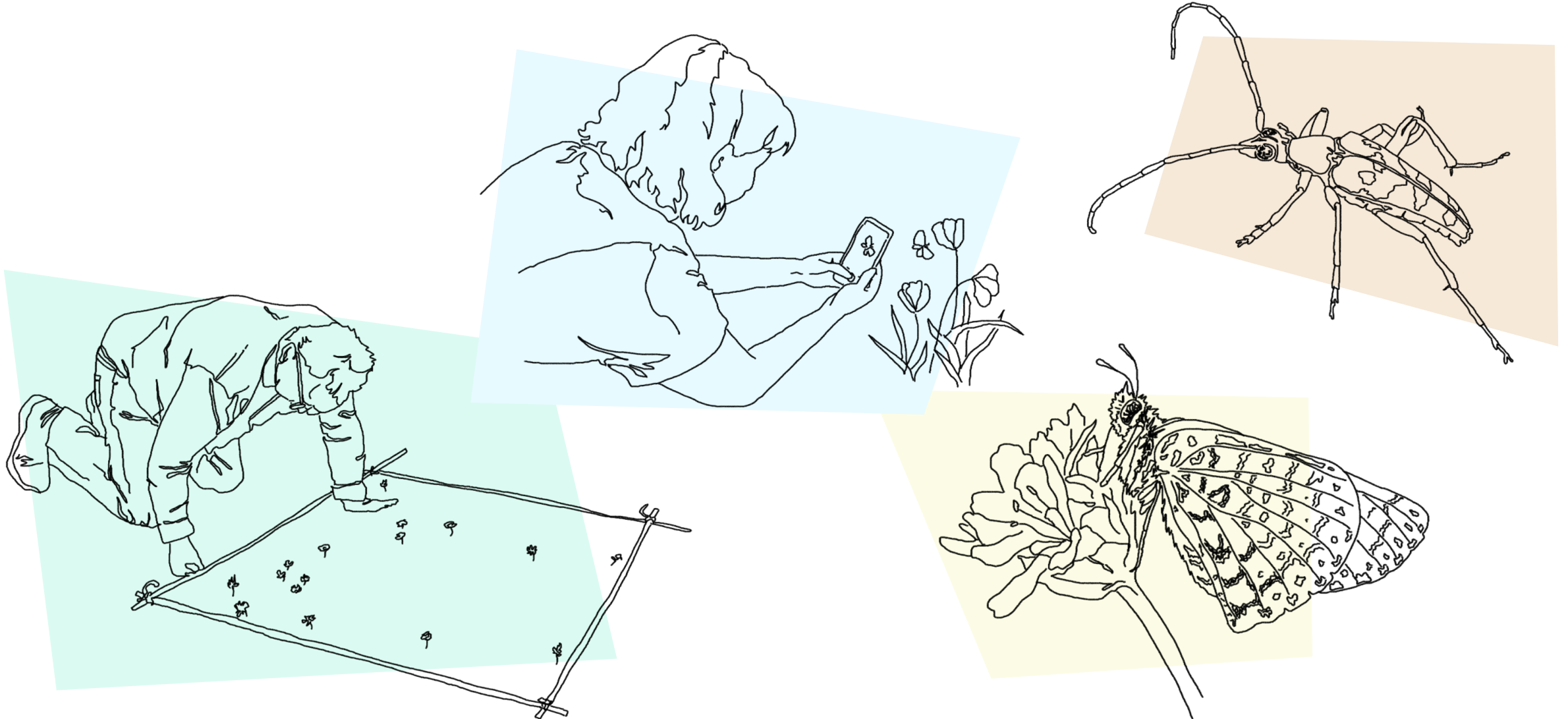


# From field observation to global data

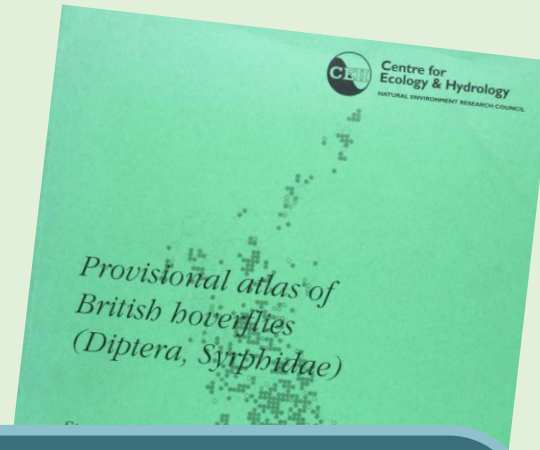
Martin Harvey  
NBN Conference 2025



# Year 2000

NBN's founding organisations: JNCC, English Nature, NHM, NERC/CEH/BRC, RSPB, Wildlife Trusts, NFBR

CEH/BRC and JNCC published the Provisional atlas of British hoverflies (Stuart Ball and Roger Morris)



The Hoverfly Recording Scheme is 50 next year, and a new atlas is planned – please send in your records!



## Paul Harding

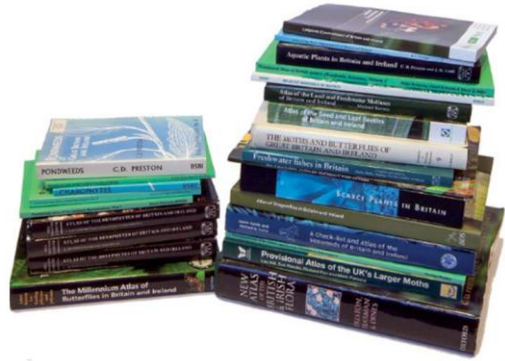
Paul Harding has been a key figure in the development of BRC's wider partnerships with the biological recording community. As head of BRC between 1982 and 2003, he was at the forefront of development of the National Forum for Biological Recording in 1987 and the NBN partnership in 1997, and continues to be actively involved with both organisations. His contribution was given national recognition in 2001 when he was appointed MBE.



Gilkicker Weevil  
*Pachytychius haematocephalus*  
© Pierre Bornand CC BY NC

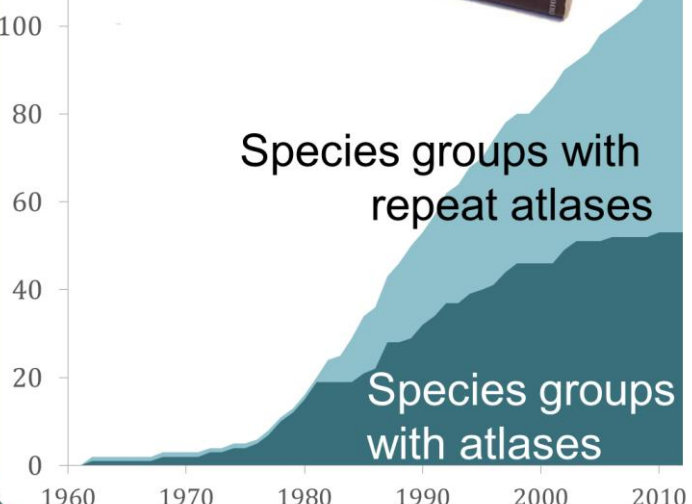


# Atlas publication



Species groups with repeat atlases

Species groups with atlases



## Click-beetles of Great Britain and Ireland An Atlas and Natural History

Family ELATERIDAE Leach, 1815  
Subfamily AGRYPNINAE Candèze, 1857  
*AGRYPNUS* Eschscholtz, 1829  
*Agrypnus murinus* (Linnaeus, 1758)

Names used in British/Irish literature

*Elater niger* Beckenb. 1789; *Elater murinus* Linnaeus [Martyr, 1792; Marsham, 1802; Stephens, 1829; 1830]; *Agrypnus murinus* (Linnaeus) [Stephens, 1839; Pope, 1977; Mendel & Clarke, 1996; Duff, 2018]; *Lacum murinus* (Linnaeus, 1758) [Fowler, 1890; Beate & Donisthorpe, 1904; Beate, 1930]; *Stachylacon murinus* (Linnaeus, 1758) [Joy, 1932]; *Adeleocera murina* (Linnaeus, 1758) [Kloet & Hincks, 1943].

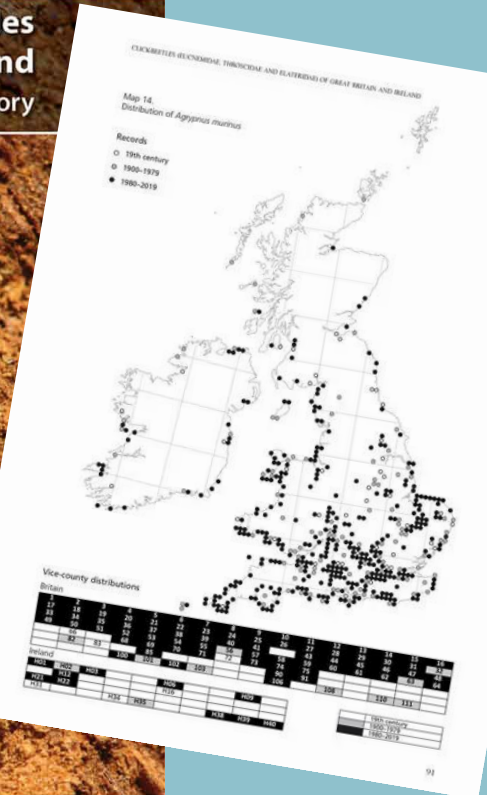
### Recognition

Length 10–17 mm. One of only two click-beetles in the British Isles with head, pronotum and elytra bearing decumbent scales giving species a variegated appearance. Scales sometimes worn but invariably evident on the outer third of each elytron. Cuticle beneath the scales reddish-brown to black. Deep suture on ventral surface (pronotosternal suture) between hypomeron and prosternum for reception of the antennae. Little sexual dimorphism (larger individuals usually ♀).

**Similar species:** *Lacum quercosus*. Posternum tessellatum. In *L. quercosus* decumbent scales form distinct golden-yellow band towards apex of elytra; species associated with rotten oak. *Quercus* and only from very few quality pasture woodland sites (see that species). Posternum tessellatum has decumbent golden-yellow or grey scale-like pubescence variously angled to form characteristic swivling pattern on the elytra, deep pronotosternal suture absent.



Figure 25. Left: *Agrypnus murinus* underside, clearly showing the grooves into which the antennae and legs are tucked when the beetle is under threat. Photograph: Barry Donisthorpe. Right: *A. murinus* ♂; the broad outline and mottled dorsal surface are characteristic of this species. Photograph: Paul D. Brock.



# Atlas publication

Home Atlas Background Acknowledgements

Welcome to Plant Atlas 2020

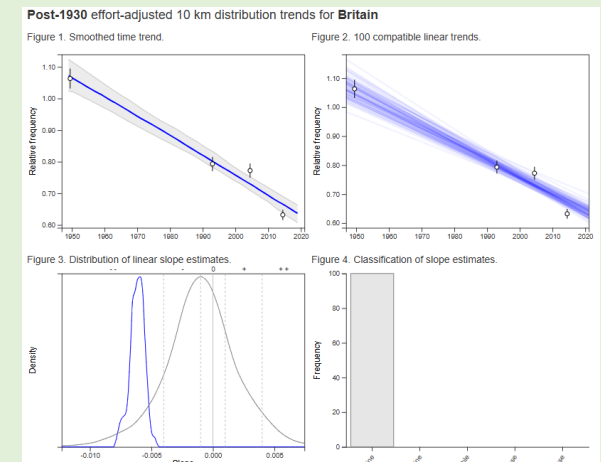
Summary Conservation Gallery Trends Phenology Altitude

**Change from 1987–1999 to 2000–2019**

- ▲ Gain
- No change
- ▼ Loss

**Devil's-bit Scabious**  
*Succisa pratensis*  
Moench

A perennial herb, growing in a wide range of moist to moderately free-draining



Fundamental knowledge – every record counts!

**Taxa covered [show]**

**Trends**

Post-1930 effort-adjusted 10 km trends

Britain: [down arrow] [up arrow]

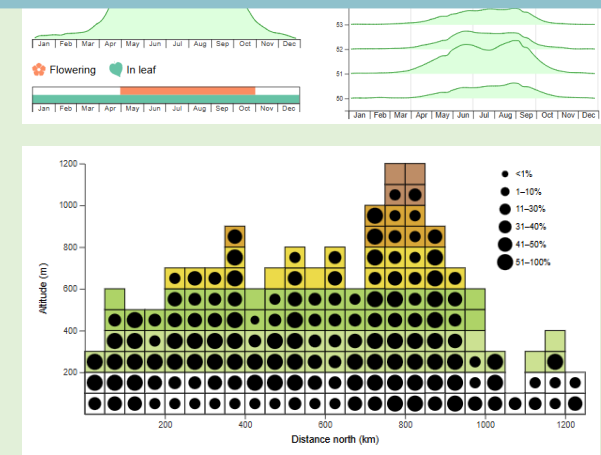
Ireland: [down arrow] [up arrow]

Post-1987 effort-adjusted 10 km trends

Britain: [down arrow] [up arrow]

Ireland: [down arrow] [up arrow]

A widespread decline in lowland areas of England took place in the second half of the 20<sup>th</sup> century, with losses and the subsequent fragmentation of populations



Botanical Society of Britain & Ireland

UK Centre for Ecology & Hydrology

Biological Records Centre

# BRC and national recording schemes

- From the start, BRC has worked with and supported a wide range of national recording and monitoring schemes and societies
- All have an enormous amount of input from volunteers, and many are run entirely by volunteers



**Since 1964:** 100 taxonomic schemes & societies



**Since 2012:** 21M records, 23,900 spp., 218,000 people

**Since 1976**



**Since 2015**



**Since 2017**



# National recording schemes

- Provide a source of expert taxonomic knowledge
- Collate and check records from many people and places
- Provide feedback to recorders, plus mentoring and training
- Publish atlases and identification guides
- Enthuse everyone about their species group!
- Carry out and contribute to conservation and research



Home | News & Events | Resources | **Recording** | Diptera groups | Forums | Help | Log In

## Soldierflies and Allies Recording Scheme

Home | Gallery | Resources - Books

The Soldierflies and Allies Recording Scheme collates biological records for 11 related Diptera families, using the information to promote enjoyment, study and conservation of the species and their habitats.

This recording scheme falls under the umbrella of Dipterists Forum. The scheme is coordinated by [Martin Harvey](#) with help from others in Dipterists Forum.

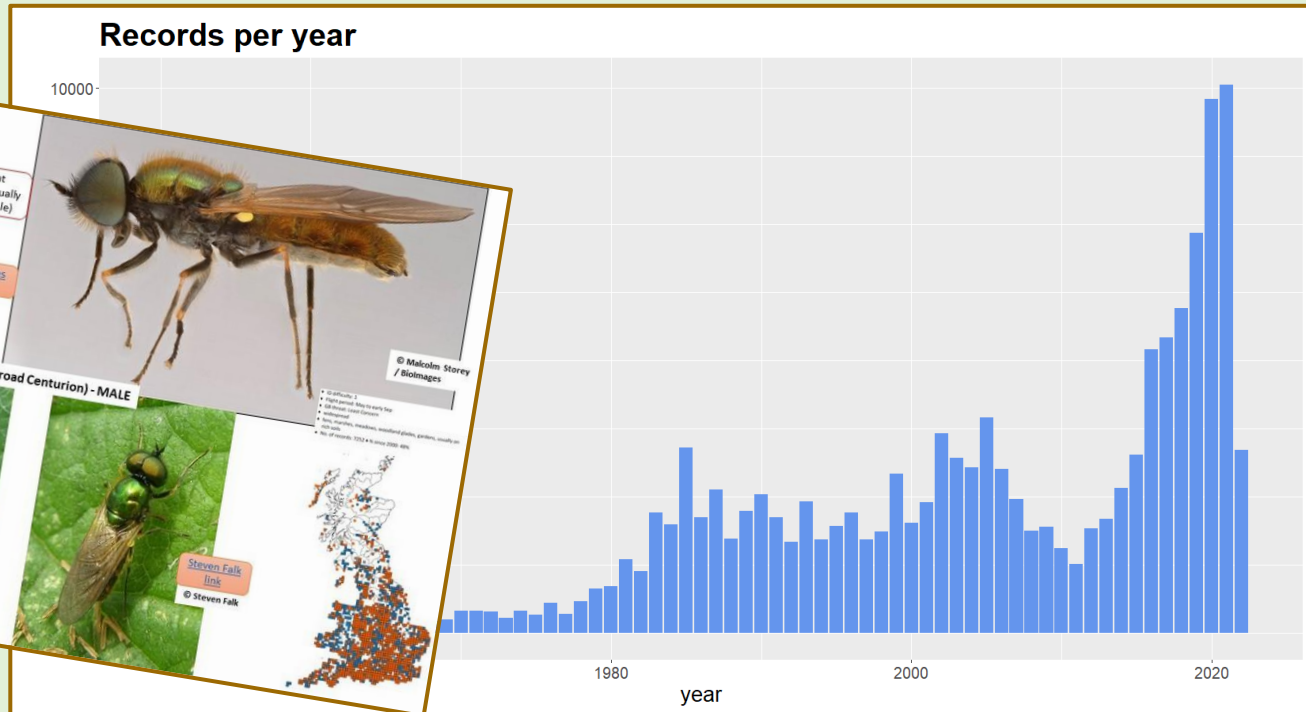
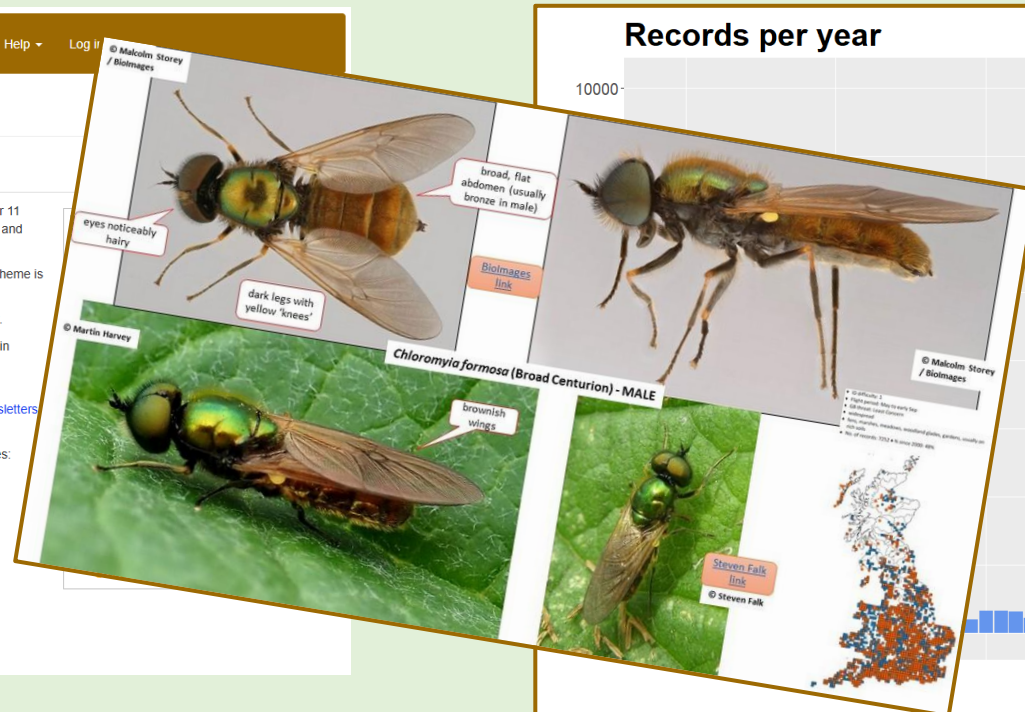
A series of identification guides can be downloaded from the link on the left.

To send in your records, please add them to [iRecord](#) (or see the "Sending in records" link for other options). Records are shared with NBN Atlas, Local Environmental Recording Centres and others.

Lots more resources, including a [national atlas](#) and [recording scheme newsletters](#) are available via the links.

The Soldierflies and Allies Recording Scheme includes these families of flies:

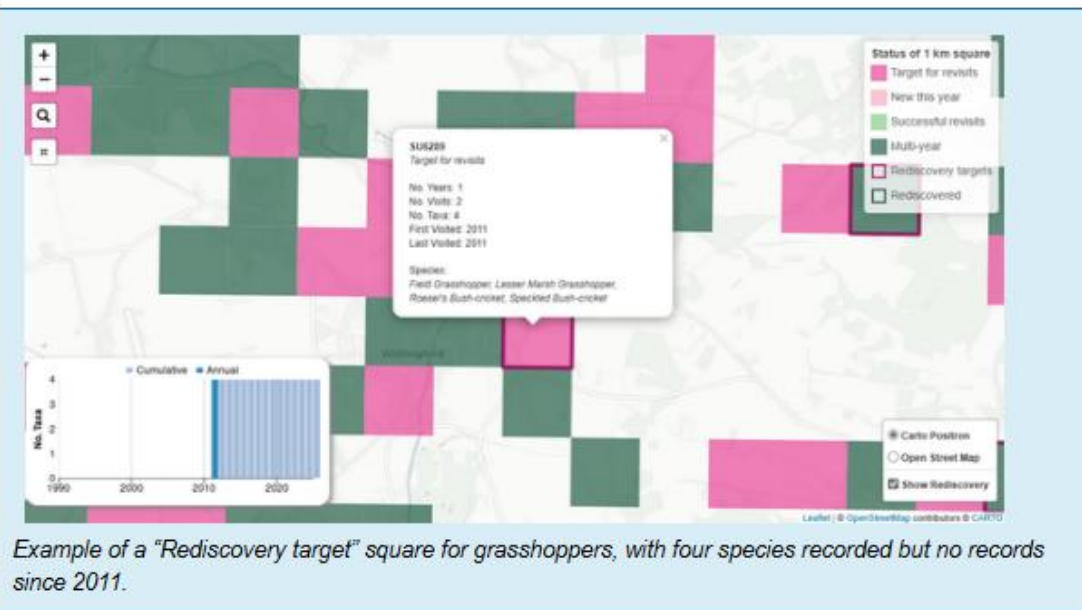
- Soldierflies, Stratiomyidae
- Horseflies, Tabanidae
- Robberflies, Asilidae
- Snipeflies, Rhagionidae
- Stiletto-flies, Therevidae
- Bee-flies, Bombyliidae
- Hunchback-flies, Acroceridae
- Water-snipeflies, Athericidae
- Windowflies, Scenopinidae
- Awi-flies, Xylophagidae
- Wood-soldierflies, Xylomyiidae



## Home

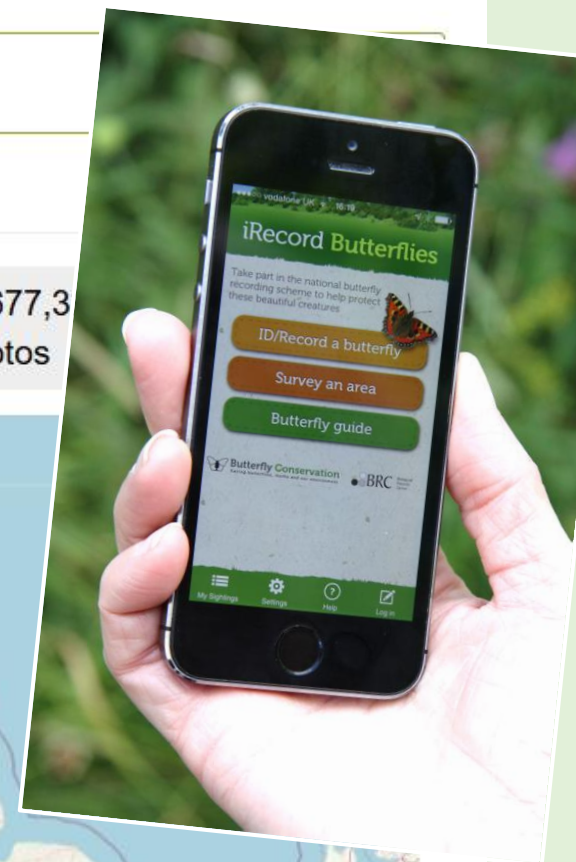
### Targeting Revisits: new features added

The **Targeting Revisits Maps** are intended to help wildlife recorders make the most of their time out recording insects, by guiding people to where records are most needed to help assess changes in distribution. Maps are currently available for grasshoppers/bush-crickets, craneflies, soldierflies, ground beetles and ladybirds. NEW for this year: an option to view 'Targets for Rediscovery'. These are the squares that have 4+ species recorded but haven't had records for 10+ years. Are those species still present? Will new species be found? Add your records to iRecord and the Targeting Revisits Maps will be updated each day.



Example of a "Rediscovery target" square for grasshoppers, with four species recorded but no records since 2011.

34,705,581 records
 34,140 species
 13,677,3 photos



**United Kingdom Butterfly Monitoring Scheme** UKBMS

UKBMS Home Reporting Mapping Forum Login Register

**Home**

Welcome to the UKBMS Transect Walker online.

This online system will become the primary route for submitting UKBMS data, although we will continue to support data submission via existing routes (e.g. via Transect Walker). The system can help to speed up data capture each year, as recorders will be entering their data directly onto a central database, and they will also be able to submit data on a weekly basis. The site enables progress with recording to be tracked through the season. Data can also be reviewed by transect co-ordinators.



The map on the right summarises recent recording activity (red symbols for sites recorded this year, blue symbols indicate sites recorded in previous years) and the website includes more detailed reports of recent activity. Please note that this website does not currently include historic UKBMS data.

**LERC Wales App**

Record any species on the go in Wales.

Download on the App Store GET IT ON Google play



- Endrosis sarcitrella 4/5/2018 @ St Andrews Crescent
- Greater Stitchwort 29/4/2018 @ Brynigara Country Pa.
- Opposite-leaved Golden-saxifrage 29/4/2018 @ Brynigara Country Pa.
- Phytomyza ilicis 29/4/2018 @ Brynigara Country Pa.
- Fallopia japonica 29/4/2018 @ Brynigara Country Pa.
- Himalayan Balsam 29/4/2018 @ Brynigara Country Pa.
- Marsh-marigold 29/4/2018 @ Brynigara Country Pa.

**iRecord**

Home Record Explore Summarise Activities Verify Forum Help

My account Log out

Welcome back Martin C. Harvey. You have 8 unread notifications.

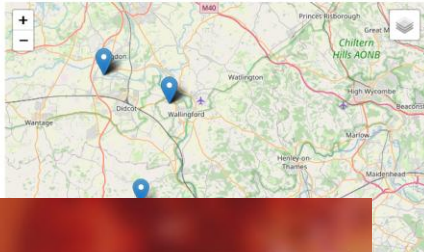
19,920,726 records 29,585 species 4,475,755 photos 218,434 recorders

Who would you nominate for an NBN wildlife recording award?

There are five categories of Award:

- NBN Award for Wildlife Recording – Terrestrial (open to individuals 21 years +)
- NBN Award for Wildlife Recording – Marine (open to individuals 21 years +)
- NBN Group Award (no age restrictions)
- NBN Young Person's Award (open to individuals aged 11-20)
- NBN Newcomer Award (open to individuals 21 years +)

Nominating an exceptional wildlife recorder group is very simple – just go to the NBN Awards for Wildlife Recording and complete a short form by **Sunday 17 July**.



**National Plant Monitoring Scheme**



**Indicia**

Home Lookup lists Custom attributes Taxonomy Observations data

Home

**Welcome to the Indicia Warehouse!**

Indicia is a toolkit that simplifies the construction of new websites which allow data entry, map & Hydrology.

- Indicia project website
- Indicia on GitHub

**EUROPEAN LADYBIRDS**

Species Info

Record

**Asian Hornet Watch**

Learn more about Asian hornet and help detect it by recording suspected sightings.

- Species Info
- Record
- App Info

**Ynndiriodolaeth Natur Maldwyn Montgomeryshire Wildlife Trust**

Nature Counts - Montgomeryshire Wildlife Trust

Enter a casual record

Enter a list of records

Click here to enter a single record of wildlife that you've seen.

If you have a list of records from the same place on the same date, you can enter them here.

**Butterfly Conservation**

National Moth Recording Scheme Online

Home Enter records My sites Explore my records Explore all records Download records Notifications

My account Log out

Welcome back Martin C. Harvey. You have 13 unread notifications.

Moth recording is the foundation for protecting these beautiful animals. Simply by submitting your sightings of moths to the UK's National Moth Recording Scheme, whether from kitchen window, back garden moth-trap or remote mountain top, you can make a real contribution to their conservation across the UK. More information about the National Moth Recording Scheme.

All new users of this NMRS Online portal will need to create a new account.

This portal links to iRecord. If you want to link to an existing iRecord account (for example if you use the iRecord app) then simply use the same email address when you create your NMRS Online account.

**Recent verified records**

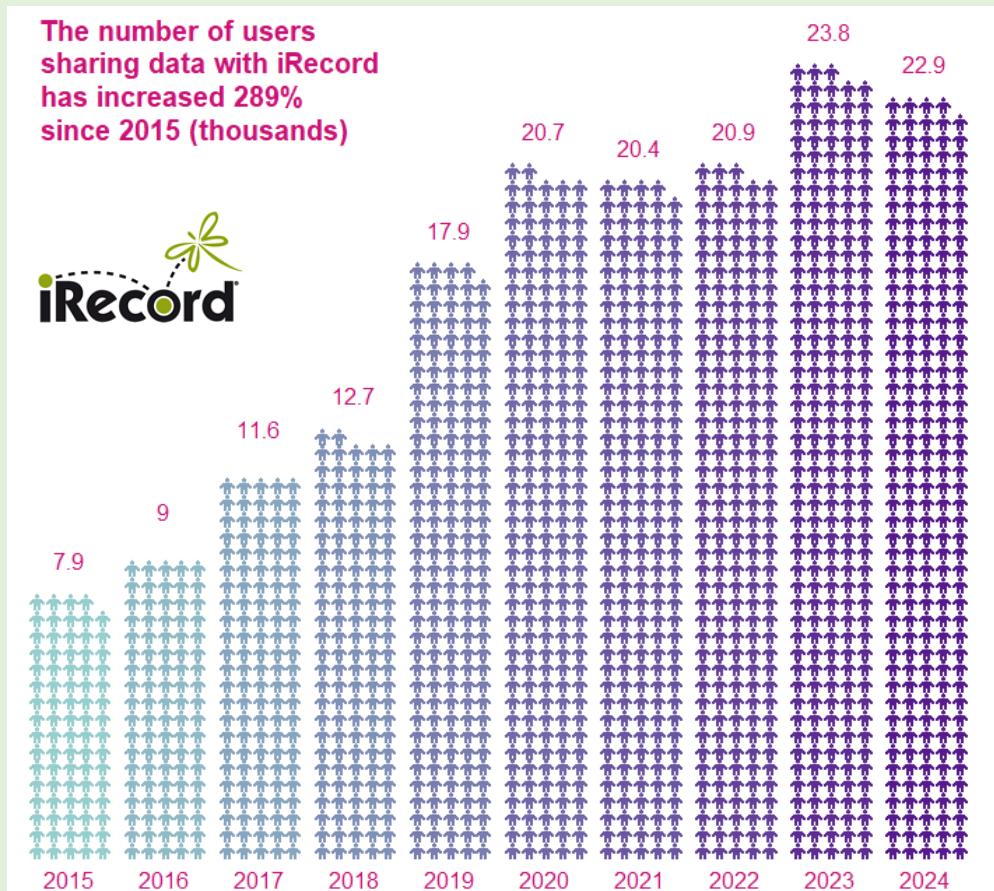
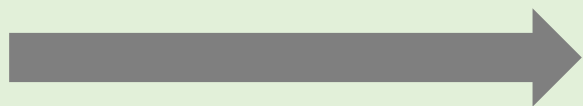
*Agonopterix cillella/heracliana*  
NZ19148606 on 05/03/2025 by welfare, mark

*Small Quaker (Orthosia cruda)*  
SO80344282 on 05/03/2025 by Clarke, Peter





# From field observation to global data



Calculated as the total number of Indicia users sharing records with iRecord for reporting  
Based on year of data entry  
Icons by Font Awesome

Graphic by Robin Hutchinson,  
based on data recorded via  
iRecord

National recording scheme  
+ county recorders  
(verification)



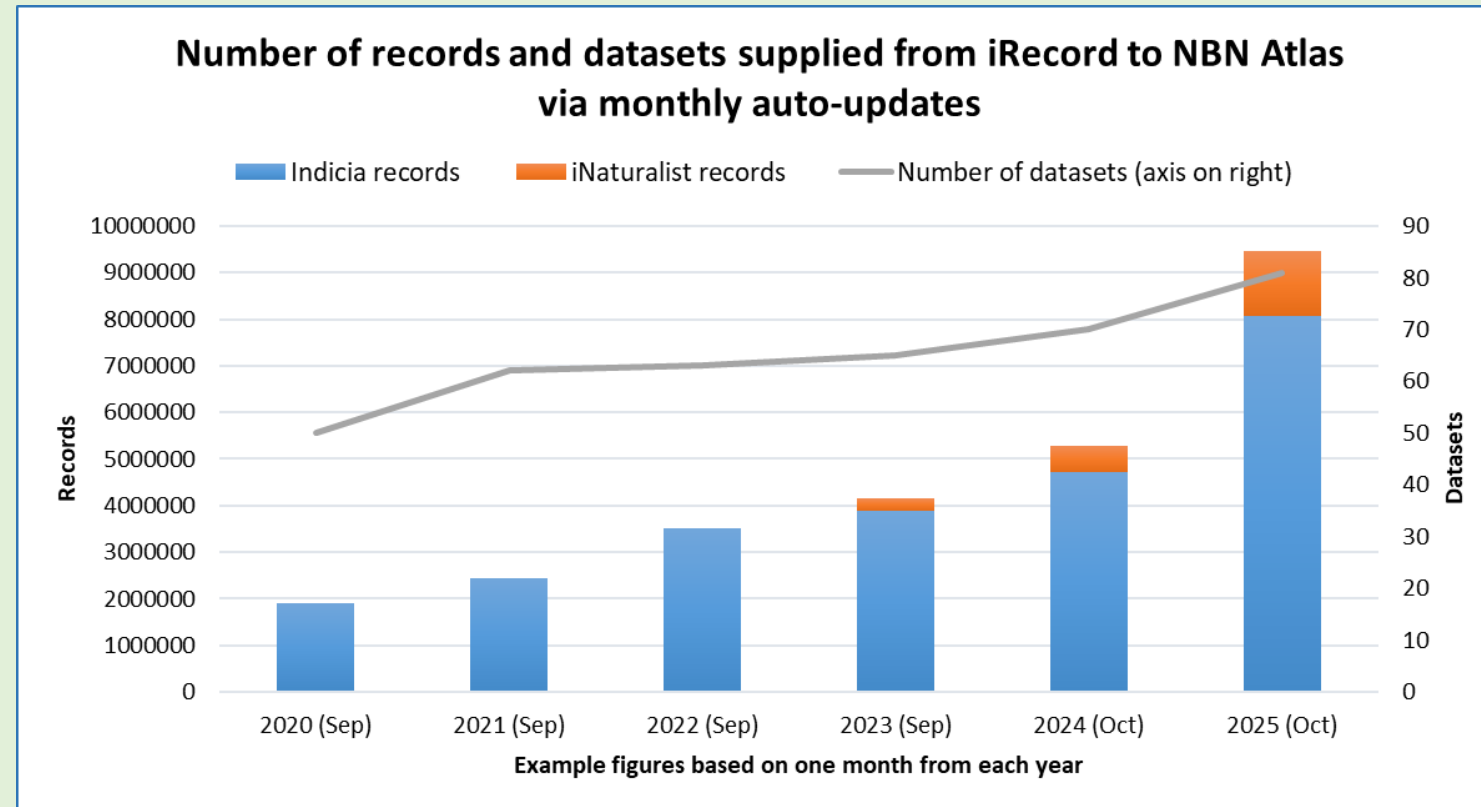
# Sharing data via NBN Atlas



Data is uploaded directly from iRecord to NBN Atlas each month, for many recording schemes and projects

Other schemes take data from iRecord and include it in their own annual uploads

In October, over 90% of records on NBN Atlas for year 2025 came via iRecord



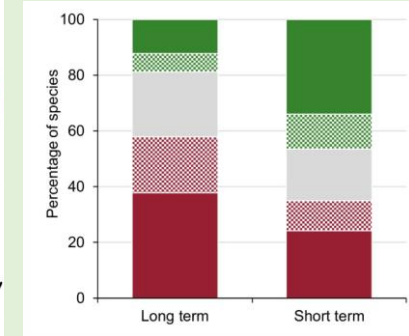
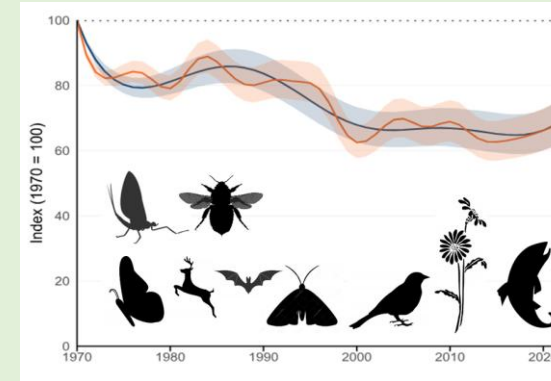
# Some key messages

## 1. Volunteer-collected data is critical

- over 1/3 of the Defra Headline Biodiversity Indicators
- >9,000 species trends in State of Nature

## 2. People are key – as volunteer recorders & verifiers

3. Sharing data supports high impact research on drivers of biodiversity loss and impacts of interventions (protected areas, agro-environment, pesticide use, climate change etc.)



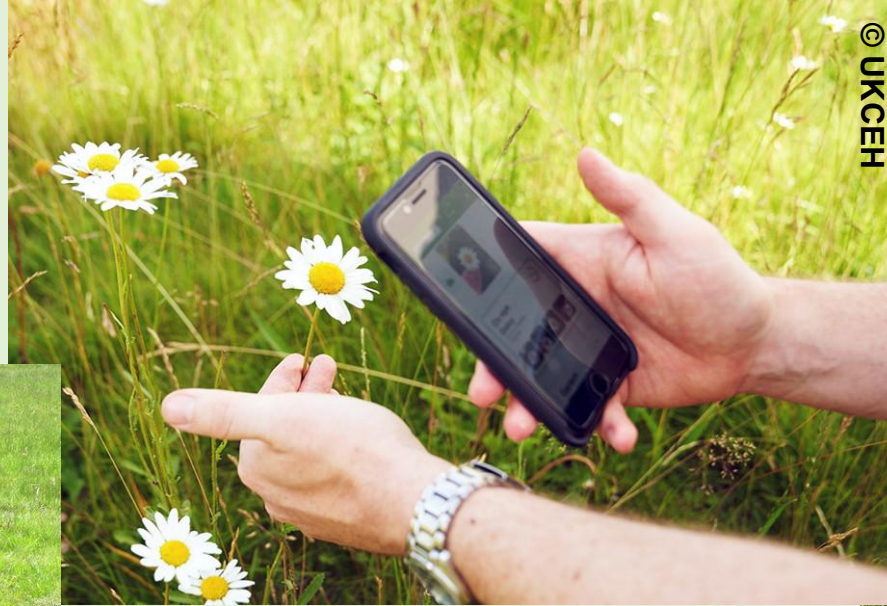
Example UKRI/  
Defra projects:



# From field observation to global data

*Jim Munford (NBN's first Programme Director), 2000, in NFBR newsletter:*

“We are laying the foundations for a Network that will take biological recording well into the 21<sup>st</sup> Century”



# From field observation to global data

- Many thanks to all contributing recorders and recording schemes
- BRC is supported by the Joint Nature Conservation Committee and UK Centre for Ecology & Hydrology, a not-for-profit research institute which receives support from Natural Environment Research Council as part of the National Capability for UK Challenges programme.
- Some recent projects have been supported by Defra's Natural Capital and Ecosystem Assessment (NCEA) programme



The late Trevor James, at the time of receiving the NBN 2018 Gilbert White Award for recording terrestrial and freshwater wildlife