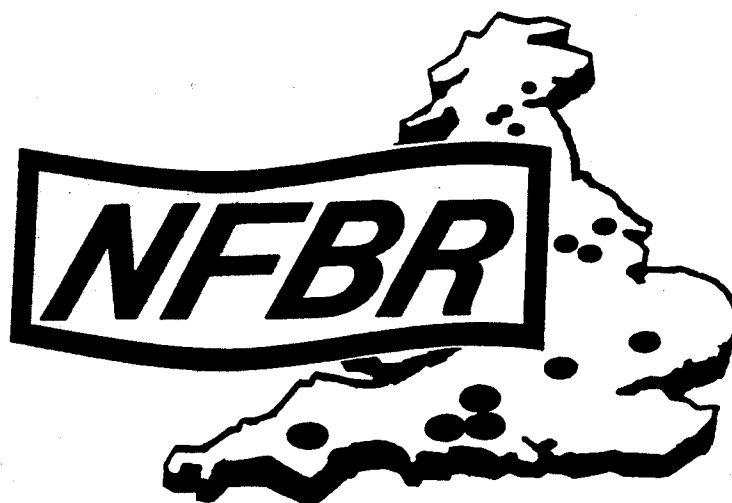




NATIONAL FEDERATION FOR BIOLOGICAL RECORDING



NFBR NEWSLETTER 7; MAY 1989

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NEWS

EDITOR'S APOLOGY

No you haven't missed one, this is the first newsletter to be produced since number 6 in March 1988. I am very sorry to have stifled the voice of NFBR for so long and I aim to remedy the problems associated with newsletter production. I hope there is sufficient in this edition to provide some compensation for the lack of contact in the last year. I would like to thank the many contributors to this newsletter and I owe a special debt of gratitude to Marie Moreau, Paul Harding, and Claire Appleby for their help in the production of this newsletter.

NFBR CONFERENCES

By now you should have received notice of the NFBR's 1989 annual conference and AGM. The conference follows the theme '*National Perspectives in Biological Recording in the UK*' and will be held on Thursday 11 May at the CEGB offices in London.

NFBR conference proceeding 1987

The proceedings of the NFBR conference '*Biological Recording: The Products*' are now available and we apologise to delegates for the delay. The following papers are included:

Biological recording in its policy making context
Survey funding by the NCC
Funding biogeographical recording
Biological survey for nature conservation planning
The involvement of ecological/nature conservation consultants in development and planning issues
The Gordano Valley project
Badger protection - who pays the bill?
Supporting butterfly conservation research
Answering wildlife enquires - the Bristol Museum Enquiry Project
Surveys of wildlife by the public: funding and resources

Availability

Those who attended the conference should already have received their copy - if not, please write to

Geoff Stansfield. Further copies may be obtained from the Museum Documentation Association price £4 to NFBR members, £6 to non-members.

Mr G. Stansfield, c/o Dept of Museum Studies,
University of Leicester, 105, Princess Road East,
Leicester, LE1 7LG

MDA, Building O, 347, Cherry Hinton Road,
Cambridge, CB1 4DH.

DATA HANDLING GROUP

Wildlife Link Joint Data Handling Group

The NFBR, which is an associate member of Wildlife Link, is represented in this NCC/NGO liaison group. There have been three meetings of the group since the last newsletter, in June 1988, September 1988 and January 1989. Matters discussed included the following:

CORINE

CORINE is a major database on conservation sites which is being implemented by the European Commission in Brussels. The NCC is concerned that CORINE have asked for information only on sites of European importance and there are too many SSSIs in Britain to be included under this definition. There might also be difficulties keeping such a large database up-to-date. RSPB may also supply information and is liaising with NCC.

Geographical Information Systems (GIS)

NCC will soon make a major investment in a GIS system, although full implementation will take several years. Because of the cost of a full GIS facility, the contract provides for work stations at NCC HQ only, although simpler regional mapping facilities may be considered in the future.

RECORDER

NCC and RSNC hope to create two two-year posts to enhance and support RECORDER (S. Ball's local records centre database). They plan to install eight systems in the first year, of which five would be in county trusts. NCC has also decided that ADVANCED REVELATION is the database they will be using on their PCs.

Coding checklists

Ulster Museum has put all the current names of British insects on computer. BRC has comprehensive lists of most insects, most plants and vertebrates except fish.

NCC data management

NCC have advertised for a new two-year Data Manager who will establish an inventory of all NCC's data. NCC is investigating what data can legally be divulged and may publish a list of available data. Where appropriate NCC would provide an advisory service rather than release raw data and would include an element for data collection in any charges made.

Phase 1 manual

NCC are considering releasing their excellent detailed manual on phase 1 survey. Further details of this can be found in the phase 1 article in the 'Survey Register' section of this newsletter..

LINNEAN SOCIETY REPORT

The Linnean Society has published the report '*Biological Survey Need & Network*'. This document derives from concern for the state of biological recording expressed at the 1984 Leicester Biology Curators Group meeting and the subsequent 1985 meeting which established the NFBR and led to a request to the Linnean society for a comprehensive review of biological recording.

Follow up meeting

On 1 December 1988 a meeting was held between NFBR committee members and Prof Sam Berry of the Linnean Society to discuss the need for further action in promoting the Linnean Society's report. The report received press coverage in The Times, The Guardian, Nature and the New Scientist and has been circulated to the main national bodies interested in biological recording.

NERC meeting

The NERC are to convene a meeting on 21 February to consider and hopefully act on the recommendations of the report; nearly 30 government and voluntary organisations will be represented. Professor Berry will make a presentation on the Linnean Society report and there will be

presentations on the new ITE Environmental Information Centre and the ESRC Rural Areas Database. Individual organisations, including NFBR, will have an opportunity to describe their involvement with, and policies on, biological recording. There will be a report on the meeting in the next NFBR newsletter and NFBR will await the outcome of the meeting before deciding on further action. The NCC/NGO data handling group has suggested that the original Linnean Society working party should reconvene to actively promote the recommendations of the report but the Society also wishes to postpone further action until after the NERC meeting.

Availability of the report

Berry, R.J. 1988 Biological survey: Need & Network. Report of a working party set up by the Linnean Society of London. PNL Press ,London

Copies of the Linnean Society report are still available from the Society at a cost of £2.00.

The Linnean Society of London, Burlington House, Piccadilly, London, W1V 0LQ.

COMPUTER NEWS

Introduction

The computer scene continues to run ahead of our ability to keep track of what is going on. Two themes of this computer news section are the emergence of users groups and the beginnings of the invasion of GIS into our work.

SUPPORT FOR RECORDER

RECORDER has proved to be an excellent program for use in record centres. However, it does need central support to be truly effective. Support personnel would; install the system, sort out teething problems, provide documentation and training, make modifications and improvements to the facilities offered, and, most importantly to provide the users with the reassurance that there is someone at the end of a telephone to help out with difficulties. NFBR and others have therefore suggested to the NCC that they might employ a two-person team to support

RECORDER. NCC has now agreed that there should be a two-person team to support and develop RECORDER. NCC is discussing this possibility with RSNCR, and are hopeful of obtaining two two-year contract posts, one of which would be funded by NCC. WWFN and RSPB are also taking a close interest.

RECORDER in operation

RECORDER is in operation at Clifton Park Museum Rotherham, Norfolk Biological Records Centre and Bedford Museum. To give an example of progress with the installed packages the local records centre at Rotherham, after an initial period configuring the system to their locality, entered 5,500 records in three months. Suffolk Biological Records Centre have recently equipped with a Dell System 310 AT computer in preparation for receiving RECORDER. The Dell was purchased for the records centre by Suffolk Naturalists Society aided by a 50% grant from the NCC. The Lincolnshire and South Humberside Trust for Nature Conservation have just evaluated RECORDER along with other software.

Upgrades

Stuart Ball has been actively upgrading RECORDER whilst sorting out teething problems (mostly an uncooperative index) for Bedford, Norfolk, and Rotherham. The initial version of RECORDER is now enhanced with i) 'popup' species entry, a very quick technique for selecting species names from screen, ii) a generalised record retrieval package which includes support for sorting and selecting records within a range of dates iii) searching for records given grid references for the diagonally opposed corners of a rectangle or a central grid reference and the radius of the area of interest around the centre.

Contacts

For more information about the technical capabilities of RECORDER contact Stuart Ball while advice on how the package feels to use might be sought from the users listed below:

Dr Stuart Ball, Invertebrate Site Register, Nature Conservancy Council, Northminster House, Peterborough, PE1 1UA Tel: 0733 40345

Bill Ely, Clifton Park Museum, Clifton Lane, Rotherham, South Yorkshire, S65 1JH

Dr Tony Irwin, Keeper of Natural History, Natural History Dept, Castle Museum, Norwich, Norfolk, NP1 3JU

Rosemary Brind, Bedford Museum

Martin Sandford, Suffolk Biological Records Centre, c/o Ipswich Museum, High Street, Ipswich, Suffolk, IP1 3QH.

GIS DEVELOPMENTS

At the end of February Charles Copp left behind his achievements at Bristol Museum for a computer oriented business venture of his own. Charles's new activities include provision of computer training, database applications programming and the supply of PCs and database software.

GIS on REVELATION

With the backing of a company called Resource Management Charles has begun the development of a graphics interface for ADVANCED REVELATION with the aim of giving this database some geographical information system (GIS) functionality. GIS is beginning to revolutionise database applications which rely heavily on map based data and has obvious applications in biological recording. Charles aims to provide an affordable GIS system which builds on software already being adopted in planning and conservation applications. A demonstration version of Charles's programme may be shown at the May NFBR AGM.

GIS Review

Responding to an appeal by NFBR council for members to take on projects, Charles and Alex Tait began a review of GIS systems with the aim of producing a document which looked at the hard and software options and drew on the experience of existing GIS applications. Charles has now developed the idea and will be producing a book entitled '*GIS in Planning and Conservation*'. The book will be published by Taylor & Francis late this year. Taylor & Francis are a publisher to watch for GIS publications and one of their first titles is to be a '*GIS Yearbook*' produced by the Association for Information Geography.

Contact

Mr Charles Copp, 8, The Paddock, Clevedon, Bristol, BS21 6JU Tel: (0272) 874128

DMAP

Introduction

Map output from databases is becoming a standard operation for many biological recording projects. Here Alan Morton describes his DMAP routine which is similar in function to the MAPPER (PLOT4) routine developed by Stewart Ball for the NCC's Invertebrate Site Register and RECORDER databases. In the *articles* section of this newsletter Stephen Coker describes the mapping functions which are integral to BIORECS.

Compatibility

DMAP is a computer program for distribution map and coincidence map plotting which will run on a wide range of IBM-compatible PCs (e.g. the Amstrad PC1512 and PC1640, Opus, and Wyse PCs), and will operate with all commonly fitted graphics displays (e.g. CGA, EGA, VGA, Hercules).

The program is not very demanding on disk space and can be run on computers without a hard disk, reading data files supplied by the user on floppy disk. Alternatively, DMAP can be linked to an existing database on floppy or hard disk. The quality of the screen display depends on the resolution of the graphics hardware fitted to the computer, but a hard copy facility is also provided which is independent of this and gives a high resolution (800 x 480 pixels) plot directly onto an ordinary dot-matrix printer. With Hewlett-Packard-compatible inkjet or laser printers, higher resolution (800 x 800 pixels) publication-quality maps can be produced.

Symbol control

The program reads data files supplied by the user, giving control and flexibility in the boundary outline, extent of the gridded area, and plotting symbol size and type. Square or rounded symbols can be selected, and a range of different sizes and types of symbol can be set for individual records in the distribution data file.

Grid Reference based

All data files are based on grid references, and the program can be used for plotting records on any sampling scale (1km, 2km, 5km, 10km etc.). The grid references can be in simple numeric form, or standard National Grid Reference alphanumeric form, and can include tetrad letter coding. The coincidence mapping facility can be used for plotting the joint frequencies of groups of species chosen for

'habitat' mapping, or for all species as a useful guide to recording coverage during the course of a biological records project.

Contact

For further information about DMAP or for a trial version of the program, write to:

**Alan Morton, Imperial College, Silwood Park,
Ascot, Berks. SL5 7PY.**

MDA USER PANEL

Membership of the Museums Documentation Association (MDA) was recently broadened beyond the original National Museum / Area Museum Council basis to include museum federations and specialist groups. The 'User Panel' has been convened to act as a forum to provide informed advice on the work and priorities of the Association.

First meeting

Nineteen organisations were represented at the first meeting of the MDA User Panel held at the Tate Gallery in mid October 1988. The panel had been asked to consider for its meeting the advice and training role of the MDA. Accordingly the Panel reviewed the MDA's current and future training provision, conference programme, advisory support service information resources, written documentation and research. With the inauguration of a User Panel for the MDA perhaps it is time to take a quick look at the progress of the MDA's documentation systems.

Cards out moded?

By the end of the 1970's the MDA had produced about 18 cards and instruction books to cover documentation of museum objects. Within the eighteen was a card for natural science specimen documentation which the editor at least tried adapting for biological recording ends. The documentation system behind the cards is now implemented in a computer system running on IBM compatible PCs. The computer system involves a data entry package MODES, and a retrieval package TINmus. MODES (Museum Object Data Entry System) has been squashed onto AMSTRAD PCW [CP/M] machines although this version will not be developed any further. 140 institutes now use MODES and an independent users group has been started. The editor is keen to hear from any one using MODES for

biological recording applications or who has exported data entered under MODES to other systems.

Training & support

In support of its documentation systems the MDA made 70 advisory visits between 1987 and October 1988. Further backup for the MDA computer system is provided by training courses which include basic computing, and the use of MS-DOS, MODES and TINmus. The basic computing course remains in demand as new professionals enter museums with little computing experience. The MDA has identified the need for a course on dealing with data backlogs.

Contacts

Further information about the MDA, its publications, services and documentation systems is available from:

**Museum Documentation Association, Building 0,
357 Cherry Hinton Road, Cambridge, CB1 4DH
Tel:0223 242848**

The MODES User Group can be contacted through:

**Mark Davies, Keeper of Conservation, Somerset
County Museum, Taunton Castle, Castle Green,
Taunton, Somerset TA1 4AA.**

BSBI Computer Users Group

Data versus hardware standard

In November 1988, an informal committee consisting of 9 Botanical Society of the British Isles (BSBI) members and interested people, met at the British Museum (NH) to set up a computer users group. The stimulus for the meeting was a concern among BSBI members that there should be more standardisation of computerised botanical recording. The feeling of the meeting on this point was that standardisation of the data content of recording systems would be valuable. It was felt that it would not be helpful to try to impose a software or hardware standard, because people may wish to use computers they already have or software they have developed themselves.

Questionnaire

The first action of the users group was to send a questionnaire to interested members. At the present time, 64 people want to join the users group; 47 already use computers for botanical work; 17 want to

use computers but need advice. It is interesting to see from the replies that 26 people have PC compatible machines, 11 have BBC systems and 10 have Amstrad PCWs. Owners of non-PC machines have expressed concern that we do not forget them in the name of standardisation. Another result from the questionnaire is that there are a lot of programs written by users for their own purposes for a wide range of computers. It is my hope to evaluate some of these systems and to help their authors to distribute them more effectively, if they wish to.

Newsletter

We will have a newsletter containing reviews of software (commercial, public domain, and user written), letters and comments from members, and basic advice on choosing and using computers and software. We have already had several requests for workshops and introductory teaching sessions from potential computer users, so these may form part of our future activities. As well as helping to distribute software, we aim also to distribute disks of data such as; BRC species numbers, English names of plants etc. It is likely that the informal committee will remain as an advisory body meeting several times a year.

Contact

The BSBI computer users group is open to BSBI members..

**Dr. Mark D. Atkinson, BSBI Computer Users
Group, 308 Mill Road, Cambridge CB1 3NL.**

MOSS SOFTWARE

International library

The International Association of Bryologists is running a 'software library' for its members which holds a collection of over 120 programs for IBM compatible PCs. Members order copies of desired programmes by sending a request to the library based in Holland together with an appropriate number of blank floppy disks. The idea behind the library is to provide all computer-using bryologists with programmes as tools for more effective work.

Shareware

The programmes selected for the library are either general purpose aids to computer use or have proved useful in Bryological work. The programmes can be

copied freely but some are distributed using the 'Shareware' principal where the authors ask for a financial contribution if their programme is found to be useful.

Catalogue of delights

The library catalogue is, appropriately, itself on disc and is well indexed. The catalogue includes many of the shareware standards such as PC-WRITE, PC-GRAPH which can provide the PC user with full featured Word Processing, Spreadsheets, Databases and Graphics without the cost of market leading commercial software. There are numerous specific aids to Bryological work such as herbarium loans, herbarium management labelling programmes and taxonomic check-lists. An interesting group of programmes are designed to aid learning Bryophyte taxonomy including KEYOUT which will tell students when inappropriate characters are chosen in a key (once an instructor has configured the program for test specimens). The catalogue is rich in utility programmes to make the *** machines easier to use, Eg: menus, things to undelete files.

Computer workshop

Not only do Bryologists get the benefit of the library they are shown what the programmes can do! In November 1988 Dr Brown of Bristol University held a '*Bryological Computer Workshop*' to give delegates practical experience of PC use including running bibliographies, taxonomic, ecological and mapping applications.

What about an NFBR software library ? Applications for the post of librarian to NFBR council ASAP

COMPUTER RECORDS COURSE

Bristol Extra-mural course

On March 3rd 1989 the University of Bristol Dept of Extra-mural studies held its first '*Computerisation of Natural History and Conservation Records*' course. The course was over subscribed and an overflow course is due run on 17 April. Doubtless the £35 one day event will be repeated so contact;

**Dr C.J.Steadman, DEMS, University of Bristol,
Wills Memorial Building, Queens Road, Bristol,
BS8 1HR Tel:0272 303030 ext.4631**

What is on offer

No previous knowledge of computing is necessary for the participants of the course which is aimed at 'anyone involved in the collection, management, and use of environmental (biotic) records'. Lecturers include Charles Copp and Stuart Ball. Topics range from a look forward to the coming of geographic information systems (GIS) to the need for information. Examples of databases include the RECORDER package and ADVANCED REVALATION while database structure is tackled as a separate subject.

ERICA

Introduction

The Cornish Biological Records Centre's computing system was reviewed in NFBR Newsletter 6 just after the centre had received a 600mb Prime computer. Since then CBRU have been busy and here Colin French, who is the creator of ERICA brings us up to date with developments. ERICA stands for Environmental Recording in Cornwall Automated.

Larger premises

To accommodate the computerization project ERICA the Cornish Biological Records Unit has moved to much larger premises on the Campus of the Cornwall College of Higher Education. The CBRU has been wired up so that up to ten computer terminals can feed biological records directly onto the Unit's PRIME 2550 mini-computer at Exeter University via a dedicated phone line.

Official launch

The project will be officially launched on May 12 by the Christopher Beazley (euro MP for Cornwall and Plymouth). A two year development phase will then be complete and the intention is that the 1.5 million biological records held by the CBRU will be placed on computer in 15 years using volunteers, YTS and ET trainees.

Schools access

ERICA will provide direct online access to Cornish schools, supply raw data for research within the University as well as service the needs of consultancies, and amateur and professional naturalists.

Trust use

ERICA is designed to encompass everything that is recorded by the CBRU in its manual data bank and is being tailored to meet the specific requirements of the National Trust and Cornwall Trust for Nature Conservation who are also to use it on their own PC computers. In particular, a site management/project recording system is well under development. This closely follows the NCC recommendations for producing site management plans and is based on the extensive working management plan drawn up for the Lizard by Nigel Davies of the National Trust.

The system now incorporates a computerized gazetteer for Cornwall and the graphics package DMAP (see article by Dr Alan Morton in this newsletter) which enables the production of a wide selection distribution and coincidence maps directly from within ERICA.

For further information on ERICA contact:

**Dr Colin French, Cornish Biological Records
Unit, Trevithick Building, Trevenon Road, Pool,
Redruth, Cornwall, TR15 3PL Tel: 0209 710424**

ARTICLES

Introduction

On April 23 last year the NFBR held a conference on '*Computers and Biological Recording*' in the medical school of Nottingham University. The conference was initiated by Bill Ely following his work running the *Computer Records Systems and Data Standards* working party of the NFBR. Much of the smooth running of the conference was ensured by the good offices of the MDA who had held their own computer oriented conference at the same venue on the preceding days.

The seventy delegates had plenty of opportunity to talk directly to the developers of a dozen computer recording systems. Ten of the systems were presented in short talks. There will be no specific conference publication due to the visual and informal nature of much of the presentations and demonstrations. The Newsletter brings you three articles based around the conference presentations kindly provided by Stephen Coker, John Tucker, and Phil Collins. The systems and developments they describe are I hope new to most NFBR members.

For those who missed the conference the systems presented which are not covered by this Newsletter were: Recorder (Stuart Ball), Wiltshire BRC (Claire Appleby), BRERC's BLISS (Charles Copp), Passmore Edwards (Colin Plant), RSNC (Nick Logman), Wigan (Sheila Crombie), ERICA (Colin French). News on the majority of these systems can be found in the 'News' and 'Computer News' sections of this edition. The Wigan system was presented in *NFBR Newsletter* 5.

BIORECS

BIORECS is an integrated recording and analysis package described here by its designer, Stephen Coker.

Background -Dyfed devolution

The Dyfed Wildlife Trust are investigating the possibility of equipping all their recorders with Amstrad PCs. This will both increase the recorders effectiveness and be a means of getting biological records on computer as part of an initiative to promote local Biological Recording Schemes. The small Dyfed recording community works closely with other bodies, most recorders doubling up as local reps for national schemes.

Home computer power

The computers will be based in the recorders homes. This will allow records to be input at any convenient time and more importantly allow easy access to the records. The software used will be BIORECS which is not just a recording package. Great emphasis has been placed on manipulating the data and future development of the software is expected to concentrate in this area. It is hoped that even recorders reluctant to use computers will be attracted by these facilities, while the several recorders who already use BIORECS have clocked up 75,000 records.

Low cost

The philosophy of the system is to use the cheapest machine that will run BIORECS software which requires no special expensive packages (database/graphics etc.). The software allows for easy use of computer, easy input of data, easy exchange of data, merging of data etc and interesting analysis of data. The system puts the power of computers into the hands of as many people as possible rather than

concentrating computer power at the centre of the organisation.

Division of labour

Inputting of records is always the major problem of any system. The sheer numbers of records and the accuracy required makes huge demands on manpower. The fragmentation of the effort allowed by using any number of input computers each controlled by the local 'expert' goes a long way to solving this problem.

BIORECS -system features

Biorecs attempts to provide an integrated biological recording and analysis environment.

Input and structure

Input of species data is via tick screens based on facsimiles of BRC recording cards. Any card design for any group of species is catered for. A built in word processor allows text files stored by grid reference to be maintained for both sites and species. Data is stored as 'cards' or group of cards for visits to a location. A separate site file maintains description of sites and their compartments. Sites are any shaped area and the aggregation of species lists to form a site report also works on square data (Eg: 1 km, tetrad, 5 km or 10 km squares).

From screen map to record

Biorecs makes extensive use of graphics. Once data has been input, looking through the data is mainly achieved via an atlas of species maps. The atlases are made up of species dot maps at a 1 km level for a vice county and 10 km dots at a regional level. From a particular species map it is possible to go directly, by pointing a cursor at the dot on the map, to: i) the originating record, ii) the text site description, iii) the text species description for that site and then return to the atlas map. Also possible is jumping between the vice county map and the regional map for a given species, and then returning to the vice county map or changing to maps for another species. All the movements within and between maps is done by pointing the mouse cursor at the dots on the maps.

Habitat dendrograms

The atlas function of BIORECS maintains a dendrogram which represents the records of a given species by habitat and will map the occurrence of the habitats. Again from a habitat map it is possible to

jump directly to the originating record. A species rarity scoring system is supported with an atlas of maps showing level of scoring.

Zooming

In addition to the atlases used to access records there is a detailed mapping function. It is possible to zoom in to part of a from a vice county map, then plot the positions of field visits and collect a chosen selection of these to form a species list. Sites with compartment boundaries, and even species distribution within each site on a compartment basis, can be plotted. Coincidence mapping for a selected number of species, for a whole group of species, or for species associated with a selected species, is supported.

Record analysis via ordination and classification is supported, records to be analysed being selected via map capturing, associated with a selected species or on a record filters procedure based on record characteristics.

Equipment

Biorecs has been developed on an Amstrad PC 1512 with a 20Mb hard disk with a CGA graphics screen. The programme with the general taxonomic files occupies about 3Mb. The amount of space required for data obviously depends of the type of records and how much use is made of the different text file options. On average about 10 bytes is used for each species record and about 400 bytes for each species map.

Installation and manual

The program is designed to be easy to operate and comes with an installation program and a 135 page manual with an index. All the options are menu driven and should be able to be used by someone with little knowledge of computers.

Availability

BIORECS can be set up to work for any recording area. The programme is commercially available at institutional price of £300. However substantial discounts exist and amateur records might expect to outlay closer to £60. For further details of the price and works of the programme contact:

**S.Coker, Mountain, Clarbeston Road,
Haverfordwest, Dyfed SA63 4GS**

TETRAD

John Tucker describes his quick and easy program for tetrad distribution data originally developed to devolve computerised recording to individual recorders in Shropshire.

Ready-made answer

For anyone facing the task of handling tetrad distribution data, for whatever species (or pseudo-species, for example rivers, altitude etc.) and for whichever county (or parts or limited combinations of counties) then, I believe that 'TETRAD' is a ready-made answer.

Breeding Bird survey origin

TETRAD was commissioned by the Shropshire Ornithological Society in 1984 to store and process tetrad breeding bird data for its Breeding Bird Survey now in its forth year. It was written for the Shropshire Wildlife Trust's COMART, of the 'Computers in the Trusts' scheme and was designed to handle any county with any group of species or pseudo-species. The program has been in use in Shropshire since 1985.

System features

TETRAD stores a recorded level (0-4) for each of up to 200 species in each tetrad of a user-defined area, usually a county. Up to ten sub-areas can be specified, for example for area co-ordinators. New species may be added and levels are changed via fast data-input routines. Output analyses can be as; i) lists ii) maps, iii) statistical summaries iv) selective searches for combinations of species. In each case the subject of output to screen or printer can be tetrads or species. Outputs can be requested for the whole county or for sub-areas.

Availability

TETRAD has now been translated into PC-compatible form and it is commercially available at £74.75 (incl. VAT), marketed by Oxford Mobius. , Technical and delivery queries should be directed to Oxford Mobius. Implementation queries should be sent to me. I have three years experience with the program as Conservation Officer at the Shropshire Wildlife Trust with responsibility for the Shropshire Ornithology Society's bird records and Trust data.

**Oxford Mobius, 68, Church Way, Iffley, Oxford
OX4 4EF (0865) 727757. (the Newsletter should
contain a flyer for TETRAD from this company)**

**John Tucker, 13 Brook Road, Pontesbury,
Shropshire SY5 0QZ.**

PROGRESS IN HERTS

Phil Collins outlines the developments at South Hertfordshire Environmental Records Centre. Phil's talk at the Nottingham conference (see introduction) concentrated on computing at SHERC which is here put into the context of the recent operations of the records centre.

A major area of concern at the Nottingham conference was the coming conversion of MSC into ET (employment training) in September 1988. SHERC provides an encouraging example of how alternative funding for biological recording can be found.

Formation and Funding of a County Records Centre.

Following the demise of MSC support, Herts County Council is funding two staff at SHERC until April 1989. Then the centre will be funded by a consortium of district councils, the County Council and NCC, and will serve most of the county except N.Herts District. Initially it is hoped that three staff will be employed, increasing to 6 in 1990. The Centre will be administered by a steering committee, with representatives drawn from the funding organisations, the Herts & Middlesex Wildlife Trust and natural history societies. SHERC will be based in St Albans for at least the next 12 months, but will be forced to move to larger accommodation if staffing levels expand.

Planning Input

Work has continued to improve the availability of information to planning authorities. Alert Maps detailing grade C and above sites have been supplied to the County Council and will be supplied to all authorities in 1989. The Centre has been working jointly with local authorities to produce nature conservation strategies. These provide environmentally sensitive planning and land management policies and priorities. The St Albans strategy was adopted in January 1988 and Broxbourne & Watford District strategies are being developed at present. The County Council has launched its Heritage Sites Project, which sets out to identify and secure sites of high value. Management agreements with site owners are being implemented, to ensure that the ecological, archaeological and landscape value of these areas is protected.

Surveys

The phase 1 survey is now complete. In excess of 15000 sites are now on file. Considerable quantities of high priority data have been computerised. Contract survey work is being undertaken for Thames Water, and a number of phase 2 surveys were undertaken in 1988. In particular, the Centre launched the 'Upper Colne Valley Project' which aimed to assess the ecological importance of the extensive gravel pit chain to the south of St Albans. Subsequently the Centre has been able to provide information for the development of planning policies for this area.

Computerisation

The development of the computer system continues. The current system consists of an ICL Vienna Office Automation computer running 4 terminals under Xenix. An additional terminal is to be added, located in the North Herts Records Centre some 20 miles away, to give on-line access to the database in St Albans. Database applications are evolving using INFORMIX.SQL (Structure Query Language). A computer assisted mapping pilot scheme is underway, in conjunction with Welwyn Hatfield District Council, using Sun hardware operating under Unix. Means of gaining access to the development control databases of a number of local authorities are being investigated. Several planning departments in the county use the UNIX based APPLY package and it is hoped that on-line access will be developed.

Publications

The County Council, in conjunction with SHERC and the North Herts Records Centre, have published habitat status reports for grasslands and ponds. Also published with the support of industrial sponsorship a brochure '*Hertfordshire's Disappearing Wildlife*' and leaflets on ponds and grasslands. These have attracted much publicity and political support for the development of the county records centre and the Heritage Sites Project.

Editors note

The publications were supplied to the editor and are extremely attractive. The brochure is notable for well presented statistics in conjunction with photos and text. Further details and publications can be obtained from :

**Herts Environmental Records Centre, The
Cottage, City Museum ,Hatfield Rd,St
Albans,Herts AL1 3RR Tel : (0727) 66100 ext
2928**

ARE YOU REGISTERED ?

Introduction

Most biological recording organisations in common with many voluntary and public sector bodies are not very well known and frequently overlooked by potential users. One way to help publicize the facilities and functions of your organisation is to get details of what you do onto appropriate directories and registers.

DoE/DoT Register

Bill Ely of Rotherham Museum looks at the DoE/DoT '*Register of Research and Surveys*'.

This register, published by the Depts of Environment and Transport contains a list of studies, surveys and projects relevant to the interests of these Departments and carried out by Government Departments, Local Authorities, Research Institutions, Universities, Consultants and Industry. The projects included in the Register include fixed-term studies with a clear beginning and end as well as on-going studies, and MSC-supported schemes are included as well as those with full-time staff.

Environmental Planning

The volume which is of particular relevance is one dealing with Environmental Planning. My (1978, and thus presumably nicely outdated now and almost worth putting into our collection) copy has chapters on Land and Land Use, Conservation and Heritage, Landscape and Environment and Natural Resources. The research topics include surveys of derelict land, digital mapping, surveys of conservation areas, ecology of vegetation change and bird population studies. The work of a BRC/LRC in compiling a record of the wildlife of a defined area is just as much a research topic as many of the ones included in this volume and I have updated the original entry for Rotherham's BRC which was filed in 1977. With a bit of imagination and a facility to be economical with the truth any BRC can claim that its governing body comes within the given list of participants.

Register contents

The Register has the name of each governing body, the title of each project, a brief outline of its scope (provided by the project staff), the name(s) of the contact(s), costs/grants where known or applicable, start and (where appropriate) completion dates and a list of publications resulting from the project. I have included publications by other naturalists where information from our records has been used in their compilations.

Index troubles

The arrangement of individual projects seems rather arbitrary (unless it has been rationalised in the past decade). Out entry labelled "Protection and Conservation of the Environment", is in the chapter on Natural Resources under 'General (including ecology and hydrology)' and you would search in vain in the index by checking such entries as Wildlife, Vegetation, South Yorkshire, Plants or Environment. When I need to look it up I have found the entry for Rotherham. This minor quibble aside I suggest that more Record Centres should contribute to this Register and establish our claim to be undertaking research of widespread benefit.

Three Directories

Lawrence Way looks at two new and one established Environmental directories.

The craze for knowing who is doing what continues. Recently published are two new environmental directories and I am pleased to find a biological recording organisation mentioned in one of them.

Who's who ?

The Environment Council, formerly Council for Environmental Conservation, have produced the '*Who's who in the Environment for Scotland*'. This looks at some 200 organisations with headquarters and staff in Scotland excluding those which service areas smaller than a region. The directory provides details of who to contact in each organisation, a brief description of function and details of publications, staff, volunteers, members, membership costs and local branches. There is no subject index so the only way of finding an organisation is by its name, though the directory is sufficiently small to browse quickly. BRISC(Biological Recording in Scotland Campaign) has an entry though I feel it would be good to have

had local records centres specifically mentioned in the 'Local branches' category of BRISC's write-up.

BP versus ICI

BP funded the Scottish publication and ICI plc are hot on their heels with support for '*Who's Who in the Environment?*' from the Conservation Trust. This is a small directory which samples subjects ranging from 'Our Heritage' to 'Trees and Woodlands'. There is an index to topics and organisations while the body of the book has addresses of relevant organisations presented after a discussion of each subject. The 'Protecting Wildlife' section is probably most relevant to the recording world.

Overlap

Both of these handy A5 directories overlap with the comprehensive though now increasingly out of date '*Directory for the Environment*' by Michael Barker which first appeared in 1984 and was updated in 1986. A third edition of this invaluable book is being compiled by Monica Frisch for Merlin Press and is due out in late 1988 or spring 1989. Though the selection criteria for some of these directories preclude some smaller conservation and recording organisations, I feel that where possible such organisations should seek inclusion in Environmental directories. It is effectively free publicity and the mixing of recording with disparate environmental concerns in one source might bring new people into contact with the objectives and activities of biological recording organisations.

DIY Directories

Philippa Burrell describes the preparation of a county environmental directory in the recently published NFBR 1987 conference proceedings. The Bristol Museum project found a variety of benefits from their local directory including better cooperation between organisations.

References:

Barker, M.J.C 1986 Directory for the Environment: Organisations in Britain and Ireland 1986-7. 2nd Ed. Routledge and Kegan Paul.

Berry, P.S.(Ed) 1988 Who's Who in the Environment. The Conservation Trust

Burrell, P. 1988 Answering Wildlife Enquiries :The Bristol Museum Enquiry Project in Stansfield, G & Harding, P.T. Biological Recording: The products NFBR Cambridge : 51-53.

Cowell, S (Ed) 1988 Who's Who in the Environment Scotland. Published by the Countryside Commission for Scotland for the Environment Council.

Availability:

Cowell.(1988) is free , send an A5 envelope with a 26p stamp.to
The Environment Council, 80 York Way, London N1 9AG 01 278 4736.

Berry (1988) is £2.50 incl pp.from
The Conservation Trust, George Palmer Site, Northumberland Avenue, Reading RG2 7PW 0734 868442.

To submit entries to the new edition of the '*Directory for the Environment*' contact
M. Frisch 8, Ivy Avenue, Ryton, Tyne & Wear, NE40 3PU.

OS MAPS ON DISK

Introduction

The Ordnance Survey first produced a gazetteer to their 1:50,000 map series in 1979. It provides the county, four figure grid reference, latitude, longitude, feature code and Landranger map no: for every name that appears on OS 1:50,000 maps of Britain. For some time now, the gazetteer has also been available on microfiche and magnetic tape. In February of this year the OS added the facility to produce all or part of the gazetteer on IBM format floppy disks. Now the gazetteer is on disk it should be easier to develop database routines which check place name elements of records against the gazetteer. The Invertebrate Site Register of the NCC has ,with Stuart Ball's programming, implemented the whole gazetteer (from mag tape) to run look-up and error trapping operations in their substantial database.

How can it be used?

I can think of three obvious ways in which the OS gazetteer is an aid to record entry.

- i) to assign data with a grid reference where only the name is known
- ii) to check that the location name and grid reference in a record match the gazetteer entry (this gives a way of verifying grid references which are very easily miss quoted or carelessly written)
- iii) where 1:50,000 maps are used in field surveying / observations it might be sensible to check that all location names quoted for data are OS names.

These three checks can be done manually but with large numbers of records the only practical solution is if a computer can look-up its own copy of the gazetteer !

Buying the Gazetteer

Printed gazetteer.

The printed gazetteer is published by the Ordnance Survey & Macmillan Press (ISBN 0-310-00098-2) at £50. The second edition is due in 1989 and is essentially a revision of the first edition's errors and omissions.

Microfiche

The full gazetteer on microfiche costs £94 after which annual updates cost £31. The updates are complete re-issues of the gazetteer incorporating any new or corrected information. It is not possible to buy an update without having made an initial purchase at the full price.

Magnetic tape (& paper printout)

The OS can supply all or part of the gazetteer on magnetic tape for use in computer applications. The tapes are run in any of, ICL, VAX, ASCII, EBCDIC formats and the whole gazetteer costs £1,200. Selections of the gazetteer are made with a handling cost of £60 and a charge of £4.80/1,000 names. Selections can be made for; countries, counties, map number, and rectangular areas defined by grid references. Selections can also be made by the seven coded types of name ie; towns, water, hill, forest, antiquities and 'other'. To give an idea of the cost for a county the average number of names/county is 3-4,000. North Yorks will have to dig deep to afford the circa 10,000 names within their boundary. The OS continually updates its master tapes and unfortunately customers must repeat their purchase at the full original price to get at the current data

Floppy disc

The cost of gazetteer data on floppy disk is to be set with each customer and a guide price is not yet available. It is assumed that selections of the gazetteer will be possible as described for magnetic tapes above.

Problems

The OS updates its gazetteer with additional names as areas are re-surveyed. Names and other data will also change as errors are discovered and corrected. It is possible that names will be removed when re-surveying shows that a previously mapped feature has been obliterated by development, or a natural process Eg; erosion. The OS does not have the ability to give its customers just the new or changed gazetteer entries since the purchase date. The only update possible is a complete new gazetteer or re-run of a selection from the gazetteer. Setting aside the cost of such updates there may be practical problems. Eg: You may wish to retain out of date gazetteer names since they refer to features which existed when records were made.

If you wish to order gazetteer data or need further information, contact:

Repayment Services, Ordnance Survey, Romsey Road, Maybush, Southampton, SO9 4DH Tel: 0703 792449

SURVEY REGISTER

Introduction

The survey register aims to publish details of new surveys and keep in touch with surveys which run for several years. A major objective of the register is to provide contact addresses so that ecologists can rapidly brief themselves on the problems of particular survey types by getting in touch with active surveys. The editor is keen to receive details of surveys, local or national, so please provide a couple of paragraphs on your survey.

BIOLOGICAL SURVEY OF COMMON LAND

Following the announcement of the survey in *Newsletter 6*, Nicola Penford reports progress of this NCC funded project at the end of its first year, 1987-1988 and plans for 1988-1989.

The team has surveyed 522 commons, as listed below:

NCC East Midlands Region:

Bedfordshire	25
Cambridgeshire	28
Hertfordshire	102
Leicestershire	13
Lincolnshire	23
Northamptonshire	2
Nottinghamshire	21

NCC Dyfed-Powys Region:

Dyfed	237
Powys	71

The initial stages of the survey involved visiting the offices of organisations in each county which held site-based biological information, and checking this against commons. Cards for each common were compiled, together with maps of the site, mostly at 1:10,000 scale. During the summer, each site over 1ha was surveyed, unless sufficient information already existed. After the field season, writing up sites and entering the information into the computer database commenced. This is likely to continue until the end of March, when work on the next round of counties will begin. In addition, as the details are added to the database, analysis of the results will be undertaken, enabling a county report on the biological characteristics of the commons to be produced, forming a type of "Domesday Book" on the current ecological value of each county's common land resource and the management currently undertaken. Our 1989 survey schedule is:

NCC Dyfed-Powys Region:

Powys

NCC South Wales Region:

Gwent
West Glamorgan
Mid Glamorgan
South Glamorgan

NCC South East Region:

East Sussex

NCC South Region:
West Sussex
Berkshire

Issues

The issues raised in relation to present uses and management of common land, encroachments and vegetation trends will provide much scope for further analytical work, and also be of considerable help in providing background information for the proposed forthcoming legislation.

Catalogues and maps

Other work undertaken by the Rural Surveys Research Unit is the production of catalogues and maps for all common land in Wales. Work is nearing completion on collating information for similar maps and catalogues for England, also including village greens. These will be available later this year.

Countryside Commission funding

The catalogues are produced in association with the Countryside Commission, and brings together for the first time information for all commons recorded in the country registers (established following the Commons Registration Act 1965). The catalogues include maps of common land boundaries at the scale 1:50,000.

The catalogues are available as files of A3 computer sheets (37x28 cms) bound within card folders, or as fiche though these do not include the maps. The cost of catalogues (including maps) for each of the counties of Wales is detailed below. The prices include postage and packing, and the royalties which the RSRU has to pay for using photocopies of the Ordnance Survey Outline Series.

County	Commons	Maps	Cost £
Clwyd	323	4	40
Dyfed	522	9	60
Gwent	69	3	21
Gwynedd	280	7	54
Mid Glamorgan	54	4	26
Powys	290	8	60
S Glamorgan	23	2	14
W Glamorgan	66	3	21

Availability

A full set of A3 catalogues and maps for the whole of Wales for £225. Fiche are available for £10 each with most county catalogues represented by 2-3 fiche. Orders and enquiries to the RSRU, Dep of Geography. Cheques should be made payable to the Department of Geography, UCW, Aberystwyth.

For further information

Rural Surveys Research Unit, University College of Wales, Department of Geography, Llandinam Building, Aberystwyth, Dyfed SY23 3DB

NCC'S WELSH MONITORING

An introduction by Peter Hope Jones

On 1st August 1988, NCC created the post of Monitoring Ecologist Wales. This is a minimum two year appointment, based at NCC's Welsh headquarters in Bangor, Gwynedd. The main points in the job description (together with action or ideas on them) are outlined below:

1. To compile a comprehensive register for all biological monitoring work in Wales. Most of NCC's monitoring projects have now been identified, and I am aiming to set up a database of these (and future) projects within the COREDATA system operated at Bangor.

2. To develop a co-ordinated monitoring strategy for sites, vegetation and species in Wales. This means looking at the demands of site integrity and quality monitoring, together with those of various plants and animal species, then trying to decide on the most important projects in the light of available resources of cash and staff time. (I'm on a hiding to nothing here, but it must be done!).

3. To liaise widely within NCC and other organisations. A considerable amount of monitoring goes on in Wales, and we should be aware of all these other projects, in order not to duplicate them, and to learn appropriate methodologies from other organisations.

NCC in Wales is very conscious of the need to keep an eye on the changes occurring in reserves, SSSIs and the countryside outside these special sites; it is hoped that this post can guide NCC's biological recording effort in monitoring.

Contact

For further information on NCC's monitoring in Wales please contact:

**P. Hope Jones, Monitoring Ecologist Wales, NCC
Wales HQ, Plas Penrhos, Ffordd Penrhos,
Bangor, Gwynedd LL57 2LQ. Tel: (0248)370444**

PHASE 1 HABITAT SURVEY

Marie Moreau has prepared a summary of Phase 1 surveying in England and Wales.

A brief recap

Much of conservation depends on knowledge of the location, extent and status of semi-natural habitats. The Phase 1 survey method was designed by NCC to find and classify natural and semi-natural habitats and involves mapping all land within an administrative area. Sites that warrant consideration for protection are surveyed in more detail in Phase 2 and at this stage the relative value of each site can be established. Phase 3 survey involves full assessment of selected sites with detailed recording of most taxonomic groups. This final stage of survey will lead to development and implementation of management plans and policies for the use of each site.

Survey a shared resource

Phase 1 survey should provide expert, reliable and comprehensive information on the ecological resource to assist both statutory and voluntary bodies in protecting and managing the countryside. For example planning authorities need to know where sites of wildlife interest are to protect them from development and for strategic planning functions. Survey results can be used to allocate resources to areas of priority conservation importance.

Manual due for publication

To support their phase 1 methodology the NCC have produced a manual of classification codes, definitions, procedures and advice. It is important, for the sake of national compatibility that this system is adhered to. The Phase 1 survey manual does have some areas that need clarification but if pursued thoroughly it sets a standard and procedure that is fairly easy to follow. Any drawbacks within the system are far out-weighed by the importance of national consistency. Carol Blake at NCC

Peterborough is currently re-editing the manual. She is not altering the substance or the method but clarifying certain points, in particular the definitions of wet habitats and grasslands. She is also aligning Phase 1 habitat classifications with broad '*National Vegetation Classification*' categories. Publication of the re-drafted manual will be later this year.

Maps and target notes

Phase 1 survey results should be recorded as maps and target notes from which statistical analyses, distribution data and reports can be prepared. An ideal system would also have a computer database for easy retrieval of information and for expanding the uses of that information. Colour coded maps are preferable to acetates or monochrome maps; the former are clear and definitive, whereas on the latter boundaries between habitats are usually difficult to define. Ideally two or three sets of coloured maps should be prepared plus a set of acetate maps with boundaries delineated. From these acetates many copies in monochrome can be made for quick reference to indicate presence of a site of interest and referral to the source of more definitive information and its interpretation.

Advice

Further guidance and advice can be obtained from the NCC and from those who have completed Phase 1 surveys (see contact list). The current situation regarding completion of surveys is as follows:

Survey On-going

Tyne & Weir
Cleveland
Humberside
Lancashire
Nottinghamshire
Leicestershire
Oxfordshire
Buckinghamshire
Hertfordshire
Essex
Berkshire
Avon
East Sussex

Counties with no phase 1

Northumberlandshire
Durham
North Yorkshire
Lincolnshire
Cambridgeshire

Warwickshire
Northamptonshire
Wiltshire
Hampshire
Kent
Isle of Wight

Wales

In Wales Phase 1 survey has been completed on upland areas and lowland survey is now the major requirement. Lowland grassland is the most threatened habitat and so this habitat in particular will be identified for priority Phase 2 survey. The survey is being directed by the Wales Field Unit, NCC Bangor with one or two surveyors in each region. Fieldwork commenced in 1987. Data will be entered into the COREDATA system for ready access for Regional Staff.

Avon

Avon's Phase 1 survey is also funded and controlled by the NCC. Two thirds of the fieldwork has been carried out under the Community Programme scheme, funding for the remainder from the NCC is hoped for.

Nottinghamshire

Nottinghamshire survey has been organised by the Nottingham City Natural History Museum with an NCC funded supervisor, Greg Smith, and a Community Programme funded survey team. Two years of fieldwork have been completed leaving approximately three months still to go. Maps will be produced as acetates with habitat codes, and target notes will be input to a site related database. Funding to replace the loss of C.P. support is hoped for, and if this is obtained the expected date for publication is March 1990.

Hertfordshire

In Hertfordshire the Phase 1 survey has been completed on half of the county. Sets of coloured maps have been produced and also black and white "alert" maps alerting planning departments to the presence of areas of wildlife interest. The survey data, along with recording over and above Phase 1, has been put onto survey forms and species recording cards. Mostly flora and habitats are recorded but some fauna is also included, 12,000 sites have been covered. The data is recorded on an "in-house" designed system using the INFORMIX SQL database which is run on a UNIX computer system (see computer news section of this newsletter). Interim

reports on some habitat types have been prepared. Phase 2 surveys of river corridors (to fill a gap in information) and gravel pits (which are under particular development pressure) are under way.

Bedfordshire

Bedfordshire's Phase 1 survey is the result of a joint enterprise between the NCC, the Bedfordshire and Huntingdonshire Wildlife Trust and Bedfordshire County Council's Planning Department. The fieldwork was completed in 1988. Three sets of coloured maps are being produced, one for each of the above three bodies. Hopefully black and white "alert" maps will also be produced from acetates, for district and local authorities who can then refer back to the County authority. It is intended that the resultant data will be converted to a form suitable for entry into a site-related database. Bedfordshire has chosen to use RECORDER - see *Computer News* section of this newsletter.

Aerial Photos

To add to the debate on the rôle of aerial photos in phase 1, Bedfordshire found that not all semi-natural habitat could be classified using aerial photographs e.g. grassland types could not be distinguished from one another or often from scrub and ruderal. However aerial photos proved invaluable for error checking and to determine difficult boundaries, but they could not replace ground inspection of land.

Resources

Perhaps the role of NFBR is to encourage bodies to adopt the standard survey technique and to help persuade authorities in the remaining unsurveyed counties to undertake Phase 1 surveys. Many Phase 1 surveys are desperately in need of resources and it is hoped that planning authorities, record centres, wildlife trusts, natural history societies and the NCC can co-operate in providing the resources necessary to expedite this task.

Contacts:

Phase 1 manual
**Carol Blake, EFU, NCC, Northminster House,
Peterborough, PE1 1UA. Tel: 0733-40345 ex 3207.**

Phase 1 Survey Wales:
**D.A White, NCC, WFU, Bangor, Gwynedd, LL57
2LQ.**

Phase 1 Survey Avon:

Julian Scott, City of Bristol Museum, Queen's Road, Bristol, BS8 1RL.

Phase 1 Survey Notts:
Graham Walley, Senior Keeper (Natural Sciences), Natural History Museum, Wollaton Hall, Nottingham, NG8 2AE.

Phase 1 Survey Herts:
Phil Collins, Herts Environmental Records Centre, The Cottage, City Museum, Hatfield Rd, St Albans, Herts AL1 3RR Tel: (0727) 66100 ex 2928

Bedford Phase 1 Survey: (and responses to this article)
Marie Moreau, Environment Section, Planning Department, County Hall, Bedford, MK42 9AP.

BUTTERFLY RECORDING AND SURVEYS

A report in preparation.

The Biological Records Centre (BRC) is preparing a detailed report on butterfly recording and survey in the United Kingdom. The work has been funded by ITE, NCC and WWFN and has the support of the British Butterfly Conservation Society (BBCS). The report describes the work of ITE, NCC BBCS and the Joint Committee for the Conservation of British Insects (JCCBI) on recording and surveys, including the national BBCS/BRC Butterfly Recording Scheme and the ITE Butterfly Monitoring Scheme.

Extensive survey

An extensive survey of county and local recording has been analysed, with a full bibliography of county butterfly atlases. Many independent butterfly 'walks' similar to those co-ordinated as the Butterfly Monitoring Scheme are also listed. There is an annotated bibliography of publications on the status, ecology and conservation of individual species. The report includes recommendations on possible options for national recording schemes. The recommendations will form the basis for discussion between ITE, NCC and BBCS later in 1989.

Restricted circulation

Prepared by Paul Harding and Stewart Green the report will initially be produced for restricted circulation. For further details contact:

Paul Harding, BRC, ITE, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS.

NEW RECORDING SCHEMES

Two new national recording schemes are awaiting your participation. Copies of newsletters and a supply of recording cards for both schemes (neuroptera RA68, conopidae RA69) are available from;

Brian Eversham, BRC, Monks Wood Experimental Station, Abbots Ripton, Huntingdonshire, Cambs PE17 2LS. tel: 04873 381 ex 229.

Neuroptera Mecoptera Megaloptera

A revitalized national recording scheme for lacewings and their allies was launched in April 1988 by BRC with Colin Plant taking over from Michael Kirby as scheme organiser. Over 100 people have already expressed an interest. The scheme's twice yearly newsletter, free to recorders, contains advice on finding and preserving lacewings, and help with identification, including trial versions of new keys by Peter Barnard of the BM(NH). These will appear in a revision of the 1959 Royal Entomological Society handbook, due in 1990.

Colin will check IDs

In cases of doubtful identification, Colin is willing to check or name any specimens providing these have full locality data and data of capture. The scheme covers about 70 species; the group including conspicuous animals like alderflies and scorpionflies, and elusive beasts such as snakeflies and the snow-flea as well as green and brown lacewings. They form an attractive and manageable group, ideal for newcomers to insects as well as established entomologists. Some species come readily to light traps, so moth-hunters can help too.

New BRC card

The new recording card gives the chance to contribute to our understanding of the habitats and biology of lacewings as well as their distribution. Pre-1988 records are as welcome as current ones, as records from the earlier scheme have not yet been made available.

Detailed enquires about lacewings and their allies should be sent to;

Colin Plant, Essex BRC, Passmore Edwards Museum, Nature Reserve Interpretative Centre, Norman Road, East Ham, London E6 4HN. Tel: 01-470-4525 (office hours only).

New life in the Conopidae (Diptera)

Conopids, or thick-headed flies, are medium to fairly large flies whose larvae are parasites of bees and wasps. There are fewer than 30 species in Britain. Some species are quite common on brambles, hogweed and other flowers, the rarer species are very poorly-known.

David continues Ken's work

The new scheme organiser is David Clements, who has received all existing records from the previous organiser Ken Smith (formerly of BM(NH)) who is continuing to advise the scheme. David has designed a new recording card which enables recorders to note the habitat and even the precise capture situation of each fly. He is also producing a regular newsletter, which contains notes on distribution and behaviour, and a guide to available literature. A series of identification notes should overcome most of the problems in using earlier keys.

David will help with IDs

David will be pleased to help with identifications, and can also arrange to have any bees and wasps that are associated with a conopid identified too. The scheme has already attracted about 110 recorders and anyone who is willing to supply records or specimens is welcome.

For the brave

For the specialist a LONCHOPTERIDAE STUDY GROUP has been set up, and is also run by David Clements. The poisited-winged flies are a small group, with seven British species which live mainly in damp, shady spots. Records are welcome, on BRC single-species cards GEN13.

Contact for Conopids and Lonchopterids

David Clements, 9 Cecily Hill, Cirencester, Gloucestershire GL7 2EF.

REVIEWS

NEW FROM LEU

The London Ecology Unit (formerly the Greater London Ecology Unit) has an excellent catalogue of publications deriving from its survey work. Here Marie Moreau reviews two recent additions to the catalogue.

"London's Meadows and Pastures"

This is a handbook of the significant neutral meadows and pastures found within Greater London. The introduction, whilst informative, is a little confused and perhaps could have benefited from a more systematic approach. The paragraphs covering the National Vegetation Classification are somewhat unclear, and perhaps not in tune with this non-technical volume.

Wealth of information

However, the major part of the book provides a wealth of ecological, geographical and historical knowledge of seventeen sites of great wildlife value. This section, which constitutes two thirds of the book, is strongly recommended for naturalists, visitors or anyone who has an interest in the wildlife of these sites. The handbook is not particularly suitable for assessment of similar grassland sites of for proposing management strategies, but it is very informative about the areas it does cover. I look forward to the publication of the similar handbook on basic and acidic grasslands and on neutral grasslands without pastoral use.

"Nature Conservation in Croydon"

This publication adds to the LEU's series '*Nature Conservation Strategy for London*'. It is exceedingly well written with the sections on geology, history and habitats being particularly informative. Points throughout the text are clarified and explained, for example: why the October '87 storm had beneficial aspects for wildlife. All sites of ecological significance within the borough are covered, with much useful information and interesting detail. The book is set out logically and is very readable. Mention must also be made of the high quality photographs and maps throughout.

Setting a standard

This handbook will provide a good basis for planning decisions incorporating nature conservation, as well as being an invaluable gazetteer of the natural history of the Borough. It is strongly recommended for those with an interest in Croydon's wildlife and should set the standard for similar handbooks on other areas.

Details

Hare, A. 1988 London's Meadows and Pastures (Neutral Grassland). London Ecology Unit. 54pp, 23 colour photos, 20 maps and tables. £4.00 + £0.60 pp.

Clenet, D., Britton, R., Game, M. 1988 Nature Conservation in Croydon. London Ecology Unit. 60pp, 48 colour photos, 17 maps and diagrams. £4.00 + £0.60pp

If more than one copy is ordered the additional copies attract only £0.40 postage and packing. For those wishing to order either of the above two handbooks, contact;

London Ecology Unit, Berkshire House, 168-173, High Holborn, London, WC1V 7AG. Tel: 01-379-4395

NEW ATLASES FROM BRC

Roger Key of NCC reviews five new national distribution atlases from the Biological Records Centre. The new groups given coverage are; sepsid flies, centipedes, harvest spiders, click beetles and ticks.

Welcome addition

A knowledge of the level of recording and known distribution of any group of organisms is essential when considering priorities for further survey, square bashing, of individual species or the use of those organisms for evaluating potential conservation sites. The publication of 5 new Provisional Atlases is therefore very welcome. Although it may be some time before most conservationists can be persuaded to consider ticks in their evaluations this group is of interest to the medical and veterinary professions.

Interpretation

Of particular value is the addition of two features i) a paragraph of interpretations of the maps and ii) an

expansion of the biological information with each of the species in four out of five of the atlases, absent only in the click beetle volume, where this is replaced with an analysis of vice-county distribution. The click beetle atlas might more realistically be called a preliminary atlas for, as Howard Mendel points out in the introduction, the data have yet to be incorporated into the BRC dataset and subjected to the usual BRC checking procedures.

Conservation needs

The click beetle atlas in particular highlights the need for conservation of many of the species that have obviously declined dramatically between the different recording intervals symbolized on the maps, and points to the importance of a smaller number of key sites, in particular Windsor Forest and Park and the New Forest, for this group of beetles. Much more in depth and very useful analysis of habitat information is presented in the centipede atlas although perhaps in a somewhat indigestible format.

New format

The new, smaller, A5 format of these atlases is also welcome, making them easier to fit on the relevant section of the bookshelf than the older format. It does, however, prevent the use of the BRC environmental overlay sheets, although this is in keeping with quite a number of BRC atlases. Indeed it is rather a shame that three different map scales have been used in the five atlases, precluding the use of a future set of overlays. Consistency could easily be achieved by the use of a scaled photocopier. My only other criticism would be lack of any key to the symbols used on both the coverage map and the species maps in the centipede volume - surely due to an oversight, and the use of only a single date category symbol on the maps in the Sepsid atlas.

These minor points aside, these atlases will prove very valuable both to students of the particular groups of organisms, and to those who need a greater insight into the state of our knowledge of the groups in order to interpret invertebrate site information.

Details

Mendel, H. 1988. Provisional atlas of the click beetles (Coleoptera : Elateroidea) of the British Isles. BRC Atlas ITE Publications. 89 pages. A5. £5.50

Barber, A.D Keay, A.N. 1988. Provisional atlas of the centipedes of the British Isles. BRC Atlas ITE Publications. 127 pages. A5. £7.00

Pont, A. 1986. Provisional atlas of the Sepsidae (Diptera) of the British Isles. BRC Atlas ITE Publications. 33 pages. A5. £3.00

Sankey, J.H.P. 1988. Provisional atlas of the harvest-spiders (Arachnide : Opiliones) of the British Isles. BRC Atlas ITE Publications. 42 pages. A5. £3.00

Martyn, K.P. 1988. Provisional atlas of the ticks (Ixodoides) of the British Isles. BRC Atlas ITE Publications. 62 pages. A5. £4.00

Not reviewed but also recently published is;

British Myriapod Group. 1988. Preliminary atlas of the millipedes of the British Isles. BRC Atlas ITE Publications. 65 pages. A4. £3.00

The Atlases are available from:

ITE Publications, Merelwood Research Station,
Grange-over-Sands, Cumbria, LA11 6UJ.

Prices include postage and packing.

LONDON BUTTERFLIES

Brian Eversham of BRC reviews '*The butterflies of the London area*' which is the fruit of recording work by the London Natural History Society.

20 miles from St Paul's

The area covered is a 20 mile radius from St Paul's Cathedral, bounded by the OS grid lines, and mapped on tetrads. Seventy-two species have been recorded, including 10, exotic introductions/escapes such as the blue pansy and the brown playboy. The history of butterflies and recording in London emphasizes changes. Six species (wood white, small pearl-bordered fritillary, marsh fritillary, heath fritillary and large tortoiseshell) have become extinct since the 1900-1948 survey, all attributed to loss of woodlands; but to class the marsh fritillary as a woodland butterfly is rather misleading.

Geology to introductions

A very brief account of the geology is followed by more detailed essays on the origins and nature of habitats for butterflies, with details of woodland and grassland management and the characteristic butterflies of each, both past and present. There are sections on conservation, collecting and

introductions, and a list of 'useful addresses', which includes societies, conservation bodies, suppliers of collecting equipment, cabinets, even plants and seeds ... but misses the local biological records centres covering London!

The bulk of the book consists of species accounts. These summarize past records, giving fine details for the rarer species, and provide information on habitats, foodplants and biology. Much of this information appears to come from fieldwork in the London area rather than the literature; but the distinction is not always clear.

42 Maps

The 42 maps of residents and frequent migrants have orange dots on a black base-map, and are large and clear. All the maps are gathered together near the end of the book and show the records from the 1980-86 survey only. Distribution is also tabulated by Borough. Very thorough coverage has been achieved. The recommendations for further reading will be useful.

Being attractively produced and well illustrated (a few of the photographs are truly excellent), the book should appeal to the novices as well as to seasoned recorders. In which case, it is a shame that not all technicalities, such as vice-counties, the citing of tetrads, and 'reolith overlays' are explained fully; and referring to C G M de Worms simply as 'the Baron' may confuse the uninitiated. Overall, the book is well produced, exceedingly carefully researched, and summarizes an enormous amount of data very clearly.

Details

Plant, C.W. 1987 *The butterflies of the London area*. London Natural History Society. 199 pp, 45 colour photos, 42 two-colour maps, hardback.

Available from the London Natural History Society address below for £15.95 including postage and packing. A trade discount is offered to anyone re-selling copies. The author reports a good response in the first year with 1,000 copies sold.

London Natural History Society c/o Colin Plant,
Passmore Edwards Museum, Nature Reserve
Interpretative Centre, Norman Road, East Ham,
London E6 4HN

OAK GALLS ATLAS

Bill Ely of Rotherham museum reviews '*Oak galls of Essex. An Identification guide and provisional atlas*'.

Combined effort

This publication has a number of excellent features. It must encourage anyone interested in biological recording to see three record centres combining their resources and records in order to produce an atlas to a larger, more popular and presumably, more economically viable area than any of the three covers individually. The standard of the finished work is excellent, the large (A4) format, the numerous drawings as well as maps and the well spaced layout making this a pleasure to consult. I doubt if each of the centres could have produced such an attractive atlas - I know that mine could not!

Individual interest

This atlas was produced largely as the result of one naturalists enthusiasm for plant galls, and it is most pleasing to see individual interest and work being encouraged in this way. The restriction of the coverage to galls on oak trees rather than a more comprehensive atlas to plant galls in the country has allowed the author to include identification keys to the Essex species, as well as others which could occur there. This key is based on the one to oak leaf galls produced by the Dorset Environmental Record Centre a few years ago, which many of us, I suspect, have used to encourage local naturalists to take an interest in this subject, and readers are directed to Eady and Quinland RES handbook for a fuller key. The inclusion of a key to enable the reader to identify galls and then to see their distribution is another excellent feature.

Scaling

There are a few aspects which seem to be less satisfactory. I have reservation about any key which is only partial as it is likely to lead to rare or new species being overlooked. The species maps are arranged in alphabetical rather than taxonomic order. The scale of the maps also seems rather coarse for a small county. Each species is mapped on 10km squares and a few of the more common ones are also mapped on 1km squares. The difference in the appearance of these two scales for one species is very marked and suggests that an intermediate scale (5km squares or tetrad) would have been more informative.

Details

The Atlas can be obtained for any of Colchester, Southend, and Passmore Edwards Museums.

Bowdrey, J.P. 1987 "Oak Galls of Essex. An identification guide and provisional atlas.. Essex Biological Records Centres Publication No.6. £1.85 (£2.00 including p&p).

DROWNING IN DATA

Review of an article by Paul Whalley (*Ecos*, 9(2)1988) and an letter in reply by Ian Francis (*Ecos* 9(3)1988).

Poor co-ordination

Paul Whalley addresses the now familiar problems which afflict the collection, storage and use of biological survey data - lack of collaboration and co-ordination of effort. In particular he is concerned that Government and voluntary conservation organisations do not have access to adequate, accurate and up-to-date information on the occurrence of species in Britain, despite considerable expenditure by many organisations. Special mention is made of the need for these data to justify expenditure on site protection and to provide information for use in environmental impact assessments. He advocates the setting up of a National Wildlife Inventory (or Natural History Domesday Book) to document what is here today and to make sure it will be here tomorrow.

Data ownership

Ian Francis develops Paul Whalley's themes to bring in ownership of data. Now that information has a commercial value, particularly to environmental consultants, data centres which have compiled databanks from information contributed by volunteers must face the problems of data ownership and the right to sell information.

CHAIRMAN'S COLUMN

NFBR Chairman reviews some of the literature which has recently crossed his desk.

Recent work on the manuscript of a book '*Key guide to information sources in museum studies*' has

heightened my awareness of the diversity of literature relating to biological recording.

Flora of Leicestershire

New off the press is the *Flora of Leicestershire* (Primavesi A.L., and Evans, P.A. (eds), Leicestershire Museums, Art Galleries and Records Service. 1988.). The current volume is in the long tradition of county floras and represents a tremendous investment in botanical recording over many years. The current 486 page volume has chapters on Leicestershire botany and botanists; changes in the flora of the county since 1933; habitat studies; and recording the flora; as well as the usual chapters on topography; geology and soils; climate; and the systematic account.

Finnish threatened wildlife

Another publication to reach me as part of an exchange with a delegate from Finland at the Nottingham NFBR meeting is Rassi, P. and Vaisanen, R. 1987. *Threatened animals and plants in Finland* - an English summary of the report of the Committee for the Conservation of threatened animals and plants in Finland. One of the rare opportunities to compare our world with that in other European countries.

Swedish voucher specimens

Scanning abstract journals for museum studies literature has brought to light many references from the European Literature. One paper I ordered is Olsson, M. 1983. The environmental specimen bank at the Swedish Museum of Natural History. *Mem. Soc. Fauna Flora Fennica* 59. pp 93-100 (with a summary in English) shows that museum involvement in biological recording is not confined to the UK.

World congress

August/September saw the culmination of three years of planning in the mounting of the Second World Congress on Heritage Presentation and Interpretation at Warwick University, attended by more than 300 delegates from 20 plus countries. Riding a hobby horse, I presented a paper on '*Biological and environmental data banks in museums as a resource for interpretation.*' Because this subject did not fit into any of the six themes of the conference it was relegated to a miscellaneous section. As it turned out, another paper in the same session (Scott, D.M., *A model for the third millenium: the wider focus: NASA-National Park Service Project*) stimulated interesting discussion on the relationship between

techniques for biological recording from space and the verification of such surveys by work on the ground.

CONTRIBUTIONS

The editor invites contributions to the newsletter which relate to biological recording. Articles up to 2,000 words can be catered for while short notes 200-300 words on the progress of your organisation or highlighting a particular issue are welcome. The editor will compile short notes from phone interview. Publications for review cannot normally be returned as they are passed on to reviewers.

Text in any form is accepted but computer files on disc save me a lot of typing. My computer can read IBM format 3 $\frac{1}{2}$ or 5 $\frac{1}{4}$ discs of any density. Text written in most word processing packages is accepted but please save the files without any formatting.

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Contacting NFBR

The production of this newsletter immediately preceeds the NFBR AGM and so a full list of federation executive committee and council must wait for the outcome of the elections. The next newsletter will carry a full list of NFBR contacts and a membership list.