

BEDFORDSHIRE NATURAL HISTORY SOCIETY

Guidelines for Recorders

The BNHS has appointed Recorders since its formation in 1946. The role of Recorders is to record (and stimulate others to record), collate and publish information on the flora and fauna of Bedfordshire. From the outset, meteorology, geology and palaeontology have also been included. The work is entirely voluntary and has been of enormous value to those undertaking national distribution studies and research and particularly for providing basic data used in conservation and planning decisions in Bedfordshire. Availability of such records and information also provides the basis from which Recorders' successors can build, and is a baseline for future comparison of changes in the flora and fauna.

These guidelines explain the kinds of activities Recorders participate in when taking on this important role. **The minimum required is to compile records for the chosen discipline, to produce an Annual Report for the Bedfordshire Naturalist and to present a verbal report to the AGM.** It is understood that all Recorders are voluntary and will have varying amounts of time to undertake work for the Society. However, if at any time you feel that you can no longer meet these minimum requirements, do please contact the Scientific Secretary and discuss the problem.

1. RECORDING

1.1 Why Record?

The purpose of recording is:

- (a) to document and map the current distributions of animals and plants in Bedfordshire;
- (b) to discover changes that may occur in both distribution and abundance over time;
- (c) to learn more about the ecology of individual species;
- (d) to provide data to help with conserving Bedfordshire's wildlife.

Recording takes place at three levels:

- (i) Site: Apart from their inherent natural history and scientific interest, site-based records provide essential information to influence conservation decisions and monitor the results. To be most useful to a site manager, records may be needed from different parts of a site together with estimates of numbers. Site records can also contribute to planning decisions.
- (ii) County: The total of all site records can be used to make county-wide maps to show distribution changes at this scale.
- (iii) National: In the same way, county records may be fed into national mapping schemes.

1.2 Records

Records should include at least the basic information: what, where, when and by whom.

What: Animals and plants should be identified to species (and to sub-species where relevant). If species cannot be distinguished reliably, record as the genus or as .agg as appropriate. Notes of life stage and/or sex may be important for some groups.

Where: The place should be recorded both as a name for the site and as a grid reference. This allows the grid reference to be checked against the site, useful because it is only too easy to misread or transpose figures. A description of the location within the site where the record was made may also be important.

The BNHS, in conjunction with the Bedfordshire and Luton Biodiversity Recording and Monitoring Centre (BRMC), has developed an agreed set of site names covering the main areas of biological significance in the county, eg County Wildlife Sites, SSSIs, LNRs etc. Use these preferred names for locating records, to allow habitat data and species data for different taxa to be recorded to common boundaries. (Maps showing the boundaries of County Wildlife Sites, SSSIs and some other sites are available. Contact the BRMC for details.) Put records from places of less importance, such as footpaths, road verges, fields etc. under the nearest village or town name with a description of the precise location. For gardens and other urban localities given the street name but not the house name or number. Separate records so far as possible into definable areas, eg "Holt Wood and adjoining areas" is not clear and would be better split into "Holt Wood" and named parts of the adjoining areas. Records from linear sites, such as rivers, paths and road verges, are best located by clear descriptions, eg "100m downstream from Stafford Bridge" or "At cross-roads"

The grid reference should be given as precisely as is practicable. For instance, it may be desirable to place a rare and vulnerable plant within a 10m square (8-figure grid ref) if this can be done accurately. For other species, identifying the location to within a 100m square (6-figure grid ref) would be sufficient. For the commoner species, location within a 1km square is usually as precise as is practicable. For groups, such as flowering plants, with large numbers of species in the county recording to a tetrad (2km square) is often as much as can be managed.

Always remember that records can be mapped on a coarser grid, eg 6-figure references into tetrads or 10km squares but they can never be mapped finer than the original record.

The grid reference is always that of the bottom left-hand corner of the square containing the record, whether it be a 10m, 100m, 1km or 10km square. Giving the grid reference nearest to the record can lead to errors when records are mapped. For example, if the record happens to be near the top right-hand corner of the square and this reference is given, it may be mapped into the next square.

Records are frequently received with a 6-figure grid reference which appears to be the centre point of the site, such as a wood or lake. This could lead to confusion in the future. So, if the location of the record is not known precisely, it may be better to use a coarser grid but always accompanied by the site name.

Obtaining accurate grid references requires good map-reading skills. The 1:25,000 OS maps are essential for detailed recording with accurate grid references. Various plastic overlay cards are available to help with 6- and 8-figure grid references. The type with ruled squares for 1:50,000 and 1:25,000 scales is the most useful. A handheld GPS (Geographical Position System) is a useful tool but although most current models display grid references to 10-figures (1m square) they are not usually that accurate. If clearly identifiable landmarks are in sight, a compass fix is an alternative method. Neither system works well in woods.

When: The day on which the record was made is the ideal. You may receive year lists, eg from somebody's garden. These are better than nothing but they mean that significant seasonal information has been lost that might have contributed to knowledge of the lifecycle of the species.

By whom: Surname and initials of the observer(s) are the basics.

Validation: You will need to consider whether the record is reliable and whether further verification or investigation is needed. Identifications should be to a standard that is acceptable nationally. Anything less can be misleading and may lead to wrong decisions in conservation etc.

Other information - desirable but not always essential:

How many seen: Highly desirable but obviously very difficult or impossible for some species. Estimates such as "few", "many", "common", "abundant" etc are better than nothing but numerical estimates are preferable, eg about 10, 50, 100 etc.

Evidence of Breeding: For many groups evidence of breeding is particularly important. For invertebrates the presence of immature stages provides this.

How found: Were the records field observations, or were they obtained by trapping, beating, sweeping etc.

Time on Site: Taken with the number and dates of visits made to the site, this can help with interpretation of negatives, ie species that were not found there.

Weather: More relevant for some groups, eg insects, than others.

Habitat type: May be important if a species appears to be restricted to a particular habitat within a site. Foodplants and/or micro-habitats are important for some groups, such as those that live under logs or stones.

1.3 Relations with observers

The group for which you are the BNHS Recorder may be so difficult or obscure that you have to collect virtually all the records yourself. More often you will receive some or a lot of records from other people. Do try and encourage these observers or you may find that the supply of records dries up. "I sent so-and-so my records but never heard any more so I didn't bother again" is not that uncommon a complaint. Try to devise some form of feed-back that is practicable for you to manage and will keep the records coming. Some observers may not have OS maps. If this is a problem, ask the Scientific Secretary if the Society can help with maps on loan.

1.4 **Organising Recording**

Many Recorders find it helpful to plot their records on simple grid maps of the county either on computer or on paper. This enables them to see at a glance which squares lack records. Other useful summaries are: (a) a list of species found in Bedfordshire annotated with national and county status and notes on occurrence and (b) a list of references to the literature mentioning Bedfordshire records. But beware of letting maps or other summaries run on too long (see 1.5 below).

1.5 **Repeat Recording**

To obtain a good coverage of a site for a whole group it will clearly be necessary to visit at different times of year. Monitoring changes in abundance of individual species within a site may need annual or more frequent visits. For example, butterfly monitoring by transect walks requires weekly visits between April and September inclusive.

To observe wider changes in distribution it will be necessary to revisit sites every few years. The length of the cycle will vary. For small and easily identified groups, such as butterflies, it may be possible to repeat county-wide coverage every 5-10 years or more frequently just for species with limited distributions. For more difficult and large groups, such as flowering plants, a 30-year cycle may be more realistic.

1.6 **Recording Media**

Paper: Recording cards or sheets for Bedfordshire have already been designed for many groups. If you are starting recording for a new group and want to develop a new card, begin by consulting the national recording scheme for the group, if there is one. If not, consult the BRMC who will put you in touch with the Biological Record Centre at Monks Wood if necessary. Remember that if you include species that are not normally found in Bedfordshire, it can lead to mistakes and false records. It is better to list just usual Bedfordshire species to encourage people to report new or rare species promptly so that the find can be investigated quickly.

Electronic: To reduce your work-load, encourage observers to submit records in electronic form, either as standard spreadsheets or transferred from one of the biological recording packages, such as Recorder, MapMate, Biobase etc. However at some point records supplied electronically should also be printed out and stored as hardcopy as this is likely to be more durable than any current electronic medium.

You will find it useful to use one of the above recording packages to organise records. They have a number of advantages over spreadsheets for this purpose. A BHNS recording e-group has been set up for exchange of ideas and discussion of problems (contact the BRMC for details).

The BRMC's website at www.bedsbionet.org.uk (**address to be confirmed**) will be updated with supported data formats, recording standards and other useful information. This information is available on request from the BRMC to those without internet access.

1.7 Security of records

In the past, irreplaceable information on the county's wildlife has been lost, destroyed or dispersed outside the county, leaving no record for future workers. Clearly label all paper records that belong to the Society (see 1.8 below), or that you want the Society to have, so that they can be passed on to the Society in the event of your death. Give the address of Bedford Museum or the BRMC. Consider also what you want to happen eventually to your personal records and any specimens that you may have. Deposit back-up copies of electronic records for safe-keeping away from your home with friends or preferably with the BRMC.

If you generate the majority of your own records please arrange for the original paper records or copies to be deposited with the Society or with the BRMC when you cease to be a Recorder. The Society may be prepared to consider a grant towards the cost of copying records if the originals are to be kept elsewhere.

Duplicates of paper records can be deposited at appropriate intervals at the BRMC as a safeguard for their long term existence.

If you maintain a reference collection of species from the county, consider offering voucher specimens of new county records or uncommon species to Bedford or Luton Museums.

1.8 Ownership of records and transfer to other organisations.

Records sent to you because of your position as Recorder for the BNHS are considered to be the property of the Society. Records that you make yourself belong to you. However, it makes arrangements between the Society and the BRMC much simpler if all your records can be treated as belonging to the Society. Then there need be only one agreement for the supply of records from the BNHS Recorders to the BRMC, rather than separate agreements with each Recorder. **Your agreement to this will be assumed unless you inform the Chairman and Scientific Secretary that you do not want this to happen and wish to retain full rights over your own records.** If you receive records from other organisations you may need to discuss their status with the BRMC and with the suppliers.

You are encouraged to supply validated records to the BRMC under the Society's supply agreement. The BRMC is often approached for information on sites or species by consultants, conservation bodies, and others. When it has the required information in-house, it is usually able to handle the enquiry itself. If not, you may be approached for additional information.

The Society does not carry professional indemnity insurance so as a BNHS Recorder you should not provide information to outside bodies who might wish to use Society data and expertise for commercial or personal gain. Refer any enquiries to the BRMC, especially from consultants or planning authorities.

You are also encouraged to take part in any national recording scheme for your group and supply records to them. Inform the scheme's organisers that you have also supplied records to the BRMC.

1.9 Assisting in surveys

The Society is regularly asked to provide information or undertake surveys on sites or species. Scientific Committee will notify Recorders of requests as they occur. The Society encourages participation in national surveys. The Scientific Committee would be interested to be kept informed if you take part in national surveys.

1.10 Expenses

Recorders' expenditure on small items related to their recording, such as postage, production

of recording forms etc. (but not travel), will be reimbursed if requested. Send your request with details of expenditure to the Society's Honorary Treasurer. If you would like the Society to purchase larger items of equipment, contact the Scientific Secretary.

2. REPORTING AND PUBLICATION

2.1 Annual report for the AGM

The Rules of the Society require Recorders to present a verbal report to the AGM in March. If you are unable to attend, send the report to the Secretary of the Society who can then appoint someone else to read it. With more than 20 Recorders, time is limited, so reports should last no more than 5 minutes.

2.2 Annual report for *The Bedfordshire Naturalist*

The Bedfordshire Naturalist is the scientific journal of the Society and Recorders are required to produce a report of the year's recording work. In order to publish the Journal as early as possible in the following year **it is essential that reports and articles are received by the Honorary Editor by the AGM.** Recorders are sent a proof of the typeset report for checking. Copyright for reports or articles is held by the BNHS, but the author has the right to reproduce his/her own article or report.

The Journal is typeset by computer. Copy submitted on computer disc is much preferred but it may be submitted either in manuscript or typed form. It would ease the Editor's job greatly if you would bear in mind the points listed in the Appendix when writing your report.

2.3 Publication of other information

Options for publications on your group in addition to the Annual Report are:

The Society's Journal - *The Bedfordshire Naturalist* (see Section 2.2).

The Society's Newsletter - *The Muntjac* is produced quarterly. Promote county surveys to members through the newsletter and only report the results in *The Bedfordshire Naturalist* once work is completed. Results of 'fun' events are best reported in the newsletter although details may be summarised in the Journal. Information announcing other societies and their events should also be directed to the Editor of the *Muntjac*. Copy-dates for the newsletter are :

1st March; 1st June; 1st September; 1st December.

BNHS Website (www.bnhs.org.uk) **and E-mail Group** (http://groups.yahoo.com/group/bnhs_news_group) - these form useful routes for disseminating information of immediate interest to members. There is also a BNHS Recording e-group (http://groups.yahoo.com/group/bnhs_recording) for exchanging ideas on recording in general and on using computer packages, such as Recorder, MapMate and DMAP.

Books - it is the policy of the BNHS to encourage and support publications of all kinds which deal with any aspect of the natural history of Bedfordshire. Such publication should have a sound scientific basis, and contribute to and/or document the knowledge of an appropriate discipline (or disciplines) within the county. The Society will do all it can to support and finance the publication of approved works, either by itself or with a suitable publisher.

Discuss proposals for such publications initially with the Scientific Secretary who will advise on the procedures for approval and the information and costings required.

National Journals - Recorders are encouraged to send observations and papers to national journals in their discipline. The Scientific Secretary would appreciate being kept aware of such publications and Recorders may wish to add references to them in their Annual Reports so that the membership can be aware of them.

3. Recorders' Meeting

A Recorders' Meeting will be arranged annually. Please notify the Scientific Secretary if you would like any item considered for the agenda.

A Recorders' Field Meeting will be arranged during the summer months. Different sites of possible all-round interest, to which the public has no general access, are generally selected for survey. Send suggestions for future venues to the Scientific Secretary well in advance.

4. Scientific Committee

Scientific Committee is responsible to BNHS Council for the general administration relating to Recorders. Any queries about the role of a Recorder should be directed to the Scientific Secretary. A separate document defining the remit of the Scientific Committee has been prepared. A list of the current membership of that Committee is also available. The Scientific Committee includes several Recorders as well as the Editor of the Journal.

APPENDIX

ANNUAL REPORTS AND ARTICLES FOR THE JOURNAL

1. Submission

Manuscripts:

Although computer disc or typescript are preferred, copy may still be submitted in hand-written form. Please write neatly and legibly and use a simple system to indicate words or phrases to be set in bold or italic type. Lay out the headings and sub-headings in upper and lower case exactly as it occurs in the previous year's Journal.

eg. BUTTERFLIES 2004
by

Typed scripts and tables:

Typed reports are preferable to manuscripts.

Copy submitted in this format will be scanned using OCR (Optical character recognition) and converted to text format by computer.

Please submit good, clean copy. Ensure words are separated by a single space and sentences by two spaces. Double line spacing is not necessary.

Tables should be set out using tabs at five character intervals (or multiples).

Submission on computer disc:

Physical format - 3.5" discs only can be accepted. Discs can be in any of the following formats:

DOS/Windows 1.44MB Apple Mac 1.44MB Acorn/RISC OS 1.6MB

100MB ZIP discs in DOS/Windows or Apple Mac formats

CD-ROM in Windows/ISO or Apple Mac formats

In all cases avoid excessively long file names which may become truncated

Fonts - All text should be of the same fontsize, eg. 10/20. Use 14pt Bembo if you have it or a Truetype font such as Courier or Arial set to 14pt (=size 10). The name of the font used must be written on the disc label when submitted to the Editor.

Layout - some dos and don'ts:

Do - provide a printed copy with your disc.

Do - use bold and italics following the format of the previous year's Journal.

Do - space columns in tables with tabs (DO NOT USE SPACES).

Don't - use spaces to centre headings, indent paragraphs or in tables. They all have to be removed individually which can waste a lot of time.

Don't - centre headings or indent anything. If you want some sections specially indented in addition to the standard format, mark them clearly on the printed copy.

Don't - vary the font size. The typesetter will do this.

Don't - use right-hand justification.

Don't - worry if the appearance does not match the Journal. The general layout, indents etc. are best set during typesetting.

Do - try to follow these conventions:

Numbers 1 - 10 as words; all numbers at the start of sentences as words;

Use *c.* as the abbreviation for *circa*;

Use county not County;

Acronyms without full stops, eg FRPS not F.R.P.S. ;

No full stop after Mr Mrs Dr and the like;

1990s not 1990's.

Text file format - the following formats can be accepted for text:

Microsoft Word (Word for Windows): All versions - always use 'Full Save', not 'Fast Save'. If any Excel files or any graphics images are imbedded in Word files then these should also be included as separate files (see Graphics file formats below).

RISC OS: any version

RTF (Rich Text Format): many word processor and dtp packages can save in RTF format. Again, follow the advice above regarding spacing and tabs.

ASCII (plain text): output from virtually all word processors can be accepted in this format. Follow the advice regarding spacing and tabs. Bold or italic characters are unlikely to be recognised, but will not usually cause problems if included.

Excel files can be accepted, but charts generated by Excel may not import correctly.

Quark Xpress files (up to v4.1), Pagemaker files (up to 6.5) and InDesign files can also be accepted.

Microsoft Publisher files are not acceptable.

Graphics File format - bit-mapped graphics can be accepted in PCX, BMP, TIFF, GIF, PICT, PSD, JPEG and PNG and any RISC OS format. Vector graphics can be accepted in WMF (Windows Metafile), EPS (Encapsulated PostScript), Illustrator, and RISC OS ArtWorks or Draw formats.

All photographs submitted as digitised images (including images taken with digital cameras) should normally be at a resolution of at least 300dpi at the size at which they will be reproduced in print. Line art images should be at a minimum of 600dpi. Where a digital camera is used always ensure that the highest quality setting is used to achieve good reproduction in print. Do not submit graphics in Powerpoint format.

Charts, graphs, maps and similar visuals are best in a vector format such as Illustrator or EPS as they can be readily scaled without loss of quality. Note that tetrad distribution maps can usually be created from hand-drawn versions if necessary using existing tetrad map templates. Those using Recorder and DMap should provide files in WMF, EPS or PDF formats if at all possible.

Note that both text and graphics can be submitted in PDF format, but the comments above apply to any embedded graphics.

Line drawings and Diagrams:

Diagrams may be sketched for redrawing or final artwork submitted in black and white for scanning. Suggestions for line drawings to enhance the appearance of the Journal are welcome.

Colour and black-and-white photographs:

If you think that a photograph of, say, a particularly interesting species for the year should be included in the Journal, please let the Editor or Photographic Editor know well ahead.

2. Formats

The following suggested formats for the Annual Report should make retrieval and comparison of information straightforward, whilst maintaining variety and interest.

2A. Species based reports :

Introduction - a general review of the year with anecdotes, comparisons to previous years, site information etc.

Systematic lists:

It is the author's responsibility to make sure that systematic lists are in the correct order. Re-arranging lists is a waste of the editor's time and delays publication.

Small or popular groups - A systematic list for the year which may be in brief note form or more expanded depending on number of species to be described, public interest, volume of information supplied to Recorder, time available etc. All species should be mentioned in order to allow future comparisons between years.

eg. **Brown Hare** *Lepus capensis*

Brown hares were reported from many sites, and often in good numbers. A total of about 130 were seen at Old Warden in March, while groups of 39,20,10,9 and 8 were seen at other sites and other times of year.....

Dark Green Fritillary *Argynnis aglaja*

These were again recorded from Barton Hills, mainly from Noon Hill, and up to eight individuals seen in one day by

Larger or less popular groups - Partial systematic lists designed so that over several years each species is mentioned. This will ensure that species which are common and widespread, and generally tend to get ignored, are included. The use of a nationally accepted numbering system is useful here as is the inclusion of family names for unfamiliar groups. For very large groups a review article (see F below) could be published based on current knowledge and any new findings documented in subsequent years.

eg. 1642 **The Lappet** *Gastropacha quercifolia*

Several larvae of this species were found at Waterloo Thorns, Tempsford on 1st June 1986. An uncommon but widely distributed insect in the county.

Nepticulidae

24 *Ectoedemia turbidella*

This rare species which feeds on Grey Poplar is known from only a dozen or so sites in Britain. Tenanted leaf-mines were found at Stotfold in October.

New tetrad records, 10km squares or County Records should be documented at the end of the report as appropriate. Tetrad records might relate to previously published distribution maps.

eg. **Grasshoppers and Crickets** (*Orthoptera/Saltatoria*) Report of the Recorder. Maps published in Bedfordshire Naturalist 32 and referred to thereafter.

Distribution maps, graphs, tables etc.

These should be relevant and cross-referenced to the text.

Relevant photographs or line drawings provide added interest.
It can help the typesetter if original data is supplied with any table or graph.

Acknowledgements of contributors: in alphabetical order.

2B. Site/Habitat based reports :

Most Recorders produce systematic species reports, but if a Recorder's work concentrates on biology, habitat studies or site surveys then reports on these studies are equally useful
eg. REID, D.A. 1987 The Fungus Foray 1986. *Bedf. Nat.* **41** 79-80.

2C. General Comments

Remember that most members have a general interest in natural history. You are writing for them, not just for fellow specialists.

Care should be taken with any statistical analysis. Subjective statements should be made with caution.

Locations should be backed up with either a grid reference, tetrad reference or Parish name as several sites may have the same name and could be confused eg. Kings Wood, Houghton Conquest OR Kings Wood, Heath and Reach.

When summarising distribution information in county reports use the finest scale that is practicable (see 1.2). 1km references are preferable to tetrad or 10km grid references, although this may not be practical for some groups or appropriate for newly initiated recording schemes.

Avoid using the personal pronoun 'I'. The use of observers' full initials is preferred.

2D. Surveys:

Results of surveys can be published in the Journal. Let the Editor know well in advance if you are doing any research you would like to be considered for publication, as only a limited number can be printed annually.

eg. BOON, C.R. 1987 Botanical assessment of Bedfordshire's churchyards, 1982-85
Bedf. Nat. **41** 11-20

2E. Notes and Observations:

Notes on certain unusual or interesting finds can be published as small articles independent of an annual report.

eg. BRIND, R.A. 1986 The Musk Beetle *Aromia moschata* (L) in Bedfordshire.
Bedf. Nat. **40** 75

2F. Bibliographies

Reference lists of published articles relating to Bedfordshire found in the national literature should be published periodically as appropriate to the volume of literature on the subject, but certainly every 10 years.

References should be presented to the Editor in alphabetical order and in an approved format:
Journals: AUTHOR 1; AUTHOR 2 Year Title Journal Volume Pages

Books: AUTHOR 1; AUTHOR 2 Year Title Publisher Pages

eg. ANON 1985 Abstracts of literature on Bedfordshire natural history *Bedf. Nat.* **39** 75-76

DONY, J.G. 1953 *Flora of Bedfordshire*. Luton Museum 532pp

2G. Reviews

At appropriate intervals (see section 1.4 above) Recorders should consider publishing a review article covering recording and distribution trends since the last review.

eg. ANDERSON, D. 1986 Distribution of Bedfordshire mammal species 1971-1985
Bedf. Nat. **40** 13-20

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