The Worcestershire Wildlife Sightings Project

Diana Westmoreland.



01. Fox Vulpes vulpes, Worcester, September 2022. Mick Woodward.

Introduction

In autumn 2020 I was invited to join a "citizen science" project begun earlier in the year by Worcestershire Wildlife Trust (WWT). The arrival of Covid-19 had enabled them to fast-track an idea to engage the public of Worcestershire with local wildlife. As we're all aware, because the coronavirus pandemic and lockdown confined people to their gardens and local spaces, it was an ideal time to encourage public participation in local wildlife recording. A plan of action was agreed by WWT's Wendy Carter and Nick Packham, the Worcestershire Recorders Committee and Simon Wood from Worcestershire Biological Records Centre (WBRC). "Worcestershire Wildlife Sightings" was born.

Supported by Worcestershire Recorders and WBRC, the project was run by WWT staff with Nick Packham as the 'face' of the project dealing with public enquiries and Wendy Carter as the web coordinator and e-news wizard behind the scenes.

The first year

Initially, as a tie-in with a nationwide Action for Insects campaign members of the public were invited via the WWT website to look out for six species of insect. If they spotted one of the target insects, people were encouraged to record their observations digitally using a simple form on the WWT website. This form replicated information that WBRC needed to verify a record and could only be submitted with an accompanying photograph. Since the majority of people now carry a smartphone with an excellent camera, this was thought to be a reasonable requirement as the six species would be identifiable from even a blurry image.



02. One of the original target species, a Seven-spot Ladybird *Coccinella septempunctata*, Bromsgrove, April 2021. Emma Pugh.

Each target species had a designated Worcestershire Recorder, a "species champion", who agreed to tell its story and explain why information about it was important. They would also help with identification, which was very necessary since the aim was to invite people with no previous knowledge or experience to submit their observations.

The project developed quite quickly, supported by the recording community of WWT staff and volunteers and it was launched in spring 2020. It was promoted locally by Worcestershire Recorders and WBRC, and by signposting on courses by the Field Studies Council and via online talks, social media and WWT members' magazine. Wendy Carter wrote about the target species and gave links to the Wildlife Sightings webpage in editorials for magazines around the county. Additionally, people who submitted records to the scheme were invited to sign up to receive a monthly e-newsletter to keep them updated with how their records are helping to monitor wildlife in the county, telling them about sightings made during the previous month and what to look for next.



03. One of the original target species, Common Carder Bee *Bombus pascuorum*, Wychavon July 2022. Peter Hawcroft.

About a dozen records arrived during the first two months of the project then in summer 2020 a rapid increase in interest meant that WWT staff were struggling to reply to emails and submissions and to validate each record. By the end of the summer, the project had received more than 130 validated records. Each submitted form triggered an automatic "thank you" email from Nick but to achieve the project's aim of encouraging new recorders, a more individual response was needed, preferably quickly.

Years two and three

Help was clearly needed for 2021, and I was tasked with monitoring the Wildlife Sightings Inbox, extracting the data submitted into a spreadsheet for WBRC and, importantly, providing a contact point for recorders and a link between them and the "species champions" who would advise on identification.

Unable to go to Lower Smite Farm because of lockdown, I was dependent on the WWT's IT department to enable me to view the Wildlife Sightings Inbox from home. With remote access set up, I could see each record as it arrived and respond to the recorder as necessary. Each observation was validated, and the data transferred to an Excel spreadsheet. The "species champions" from Worcester Recorders, together with Wendy and Nick, provided ID help, backup and encouragement from the beginning.



04. Broad-bodied Chaser *Libellula depressa*, Hanbury, June 2021. A target species introduced in 2021. Rebekah Nash.

In March 2021 the target species list was increased to 12 species (no longer restricted to insects) and people were also encouraged to submit records of any wildlife they had spotted, so long as they attached a photograph, sound file or video that was suitable for ID purposes.

During the year, excellent links were established with Andy Young and WBRC and regular data reports sent to all those involved in the project at WWT and Worcestershire Recorders.

During 2021, 295 validated records were submitted by 157 people, of whom 105 submitted a single record. Two records were submitted by 22 people, 15 people submitted three records, three people submitted four records and 12 people submitted five or more records. The project had clearly encouraged members of the public to engage with their local wildlife!

For 2022 the target list was increased to 15 species with the introduction of Common Frog and Common Toad and their spawn, House Martin nests and Slow-worm, and spotters were again encouraged to send in any interesting observations that they made, even if they could not identify the species they had seen.

By the end of August 2022, the scheme has received another 230 validated records bringing the total to almost 700, a gratifying sign of local interest in wildlife.



05. Slow-worms *Anguis fragilis* in compost bin, Worcester July 2022. A target species for 2022. Sue Conway.

Number of records submitted each month

Records have been submitted in every month from project launch in 2020: spring and summer months are unsurprisingly the busiest. December and January records are dominated by Mistletoe recordings. As expected, some species such as 7-spot Ladybird and Mole hills are recorded throughout the year whilst others such as Small Tortoiseshell butterfly and the dragonflies and damselflies are only recorded in summer. We have yet to receive a report of a hibernating tortoiseshell, but it could happen.

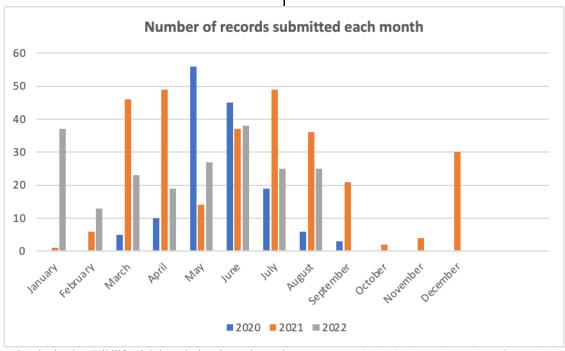


Chart 1. Records submitted to Wildlife Sightings during the project's three years. (Vertical axis shows the number of records submitted).

Records of target species

Records of target species reflect the species' promotion on the website and e-newsletter. Coverage by the press locally also leads to a flurry of activity, particularly noticeable after a spotlight report on the plight of House Sparrows. Wendy monitors social media and folk who post their observations on Facebook or Twitter are encouraged to submit a form to the project.

Nine of the target species are insects and from the start of the project records of invertebrates have outnumbered other groups. However, their identification by spotters is less reliable than for larger wildlife. For example, the Common Carder Bee and Marmalade Hoverfly have been frequently mis-identified, especially during the project's

first year. Spotters who send in mis-identified records are emailed, thanking them for their observation, correcting the identity of the species recorded and including a link (such as to the Wildlife Trusts) for further information. The corrected observation is added to the datasheet.

In contrast, people are consistently reliable in identifying Hummingbird Hawk-moths. Only two records of this species were made in 2020 and two in 2021. In 2022, to the end of August 22 records had been submitted and more have arrived in early September. That this reflects a genuine increase in frequency of sightings is supported by an increase in observations made by county moth recorders.



06. Hummingbird Hawk Moth Macroglossum stellatarum, Trench Wood, September 2022. Dirk Perry.

Species	Number of records in 2020	Number of records in 2021	Number of records in 2022 to August
Seven-spot Ladybird	22	27	13
Common Carder Bee	8	5	7
Large Red Damselfly	28	10	6
Marmalade Hoverfly	11	11	2
Small Tortoiseshell Butterfly	34	17	9
Hummingbird Hawk-moth	6	2	22
Mole/Molehill		16	8
Broad-bodied Chaser		9	7
House Sparrow		52	23
Mistletoe		51	41
Red-tailed Bumblebee		26	7
Box Tree Moth		1	1
Toad/frog/spawn			14
House Martin nest			7
Slow-worm			8
Total	109	227	175

Table 1. Number of validated records received for target species in 2020, 2021 and 2022 to end of August

Wildlife Sightings Records of Mistletoe

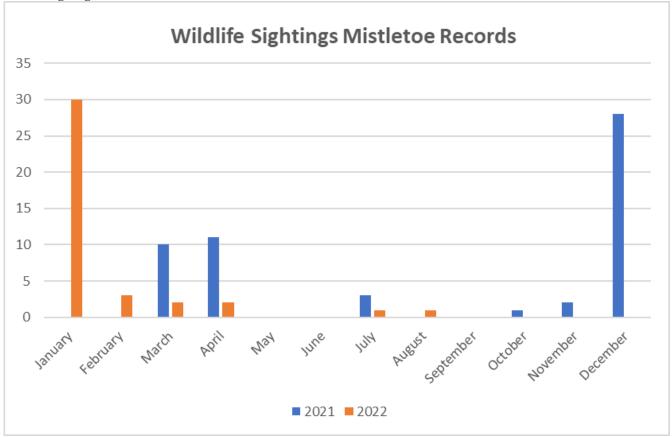


Chart 2. Records of Mistletoe during 2021 and 2022. (Vertical axis shows the number of records submitted).

Tree species	Number or records	
Acacia ?	2 'probable False Acacia'	
Apple	13	
Pear	2	
Fruit	2	
Ash	8	
Oak	0 (1 possible was not confirmed on checking)	
Blackthorn	1	
Chaenomeles (flowering quince)	1	
False Acacia	1	
Hawthorn	13	
Lime	5	
Poplar	2	
Rowan/mountain ash	7	
Willow	1	
Maple	1	
No species identified	33	

Table 2. Tree species identified as bearing Mistletoe

Mistletoe was a new target species introduced in March 2021 and 92 validated records have been submitted up to August 2022. Predictably, as chart 2 shows, most Mistletoe records are submitted in winter.

Recorders were asked to submit the type of tree on which the Mistletoe was growing, and in some cases the host tree species was mentioned in the "comments" section. However, many records were submitted without this information, and it may be worth re-visiting this another year.

Wildlife Sightings Records of House Sparrows

In 2021 we chose House Sparrow as one of our Wildlife Sightings target species. Despite extensive declines, they remain widely distributed in Worcestershire. With their loud chirping calls, habit of perching fairly openly and living in close proximity to us, they are difficult to miss but we also felt that they were being underrecorded.

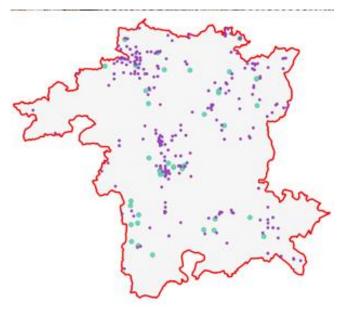
During 2021, the county bird recording team received 1210 House Sparrow records and of those, 46 were received via Wildlife Sightings.



07. House Sparrow *Passer domesticus*, Hall Green, April 2021. Vince Garvey.

Around half of the records of House Sparrows from both sources contained information on the number of birds encountered. About half of the Wildlife Sightings also contained valuable information about nesting in contrast to data from other sources where only 12% of the submissions recorded breeding evidence.

The map shows that records were widely distributed around the county, with the densest recording taking place in Bewdley and the wider Wyre Forest region, in Worcester city and Evesham. Wildlife Sightings records helped to fill in some of the gaps in Worcestershire's House Sparrow distribution. Of the 46 sites recording birds via Wildlife Sighting, 29 of them (63%) were new 1km grid squares, with no other records of this species from those squares received during 2021.



Map 1. Map of Worcestershire showing distribution of House Sparrow records in 2021 Green spots show Wildlife Sightings Records. (Credit Craig Reed).

Wildlife Sightings Records of non-target species

In addition to mis-identified records, Wildlife Sightings has received around 150 records of non-target species. Many of these were correctly identified and others were submitted with a request for identification from WWT. Thanks to the "species champions" an identification was always made (sometimes only to genus level) and sent to the recorder with a "thank-you- for submitting-your-findings" email. The invitation to submit any interesting observation has led to many records of scarce species and some stunning photographs of local wildlife.



08. Aspen Leaf-rolling Weevil *Byctiscus populi*, Droitwich, May 2022. Julia Saunders.



09. Stag Beetle *Lucanus cervus*, Upton June 2022. Wendy Carruthers.



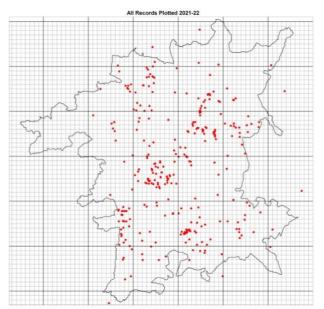
10. Swan Mussel *Anodonta cygnea* in Croome Park, July 2022. Tom Southam.

Location and distribution of Wildlife Sightings Records

Information on the submitted form gives the name and email address of the recorder. A few records have been submitted by regular recorders supporting the project, but most are casual sightings. Spotters are invited to add "comments" about their record, and these provide a wealth of information.

Many people record wildlife that they observe in their own garden, this is particularly the case for House Sparrow and Common Frog and their spawn. Almost all the records of frogs/spawn were from garden ponds whereas the (fewer) observations of Common Toads/spawn were from larger bodies of water in public places.

A second large group of records comes from observations made whilst people were "out and about" (frequently dog walking) and a smaller number from people visiting nature reserves and other places where they had gone specially to look for wildlife.



Map 2. Distribution of Wildlife Sightings records for 2021 and to July 2022. (Credit Simon Wood).

The distribution of records submitted shows concentrations of records in areas where people live. Worcester, Malvern, Pershore and the central north of the county are well represented, the northeast and around Tenbury much less so. A few records were submitted from outside VC37 as is shown.



11. Common Toad *Bufo bufo*, Bromsgrove, March 2022. Margaret Dobson.

An Overview

Records of insects dominate Wildlife Sightings, both target and nontarget species. People seem to be genuinely aware of, and interested in the insects they see; thanks perhaps to recent publicity about insect decline all over the country.

In July 2021 one contributor spotted, and recorded on video, a group of eight glow worms at a new site for the county near Droitwich and we would really like to know if they were once connected to the known colony further along the canal at Droitwich.

Validated records have been received of Purple Emperor butterflies in gardens and of a Death's-head Hawk-moth in a chimney inhabited by bees!

Until August 2021, the scheme had been promoted via social media, the Trust's e-newsletters and magazines and via the other methods mentioned above. A sighting of the rare ichneumon wasp *Agrothereutes abbreviatus* in Worcester, however, saw press coverage in the *Worcester News*, a live interview (with Wendy Carter) about the wasp and the scheme on BBC Hereford and Worcester radio and coverage (with Nick Packham) on BBC Midlands Today.



12. A short-winged ichneumon wasp *Agrothereutes abbreviatus*, Worcester June 2021. Cathryn Dhonau.

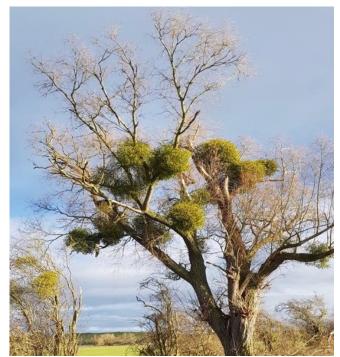
Further press coverage, specifically asking for records of Mistletoe followed in December 2021, prompting records from across the county, and the successful coverage of House Sparrows in August and early September of 2022.

Mistletoe and House Sparrows were recorded in good numbers, no doubt because they are easily seen and identified. House Sparrow records were notable for the number of comments made by recorders about the pleasure they gained from watching these busy birds in their gardens. Similarly, those recording Frogs and Slow-worms expressed their joy at having the creatures in their gardens and often revealed the active steps they had taken to encourage "their" wildlife.

Many Wildlife Sightings are recorded in gardens; it might be interesting to determine what proportion of records come from "own garden" and what proportion from observations made whilst "out and about".

As the dataset increases, other analyses of the comments section could be rewarding as such "soft" data reveals the concerns of the recorders as well as the context in which observations are made.

After two and a half years the project continues to go well. Thus far 224 people have submitted well over 670 validated records. There are 240 subscribers to the e-newsletter which now has a regular feature "Meet the Recorders" to introduce regular recorders to e-newsletter subscribers.



13. Mistletoe *Viscum album* on hawthorn, Castlemorton, January 2022. Mick Woodward.

For the future

And for the future? WWT is planning to install a map of Wildlife Sightings on its website so that people can see what has been recorded and where.

Members of the steering group will review the target species list again at the end of 2022. It will probably remain at 15 as introducing more target species might be unwieldy. Over time the species targeted might be changed but this would be at the expense of seeing longer term trends in recording. Species which are rarely recorded might be substituted by ones in which there is particular interest.

The invitation to submit records of any interesting wildlife has not led to a tsunami of unidentifiable records: in contrast it has produced some of the more interesting observations and this open approach will be continued.

As described, the "comments" section is full of interesting context detail which can be analysed relatively straightforwardly.

We are aware that many good records are submitted via Facebook and Twitter, but data handling restrictions prevent these being incorporated into our dataset, it isn't clear if a way can be found around this problem.

Another possible future initiative is to invite Wildlife Sightings Recorders to their own introductory "field" meetings or offer them a chance to meet the local recording community, furthering the idea of "species champions".

Lastly, we need to keep up the project profile and encourage people in Worcestershire to send in their Wildlife Sightings.



14. Marmalade Hoverfly *Episyrphus balteatus*, Fernhill, July 2022. John France.

Acknowledgements and Thanks.

Grateful thanks are sent to the following, without whom the project would have been and continue to be impossible

Worcester Biological Records Centre: Andy Young for support, encouragement and helping me navigate round the intricacies of wildlife recording and data transfer. Simon Wood for producing the dot plot map.

This has been and continues to be a collaborative project. A big Thank You to each and every one of the "species champions" for unstinting support, guidance and speedy identification of wildlife submissions: Harry Green, Rosemary Winnall, Gary Farmer, Mike Averill, Craig Reed, Steve Bloomfield, Tony Simpson, Dominique Cragg, Jean Young.

Images

- 01. Fox, Worcester, September 2022. Mick Woodward.
- 02. 7-spot Ladybird, Bromsgrove, April 2021. Emma Pugh.
- 03. Common Carder Bee, Wychavon July 2022. Peter Hawcroft.
- 04. Broad-bodied Chaser, Hanbury, June 2021. Rebekah Nash
- 05. Slow-worms in compost bin, Worcester July 2022. Sue Conway.
- 06. Hummingbird Hawk Moth, Trench Wood, September 2022. Dirk Perry.
- 07. House Sparrow, Hall Green, April 2021. Vince Garvey.
- 08. Aspen Leaf-rolling Weevil, Droitwich, May 2022. Julia Saunders.
- 09. Stag Beetle, Upton June 2022. Wendy Carruthers.
- 10. Swan Mussel in Croome Park, July 2022. Tom Southam.
- 11. Common Toad, Bromsgrove, March 2022. Margaret Dobson.
- 12. A short-winged ichneumon wasp *Agrothereutes abbreviatus*, Worcester June 2021. Cathryn Dhonau.
- 13. Mistletoe on hawthorn, Castle Morton, January 2022. Mick Woodward.
- 14. Marmalade Hoverfly, Fernhill, July 2022. John France.

Chart 1. Records submitted to Wildlife Sightings during the project's three years.

Chart 2. Records of Mistletoe during 2021 and 2022.

Table 1. Number of validated records received for target species in 2020, 2021 and 2022 to end of August

Table 2. Tree species identified as bearing Mistletoe

Editor's comment

This project has involved many people acknowledged above. However, without the author's time, dedication and tenacity this article would never have been written. Thank you Diana!