



# UK citizen science schemes for monitoring farmland biodiversity

This list is adapted from "A review of existing citizen science approaches to monitoring farmland biodiversity" written as Deliverable 3.8 (December 2021) for the **Showcase project**.

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**Biodiversity monitoring** is carried out in order both to track large-scale biodiversity trends, and to assess the effectiveness of actions aiming to promote biodiversity.

**Citizen science** refers to the contribution of members of the public to scientific research, with biodiversity being one major area of focus.

This list includes citizen science approaches that are, or have recently been, used to monitor biodiversity on farmland in the UK with data gathered by volunteer recorders including members of the public, amateur naturalists, and farmers. In these schemes the monitoring data are collated by the scheme organisers and usually made publicly available all under an open access agreement.



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# List of UK citizen science schemes for monitoring farmland biodiversity (May 2024)



## PLANTS, TREES & HEDGES

<b>National Plant Monitoring Scheme</b>	Monitors plant diversity using grid squares. Focuses on natural habitats, but does include farmland (confirmed by email).	<a href="#">→ Read more</a>
<b>Rare Arable Flowers App</b>	App specifically focused on wildflowers on arable land. Presented mostly as an educational tool with an ID guide and "information about the management of arable land for the benefit of rare plant species".	<a href="#">→ Read more</a>
<b>OPAL hedge-focused survey</b>	Asked participants to examine hedges and the biodiversity found in them, using i.d guides/instruction materials provided by OPAL.	<a href="#">→ Read more</a>
<b>PTES Hedgerow Survey</b>	Great British Hedgerow Survey	<a href="#">→ Read more</a>
<b>Ancient Tree Inventory</b>	Aims to monitor ancient trees in the UK in order to protect them. Volunteers record details rather than quantity.	<a href="#">→ Read more</a>
<b>Conker Tree Science Recording Scheme</b>	Aims to monitor conker trees & pest damage from leaf miner, previously looked at moth abundance, and at bird predation of minors.	<a href="#">→ Read more</a>
<b>British Bryological Society Recording Scheme</b>	Aims to monitor UK bryophytes to discover how they are doing.	<a href="#">→ Read more</a>



## BIRDS

<b>BTO Breeding Bird Survey</b>	The BTO/JNCC/RSPB Breeding Bird Survey (BBS) is the main scheme for monitoring the population changes of the UK's common and widespread breeding birds. Main method = 1km <sup>2</sup> counts.	<a href="#">→ Read more</a>
<b>Big Farmland Bird Count</b>	Similar to the many national bird surveys that make up programme Type B, but with a specific focus on farmland and the engagement of farmers.	<a href="#">→ Read more</a>
<b>RSPB Farmland Bird Survey</b>	Farmers can choose to be part of this project, in which "volunteers undertake surveys to monitor population trends of priority bird species, and we provide targeted advice to ensure appropriate conservation management".	<a href="#">→ Read more</a>
<b>BTO/JNCC winter farmland bird survey</b>	Survey of birds on farmland in winter. Took place between 1999 and 2003. 1km square counts carried out by "volunteer surveyors".	<a href="#">→ Read more</a>
<b>GWCT Partridge Count</b>	Monitoring scheme of a typical farmland bird, mostly carried out by farmers.	<a href="#">→ Read more</a>
<b>English Farm Woodland Bird Monitoring Scheme</b>	Focused, time-bound scheme in 2019, assessing how well birds have colonised new "farm woods" planted since 1999.	<a href="#">→ Read more</a>
<b>Northumberland Coast farmland bird monitoring</b>	Small farmland bird monitoring scheme, starting by pairing 10 volunteers with 10 farmers. Specifically developed for mixed farming system there, which is not typical of UK farming.	<a href="#">→ Read more</a>
<b>Strathspey Wetland and Wader Initiative</b>	Partnership scheme aiming to create wader-friendly habitat, in partnership with farmers and crofters. "The project work is guided by a comprehensive survey which takes place every five years".	<a href="#">→ Read more</a>





## INSECTS

<b>UK Butterfly Monitoring Scheme</b>	National scheme not restricted to farmland, and where data is carried out by volunteers, who choose their own site to monitor.	<a href="#">→ Read more</a>
<b>Wider Countryside Butterfly Survey</b>	Stemming from the National Butterfly Monitoring Scheme, the WCBS is more targeted, focusing on "under-recorded habitats such as farmland, plantation woodland, uplands and urban green spaces".	<a href="#">→ Read more</a>
<b>National Moth Recording Scheme</b>	Nationwide scheme run by Butterfly Conservation. Volunteers submit records of "any larger (macro) moth", in any habitat.	<a href="#">→ Read more</a>
<b>UK Ladybird Survey</b>	Recording scheme focused on ladybirds. Partly a response to the 'invasion' of the harlequin ladybird. Members of the public simply record sightings and enter them online.	<a href="#">→ Read more</a>
<b>Soldierflies and Allies Recording Scheme</b>	National recording scheme that "collates biological records for 11 related Diptera families, using the information to promote enjoyment, study and conservation of the species and their habitats".	<a href="#">→ Read more</a>
<b>Diptera recording schemes</b>	Aims to monitor diptera of the British Isles to discover how they are doing.	<a href="#">→ Read more</a>
<b>Lacewings &amp; Allies Recording Scheme</b>	Aims to monitor Neuroptera, Megaloptera, Raphidioptera and Mecoptera of the British Isles to discover how they are doing.	<a href="#">→ Read more</a>
<b>UK beetle recording schemes</b>	Aims to monitor UK beetles to discover how they are doing and the factors that are important for their survival.	<a href="#">→ Read more</a>
<b>Bees, wasps, &amp; ants recording schemes</b>	Aims to monitor UK bees, wasps, & ants to discover how they are doing and the factors that are important for their survival.	<a href="#">→ Read more</a>
<b>British Bugs Recording Schemes</b>	Aims to monitor UK hemiptera & heteroptera to discover how they are doing.	<a href="#">→ Read more</a>
<b>Dragonfly and Damselfly Recording Schemes</b>	Aims to monitor UK Odonata to discover how they are doing.	<a href="#">→ Read more</a>
<b>British Leaf-miner Moths Recording Scheme</b>	Aims to monitor UK leaf-miners to discover how they are doing.	<a href="#">→ Read more</a>



## POLLINATORS

<b>X:Polli-Nation</b>	Brings together BeeWatch and OPAL Polli:Nation schemes, and lots of clever tools. Aims to increase interest in pollinators, their recording and creation of habitat to support their populations.	<a href="#">→ Read more</a>
<b>BeeWalk</b>	Gathers data on the abundance of bumblebee species in the UK.	<a href="#">→ Read more</a>
<b>Short-haired Bumblebee Reintroduction Project</b>	Project aimed at re-introducing the short-haired bumblebee. Working with farmers, conservation groups and smallholders in a particular area - Dungeness and Romney Marsh in Kent/East Sussex. Includes monitoring carried out by "trained volunteers".	<a href="#">→ Read more</a>
<b>UK Pollinator Monitoring Scheme</b>	National recording scheme enabling the public to carry out pollinator surveys, using either a ten-minute count or a 1km square survey that includes 'cropped' and 'non-cropped' land.	<a href="#">→ Read more</a>
<b>Open Farm Sunday Pollinator Survey</b>	One-off count in which volunteers were invited to farms to carry out pollinator surveys (2012).	<a href="#">→ Read more</a>
<b>National Honey Monitoring Scheme</b>	Aims to use beehives to monitor long-term changes in condition and health (e.g. plant diversity) of UK countryside. Focuses on the impact of pathogens, pesticides, and plant diversity on honey production and bee health.	<a href="#">→ Read more</a>



## OTHER INVERTEBRATES

- |  |   |                             |
|--|---|-----------------------------|
| <b>On-farm earthworm survey</b>                              | Pilot study which mobilised farmers to assess over 1300 ha farmland soils in spring 2018. | <a href="#">→ Read more</a> |
| <b>Collembola Recording Scheme</b>                           | Listed on National Biodiversity Network.  | <a href="#">→ Read more</a> |
| <b>British myriapod &amp; isopod group recording schemes</b> | Aims to monitor myriapods & isopods of the British Isles to discover how they are doing.  | <a href="#">→ Read more</a> |



## MAMMALS

- |  |  |                             |
|--|--|-----------------------------|
| <b>Mammal Mapper</b>                     | App enabling members of the public you to record signs and sightings of mammals in the UK, in any kind of habitat. | <a href="#">→ Read more</a> |
| <b>Hedgehog Street</b>                   | The BIG Hedgehog map helps us to understand where hedgehogs are in the UK and where they are missing from.         | <a href="#">→ Read more</a> |
| <b>National Bat Monitoring Programme</b> | Aims to monitor UK bats to discover how they are doing and the factors that are important for their survival.      | <a href="#">→ Read more</a> |



## REPTILES & AMPHIBIANS

- |                    |  |                             |
|--------------------|--|-----------------------------|
| <b>Record Pool</b> | National recording platform for collecting information on reptiles and amphibians in the UK. | <a href="#">→ Read more</a> |
|--------------------|--|-----------------------------|



## FRESHWATER

- |   |   |                             |
|---|---|-----------------------------|
| <b>Freshwater Habitats Trust</b>            | Aims to monitor freshwater habitats. Mostly submitting records any time or place. | <a href="#">→ Read more</a> |
| <b>Freshwater Flatworm Recording Scheme</b> | (Unclear. Listed on National Biodiversity Network but little information).        | <a href="#">→ Read more</a> |



## FUNGI

- |  |  |                             |
|--|--|-----------------------------|
| <b>Fungus Conservation Trust Recording Group</b> | Aims to monitor UK fungi to discover how they are doing.                   | <a href="#">→ Read more</a> |
| <b>Fungal Recording</b>                          | Aims to monitor fungi of the British Isles to discover how they are doing. | <a href="#">→ Read more</a> |



## SUSTAINABILITY TOOLS

- |   |  |                             |
|---|--|-----------------------------|
| <b>Cool Farm Tool</b>                       | A tool for farmers to monitor greenhouse gases, water (quality), and importantly, biodiversity.                                | <a href="#">→ Read more</a> |
| <b>LEAF simply sustainable biodiversity</b> | A booklet to help farmers monitor, manage and enhance biodiversity "through the adoption of Integrated Farm Management (IFM)." | <a href="#">→ Read more</a> |
| <b>FWAG farmland monitoring tools</b>       | Monitoring tool for farmers – not part of a citizen science scheme.  | <a href="#">→ Read more</a> |



## GENERAL BIODIVERSITY RECORDING SCHEMES

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|--------------------------|--|-----------------------------|
| <b>Nature's Calendar</b> | National recording platform focused on a wide range of species/taxa and their phenology, helping to understand "how wildlife is affected by weather and climate change."   | <a href="#">➔ Read more</a> |
| <b>iSpot</b>             | Website and app run by Open University. Describes itself as an online "community" rather than platform or programme of study. Participants upload their observations of wildlife, often accompanied by a photo, and are then helped by other users to identify the species. Also includes an ID guide. | <a href="#">➔ Read more</a> |
| <b>iRecord</b>           | Website/app enabling members of the public to submit wildlife sightings.   | <a href="#">➔ Read more</a> |



## FARM BIODIVERSITY MONITORING COLLABORATIONS

- |                                       |  |                             |
|---------------------------------------|--|-----------------------------|
| <b>Farmer Clusters</b>                | Monitoring forms part of this programme, which brings farmers together in clusters to "work more cohesively together in their locality", aided by an advisor or facilitator.   | <a href="#">➔ Read more</a> |
| <b>Innovative farmers</b>             | "Innovative Farmers is a network of farmers and growers who are running on-farm trials, on their own terms".   | <a href="#">➔ Read more</a> |
| <b>Selborne Landscape Partnership</b> | The Selborne Landscape Partnership (SLP) was established in 2014 when a group of local farmers met with the Game & Wildlife Conservation Trust (GWCT) and the South Downs National Park Authority (SDNPA) to develop the group.  | <a href="#">➔ Read more</a> |
| <b>Coreo</b>                          | Farming groups in the south of Wiltshire wanted to record biodiversity on their farms to understand both what they had currently and how changes in farming practices could have a positive impact. The Coreo app provides the ability for farmers to ID the wildlife on their farms and record it in-situ | <a href="#">➔ Read more</a> |



## OPEN ACCESS JOURNAL ARTICLE

**Farmland biodiversity monitoring through citizen science: A review of existing approaches and future opportunities**

Ruck, A., van der Wal, R., Hood, A., Mauchline, A., Potts, S., Wallis De Vries, M. & Öckinger, E. (2024) Farmland biodiversity monitoring through citizen science: A review of existing approaches and future opportunities. *Ambio*, 53(2), 257-275.

[➔ Read more](#)

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