British Arachnological Society
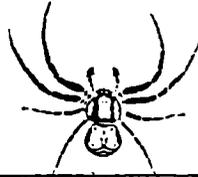
SPIDER RECORDING SCHEME

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1. EDITORIAL.

1.1. Introduction.

There has been a rather longer than intended gap between the appearance of the last Newsletter and this one, for a whole host of reasons, not least that it is more pleasurable to be out in the field or at the microscope than sitting at the keyboard. So, I apologise for the delay and hope to have another issue out to members before the end of the year.

As the number of Recorders and Area Organisers who have access to computers continues to grow there is a trend away from the use of recording cards (RA65, GEN14 etc.) towards the storage of records on computer media. There are many advantages in doing this of course. Although the data has to be entered via a keyboard, which is a rather laborious task (as is completing a batch of record cards !), once that has been done the data can be handled easily, interrogated and sorted in various ways and used to produce, for example, lists, tables and distribution maps. It has been agreed between the SRS and the Biological Records Centre at Monks Wood (BRC) that records on disk will be accepted by BRC provided certain criteria are met. As promised in Newsletter No.18 articles in this issue try and set out those criteria and describe recommended software. Of course many questions remain but these are being considered and discussed and more information will appear in subsequent Newsletters as answers are found. I do acknowledge the great help being provided by John Crocker and Stan Dobson as I attempt to get to grips with these computing issues.

I apologise for having to postpone, yet again, the inclusion of a number of interesting notes submitted by members because of shortage of space. However I promise they will be included in the next issue. But, finally, just one interesting snippet of news which I will squeeze in. As a result of the BBC programme "Tomorrow's World" , which many of you will have seen, during which viewers were asked to phone in if they had seen the "spindly-legged spider" (and nearly 13,000 did so), we obtained one new record. Pholcus phalangioides is in the Shetland Isles !

1.2. News of Members.

a). We welcome the following new Recorders who have joined in recent months:
Mr. S.W. Campbell, 4 The Laurels, Moreton, Wirral, Merseyside, WA6 6SN.
Mr. C. Davies, 153 Chatham Sreet., Edgeley, Stockport, Cheshire, SK3 9JU.
Mr. S. Dumican, Anglezarke, Sudbury Road, Gt. Whelnetham, Bury St. Edmunds, Suffolk,
IP30 OTJ.
Dr. A. Feest, Wills Memorial Building, Queen's Road, Bristol, BS8 1HR.
Mr. A. Marrow, 17 Commercial Street, Hyde, Cheshire, SK14 2JD.
Mr. M. Shardlow, 78 Grove Walk, Norwich, Norfolk, NR1 2QH.

b).<u>The following members have new addresses</u>:

Dr. K.N.A. Alexander, The National Trust, Sheep Street, Cirencester, Glos., GL7 1QW.

Mr. A.P. Fowles, CCW, Plas Penrhos, Ffordd, Penrhos, Bangor, Gwynedd, LL57 2LQ.

Dr. P. Kennedy, Rothamsted Experimental Station, Harpenden, Herts, AL5 2JQ.

Mr. P. Lee, 155 Corton Road, Lowestoft, Suffolk, NR32 1PR.

Mr. G.C. Slawson, Heath House, 20, Queens Road, Hartshill, Stoke-on-Trent, Staffs,
ST4 7LJ.

c). <u>New Area Organisers</u>:

Mr. M. Hogg, Ravenscraig, Millport, Isle of Cumbrae, KA28 OEG, has become the Area
Organiser for the Clyde Isles (vice-county 100).

Mr. M. C. Askins, 69 Savill Cresecent, Wroughton, Swindon, Wilts, SN4 9JG, has become
the Area Organiser for Wilts (vice-counties 7 and 8).

d). <u>Resignations</u>:

Dr. S. Hopkin and Dr. J. A. Horsfall have resigned because of the pressures of other activites.

2. <u>COMPUTER RECORDS.</u>

2.1. <u>Procedure for Submitting Records on Computer Discs</u>.

David Nellist, 198A Park Street Lane, Park Street, St. Albans, Herts, AL2 2AQ.

The purpose of this note is to set out the the criteria to be met if the computer disks containing records are to be acceptable and readable by the BRC. It is important to understand that the BRC will not accept records in any form, i.e. record cards or disks, until funding has been agreed for the production of the provisional distribution maps and BRC begin the data-entry phase. Even when data-entry does begin records will only be accepted that are submitted via the National Organiser or his nominee. So, *please do not send records of any type directly to Monks Wood*. A nominee now becomes necessary because of the need for someone with expertise in the use of computers to ensure that disks sent to Monks Wood are virus-free and that the data has been stored in the correct form. I am pleased to say that Stan Dobson, the author of the SPIREC software, has agreed to take on this role. As National Organiser I will continue to be responsible for checking data on record cards, their eventual transfer to the BRC, and the overall coordination of the SRS. For those still contemplating the application of a computer to the storage of records, but who have not yet taken the plunge, the use of the SPIREC software (for those with PC, i.e. IBM- compatible machines) or ARACHNOFILE (for those with APPLE-MAC machines) is recommended, and the following two articles give more details of these programs.

One of the problems arising from the submission of records on disk is the validation of those records. Currently Recorders should send their record cards to the Area Organiser for the appropriate vice-county who thus has the opportunity to query apparently anomalous records and, if necessary, call in specimens for examination. Clearly this approach is not possible if the AO does not have a computer, or has a machine which will not read the Recorder's disk. In these circumstances it has been agreed that the recorder should submit a hard copy version (i.e. on paper) to the AO for checking. When checking is complete and any possible mis-identifications have been corrected then the Recorder can update the disk. The AO should then send it to Stan Dobson, together with the corrected hard-copy, which will be retained for possible cross-reference by the BRC during the data-entry phase. It should be pointed out that a rare species card (GEN14) will still be needed for all those rare species which do not appear on the RA65.

The data on the disk should be in ASCII format, preferably on 3.5 inch disks. The minimum information required - the "fields" in computer jargon - are those currently

listed on the RA65, i.e. locality, grid reference, site description etc. However additional information, such as the numbers of each sex captured, may be entered in extra fields, as required, and will be entered into the data base by the BRC. BRC require all disk records to have the same format and this will be specified in a subsquent Newsletter. Records on disc should not be submitted if they have already been sent in on cards. If submitting disks regularly then only the new data should be included on the latest disk.

Stan Dobson has agreed to receive, check and store disks until BRC are ready to begin data-entry and he will, during the next few months, be liaising with the BRC to carry out checks of the procedure with disks from various sources, to iron-out any unexpected problems.

2.2. <u>SPIREC - Spider Recording the Easy Way</u>.

Stan Dobson, Moor Edge, Birch Vale, via Stockport, SK12 5BX. Tel:0663.743551

If you have been using a computer for any length of time for spider recording, you will probably by now have decided on the database program of your choice, whether it be general purpose such as PC-Files or Paradox, or more specialised such as Biorecs. SPIREC is not intended to replace any of these; it is a "front end" which will speed up your data entry to any program which can import data in ASCII form, and there are very few without this option (Recorder is a notable exception). Alternatively, you may be looking for a simple way of submitting records to the Spider Recording Scheme without having to fill out dozens of cards; SPIREC solves this problem also.

Together with its variations OPIREC and PSEUREC it is tailored specifically for handling spider, harvestman and pseudoscorpion records. It is not suitable for general biological recording, although it has been adapted to some other groups. As it is not intended to manipulate datasets, there are only very basic facilities for viewing what has been entered, and no facilities for modifying and deleting records; these can be done after importation into the target program, or simple adjustments can be made to the data using a standard text editor.

How does it work ? The opening menu gives you the options of creating, selecting, or erasing a database, also of switching help messages on and off (a feature of SPIREC is the comprehensive, on-screen context-sensitive help available). The first task is obviously to create a database. Choosing the create option presents you with a screen looking something like that shown overleaf, where the dashes represent single-line windows (not to scale).

You are invited to select any of these lines in any order, simply by entering a sequence of the relevant letters (the record number is always included automatically). You are then prompted for a database name, then, if you have selected the spare field, for a name for this which will be displayed subsequently.

You can create up to eight databases, and you can select any of them to work on. Having made a selection you are presented with another menu from which you can choose to add records, add site records (explained later), view records, or export data. If "Add records" is chosen, a similar screen to that shown is displayed but having only your selected fields in the specified order. All fields are initially empty except for the record number which shows "1"; this is automatically incremented every time a record is entered, but it can be changed if necessary. You can enter data into each field, in which case the cursor moves into the next one, or you can move between fields with the up and down arrow keys. The main advantage of SPIREC is the convenience of entering much of the data by reducing

keystrokes to the absolute minimum.

Screen diagram.

```
Record No.:  ___
   User ref.:  _A___
                                    Authority   Index No.   BRC No.
     Species:  _B_____  _____  _____  _____
         Sex:  _C____
    Location:  _D_____
                                    VC Name
VC Number:  _E__            _____
   Grid ref.:  _F_____
    Altitude:  _G_____ metres
        Date:  _H_____
     Habitat:  _I_____
    Remarks:  _J_____
        Spare:  _K_____
          Col.:  _L_____        Det.: _____
```

For species entry, simply type the initial letter of the generic and specific names and a list of all matching species is displayed as a table. The required species can then be selected with the arrow keys and entered. Most species are on very short lists, the longest for spiders is "pp" - note that the generic initial can be lower case - with fifteen. (Here's a challenge: without looking at a species list, write down the fifteen !). Alternatively, continue typing the specific name and the list will shrink accordingly. When selected, the name of the authority, an index number (see below) and the BRC number (the one on the record cards) are entered also. There is a facility for entering names which are not on the official British list: foreign species, such species as Oedothorax tuberosus if you wish to continue recording these, or indeterminate species such as female Dicymbium nigrum/brevisetosum (although this would have to be abbreviated slightly because you are limited to 27 characters).

Locations have to be typed in the first time they are used, but they are then stored and subsequently, they can be selected from a table as with species, but after typing only the initial letter. When a location is selected from the list, if the vice-county is one of the selected fields, this is entered automatically and there is also the option of automatic insertion of other site information, namely the grid reference and the altitude, according to what was entered when the location was frst typed in.

The grid reference can be entered either prefixed by two letters or two numbers for the100km square, followed by a two, four six or eight digit number. The reference is displayed with both the letter and the digit prefix and the subsequent eight digits padded out with dashes if necessary. For example entering sk0286 (case immaterial for the letters) would result in a display of SK(43) 02--86--.

The vice-county can be entered either as a number, or by typing the initial letter and selecting from a table as in the case of the species. In either case, the relevant name or number is automatically inserted also. Irish counties and grid references are handled in a similar way.

The altitude can be entered in metres or feet, but is always displayed and stored in metres, an automatic conversion taking place if the height is terminated with an "f".

The date is entered as a six digit number in the form 010493 for example for 21st April, 1993. After the last digit is typed it is displayed as 1/ 4/1993. Typing a minus sign before the year moves back a century so that an old record from the 1st. April, 1893 would be entered as 0104-93, resulting in a display of 1/ 4/1893.

It is assumed that the collector and determiner are normally the same person, so that when a name is entered in the "Col." field, it automatically appears in "Det."; this field can be changed if necessary. The names are held on a list so that, again, they have only to be typed once. All the other fields are normal text entry.

When complete the record can be saved by pressing the F10 key; this will also clear all the fields with the exception of the record number, incremented ready for the next record, and the collector and determiner fields since it is also assumed that these will remain constant when a block of records is being entered. If a block of records fom the same site is to be entered, selecting "Add site records" from the menu will be identical to the above, except that any field relating to the site will be retained. At any time, however, the last previously entered field can be recovered by pressing "+". The record viewing facility consists of viewing either all the records, or a range of them, a screenful at a time, in a compressed form.

To export the data you are first given the option of exporting all records or a selected range, then you are presented with the "add record" screen with letters inserted in the same way as for database creation, but this time with letters in every window, including record number, authority, index number, BRC number, vice-county name and determiner. Any of these can be selected in any order; if the grid reference and/or date are selected, you will be asked to choose the format in which they are to be exported. All the individual fields are delimited by a carriage return but you will be asked for a delimiter between fields; this can be any character, but also "Enter" or "tab". If the target database ie set up with exactly the same fields in the same order, there will be no problem in transferring the data. For use with the Spider Recording Scheme, the export file can be transferred directly to disk and, eventually, sent to the Biological Records Centre.

To assist in the export of large amounts of data, the data file can be cleared periodically without disturbing the rest of the database. All the location names and the collector/determiner names will be retained, and the data entry can resume with the next sequential record number. The export field sequence is also saved so that there is no ambiguity the next time an export takes place.

What does it work on ? The hardware requirements are an IBM compatible PC of almost any size (the program takes up less than 170k of memory), provided that it has an EGA or VGA colour screen. There are problems at present with producing a mono version. With MS-DOS 5.0 or later, there should be no problems with the display; with an earlier version, there may possibly be a slight problem with some display adapters in that the screen height may be reduced, but it will still be perfectly legible.

How do I get a copy to try ? Easy, send me a three and a half inch formatted disk, any density, with a return envelope, and I will send you a trial version. Five and a quarter inch disks can be coped with but there would be a delay. There will soon be a manual available, but a disk version will be supplied which has all the driving instructions. There is also a help line; if you have any queries give me a ring.

It would be very remiss of me not to mention the enormous help given to me by John Crocker who saw my original version, and as a result of several helpful personal visits,

many telephone conversations and sackfuls of computer discs passing between Birch Vale and Loughborough, persuaded me to produce this working version.

2.3. ARACHNOFILE.

Paul Selden, 60 Sheffield Road, Glossop, Derbyshire, SK13 8QL.
(email: PSelden @fs2.ge.man.ac.uk).

ARACHNOFILE is a personal database program for amateur and professional arachnologists which runs on Apple Macintosh and PowerMacintosh computers. The details below refer to the British version but a World version is also available. Main features of the program are:

*.. A full checklist of British spiders is included, with index numbers to the Biological Records Centre, Roberts and maps in Locket, Millidge and Merrett,Vol. III.

*.. Keep your personal records of locality, date, sex, grid reference (any format), notes, etc., on species cards, and store your commonly used grid references, locality data etc., for easy entry. A full list of vice-county numbers is included.

*.. Fast and powerful search facilities. Find any keyword or string, or linked words (e.g. date and place), and produce reports for printing or export to text, spreadsheet, database or other files. You can customise your searches and report formats.

*.. Plot data on the UK Maps extension in vice-county, 10km square (England & Wales, Scotland, Ireland) or 1km square (counties) formats. Data on the known vice-county distribution of most species (from Locket, Millidge and Merrett, Vol. III and supplements) is included.

*.. Print out species cards, search reports, maps, checklists, specimen labels and jar labels.

*.. Import and export databases in most Mac or PC formats.

*.. On-line help.

*.. Fully customisable - create your own databases for different regions or other plant or animal groups.

ARACHNOFILE will run on any Macintosh computer running system 6.0.5 or higher, is compatible with system 7 and higher and Multifinder, and requires Hypercard 2.1. A minimum of 4Mb RAM and a hard disk is recommended to run these system versions and Hypercard.

At the time of writing, ARACHNOFILE version 3 is available as shareware (free to SRS/BAS members). For a copy of the program, (British and World versions, together with the UK maps extension, and upgrade facility to upgrade old versions, and a manual) send three HD disks to the above address.

A suite of programs (NATUREFILE) is available to record any plant or animal group, with specialist versions for e.g. birds (ORNITHOFILE), in addition to ARACHNOFILE. These programs run without the need to have Hypercard, but are no longer shareware. The Hypercard version will still be available to SRS/BAS members.

David R. Nellist, National Organiser.