

Wildlife Recording Handbook

How to record wildlife in Bedfordshire,
Cambridgeshire and Northamptonshire





Front page: Clockwise from top left. Emerald damselfly (*Lestes sponsa*), water violet (*Hottonia palustris*), poplar hawkmoth (*Laothoe populi*), eyebright (*Euphrasia* sp.). Photos © Ryan Clark

This page: Surveying for aquatic plants. © Rosemary Abram



The very rare tansy beetle (*Chrysolina graminis*), a beautiful iridescent species. © Ryan Clark

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Introduction

Recording wildlife has never been more important and rewarding. Biological recording allows anyone to significantly contribute to wildlife conservation through helping to monitor the health of species and habitats in Britain. In the three counties of Bedfordshire, Cambridgeshire and Northamptonshire we have a long history of naturalists monitoring wildlife. This handbook aims to continue this tradition by providing you with the information you need to generate highly valuable biological records.

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire hosts three individual records centres, covering each of these counties, who work to collect and collate this information to make it accessible to those that need it. This guide will introduce you to your local records centre and how you can get involved with sending in records.



Dasypoda hirtipes, the pantaloen bee © Ryan Clark

What is Biological Recording?

“ Each record represents a meeting between humans and wild species, and also an interaction between humans and technology ”

Martin Harvey, Centre for Ecology and Hydrology

Biological recording is the process of generating biological records. Biological records are the way that we document which species are found and where. They are one of the essential building blocks of evidence-based conservation. Biological records need to contain four basic pieces of information to be complete, these are:



Who

The name of the recorder and the determiner (the person who identified the species, often the same person or an expert on that species)



What

The name of the organism or group of organisms that you are recording



Where

The location where the organism was observed.
Site name and grid reference



When

The date that the organism was observed

Combining these four pieces of data produces a record of the presence of an organism at a specified time and place by a named individual, also known as a biological record.

Why Are Biological Records Important?



Lesser stag beetle, *Dorcus parallelipedus*, © Ryan Clark

Biological records are essential for species conservation. Fundamentally, we cannot conserve species if we do not know where they are. Biological records allow us to manage nature reserves with both species and habitats in mind, and know when we are getting practical conservation measures correct! At a local level, biological records can be used to map where species are found within a county, and assess which species are locally more common or rare. This means we can prioritise conservation measures accordingly. Councils and ecological consultants also use them to ensure that biodiversity is taken into account in the planning process. Nationally, biological records can be used to produce national atlases showing where species are found and assess trends in populations. To date, over 120 atlases have been produced using more than 150million biological records! Biological records also allow us to predict the effect that changing conditions such as climate change may have on species and habitats and how our conservation measures can take this into consideration.

Biological records are being used in ways we would have never thought imaginable when they were made. A biological record is generated once but used countless times.

Basic Survey Kit Needed

There is a vast selection of equipment that a naturalist can use to track down species. However, there are a few things that should be in everyone's backpack. Below are some suggestions of basic equipment that can help with biological recording:



Other things to think about:

- **Specific survey kit** – The equipment you need will depend on the species groups you are targeting
- **Sensible clothing** – Surveying in the UK, weather can change dramatically during a day out. It is important to protect yourself from the sun – and (more likely) the rain!
- **Strong boots/wellies** – It is great to be able to explore every part of a site when you are recording. A strong pair of boots will let you explore those hard to reach areas.

Basic Components of a Biological Record



Who

Recorder name (you!)
Determiner name – who identified the species



What

The species name



Where

Location Name
Grid Reference



When

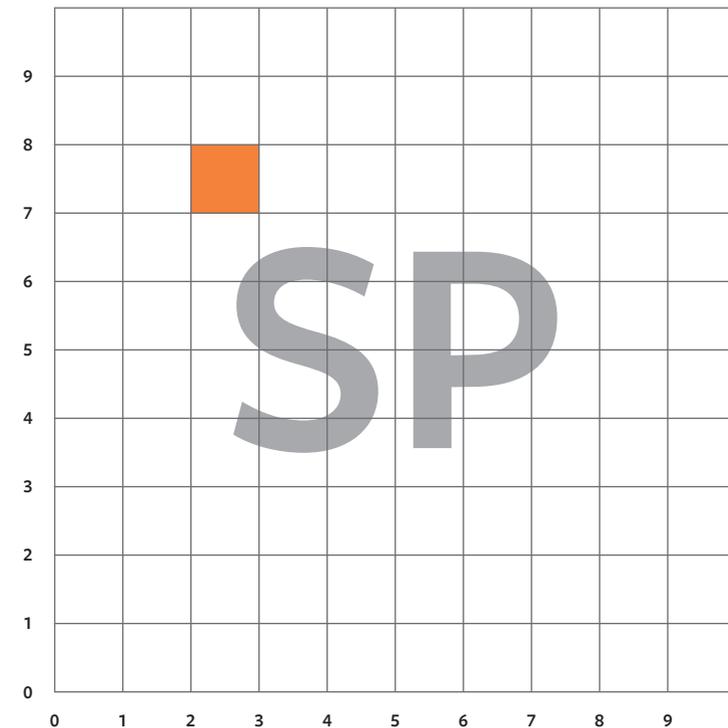
Date dd/mm/yyyy

Online Help With Identification

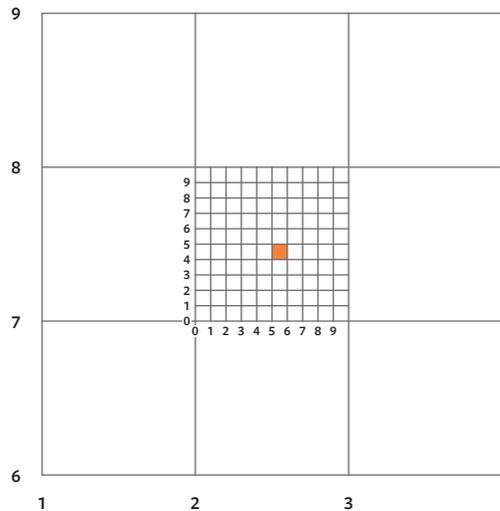
There are many resources online to help with identifying species. One of the best resources out there is the Field Studies Councils ID signpost www.fscbiodiversity.uk/idsignpost

Grid References

Grid references allow us to pinpoint exact locations on a map and are an essential component of a biological record. Grid references break up Great Britain into 100km by 100km grid squares, each of which is identified by two letters. Descriptions of these can be found on the Ordnance Survey website. Each of these squares can further be broken up into 100 10km squares; each has one number for the easting and then one for the northing. It is important to remember when reading grid references to go along the corridor before going up the stairs, i.e. read the easting first before the northing. In our example here if we have established that the square is in the 100km square SP. Then we can look up the grid reference for the orange square, which in this case is SP27.



If we want a 1km square record, (the minimum level of precision needed for a biological record) then we need to more accurately pinpoint where the species is within the orange square. We can therefore divide that square into 100 squares.



The grid reference for the orange square is now:

SP2574

The **black letters** show which 100km square we are in.

The **red numbers** show which 10km square we are in.

The **blue numbers** show which 1km square we are in.

The same process can be repeated to establish a 100m grid reference if required. For more help on reading grid references from maps, please see the Ordnance Survey website.

Grab A Grid

Grab a Grid is an excellent tool developed by the Bedfordshire Natural History Society. It allows you to establish the grid reference for any place in Britain by zooming in on an Ordnance Survey or Google Map background.

<https://tinyurl.com/GrabAGridRef>

Other Additional Information

There is lots of other additional information that you can include to make your biological records even better and more useful! For example, you could include:

- **Stage** – was it an adult or larvae?
- **Sex** – was it male or female?
- **Flower stage** – was the plant in flower? In fruit?
- **Abundance**
- **Methodology** – did you use a moth trap? Quadrat? Sweep net?
- **Evidence** – do you have a photo or specimen?

The more information you can include in a biological record, the more uses that it can be used for in the future.

Improving data quality

We want the best quality data possible. In order to do this we need precise accurate information, especially for the '4 Ws'

- **Who** – Provide the full name of the recorder and determiner. This is the person who identified the species.
- **What** – The more specific the taxonomic classification, the better. Species records are much better than genus level identifications, although only record to the level that you can confidently identify the species to.
- **Where** – Provide the highest accurate geographic resolution you can. A 100m square is much better than a 1km square. Best to provide at least a six figure grid reference.
- **When** – As with location information, the finer the resolution the higher the data quality. Providing a specific date is much more desirable than just the year of the record.

Verification and validation

There are more biological records than ever now. We need to be sure that they are as accurate as possible as decisions are based on these records. Records therefore undergo validation and verification to ensure they are accurate.

Validation

This is checking that the record is complete. The record is checked to ensure that all of the 'four Ws' are there as a minimum and are in the correct format. The record is checked to ensure that the location information and grid reference match one another. Checking your records for typos and errors helps speed this process up. This quality checking stage of the process doesn't need expert species knowledge, but it needs an eye for detail and is usually done by Local Environmental Records Centres.

Verification

This stage is checking that the record is likely to be correct. Therefore, this stage is performed by local or national experts who take into account the evidence submitted in the record to confirm whether the species recorded is likely to have been correctly identified.

Only once both of these stages are complete can the record be used.



Brown argus (*Aricia agestis*) © Ryan Clark

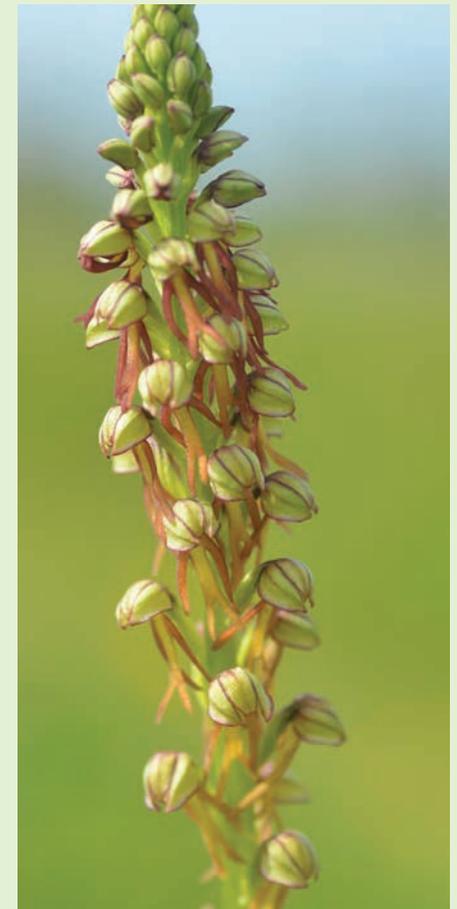
Local Environmental Records Centres

Local environmental records centres are responsible for collating, managing and sharing information about animal and plant species, and habitats and sites recognised for their natural value such as geological or protected sites. They hold all this information so it can be used by those with a need to know such as: local authorities and developers to inform the planning process and minimise the impacts on biodiversity and geodiversity; those managing nature reserves; for educational and scientific research.

Local environmental records centres:

- Securely hold and curate hundreds of thousands of species records per county
- Quality check all these records to ensure they are highly reliable
- Promote the uses of biological records to inform decision making
- Support local recorders in recording species
- Hold detailed information about protected sites, geodiversity and habitats as mapped GIS layers and citations
- Disseminate this information to organisations in the public and private sector whose actions affect the environment.

There are three local environmental records centres that cover the counties of Bedfordshire, Cambridgeshire and Northamptonshire, all hosted by the Wildlife Trust BCN. All are members of the Association of Local Environmental Record Centres (ALERC) whose members run a network of data centres covering the whole of the UK, each operating at a local level.



Man orchid (*Orchis anthropophora*)
© Ryan Clark

Bedfordshire & Luton Biodiversity Recording & Monitoring Centre



Biodiversity Recording and Monitoring Centre

The Biodiversity Recording and Monitoring Centre (BRMC) is the local environmental records centre covering Bedfordshire and Luton. It is an accredited member of the Association of Local Environmental Record Centres.

The BRMC is a not-for-profit organisation and was officially established in 2003. It is hosted by the Wildlife Trust BCN at their Priory Country Park office in Bedford and is led by a steering group comprising representatives from the local authorities, local charitable organisations and the Bedfordshire Natural History Society.

The BRMC currently holds just over 2 million species records, and these are added to on a regular basis. Up to date information about the data we hold and how to access this is available via our annual report and on our website: www.bedsbionet.org.uk.

Species records can be supplied to us online via the 'Recording Species' section found on the home page of the BRMC website. This has links to the Bedfordshire Natural History Society's 'Adnoto' online recording system, or we can accept records supplied via email; a records template Excel file can be downloaded from our website.

The Bedfordshire Natural History Society (BNHS) plays a key role in supplying the BRMC with verified species data through its County Recorders. If records come to us independently of the County Recorders we will pass the records to them for verification before we use them. To ensure that our data are as reliable as possible we only accept records that have been verified by a County Recorder or higher authority. These are the experts on their groups and are able to weed out any dubious records before they reach us.

The BRMC provides data for commercial data requests such as environmental consultancies, but also provides data to partner organisations through service level agreements and to other interested individuals and groups.

As we hold so much biodiversity-related data in one location, with skilled staff and up-to-date GIS technology on hand, we are able to undertake commissioned project work. Over recent years we have carried out many projects, usually in partnership with other local organizations, producing maps and reports for our clients. Examples include: assisting with parish-scale Green Infrastructure planning; digitizing historic phase 1 and phase 2 habitat maps; supporting the Greensand Nature Improvement Area (NIA) and Historic Environment Record digitization.

The BRMC can be contacted via:

Email – brmc@bedsbionet.org.uk

Phone – 01234 355435 / 364213



Brown hare (*Lepus europaeus*) © Ryan Clark

Cambridgeshire and Peterborough Environmental Records Centre

The Cambridgeshire and Peterborough Environmental Records Centre (CPERC) is the central source for local information on the natural environment of Cambridgeshire and Peterborough.

CPERC is a not-for-profit organisation which is hosted by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire (Wildlife Trust BCN) at their offices in Cambourne, Cambridgeshire.

CPERC works with a wide range of organisations including local authorities, national government agencies, wildlife charities, environmental consultancies and local natural history/wildlife interest groups. CPERC is therefore a partnership organisation which works to fulfil the needs of its users and partners regarding reliable local biodiversity and environmental information.

CPERC covers the administrative areas of Cambridgeshire County and Peterborough Unitary Authority. This roughly equates to the vice-county recording areas of old Cambridgeshire (VC29), Huntingdonshire (VC31) and the Soke of Peterborough (part of VC32).

CPERC was launched as the Cambridgeshire and Peterborough Biological Records Centre (CPBRC) in 2005 and was accredited by the Association of Local Environmental Records Centres (ALERC) in 2011.

CPERC holds species, habitat and designated site information for the area. We welcome reliable records from both members of the public and experienced recorders and have validation and verification procedures to help ensure accuracy of the data. We also share records with organisations and individual recorders with the aim of having the most complete datasets available. We currently have over 2 million species records in our database and this is being added to regularly over time.



Common carder (*Bombus pascuorum*) © Ryan Clark

There are a variety of ways in which you can submit records to CPERC – more information can be found on our website at www.cperc.org.uk. You can submit records directly via email or use our online recording site CPERC Record www.cperc-record.org.uk. If you are unsure please contact us.

CPERC operates a data request service for commercial clients such as environmental consultancies, but also provides data to partner organisations through agreements and to other interested individuals and smaller organisations. CPERC data is used to inform nature conservation, development planning and scientific research.

Recent newsletters and other updates about CPERC can be found on the news section of our website.

Contact details:

CPERC, The Manor House, Broad Street, Great Cambourne, Cambridgeshire CB23 6DH

data@cperc.org.uk

01954 713570



NBRC

The NBRC is the home of wildlife recording and quality ecological data services in Northamptonshire – covering the ancient northern Rockingham Forest woodlands, ex-quarries and growing new developments, the wildflower and wetlands of the Nene Valley, through central Northampton city and down to the agricultural South with its canals and market towns.

We are an impartial, non-profit organisation led by a steering group made up of educational, statutory and non-governmental organisations, hosted by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire at their Lings House, Northamptonshire office. Up-to-date information on our current data holdings and services is available in our annual report and on our website www.northantsbrc.org.uk.

Local citizen science species record collection is supported through:

- the NBRC website recording facility and ‘Look out for...surveys’
- an active and supportive WILDside Facebook recording community
- an extensive library of recording resource and equipment available to borrow
- recording groups, local surveys, special recorder talks and events advertised on our twitter and to our mailing list

Our newsletters include interesting species finds and recording sites in the county, local and national recording news, and opportunities to get involved in surveys and groups. Please email nbrc@northantsbrc.org.uk to sign up.

NBRC supplies biodiversity, sites and habitats data by area in our data request reports and as GIS layers under licence. We work closely with county experts as responsible data custodians, maintaining a secure archive for quality records both past and present.

The team include experienced naturalists and a qualified teacher, who can support community groups and schools with hands-on species identification and outdoor recording. We work with landowners and county recorders to generate up-to-date comprehensive species lists for sites through BioBlitz events.

The centre’s state-of-the-art Phantom IV drone, and trained and commercially licenced drone pilots can be booked for projects to monitor, map and show change at landscape scale with HD film and imagery, including georeferenced orthomosaic GIS layers. We aim to keep working to strengthen evidence led environmental decision making.

Get in touch:

Post: NBRC, Lings House, Lings Way, Billing Lings. Northampton NN3 8BE

Tel: 01604400448

Email: nbrc@northantsbrc.org.uk



Toad (*Bufo bufo*) © Ryan Clark

National Schemes and County Recorders



Small tortoiseshell (*Aglais urticae*) © Ryan Clark

For a wide variety of taxonomic groups there are national schemes and societies which oversee record collection of that group. Their experts can help ensure that data is correct, and are often involved in producing checklists and atlases and help with the identification of their species group.

Country recorders are local experts in a taxonomic group, and are often members of a national scheme or society. They can help to bridge the gap between local records centres and national recording schemes.

Data flow and Submitting Your Records

Knowing where to submit your records is often not easy and can put people off submitting biological records. Local records centres need your records in order to inform local planning decisions, formulate action plans etc. and inform site management. National recording schemes need your data in order to look at national trends, produce national distribution maps etc. So should you submit records to both? Ideally not, as this causes duplication and doubles your workload. The best option is online recording!

Online recording has come a long way now and in the three counties allows both local records centres and national schemes to access the data. Each of the three records centres has their own forms for submitting records on their websites. If you are recording across multiple counties then iRecord (www.brc.ac.uk/irecord/) may be the best solution for you as it allows you to record anywhere in Britain and local records centres can sign up to receive data from here, along with national recording schemes.

Online recording also allows you to keep track of your own records in a searchable database. Much easier than multiple spreadsheets!

NBN Atlas

The NBN Atlas is a collaborative project that aggregates biodiversity data from multiple sources and makes it available and usable online. It is the UK's largest collection of freely available biodiversity data and holds nearly 250 million records. Data available via the NBN Atlas can be used for research at the national and global scale. Many national schemes and local records centres pass records to the NBN Atlas. <https://nbnatlas.org/>

The Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire

We are a local wildlife charity supported by over 1000 volunteers and over 33,000 members. Together we protect and care for wildlife and wild places across Bedfordshire, Cambridgeshire & Northamptonshire.

There are three Local Record Centres hosted by the Wildlife Trust BCN, which together cover the Local Authority areas of Bedfordshire and Luton, Cambridgeshire and Peterborough, and Northamptonshire.

At the Trust we are also involved in our own species and habitat recording. Our monitoring and research team provide the science behind our conservation work. Surveys enable us to monitor population trends and assess the success of our practical habitat management. This involves a huge variety of surveys for mammals, invertebrates, plants, reptiles, amphibians, and habitats.

We encourage surveys on our reserves and are keen to support any activities that add to our understanding of sites and species. Please get in touch via our website if you are interested in surveying on our reserves.

Ecology Groups were established in 2001 to enable volunteers to help us monitor our reserves. Volunteers can get involved with a huge range of surveys, learn new skills and meet like-minded people. The results of these surveys help us with practical reserve management. If you would like to become an Ecology Group volunteer, please contact us via the website.



Getting to grips with a full range of species in many taxonomic groups can seem a daunting prospect to the beginner. But here in our three counties where we have no coasts or uplands or different climatic zones to worry about, it is often possible to reduce the choice of species to a more manageable number. On our website you will find a selection of keys, based on species you are likely to find in our area. The local checklists will tell you what species are known to occur in this area and how common or rare they are here.

Delivering conservation programmes to ensure the next generation are able to enjoy the wildlife-rich landscapes we do today is an enormous undertaking. We rely heavily on membership to generate the funds we need to do this. We cannot safeguard precious habitats and vulnerable wildlife in our three counties without the support of those who live and work around them

Wildlife Training Workshops

The Wildlife Trust BCN runs between 40 and 45 training workshops a year, including courses on lower plants, invertebrates, botany, vertebrates, habitat management, practical skills and basic ecology skills. These workshops are held at some of the best sites across Bedfordshire, Cambridgeshire and Northamptonshire and usually include an indoor classroom session, followed by a site visit.

Training workshops are an excellent way to kick start, or refresh your identification skills and knowledge, and can set you in the right direction of your chosen path.

Whilst many of the workshops are at an introductory level, some do go a step further giving more time for participants to practise their skills. Read the workshop descriptions on our website, or training workshops leaflet, for further information.

The full programme is on the BCN Wildlife Trust's website www.wildlifebcn.org and for any further information contact:

Juliette Butler, Training Workshops Officer, on 01604 774031 (Tuesdays, Wednesdays and Fridays from 9am – 2.30pm) or e-mail trainingworkshops@wildlifebcn.org



Photo: Nathalie Hueber

This booklet was produced as part of Northamptonshire Biodiversity Record Centre's WILDside Project. This project was kindly supported by the National Lottery Heritage Fund.



You can get in contact with the Northamptonshire Biodiversity Records Centre in the following ways:

- Post: NBRC, Lings House, Lings Way, Billing Lings. Northampton NN3 8BE
- Tel: 01604400448
- Email: nbrc@northantsbrc.org.uk

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire hosts the three local records centres within the three counties. For more details about the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, please see www.wildlifebcn.org



**Bedfordshire
Cambridgeshire
Northamptonshire**