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Mend the Gap Analysis Project

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Feedback

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Mend the Gap Analysis Project

Summary

Thames Valley Environmental Records Centre (TVERC) has been funded by Mend the Gap for a project on key indicator and iconic species in MTG programme area, and to learn more about those that are observing wildlife. The Mend the Gap (MTG) programme, a joint programme of the Chilterns and North Wessex Downs National Landscapes, and the Railway Action Group. The vision of Mend the Gap is that the outstanding national landscape that links the Chilterns and the North Wessex Downs will be enhanced and enriched for wildlife, residents and visitors.

The programme area for Mend the Gap covers the railway corridor along a 20km stretch of line between the outskirts of Reading and Didcot and 3km either side of the line. For the purposes of this analysis, the project area also includes a 5km buffer. The area includes parts of both Berkshire and Oxfordshire[1]. See Figure 1 Mend the Gap Project Area, which can also be found in Appendix 2, page,72.

Figure 1 Mend the Gap Project Area

[1] About Mend the Gap | Mend the Gap

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1. Introduction

Thames Valley Environmental Records Centre (TVERC) has been funded by Mend the Gap (MTG) for a project analysing the distribution of key indicator and iconic species in MTG programme area, and learning more about those that are observing wildlife

There are two parts to the Mend the Gap Project:

- Species Analysis and Mapping
- Wildlife Sightings Survey

1.1 Species Analysis and Mapping

The species part of the project analyses and maps what records exist for some of the key indicator and iconic species in the Mend the Gap programme area, plus a 5km buffer. Thirty-five species, across nine taxon groups, have been chosen for the analysis. This work will identify hot and cold spots in terms of both species' distribution and, observation and record keeping, to help us better understand species monitoring needs in the region for the future.

1.2 Wildlife Sightings Survey

To learn more about the people who sight wildlife in the Mend the Gap area, TVERC carried out a wildlife sightings survey, and asked for feedback from anyone who sights wildlife in the Mend the Gap area, or the surrounding 5km buffer. The analysis of this survey will report on the demographics and skills of the people that are currently carrying out this valuable monitoring and recording work, with the aim of identifying any support they may need. And to help identify any new audiences that might be encouraged to get involved in future. The survey can be found in Appendix 2.

2 Method

2.1 Species Analysis and Mapping

An initial species long list was created following conversations between TVERC and Mend the Gap, and research about the area. The decision was made with Mend the Gap to focus on species of wet habitats as these dominate the project area. Mend the Gap provided suggestions from themselves and local experts, and TVERC also added information and research to the list. This included a data search to produce a species list for the whole project area. Through cross referencing the data held by TVERC, using information from local experts, and discussions with the Mend the Gap team, a final list of 35 species was decided on. These 35 species are considered key indicator and iconic species in MTG programme area. They cover 9 Taxonomic groups, including reptiles, bird, bony fish, higher flowering plants (including trees), butterfly, dragonfly, moths, mammals and molluscs. The details of the rationale behind the species selection can be found in Appendix 1.

Once the species list was decided on, analysis was carried out to look at the biological data TVERC currently have for the Mend the Gap area, for the selected key species.

2.1.1 Species Spatial Distribution

A range of maps to illustrate the spatial distribution of these selected key species, within the Mend the Gap area, plus a 5km buffer zone beyond it, were produced (see Appendix 4, page.86). The maps illustrated which 1km grid squares have records, and the number of records. From these distribution maps, any geographical hotspots and gaps in records can be identified. This could then guide recommendations about what could be communicated to local communities and recorders, and which gaps need filling. TVERC holds data for 32 of the 35 selected key species. For those without records, a baseline has now been created.

Data was analysed back to 1995, giving an overall 30-year time-period. Within this, different time intervals were targeted, to identify if the records have changed over different time frames. Four different time intervals were analysed within the 30-year time-period

- 1995 to 2014 (20-year time-period)
- 2015 to 2019 (5-year time-period)
- 2020 to September 2024 (most recent 5-year time-period)
- And an overall baseline was set at 2023. This is because we are currently in 2024 and TVERC are still importing data into our database. Therefore, it's difficult to accurately compare 2024 to previous year's.

Analysis was carried out, for each of the 35 species, to understand the trends in the number of records, and number of 1km grid squares with records, over the entire 30-year time-period of 1995 to September 2024.

- 1995 to 2014
- 2015 to 2019
- 2020 to September 2024

To compare older data (10 to 30 years old) with more recent data (last 10 years), the number of records and 1km squares in 1995-2014 were compared to 2015-September 2024, to show whether there have been increases, decreases, or no change in species observations.

To understand trends over the entire 30-year time-period, line graphs were produced to show the number of records and 1km grid squares yearly. This could also show any correlations in the number of records and 1km grid squares. (see Figures 2.1 – 2.32)

To show any trends in records and 1km grid squares more recently (last 10 years), 2015-2019 was compared to 2020-September 2024. As well as noting if there were any records at all in the last 5 years. (see Tables 2.1 – 2.32)

2.1.2 Species Record Trends

Species records

For each species, the number of records in the last 10 years (2015 – 2024) was compared to the previous 20 years (1995 – 2014), to show if records of each species have increased, decreased or stayed the same. Also, if there have been records more recently, during the last 5 years. It is important to note that TVERC are still entering data for 2024; 2024 data include records up to (and including) September.

1km grid squares with records

For each species, the number of records in 1km grid squares within the Mend the Gap area in the last 10 years (2015 – 2024) was compared to the previous 10 years (1995 – 2014). To show if the number of records in 1km grid squares for each species has increased, decreased or stayed the same. Also, how many 1km grid squares in the Mend the Gap area have had records more recently, during the last 5 years. It is important to note that TVERC are still entering data for 2024; 2024 data include records up to (and including) September.

2.2 Wildlife Sightings Survey

This part of the project has come from a belief that there is a national shortage of identification skills, particularly in younger generations. It is also an acknowledgement that the Mend the Gap area has extra-ordinarily high numbers of identification experts. The aim was to find out more about who is currently making observations in this area. To do this, a survey comprising of 24 questions was created in MS Forms. A copy of the wildlife survey can be found in Appendix 2.

The survey had four sections. The first section was a brief introduction explaining the background of the project, the purpose of the survey, relevant links for further information, and a disclaimer. Before asking questions focused on demographics and wildlife sightings. *"It's often helpful to provide a brief introduction or explanation of the survey's purpose before asking demographic questions. This can help respondents understand the importance of providing accurate demographic information and increase their willingness to participate."*[2] There was an overview map of the project area (including the 5km buffer), and the option for respondents to give their name. The second section, questions 2 to 11, included demographic questions. The third section, questions 12 to 22, included questions about making wildlife sightings. The fourth section thanked people for taking part in the survey and asked if they would be happy to provide an email address and for TVERC to contact them further. The survey was expected to take between 10 to 15 minutes. A copy of the survey can be found in Appendix 2.

The survey was promoted and shared in several ways. This included: on the TVERC website as part of a news item; in the TVERC August newsletter; on TVERC's social media platforms (Facebook, Twitter, Instagram, LinkedIn); and by email on 4 September to over 170 TVERC contacts. Mend the Gap also shared details of the survey on their social media platforms and with their contacts. The survey opened for feedback on 21 August 2024 and closed on 30 September 2024.

Some of the key aims of the survey where to find out:

- Who is making wildlife sightings
- The geographical coverage of the wildlife sightings being made, in the Mend the Gap area.
- The skill level of those observing wildlife.
- The taxa being observed.

[2] https://www.questionpro.com/blog/demographic-survey-questions/

- Why people are making wildlife sightings and why they observe the wildlife they do, e.g. personal interest, work. As well as finding out more detail about how they do this e.g. method of travel, and where they do this.
- What can be done to support those making wildlife sightings e.g. wildlife ID training, how to share their sightings.

2.2.1 Demographic Questions

The demographic questions included questions on age, gender, disability, language, ethnicity, qualifications, employment status, Universal Credit, household occupancy. "*Demographic survey questions are essential for understanding and connecting with your target audience" 2.* They are important to enable audience segmentation, targeted marketing, decision making, personalisation, market research and social impact "2. Questions and response options were based on the Census 2021 for England and Wales questionnaire for individuals, by the Office for National Statistics.[3] The demographic questions in the survey were made compulsory.

The demographic questions can be found in Appendix.2, page.73. And further information about the rationale for the demographic questions can be found in Appendix 3, page.82.

2.2.2 Wildlife Sightings Questions

The wildlife sightings questions in the survey were not compulsory. They aimed to find out: where people make wildlife sightings; how they travel there; what wildlife people record; their skill level for different wildlife groups; wildlife groups they would like to observe that they don't currently; how often they make sightings; do they share their observations; is there any potential support they could be given; what barriers do they experience.

The wildlife sightings questions can be found in Appendix.2, page.75. And further information about the rationale for the wildlife sightings questions can be found in Appendix 3, page.83.

[3] Census - Office for National Statistics.

3 Results

3.1 Species Analysis and Mapping

3.1.1 Species Spatial Distribution

Mapping

Maps showing the spatial distribution of each of the 35 species, across the time intervals of 1995 – 2014, 2015 – 2019, 2020 to September 2024, and a baseline of 2023, can be found in Appendix 4, page.86.

3.1.2 Number of species records and 1km grid squares with records

Below is the analysis in trends of the number of records, and number of 1km grid squares with records, for each of the 35 species, within the Mend the Gap project area and 5km buffer. For each species there is a results Table showing:

- the trends across the 30-year time-period, by comparing 1995 to 2014 to the last decade, 2015 to September 2024.
- the more recent trends (data from the last the last decade was analysed) by comparing 2015 to 2019 to 2020 to September 2024.
- And, if there have been any records within the last 5 years.

Line graphs have been produced for each species to show the number of species records, and 1km grid squares with species records yearly, over the entire 30-year time-period. Illustrating increase and decreases in records, and any correlations between species records and number of 1km grid squares.

A summary of the number of species records, and number of 1km grid squares with records, for all 35 species across the time intervals of 1995 – 2014, 2015 – 2019, and 2020 – September 2024, can be found in Appendix 5, page.120.

Kingfisher *Alcedo atthis*

The data indicates a positive trend in both the number of records and the number of 1km grid squares where Kingfishers have been observed, especially over the last decade.

Kingfisher, *Alcedo atthis*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	550	400	383	783	Increase of 185%	Decrease of 4%	Yes
Number of 1km grid squares	67	43	46	89	Increase of 166%	Increase of 7%	Yes

Table 2.1 Trends of Kingfisher records between 1995 to September 2024

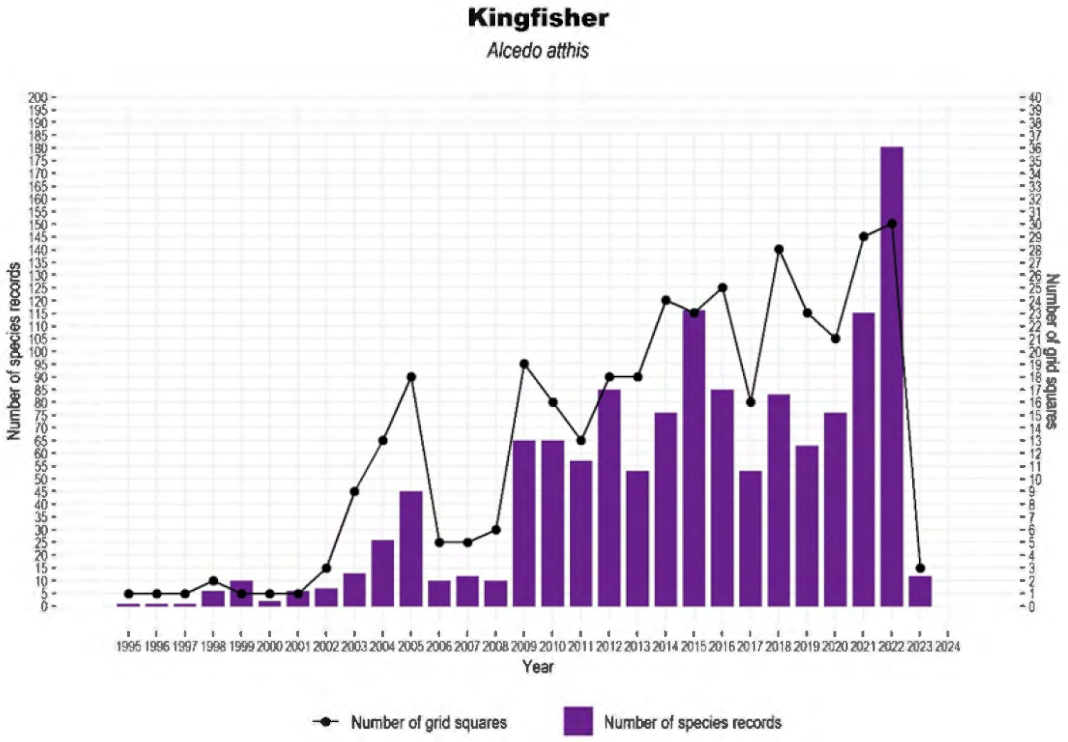


Figure 2.1 Number of Kingfisher records, and 1km grid squares, between 1995 to September 2024

Coot *Fulica atra*

This data shows that he Coot population. While there's a slight overall increase in the number of records over the last decade, there's a notable decrease when comparing the periods 2015-2019 to 2020-September 2024. Similarly, the number of 1km grid squares has increased significantly over the long term but shows a slight decrease in the more recent comparison. The data indicates a positive trend in both the number of records and the number of 1km grid squares where Coot have been observed. The recent decrease is likely because not all of the records for the last few years have been received and processed by TVERC.

Coot *Fulica atra*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	780	424	370	794	Increase of 104%	Decrease of 13%	Yes
Number of 1km grid squares	41	29	28	57	Increase of 178%	Decrease of 3%	Yes

Table 2.2 Trends of Coot *Fulica atra* records between 1995 to September 2024

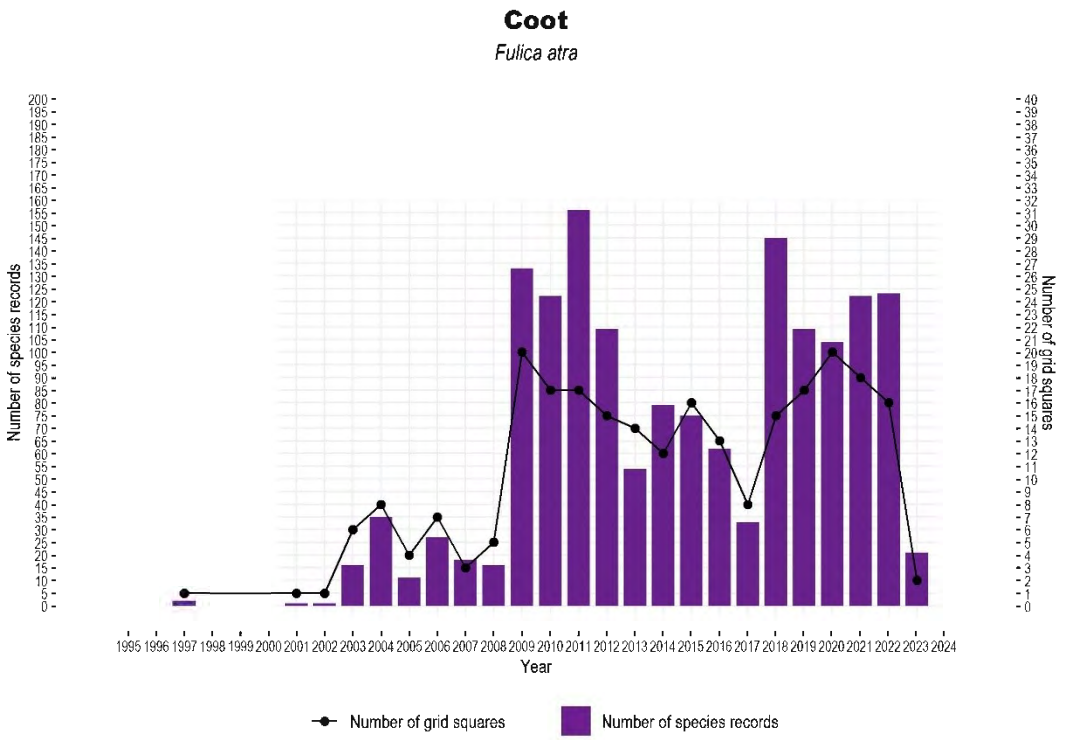


Figure 2.2 Number of Coot *Fulica atra* records, and 1km grid squares, between 1995 to September 2024

Grey Wagtail *Motacilla cinerea*

This data indicates a significant positive trend for the Grey Wagtail population, with substantial increases in both the number of records and the number of 1km grid squares over the last decade.

Grey Wagtail *Motacilla cinerea*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	317	352	395	747	Increase of 371%	Increase of 12%	Yes
Number of 1km grid squares	72	45	55	100	Increase of 178%	Increase of 22%	Yes

Table 2.3 Trends of Grey Wagtail *Motacilla cinerea* records between 1995 to September 2024

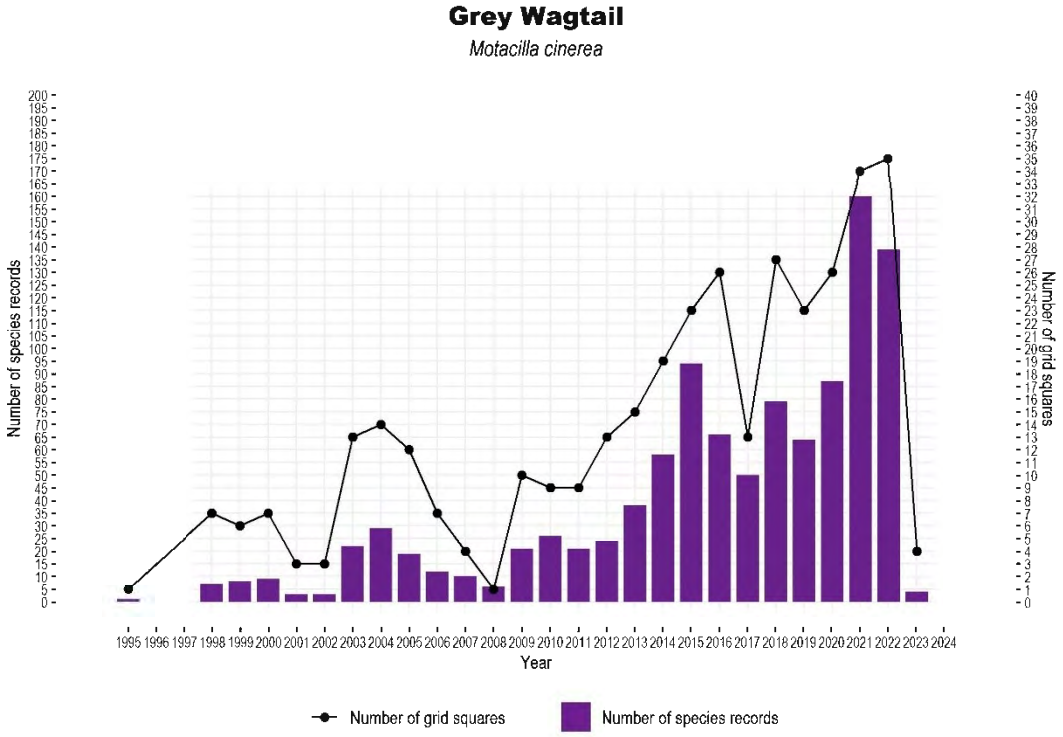


Figure 2.3 Number of Grey Wagtail *Motacilla cinerea* records, and 1km grid squares, between 1995 to September 2024

Yellow Wagtail *Motacilla flava*

This data indicates a significant decline in the Yellow Wagtail population, with drastic decreases in both the number of records and the number of 1km grid squares over the recent years.

Yellow Wagtail *Motacilla flava*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	61	54	1	55	Increase of 80%	Decrease of 98%	Yes
Number of 1km grid squares	24	15	1	16	Decrease of 33%	Decrease of 93%	Yes

Table 2.4 Trends of Yellow Wagtail records between 1995 to September 2024

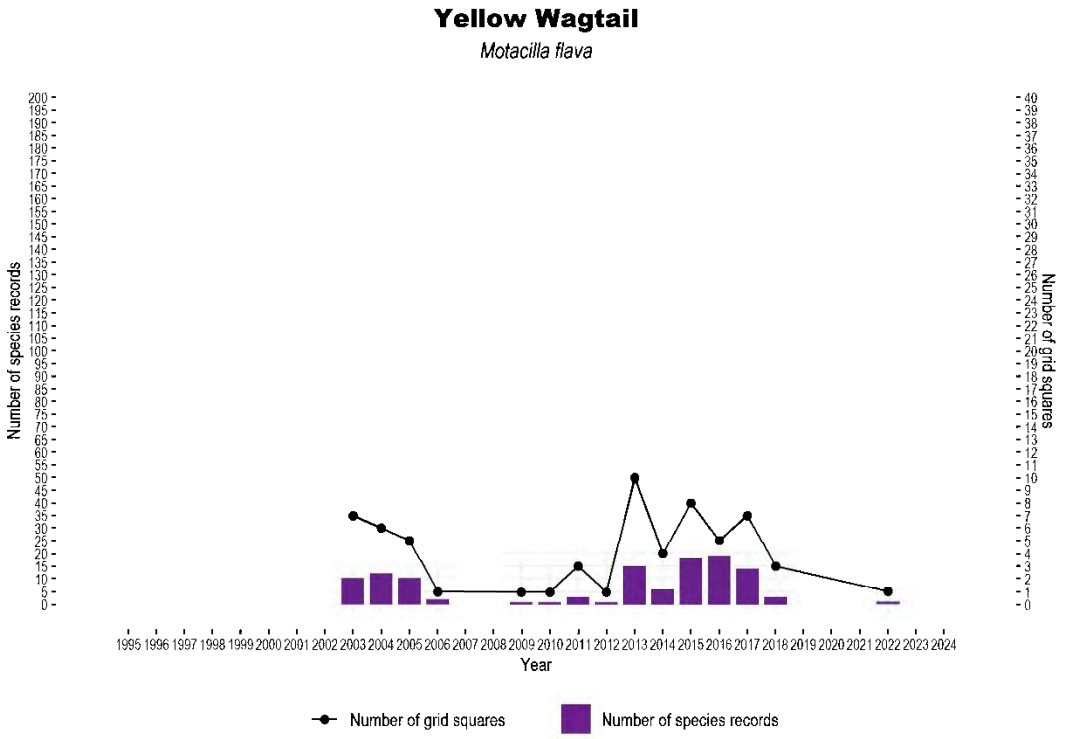


Figure 2.4 Number of Yellow Wagtail records, and 1km grid squares, between 1995 to September 2024

Water Rail *Rallus aquaticus*

This data shows a significant long-term increase in both the number of records and the number of 1km grid squares for the Water Rail from 2009. However, there is a slight decrease in the number of records when comparing the periods 2015-2019 to 2020-September 2024, while the number of grid squares remained stable. It is likely that not all of the records for the last few years have been received and processed by TVERC.

Water Rail *Rallus aquaticus*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	159	167	149	316	Increase of 297%	Decrease of 11%	Yes
Number of 1km grid squares	16	18	18	36	Increase of 350%	No change	Yes

Table 2.5 Trends of Water Rail *Rallus aquaticus* records between 1995 to September 2024

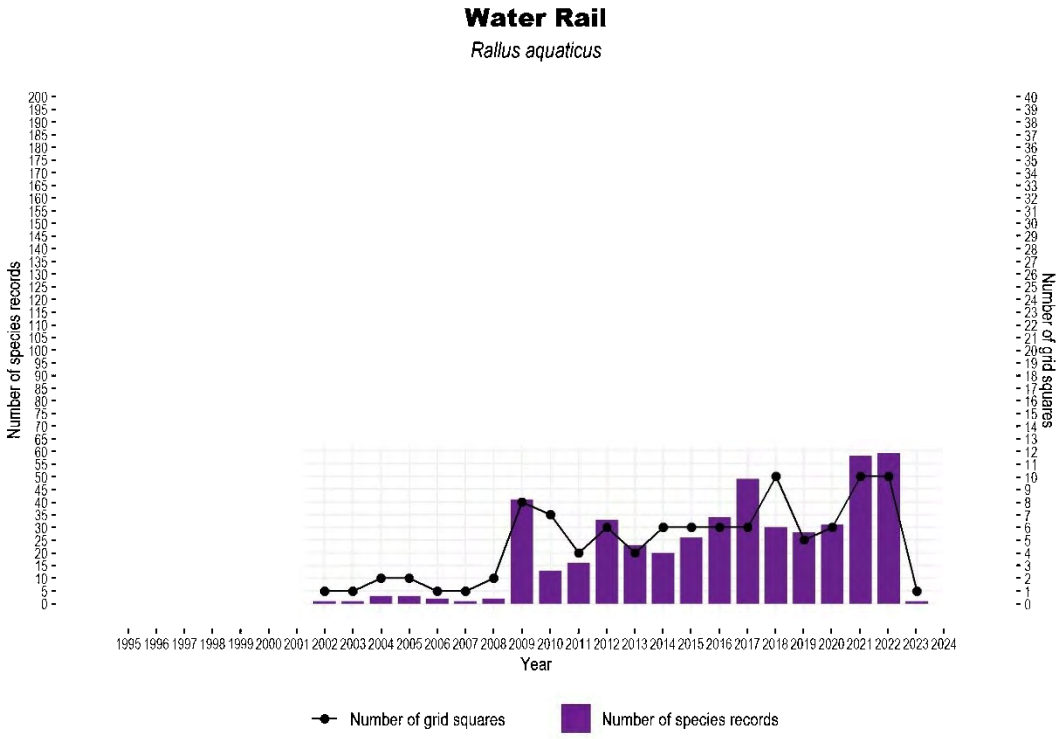


Figure 2.5 Number of Water Rail *Rallus aquaticus* records, and 1km grid squares, between 1995 to September 2024

Barn Owl *Tyto alba*

This data indicates a mixed trend for the Barn Owl population. While there's an overall increase in the number of records and grid squares in the last decade, in recent years the number of grid squares and to a lesser extent the number of records has been reducing. It is likely that not all the records for the last few years have been received and processed by TVERC.

Barn Owl *Tyto alba*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	103	107	35	142	Increase of 176%	Decrease of 67%	Yes
Number of 1km grid squares	61	44	16	60	Increase of 97%	Decrease of 64%	Yes

Table 2.6 Trends of Barn Owl *Tyto alba* records between 1995 to September 2024

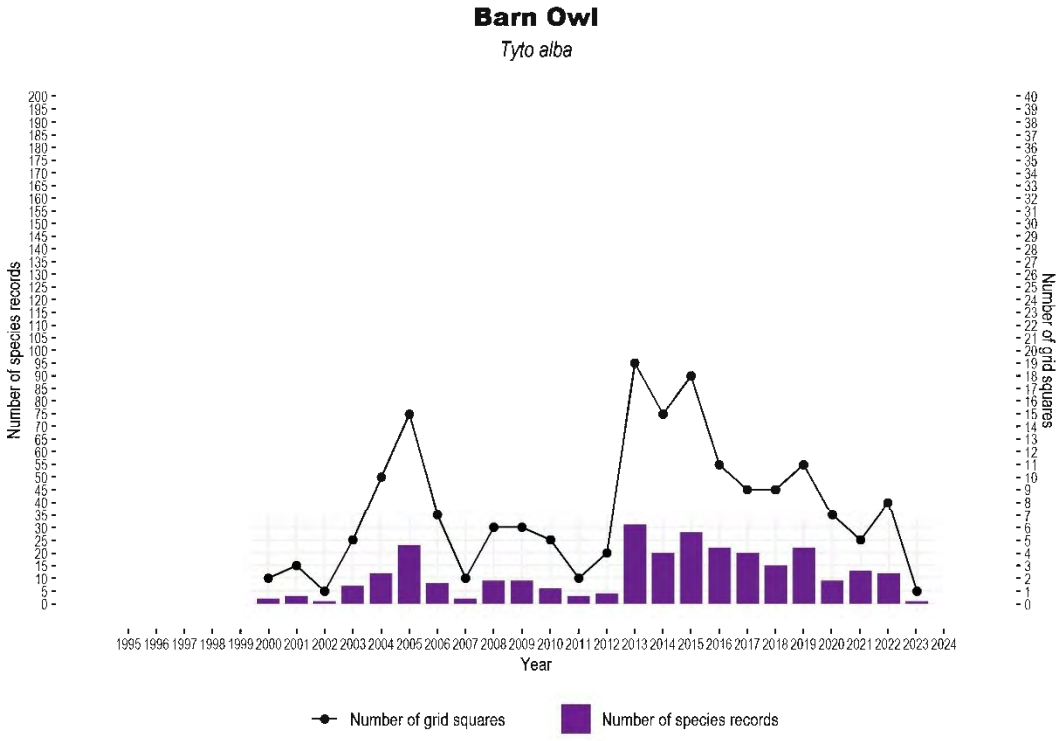


Figure 2.6 Number of Barn Owl *Tyto alba* records, and 1km grid squares, between 1995 to September 2024

Perch *Perca fluviatilis*

After an increase in records and grid squares in 2003 there has been a decline in both the number of records and the number of 1km grid squares where Perch were found over the years.

Perch *Perca fluviatilis*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –– September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	266	43	16	59	Decrease of 56%	Decrease of 63%	Yes
Number of 1km grid squares	33	17	14	31	Increase of 88%	Decrease of 18%	Yes

Table 2.7 Trends of Perch *Perca fluviatilis* records between 1995 to September 2024

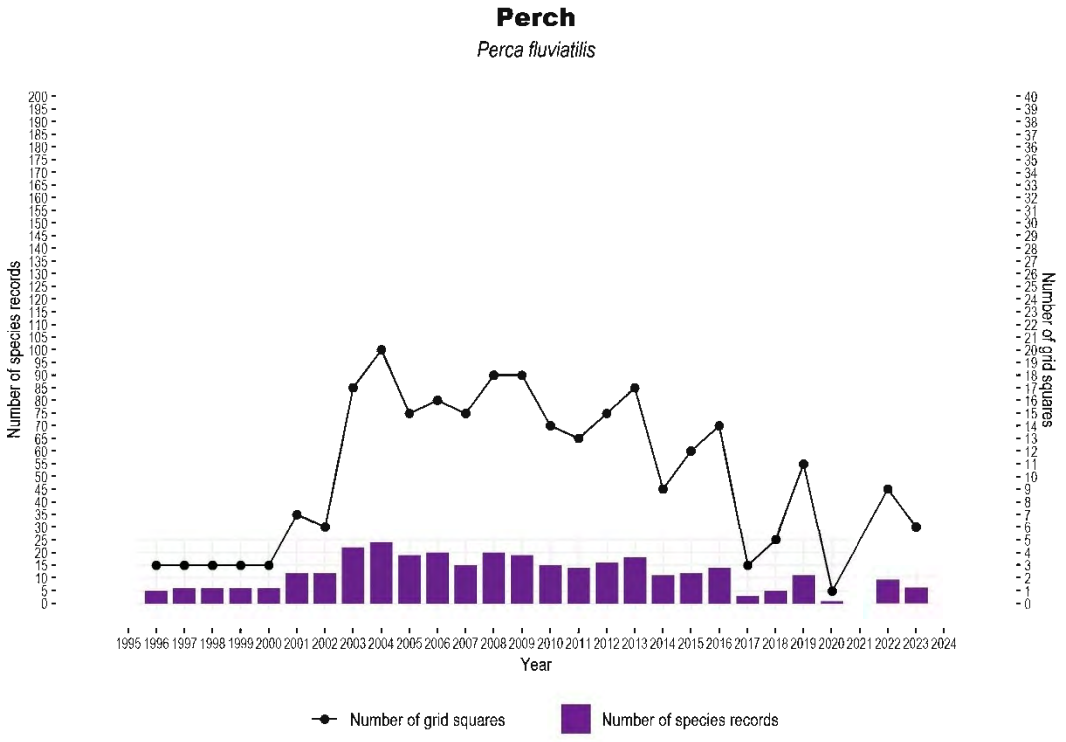


Figure 2.7 Number of Perch *Perca fluviatilis* records, and 1km grid squares, between 1995 to September 2024

Roach *Rutilus rutilus*

While the number of records for Roach has decreased, the number of 1km grid squares where they were found has increased over the last 10 years.

Roach *Rutilus rutilus*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	282	55	26	81	Decrease of 43%	Decrease of 53%	Yes
Number of 1km grid squares	31	19	18	37	Increase of 139%	Decrease of 5%	Yes

Table 2.8 Trends of Roach *Rutilus rutilus* records between 1995 to September 2024

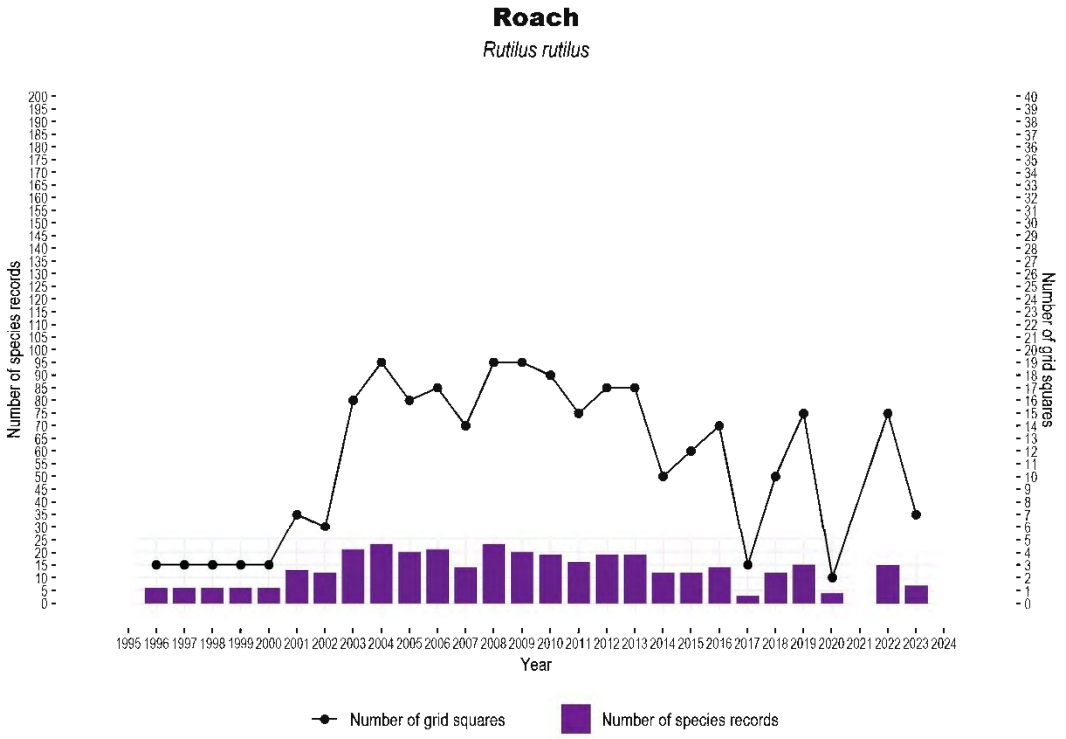


Figure 2.8 Number of Roach *Rutilus rutilus* records, and 1km grid squares, between 1995 to September 2024

Himalayan Balsam *Impatiens glandulifera*

While there was a significant increase in the number of records and grid squares for Himalayan Balsam from 1995-2014 to 2015-September 2024, there has been a sharp decline in recent years. There was some focused surveying effort for Himalayan Balsam during 2019.

Himalayan Balsam *Impatiens glandulifera*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –– September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	85	189	10	199	Increase of 368%	Decrease of 95%	Yes
Number of 1km grid squares	36	35	9	44	Increase of 144%	Decrease of 74%	Yes

Table 2.9 Trends of Himalayan Balsam *Impatiens glandulifera* records between 1995 to September 2024

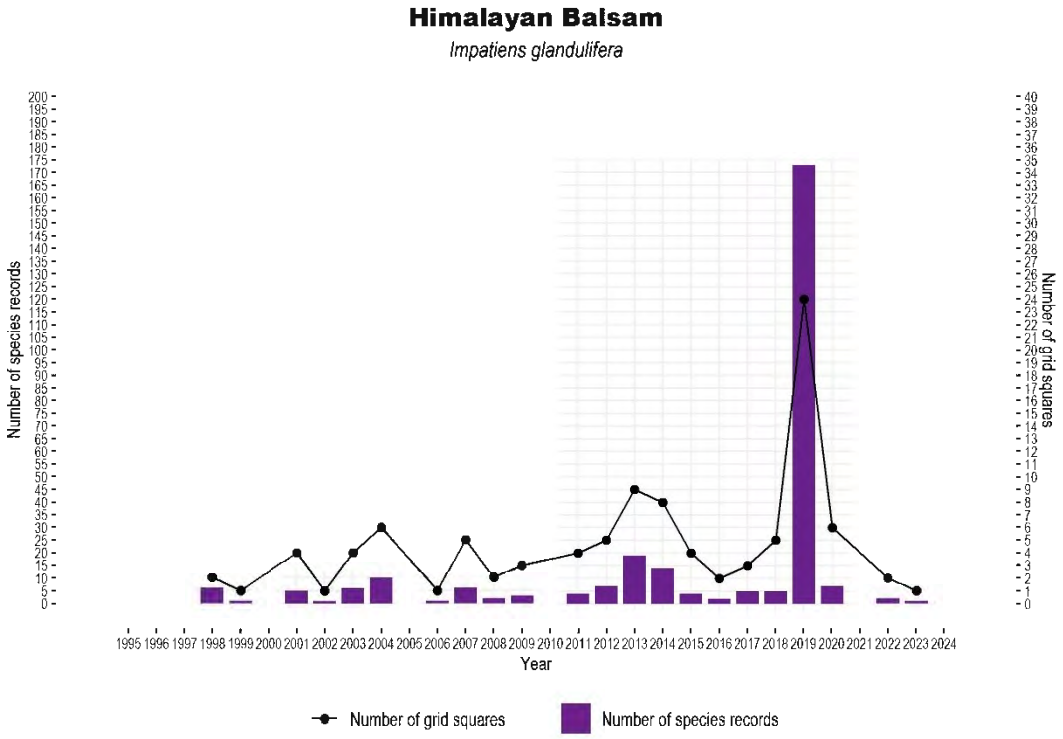


Figure 2.9 Number of Himalayan Balsam *Impatiens glandulifera* records, and 1km grid squares, between 1995 to September 2024

Summer Snowflake *Leucojum aestivum*

There has been a decline in both the number of records and the number of 1km grid squares where Summer Snowflake was found over the years.

Summer Snowflake *Leucojum aestivum*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	35	10	1	11	Decrease of 37%	Decrease of 90%	Yes
Number of 1km grid squares	19	7	1	8	Decrease of 16%	Decrease of 86%	Yes

Table 2.10 Trends of Summer Snowflake *Leucojum aestivum* records between 1995 to September 2024

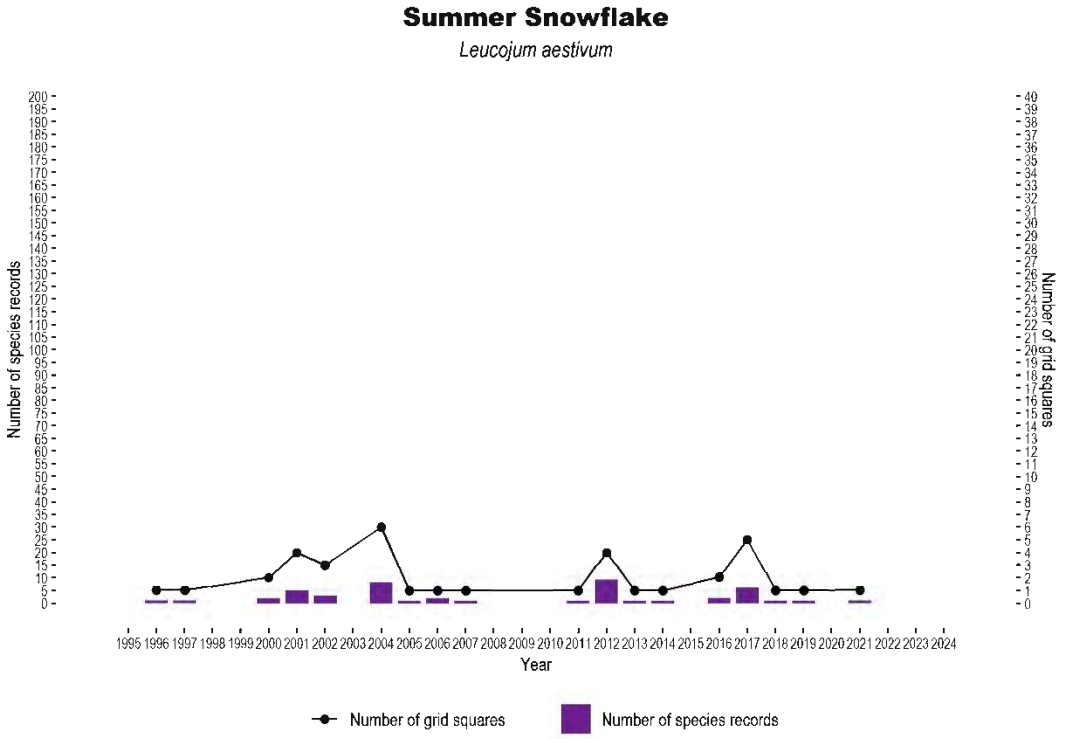


Figure 2.10 Number of Summer Snowflake *Leucojum aestivum* records, and 1km grid squares, between 1995 to September 2024

Purple-loosestrife *Lythrum salicaria*

From 2004 there has been an increase in 1km grid squares where Purple-loostrife was found. Over the last decade there has been a reduction in the number of records.

Purple-loosestrife *Lythrum salicaria*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	126	29	9	38	Decrease of 40%	Decrease of 69%	Yes
Number of 1km grid squares	45	22	9	31	Increase of 38%	Decrease of 59%	Yes

Table 2.11 Trends of Purple-loosestrife *Lythrum salicaria* records between 1995 to September 2024

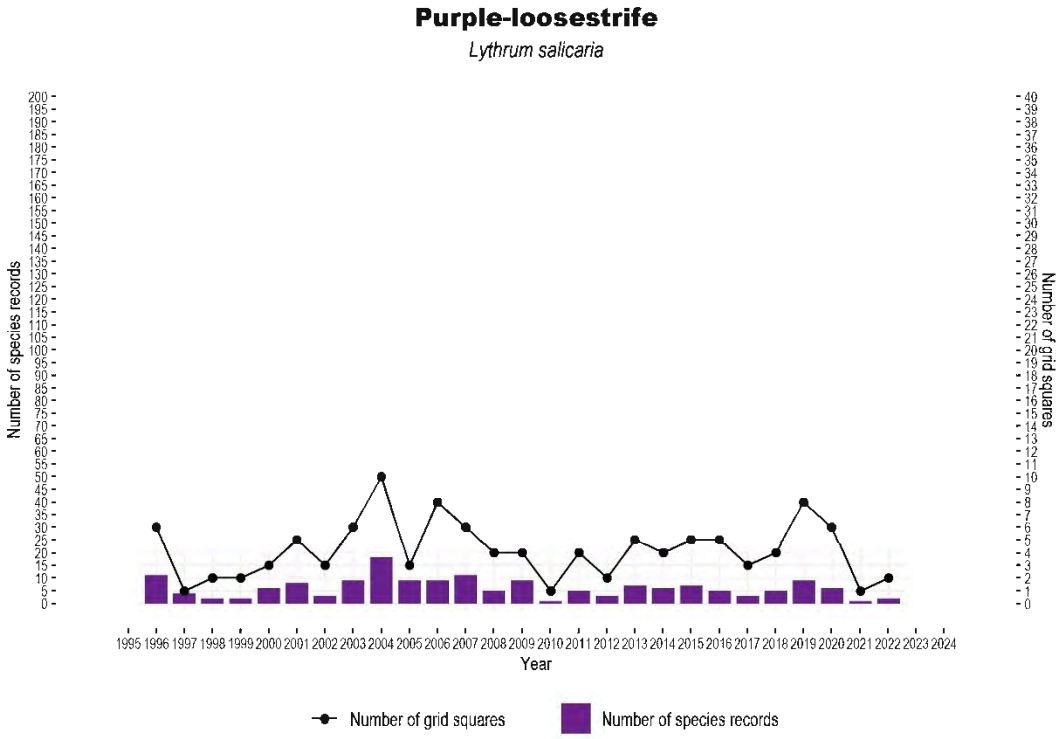


Figure 2.11 Number of Purple-loosestrife *Lythrum salicaria* records, and 1km grid squares, between 1995 to September 2024

Common Reed *Phragmites australis*

There has been a decline in both the number of records and the number of 1km grid squares where Common Reed was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Common Reed *Phragmites australis*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –– September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	79	19	6	25	Decrease of 37%	Decrease of 68%	Yes
Number of 1km grid squares	34	17	6	23	Increase of 35%	Decrease of 65%	Yes

Table 2.12 Trends of Common Reed *Phragmites australis* records between 1995 to September 2024

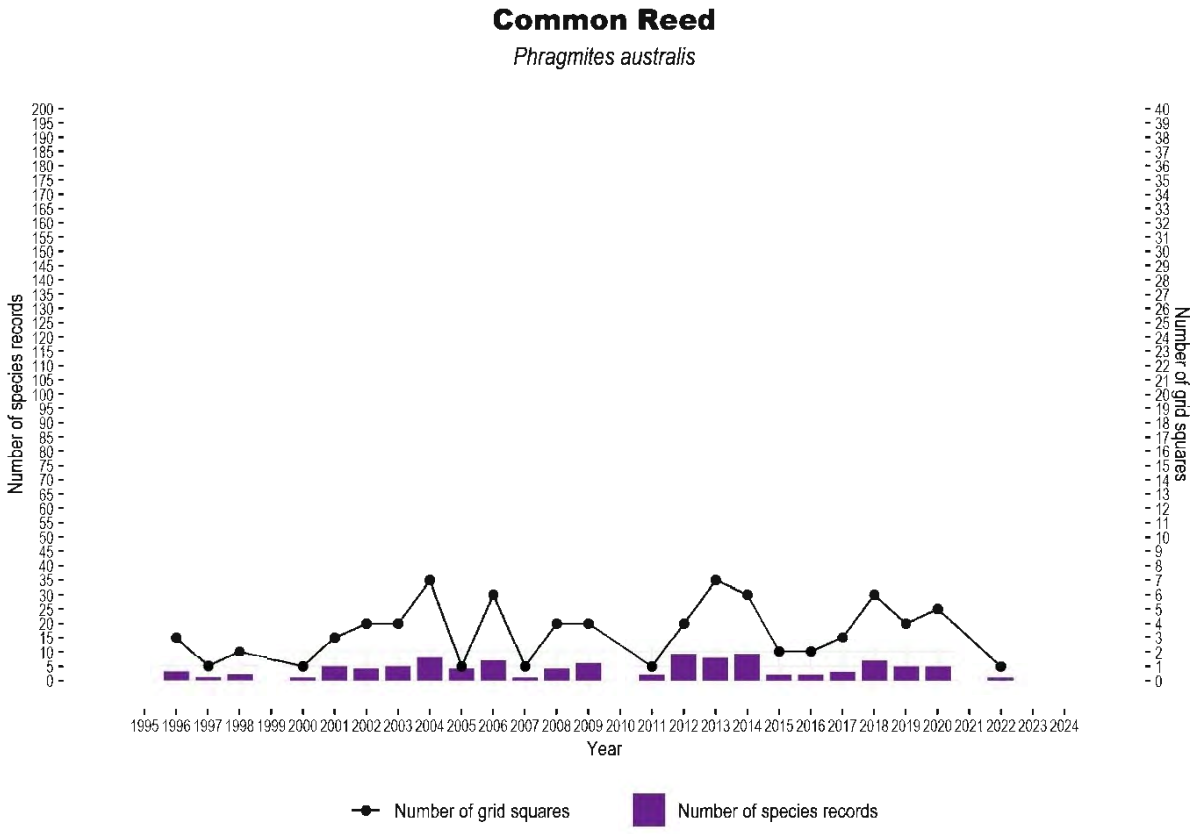


Figure 2.12 Number of Common Reed *Phragmites australis* records, and 1km grid squares, between 1995 to September 2024

Black Poplar *Populus nigra*

There have been very few records for Black Poplar.

Black Poplar *Populus nigra*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	5	3	0	3	N/A	N/A	No
Number of 1km grid squares	4	3	0	3	N/A	N/A	No

Table 2.13 Trends of Black Poplar *Populus nigra* records between 1995 to September 2024

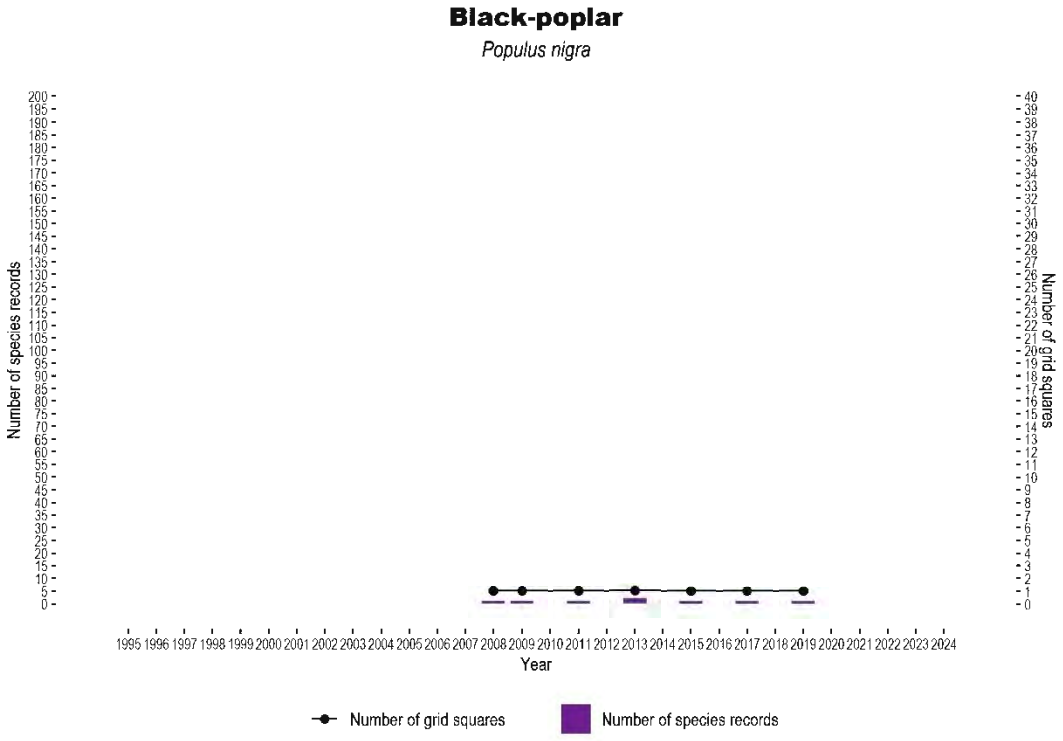


Figure 2.13 Number of Black Poplar *Populus nigra* records, and 1km grid squares, between 1995 to September 2024

Black Poplar *Populus nigra subsp. Betulifolia*

There have been very few records for Black Poplar.

Black Poplar *Populus nigra subsp. betulifolia*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	9	0	1	1	N/A	N/A	Yes
Number of 1km grid squares	6	0	1	1	N/A	N/A	Yes

Table 2.14 Trends of Black Poplar *Populus nigra subsp. Betulifolia* records between 1995 to September 2024

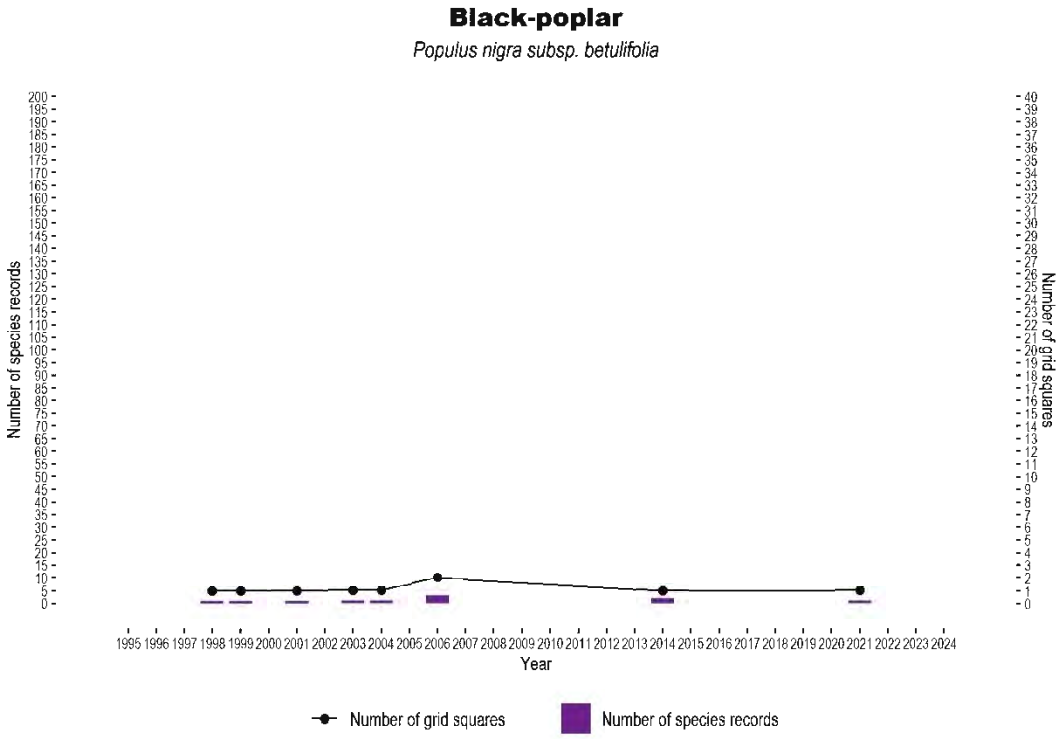


Figure 2.14 Number of Black Poplar *Populus nigra subsp. betulifolia* records, and 1km grid squares, between 1995 to September 2024

Pear *Pyrus communis*

There have been very few records for Pear over the years.

Pear *Pyrus communis*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	12	5	1	6	N/A	N/A	Yes
Number of 1km grid squares	2	5	1	6	N/A	N/A	Yes

Table 2.15 Trends of Pear *Pyrus communis* records between 1995 to September 2024

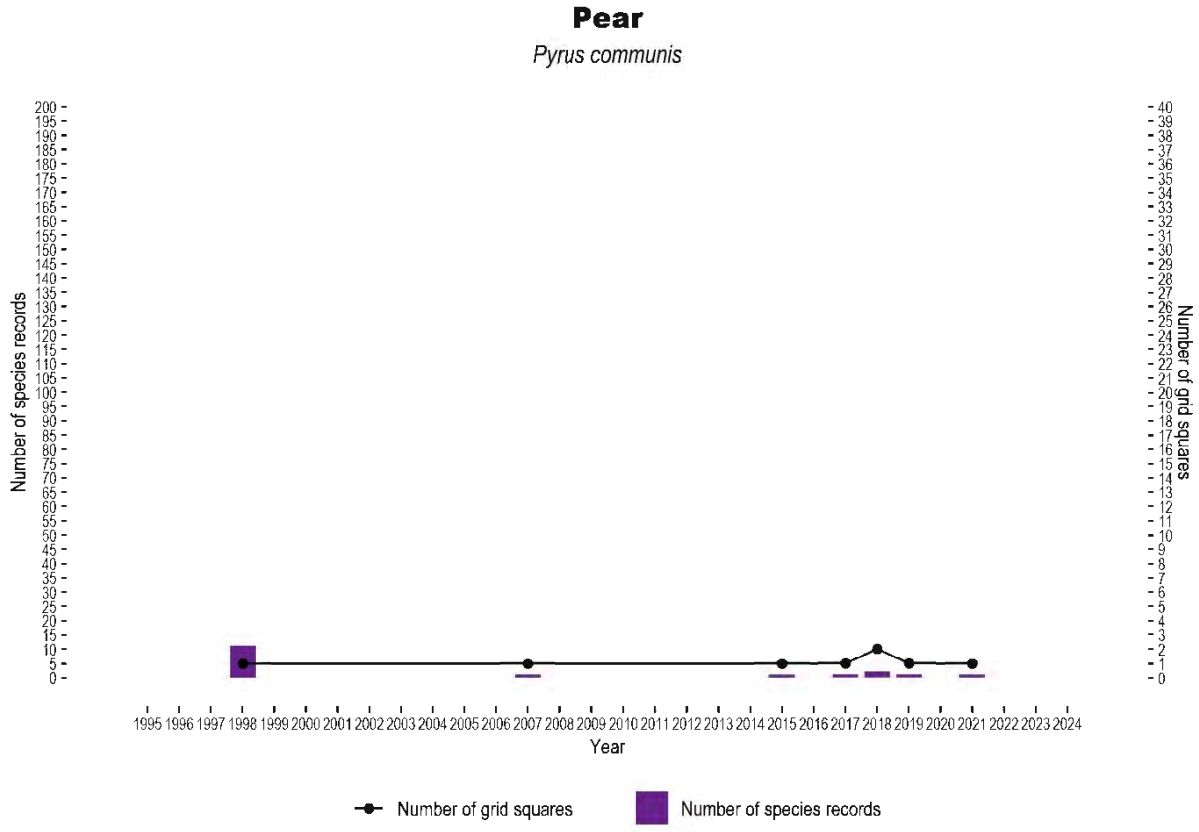


Figure 2.15 Number of Pear *Pyrus communis* records, and 1km grid squares, between 1995 to September 2024

Pear *Pyrus pyraster*

There has been a very limited number of records and grid squares for Pear (Pyrus pyraster) over the years.

Pear *Pyrus pyraster*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	0	2	0	2	N/A	N/A	No
Number of 1km grid squares	0	1	0	1	N/A	N/A	No

Table 2.16 Trends of Pear *Pyrus pyraster* records between 1995 to September 2024

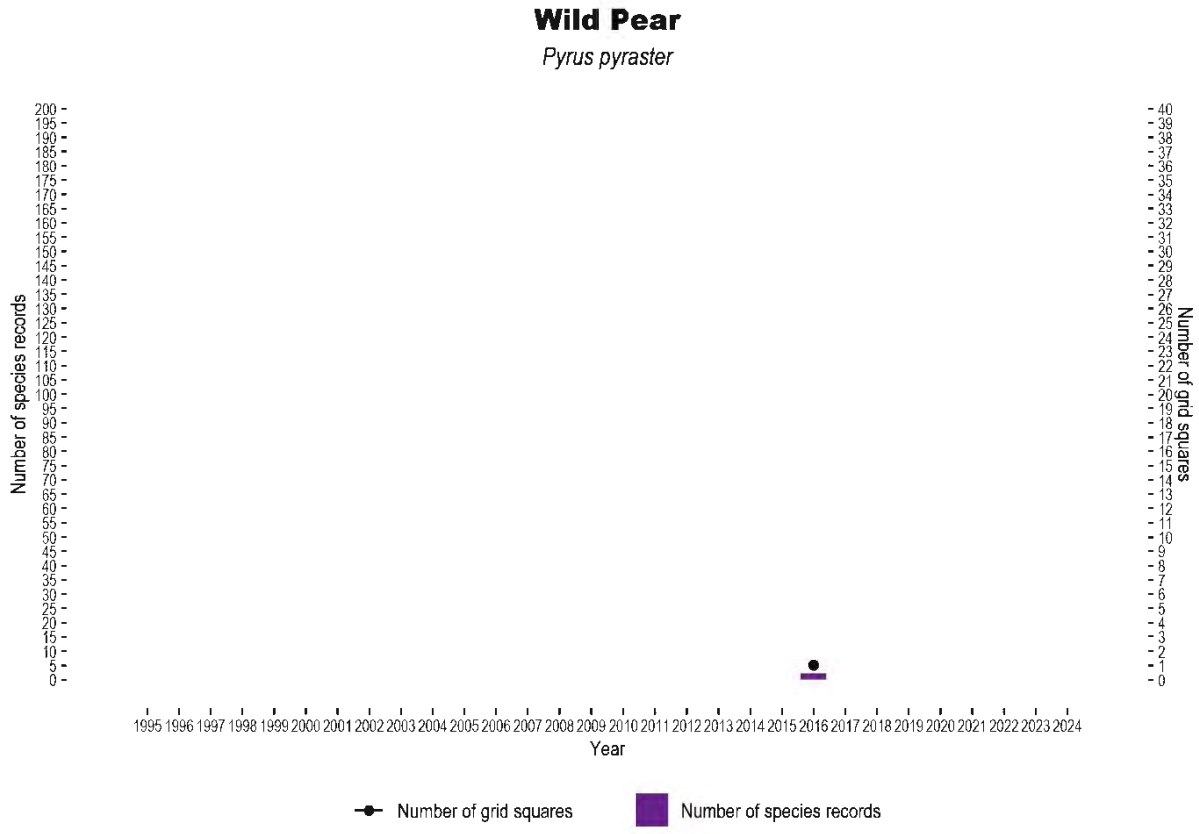


Figure 2.16 Number of Pear *Pyrus pyraster* records, and 1km grid squares, between 1995 to September 2024

Ragged-Robin *Silene flos-cuculi*

There has been a small decline in both the number of records and the number of 1km grid squares where Ragged-Robin was found over the years.

Ragged-Robin *Silene flos-cuculi*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	51	19	5	24	Decrease of 6%	Decrease of 74%	Yes
Number of 1km grid squares	28	14	5	19	Increase of 36%	Decrease of 64%	Yes

Table 2.17 Trends of Ragged-Robin *Silene flos-cuculi* records between 1995 to September 2024

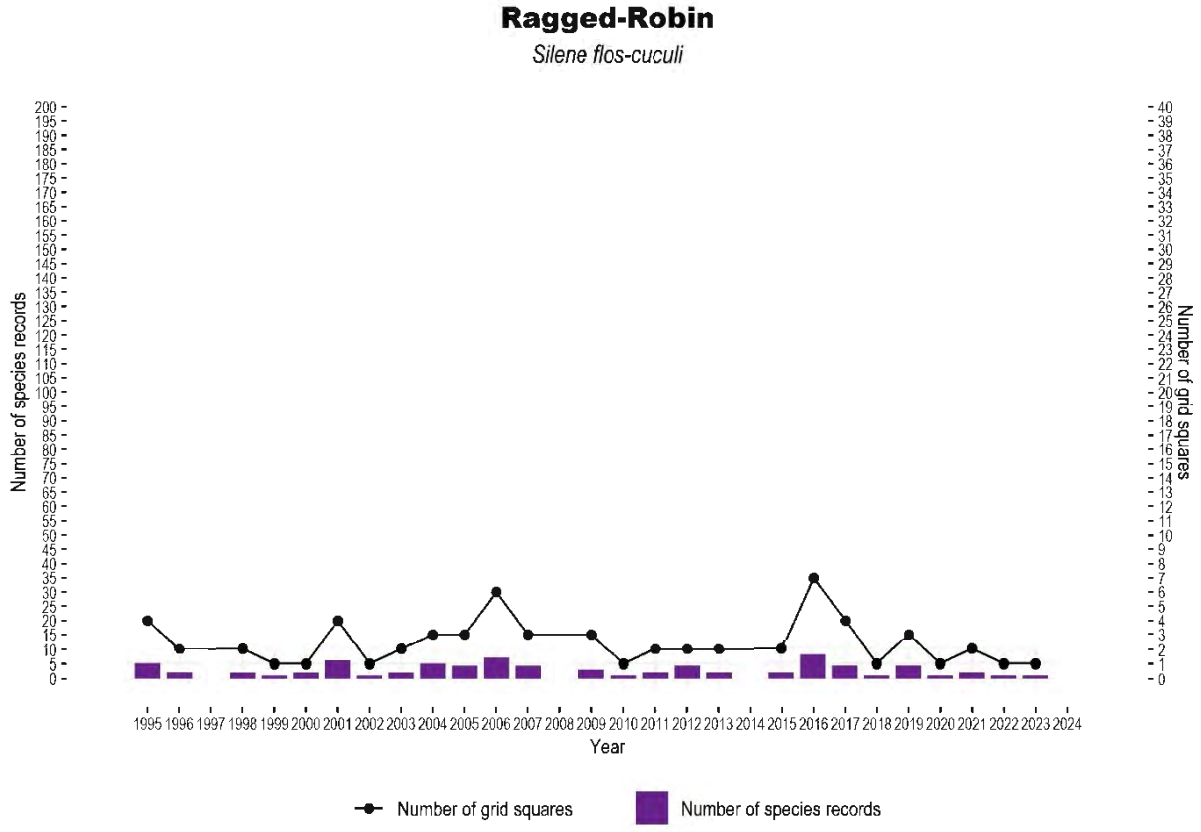


Figure 2.17 Number of Ragged-Robin *Silene flos-cuculi* records, and 1km grid squares, between 1995 to September 2024

Bulrush *Typha latifolia*

There has been a small increase in the number of records and locations where Bulrush was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Bulrush *Typha latifolia*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	73	27	12	39	Increase of 7%	Decrease of 56%	Yes
Number of 1km grid squares	38	25	12	37	Increase of 95%	Decrease of 52%	Yes

Table 2.18 Trends of Bulrush *Typha latifolia* records between 1995 to September 2024

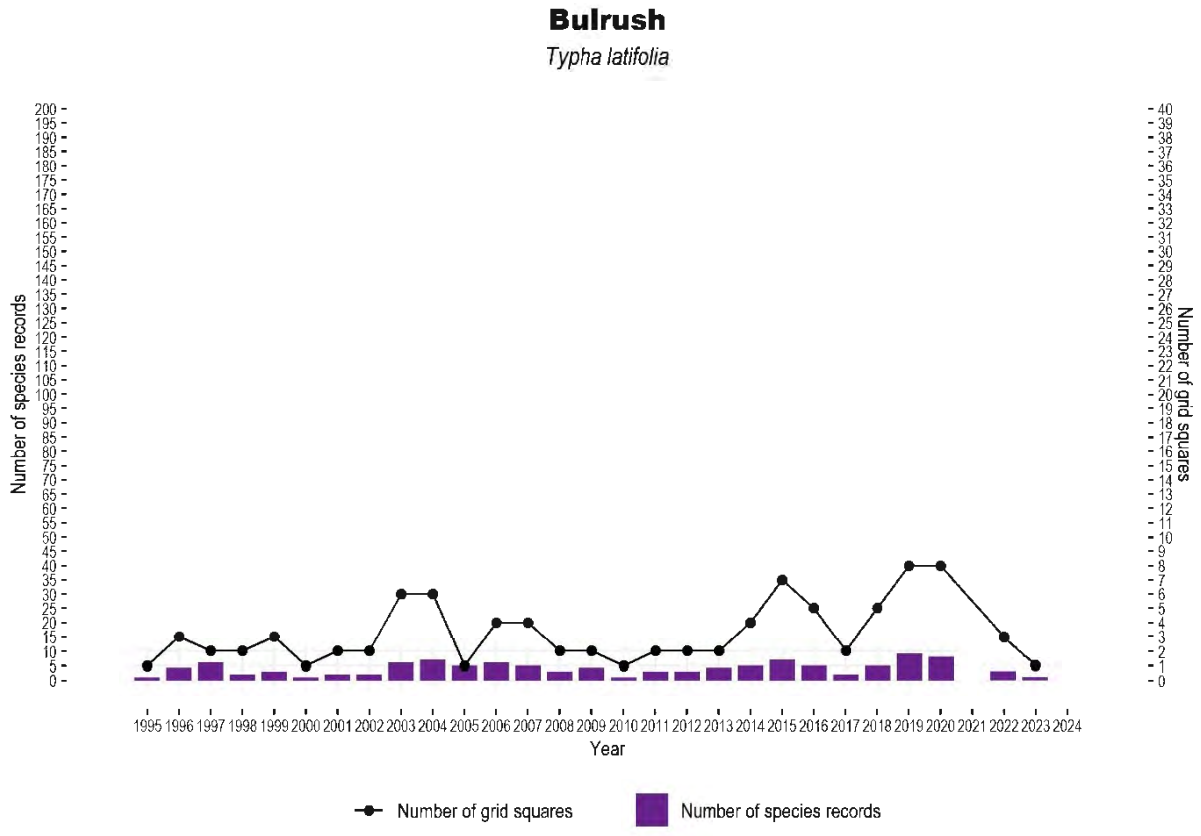


Figure 2.18 Number of Bulrush *Typha latifolia* records, and 1km grid squares, between 1995 to September 2024

Elm *Ulmus*

There has been a decline in the number of records and small increase in the number of 1km grid squares where Elm was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Elm *Ulmus*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	37	12	2	14	Decrease of 24%	Decrease of 83%	Yes
Number of 1km grid squares	20	11	1	12	Increase of 20%	Decrease of 91%	Yes

Table 2.19 Trends of Elm *Ulmus* records between 1995 to September 2024

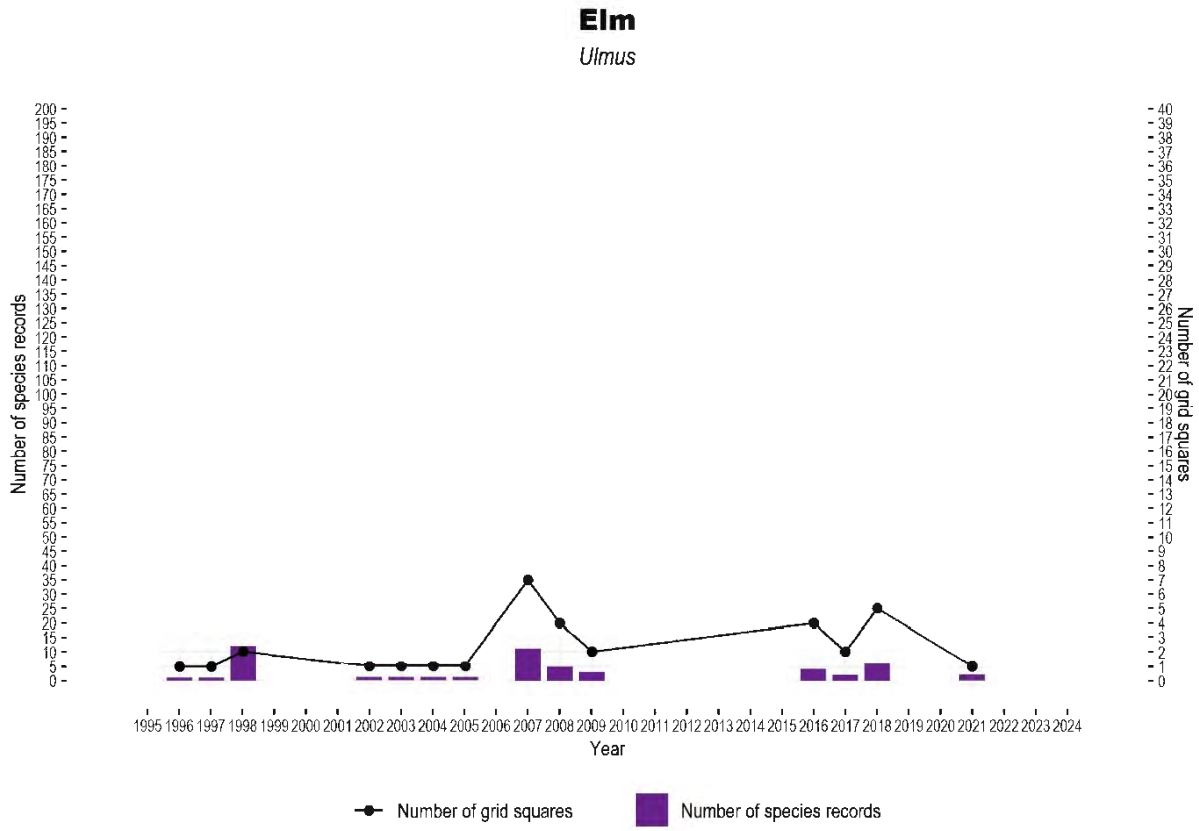


Figure 2.19 Number of Elm *Ulmus* records, and 1km grid squares, between 1995 to September 2024

Narrow leaved Elm *Ulmus ademuz*

- TVERC does not hold any records.

Dutch Elm *Ulmus glabra x minor x plotii* = *U. x hollandica*

There has been very limited data on Dutch Elm.

Dutch Elm *Ulmus glabra x minor x plotii = U. x hollandica*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	0	1	0	1	N/A	N/A	No
Number of 1km grid squares	0	1	0	1	N/A	N/A	No

Table 2.20 Trends of Dutch Elm *Ulmus glabra x minor x plotii = U. x hollandica* records between 1995 to September 2024

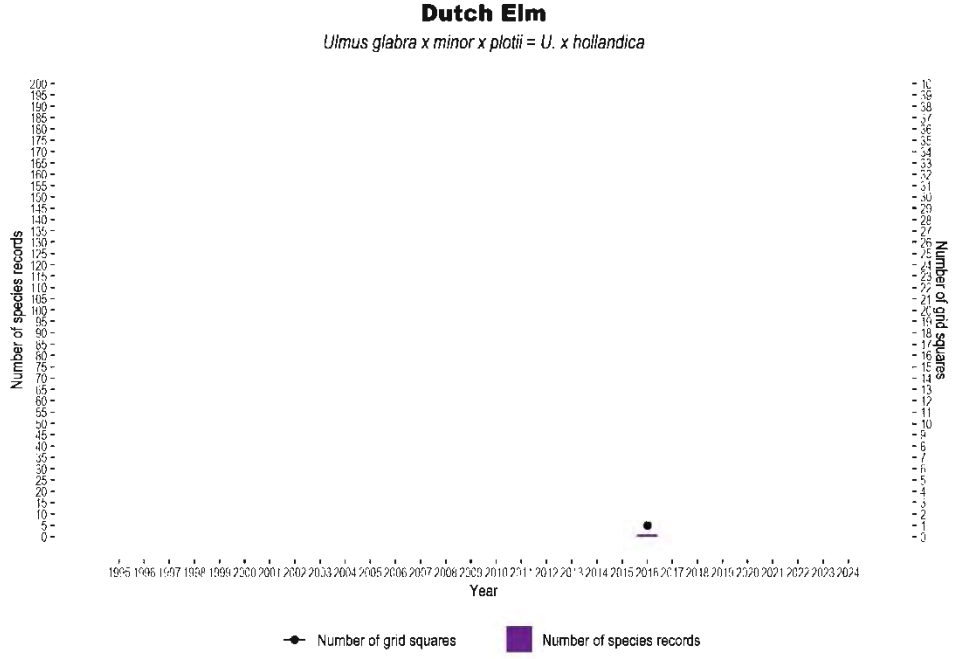


Figure 2.20 Number of Dutch Elm *Ulmus glabra x minor x plotii = U. x hollandica* records, and 1km grid squares, between 1995 to September 2024

European White Elm *Ulmus laevis*

- TVERC does not hold any records.

Elm *Ulmus Lutece*

- TVERC does not hold any records.

Small Leaved Elm *Ulmus minor*

There has been very limited data on Small Leaved Elm was found over the years.

Small Leaved Elm *Ulmus minor*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	1	0	0	0	N/A	N/A	No
Number of 1km grid squares	1	0	0	0	N/A	N/A	No

Table 2.21 Trends of Small Leaved Elm *Ulmus minor* records between 1995 to September 2024

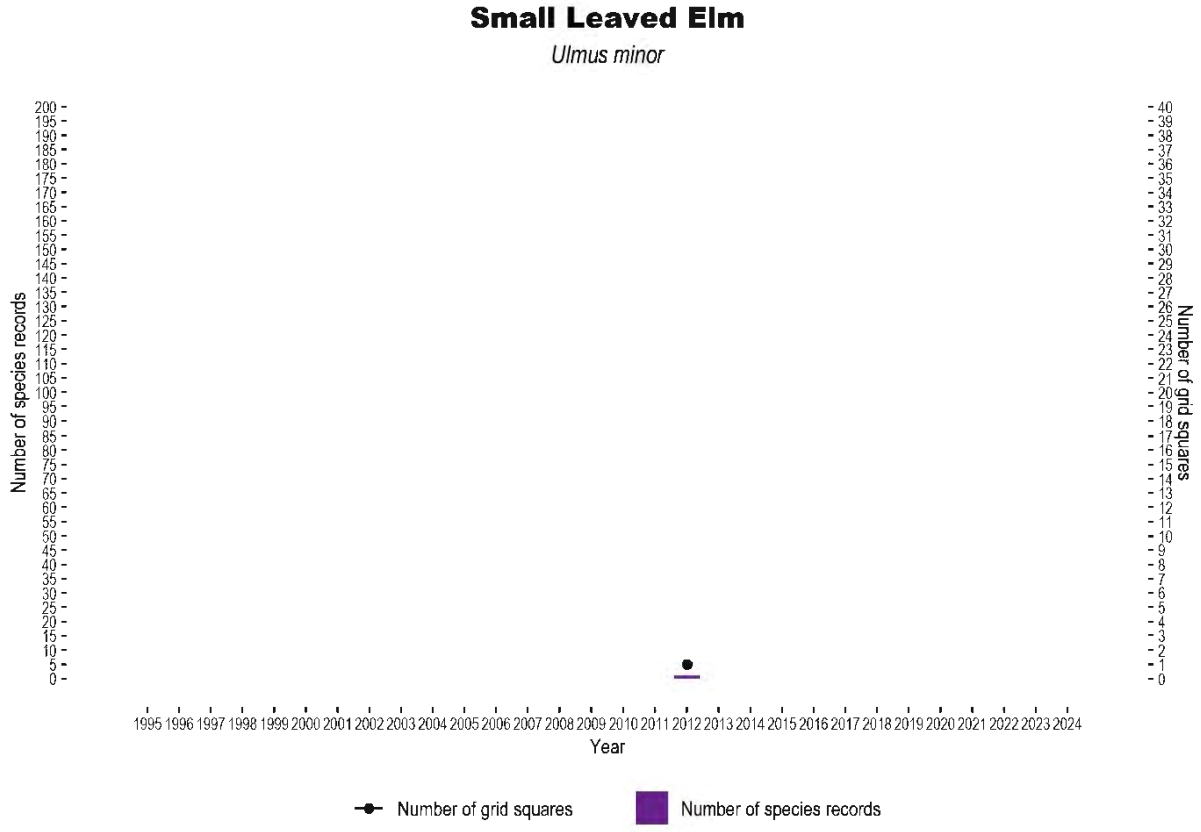


Figure 2.21 Number of Small Leaved Elm *Ulmus minor* records, and 1km grid squares, between 1995 to September 2024

Field Elm *Ulmus minor agg.*

While there was an overall increase in the number of records and grid squares for Field Elm over the last 10 years, there has been a decline in recent years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Field Elm *Ulmus minor agg.*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 — September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	12	11	4	15	Increase of 150%	Decrease of 64%	Yes
Number of 1km grid squares	7	9	4	13	Increase of 271%	Decrease of 56%	Yes

Table 2.22 Trends of Field Elm *Ulmus minor agg.* records between 1995 to September 2024

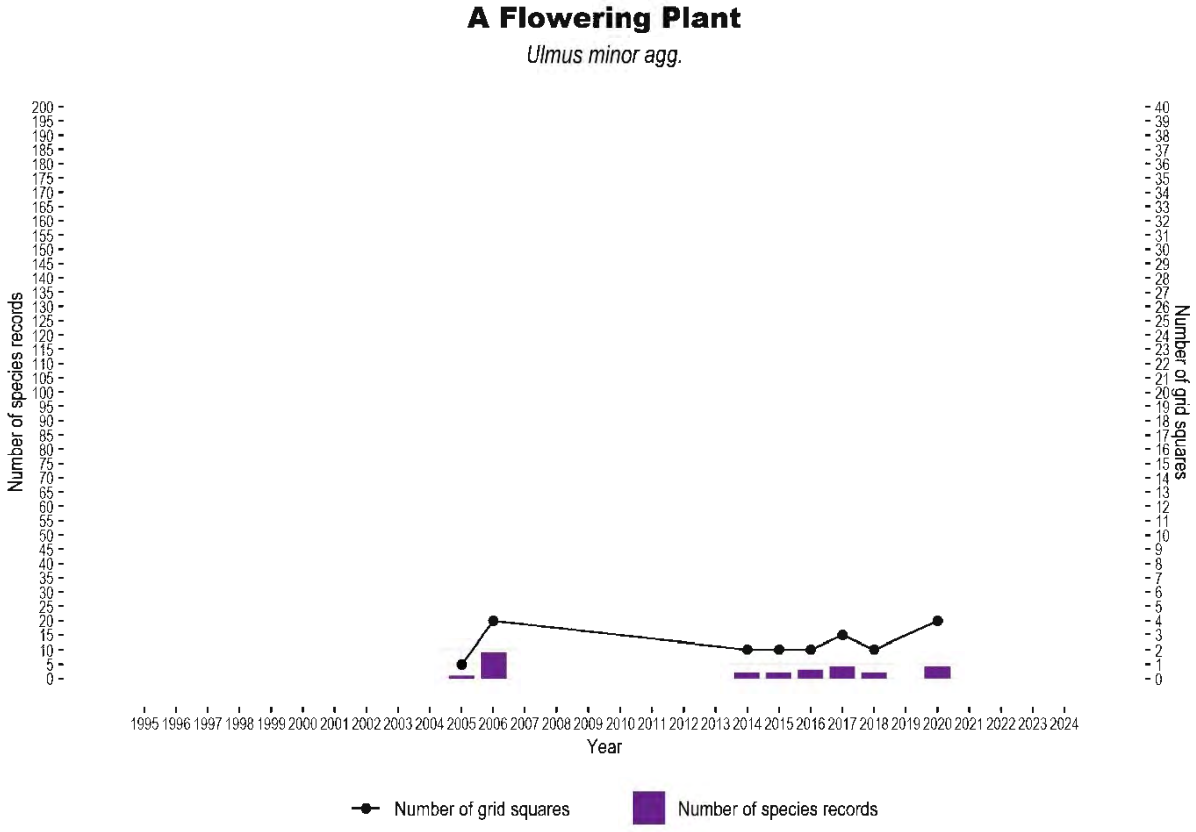


Figure 2.22 Number of Field Elm *Ulmus minor agg.* records, and 1km grid squares, between 1995 to September 2024

English Elm *Ulmus procera*

There has been an increase in both the number of records and the number of 1km grid squares where English Elm was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

English Elm *Ulmus procera*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	136	50	39	89	Increase of 31%	Decrease of 22%	Yes
Number of 1km grid squares	84	43	32	75	Increase of 79%	Decrease of 26%	Yes

Table 2.23 Trends of English Elm *Ulmus procera* records between 1995 to September 2024

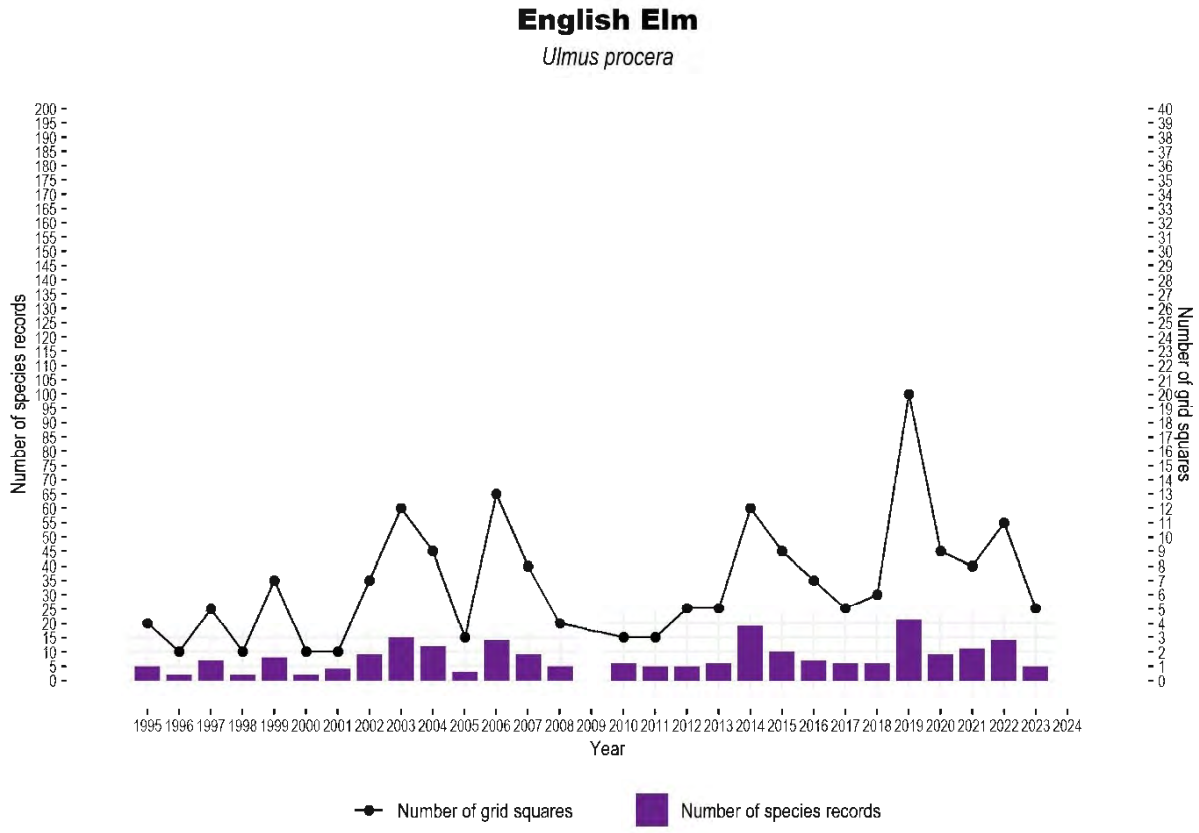


Figure 2.23 Number of English Elm *Ulmus procera* records, and 1km grid squares, between 1995 to September 2024

White-letter Hairstreak *Satyrium w-album*

While there was a significant increase in both the number of records and grid squares for White-letter Hairstreak over the last 10 years, there has been a notable decline in recent years. It is likely that not all the records for the last few years have been received and processed by TVERC.

White-letter Hairstreak *Satyrium w-album*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	41	108	27	135	Increase of 559%	Decrease of 75%	Yes
Number of 1km grid squares	7	39	17	56	Increase of 1500%	Decrease of 56%	Yes

Table 2.24 Trends of X White-letter Hairstreak *Satyrium w-album* records between 1995 to September 2024

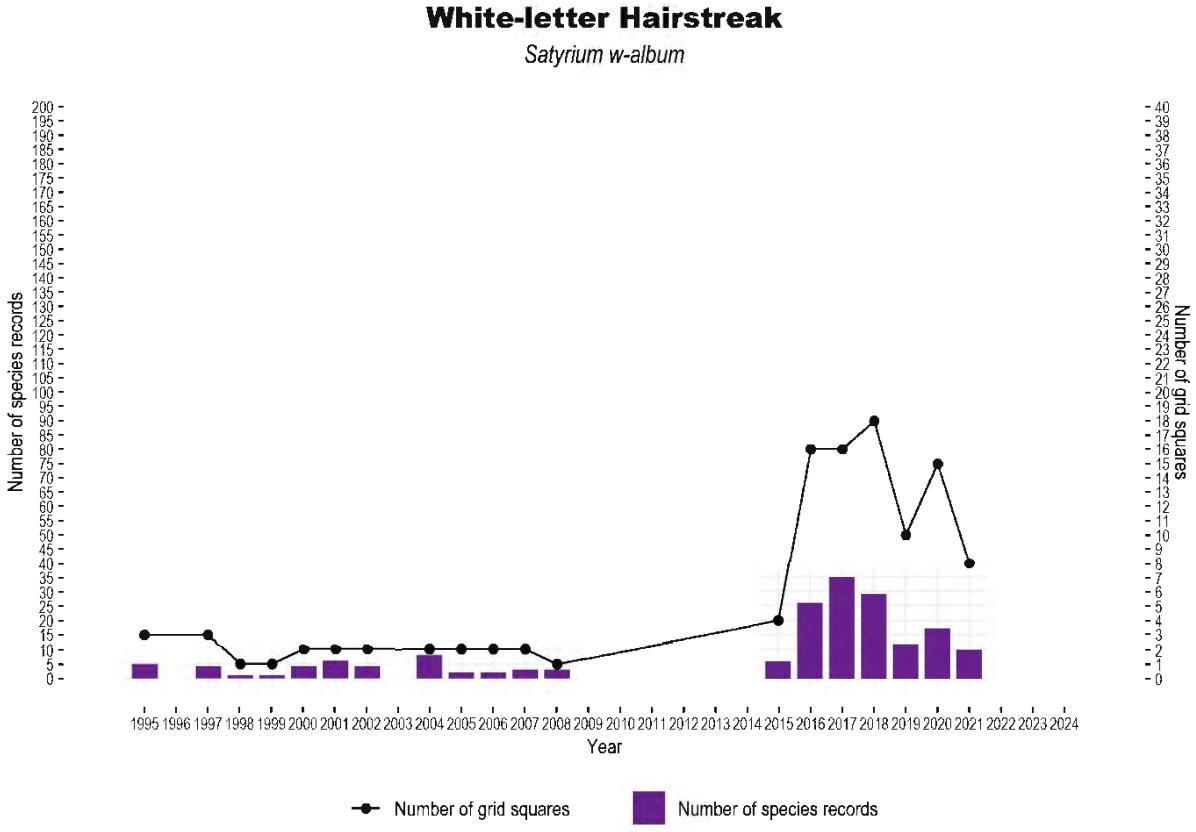


Figure 2.24 Number of White-letter Hairstreak *Satyrium w-album* records, and 1km grid squares, between 1995 to September 2024

Common Club-tail *Gomphus vulgatissimus*

There was a significant increase in both the number of records and grid squares for Common Club-tail over the last 10 years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Common Club-tail *Gomphus vulgatissimus*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	94	120	68	188	Increase of 300%	Decrease of 43%	Yes
Number of 1km grid squares	33	28	22	50	Increase of 203%	Decrease of 21%	Yes

Table 2.25 Trends of Common Club-tail *Gomphus vulgatissimus* records between 1995 to September 2024

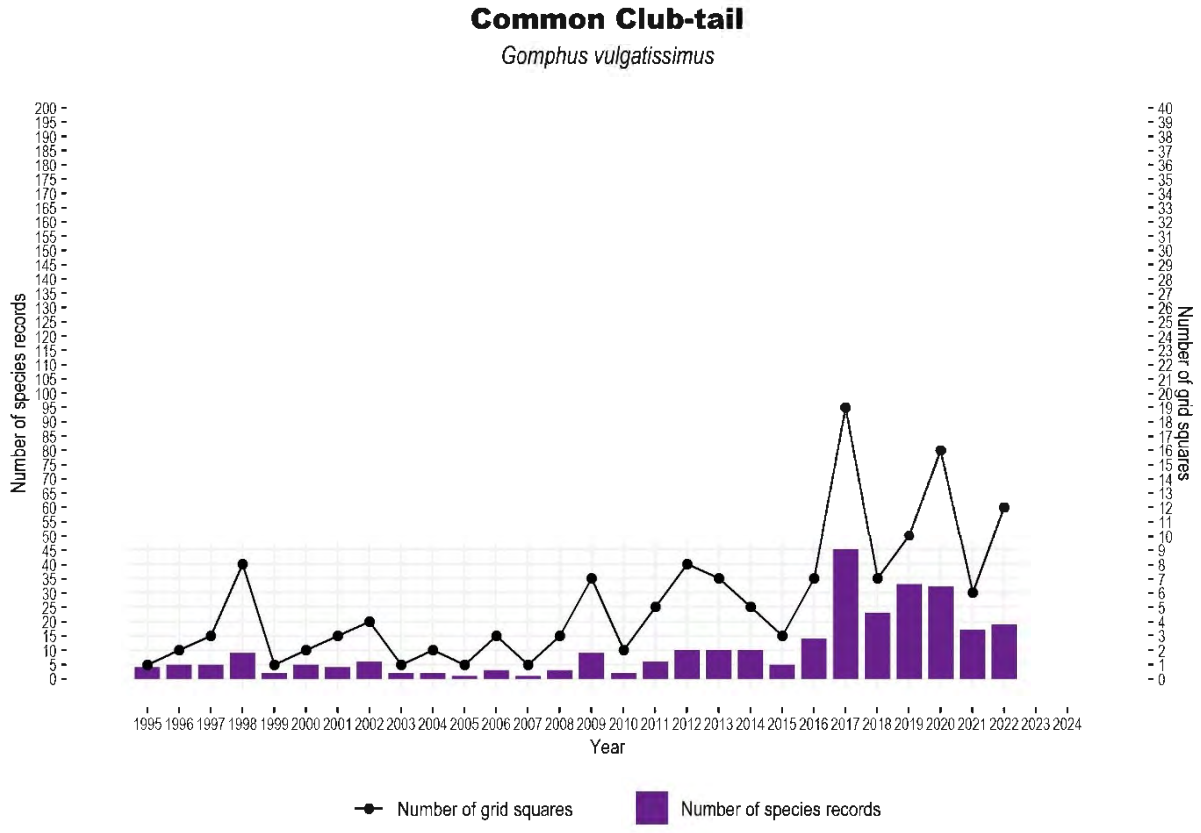


Figure 2.25 Number of Common Club-tail *Gomphus vulgatissimus* records, and 1km grid squares, between 1995 to September 2024

White-legged Damselfly *Platycnemis pennipes*

There has been a significant increase in both the number of records and the number of 1km grid squares where White-legged Damselfly was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

White-legged Damselfly *Platycnemis pennipes*	**1995 - 2014**	**2015 - 2019**	**2020 - (September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	74	63	81	144	Increase of 289%	Increase of 29%	Yes
Number of 1km grid squares	30	15	24	39	Increase of 160%	Increase of 60%	Yes

Table 2.26 Trends of White-legged Damselfly *Platycnemis pennipes* records between 1995 to September 2024

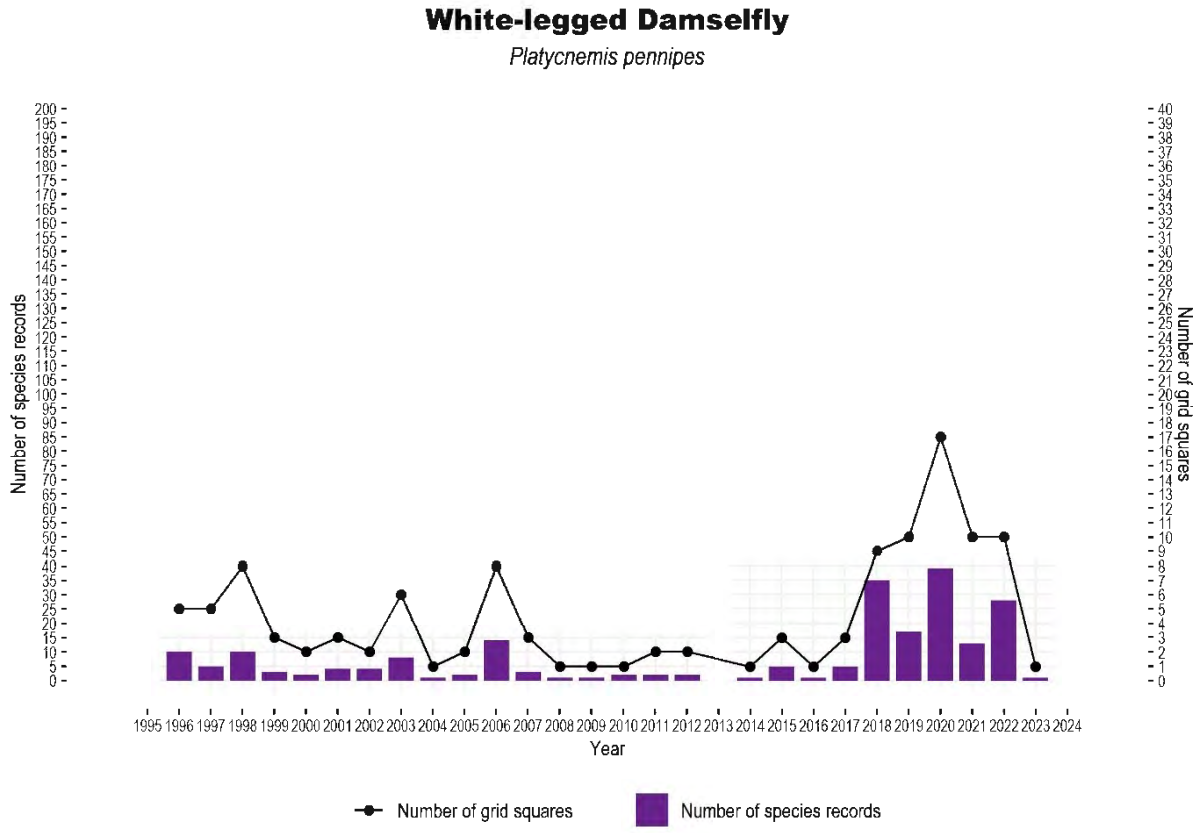


Figure 2.26 Number of White-legged Damselfly *Platycnemis pennipes* records, and 1km grid squares, between 1995 to September 2024

Burnished Brass *Diachrysia chrysitis*

There has been a small decline in the number of records but an increase in the number of 1km grid squares where Burnished Brass was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Burnished Brass *Diachrysia chrysitis*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	263	90	31	121	Decrease of 8%	Decrease of 66%	Yes
Number of 1km grid squares	22	22	6	28	Increase of 155%	Decrease of 73%	Yes

Table 2.27 Trends of Burnished Brass *Diachrysia chrysitis* records between 1995 to September 2024

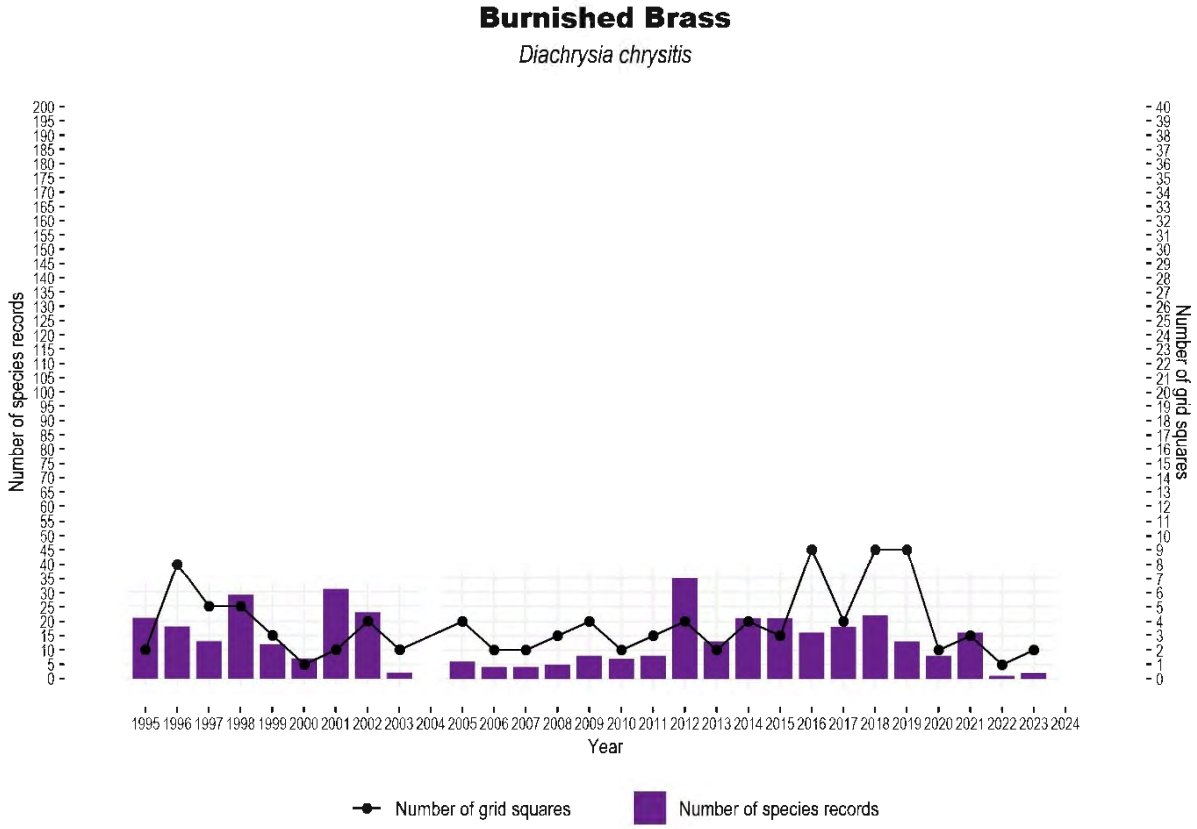


Figure 2.27 Number of Burnished Brass *Diachrysia chrysitis* records, and 1km grid squares, between 1995 to September 2024

European Water Vole *Arvicola amphibius*

This data shows an increase in records and grid squares where Water Vole was found over the years. It is likely that not all the records for the last few years have been received and processed by TVERC.

European Water Vole *Arvicola amphibius*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	122	34	79	113	Increase of 85%	Increase of 132%	Yes
Number of 1km grid squares	52	16	23	39	Increase of 50%	Increase of 44%	Yes

Table 2.28 Trends of European Water Vole *Arvicola amphibius* records between 1995 to September 2024

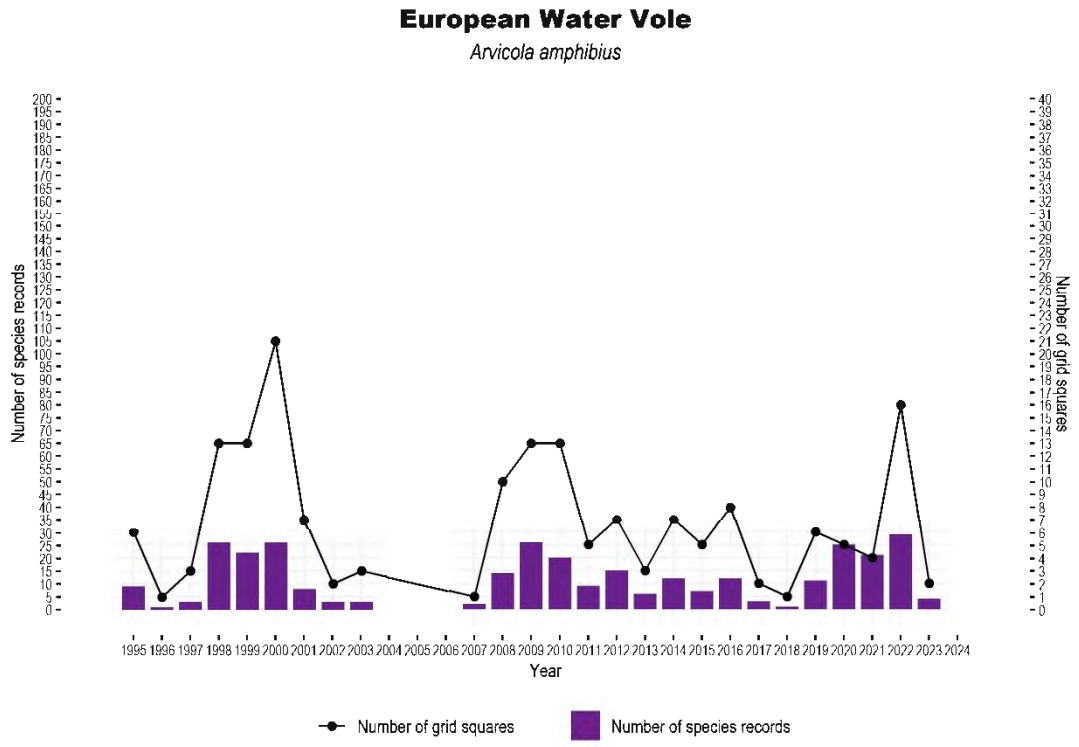


Figure 2.28 Number of European Water Vole *Arvicola amphibius* records, and 1km grid squares, between 1995 to September 2024

Eurasian Otter *Lutra lutra*

This data indicates a substantial increase in both the number of records and grid squares over the long term (1995-2014 vs. 2015-September 2024). There were a larger number of records and grid squares recorded in 2015 than any other years. It is likely that not all the records for the last few years have been received and processed by TVERC.

Eurasian Otter *Lutra lutra*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	120	161	96	257	Increase of 328%	Decrease of 40%	Yes
Number of 1km grid squares	43	50	50	100	Increase of 365%	No change	Yes

Table 2.29 Trends of Eurasian Otter *Lutra lutra* records between 1995 to September 2024

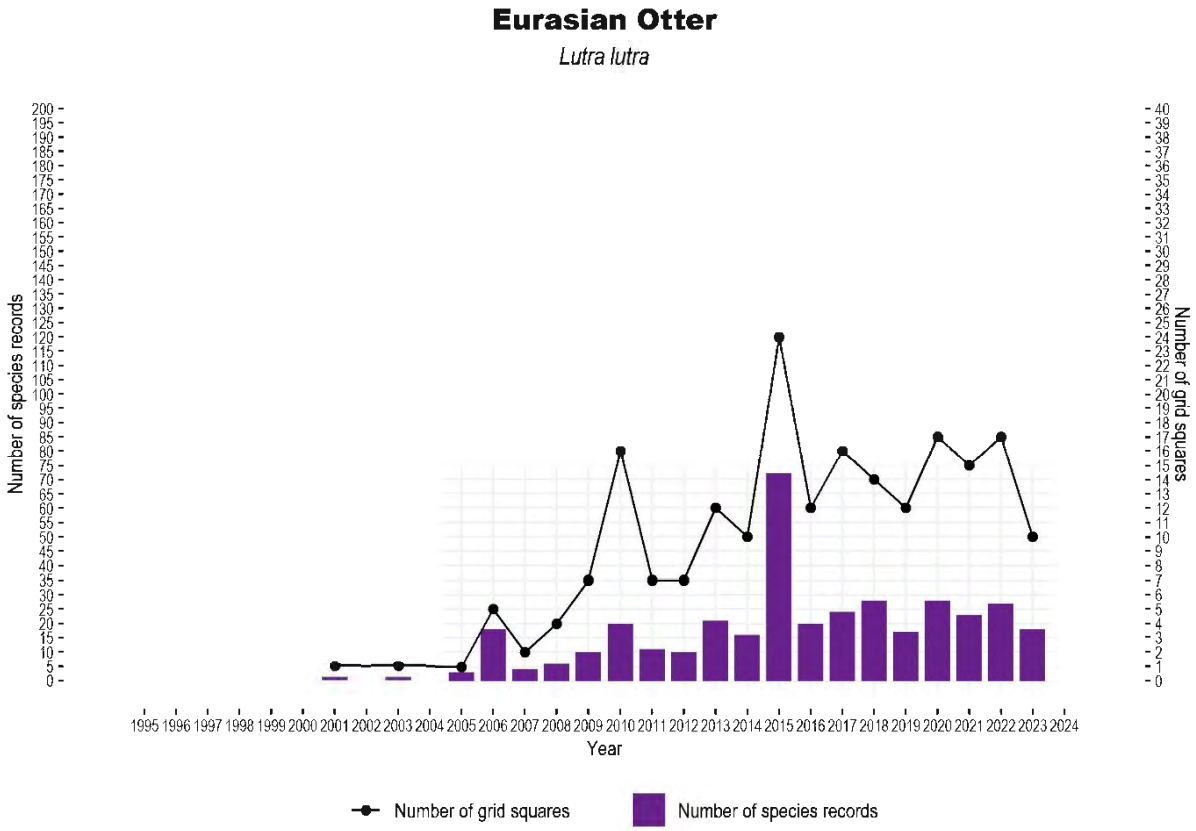


Figure 2.29 Number of Eurasian Otter *Lutra lutra* records, and 1km grid squares, between 1995 to September 2024

Daubenton's Bat *Myotis daubentonii*

This data shows a long-term increase in both the number of records and grid squares (1995-2014 vs. 2015-September 2024). However, there is a significant decrease in the number of records and grid squares in the most recent period (2020-September 2024) compared to the previous period (2015-2019).

Daubenton's Bat *Myotis daubentonii*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –- September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	222	224	30	254	Increase of 129%	Decrease of 87%	Yes
Number of 1km grid squares	30	29	17	46	Increase of 207%	Decrease of 34%	Yes

Table 2.30 Trends of Daubenton's Bat *Myotis daubentonii* records between 1995 to September 2024

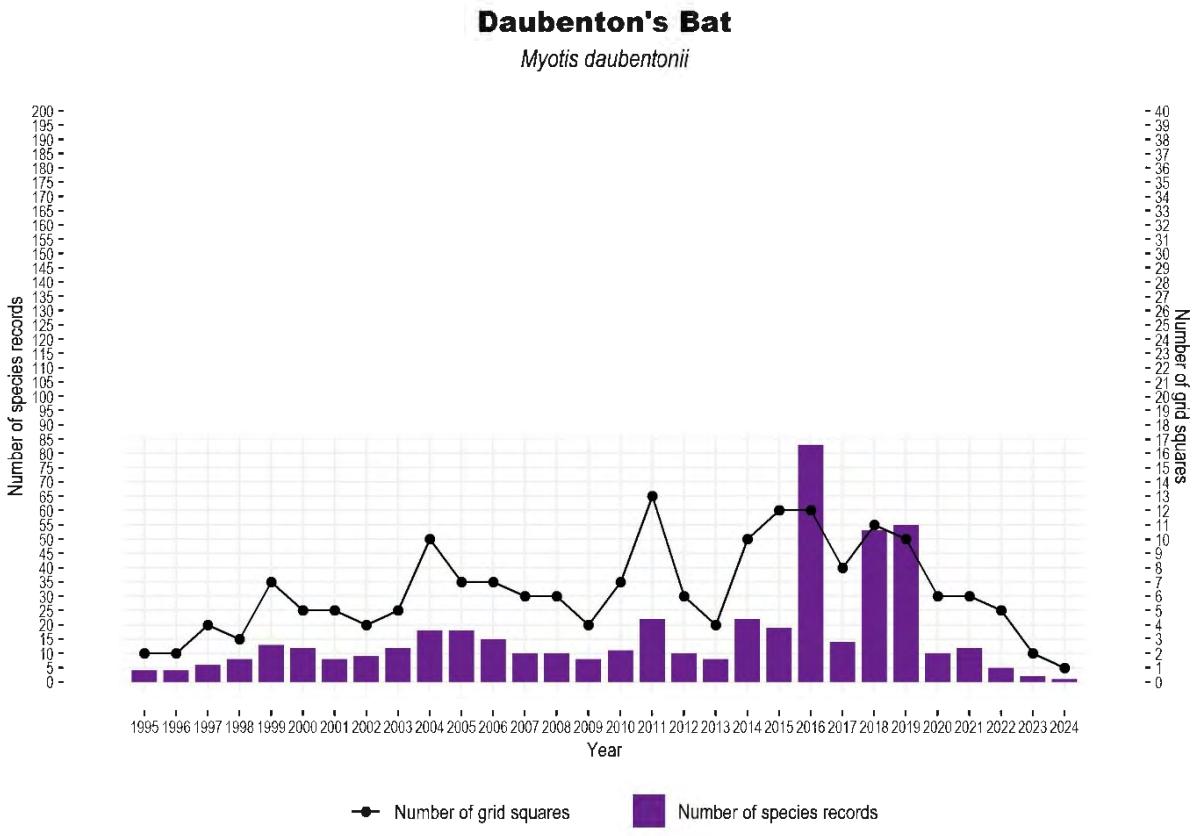


Figure 2.30 Number of Daubenton's Bat *Myotis daubentonii* records, and 1km grid squares, between 1995 to September 2024

Desmoulin's Whorl Snail *Vertigo (Vertigo) moulinsiana*

The data indicates a complete absence of records and grid squares for Desmoulin's Whorl Snail in the periods from 2015 onwards, showing a significant decline from the earlier period (1995-2014). It is likely that not all the records for the last few years have been received and processed by TVERC.

Desmoulin's Whorl Snail *Vertigo (Vertigo) moulinsiana*	1995-2014	2015-2019	2020-(September_2024)	In last 10 years (2015 –– September 2024)	Trend & % change 1995-2014 compared to 2015-September 2024	Trend & % change 2015-2019 compared to 2020-September 2024	Records in last 5 years
Number of records	15	0	0	0	N/A	N/A	No
Number of 1km grid squares	5	0	0	0	N/A	N/A	No

Table 2.31 Trends of Desmoulin's Whorl Snail *Vertigo (Vertigo) moulinsiana* records between 1995 to September 2024

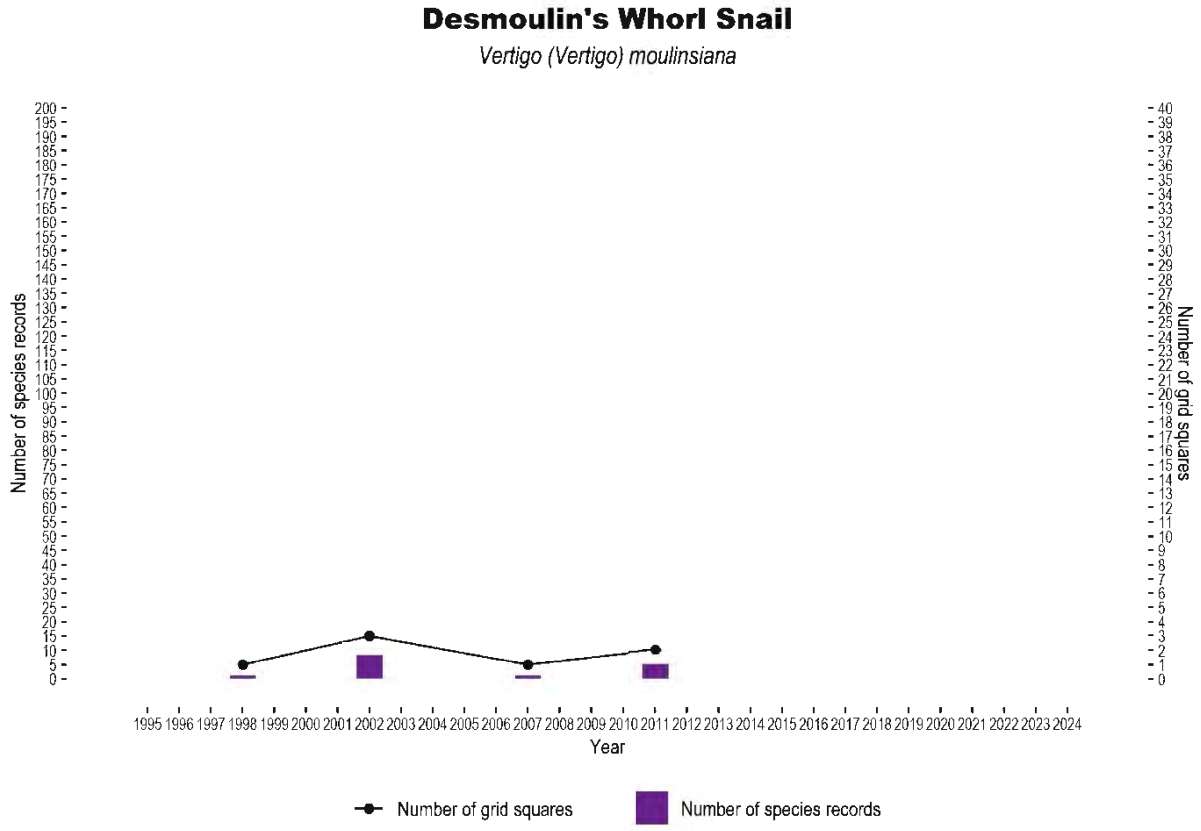


Figure 2.31 Number of Desmoulin's Whorl Snail *Vertigo (Vertigo) moulinsiana* records, and 1km grid squares, between 1995 to September 2024

Grass Snake *Natrix helvetica*

From 2009 There has been a significant decline in the number of records, but an increase in the number of grid squares where the species has been observed. This relates to a single observer stopping their regular reptile checks. Since then other observer appear to be collecting data less frequently but across a wider area. It is likely that not all the records for the last few years have been received and processed by TVERC.

Grass Snake *Natrix helvetica*	**1995-2014**	**2015-2019**	**2020-(September_2024)**	**In last 10 years (2015 –- September 2024)**	**Trend & % change 1995-2014 compared to 2015-September 2024**	**Trend & % change 2015-2019 compared to 2020-September 2024**	**Records in last 5 years**
Number of records	1763	122	50	172	Decrease by 80%	Decrease of 59%	Yes
Number of 1km grid squares	44	32	32	64	Increase of 191%	No change	Yes

Table 2.32 Trends of Grass Snake *Natrix helvetica* records between 1995 to September 2024

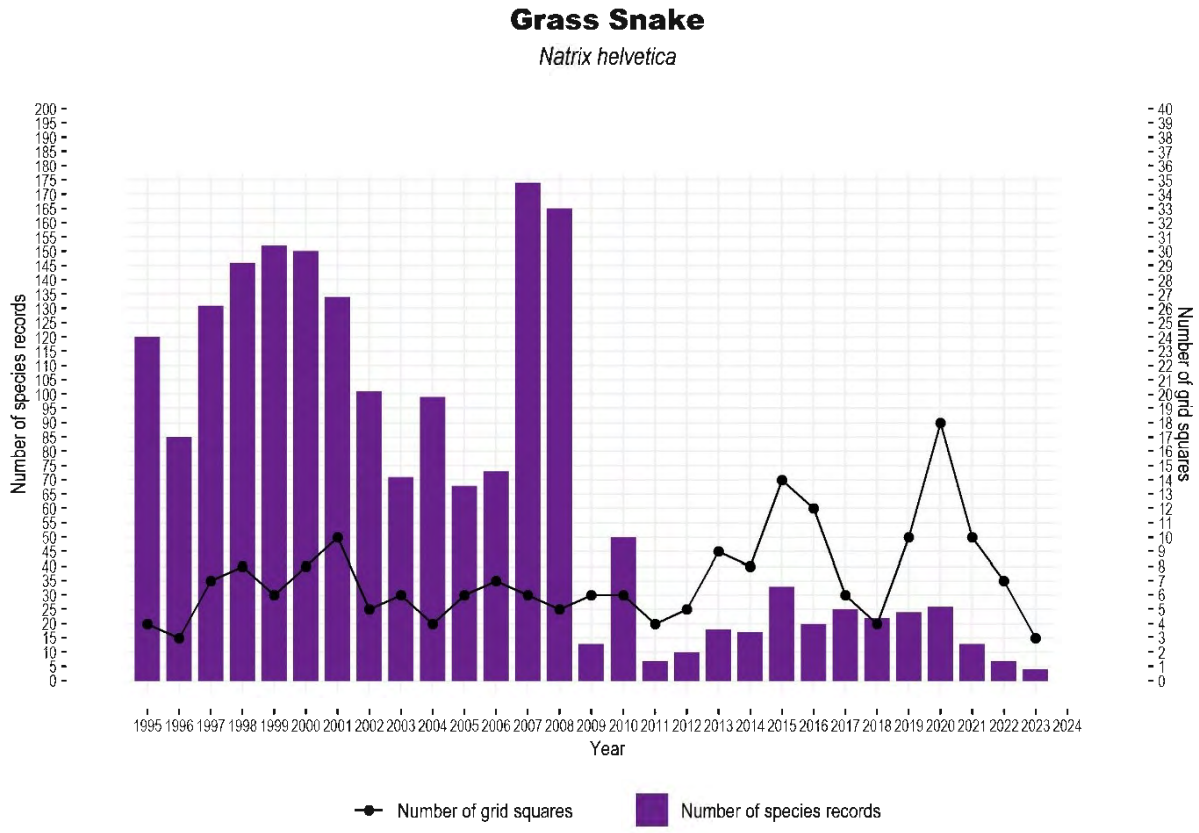


Figure 2.32 Number of Grass Snake *Natrix helvetica* records, and 1km grid squares, between 1995 to September 2024

3.2 Wildlife Sightings Survey

TVERC received a total of 69 responses to the wildlife sightings survey. Respondents took an average time of 13.27 minutes to complete the survey. They were given the option to provide their name, which 60 people did, with only 9 preferring to remain anonymous.

3.2.1 Demographic Questions

Further information and graphs about the results can be found in Appendix 6, page.125.

Question 2 - Location of respondents

Overall, most people live in the north of the project area, particularly in the north-east, in postcode area OX10. With the next main area being RG8, to the south. There is a nearly equal split between those living in an Oxfordshire (58%) and those living in a Berkshire postcode (42%). But slightly more of the respondents live in Oxfordshire.

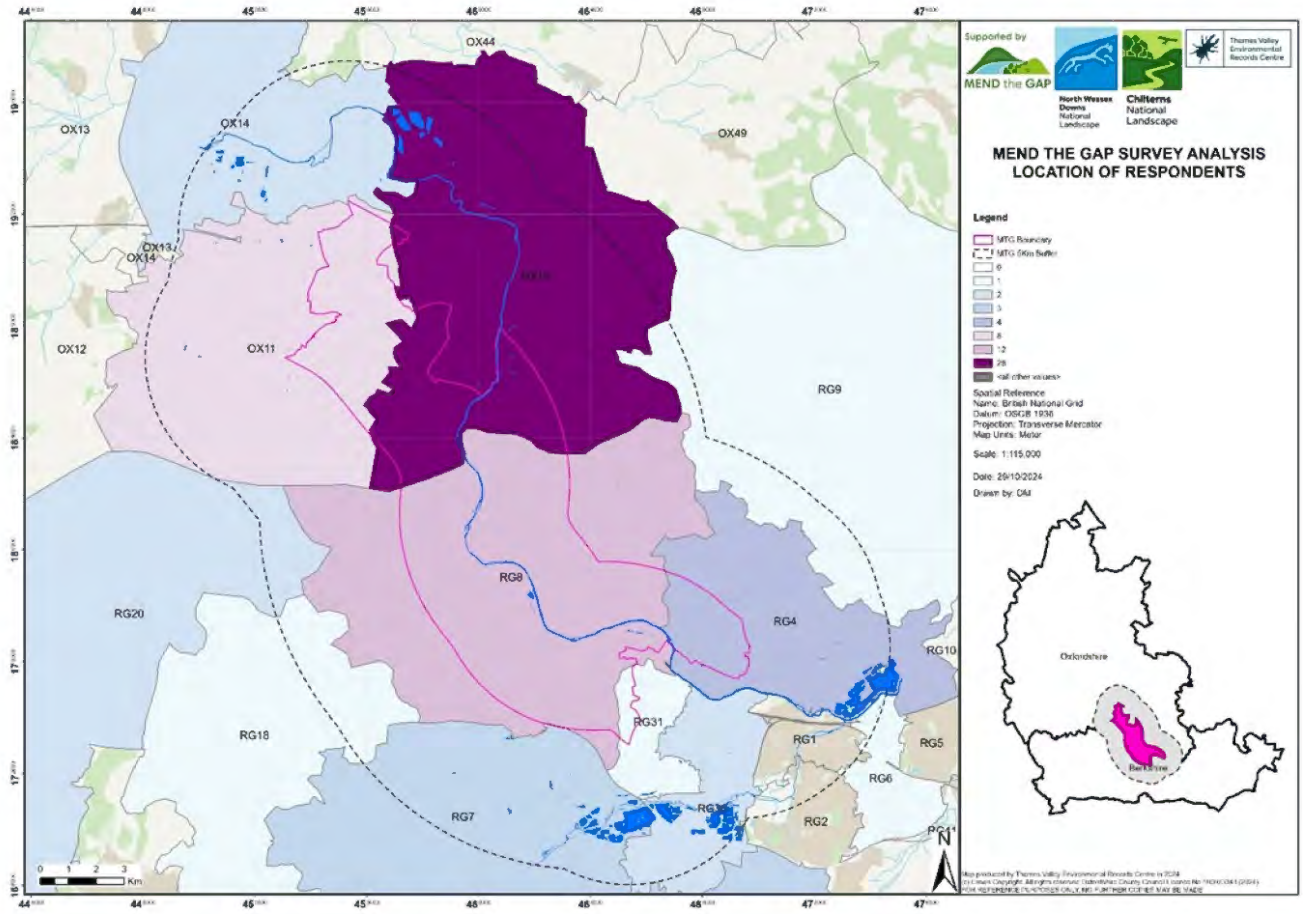


Figure 3 Mend the Gap Survey Analysis – location of the respondents. Responses to Demographic Question 2 - *Where do you live?* Respondents were asked to provide the first part of their postcode

Q3. Age

The majority of respondents are older. More than half of the respondents are older than 55 years old. Only 8 percent are younger than 35 years old.

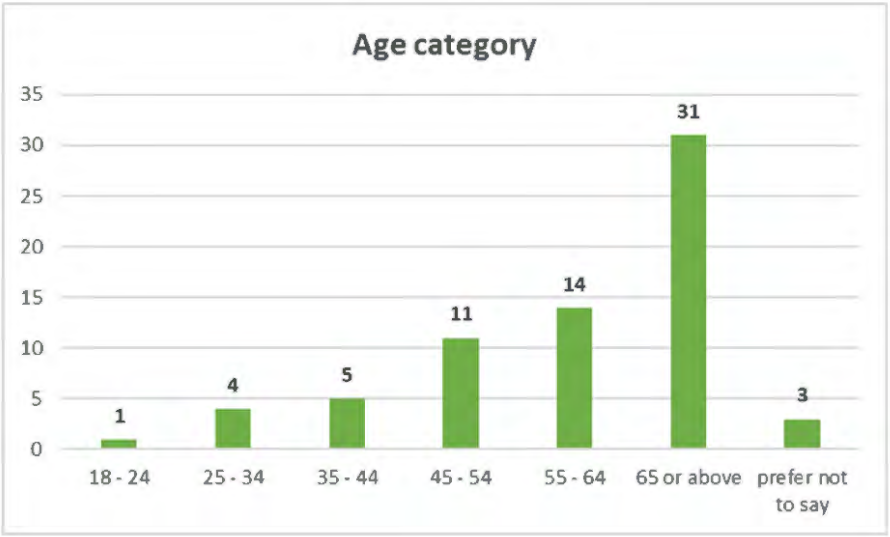


Figure 4 Number of responses to Demographic Question 3 - *Please select the category that includes your age*

Q4. Gender

There is a nearly equal split between female and male respondents, but there were slightly more females. With 35 (51%) identifying as female, compared to 31 (45%) identifying as male. Only 4 percent of respondents preferred not to answer.

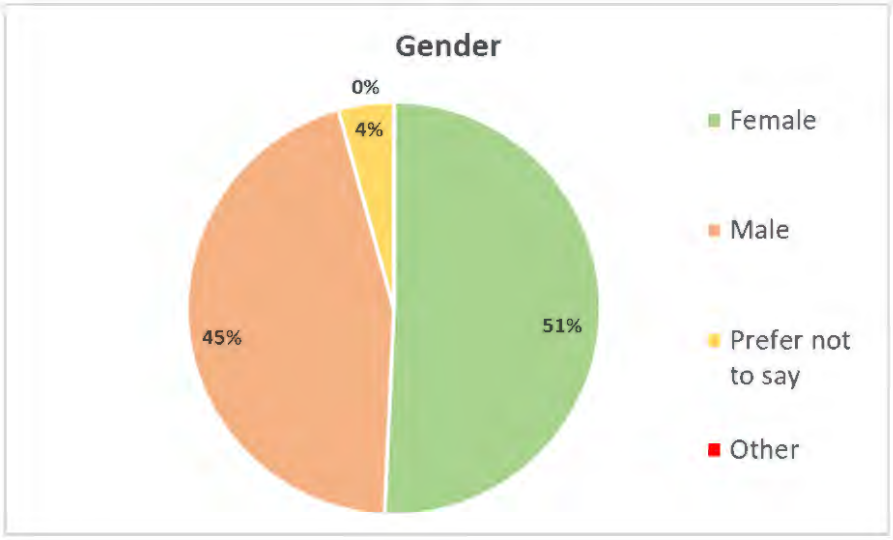


Figure 5 Percentage of responses to Demographic Question 4 - *Which gender do you identify most with?*

Q5. Disability

Of the 69 respondents; 57 people (83%) said they don't have a disability, 10 people (14%) said they do have a disability, and 2 people (3%) preferred not to say.

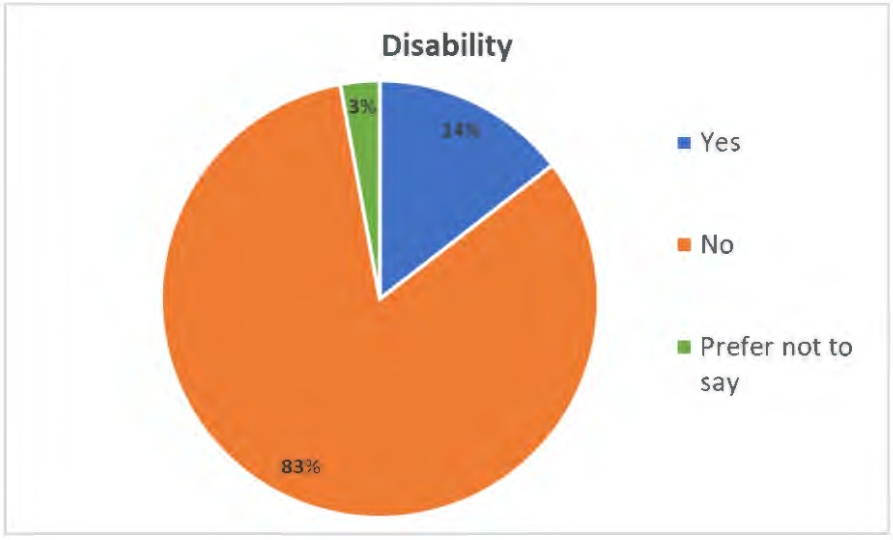


Figure 6 Percentage of responses to Demographic Question 5 - *Do you consider yourself to have a disability?*

Q6. Language

English is the main language among respondents, with 66 of the 69 respondents answering English. Three people preferred not to say, and no 'other' languages were given.

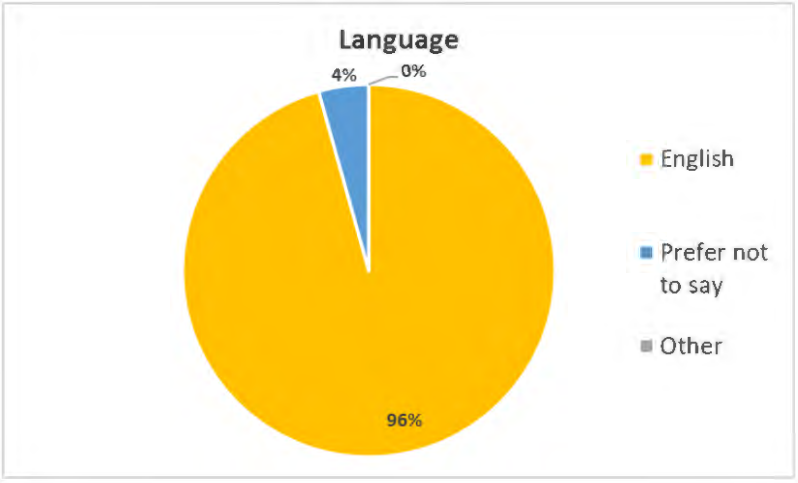


Figure 7 Percentage of responses to Demographic Question 6 - *What is your main language?*

Q7. Ethnic Group

The majority, 93%, of respondents are of white ethnicity. Of the 69 respondents, 64 people were happy to give an answer to this question, and they all responded 'white'. The remaining 5 preferred not to say, so their ethnicity is unknown. In comparison, the results of the 2021 Census data, found that 82% of people in England and Wales are white, and 18% belong to a black, Asian, mixed or other ethnic group (2021 Census data)[4].

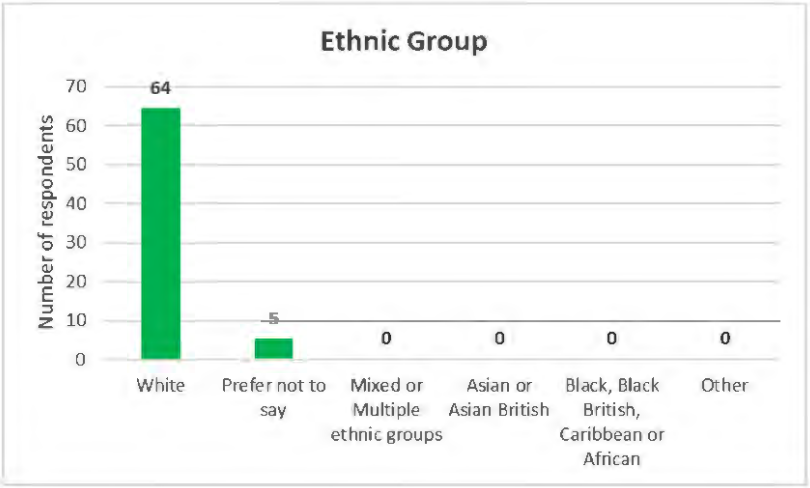


Figure 8 Number of responses to each of the options for Demographic Question 7 - *What is your ethnic group?*

[4] Ethnicity facts and Figure s – GOV.UK.

Q8. Qualifications

A higher qualification is held by 53 of the 69 respondents (77%). Respondents were asked to tick all that apply, so some gave multiple responses.

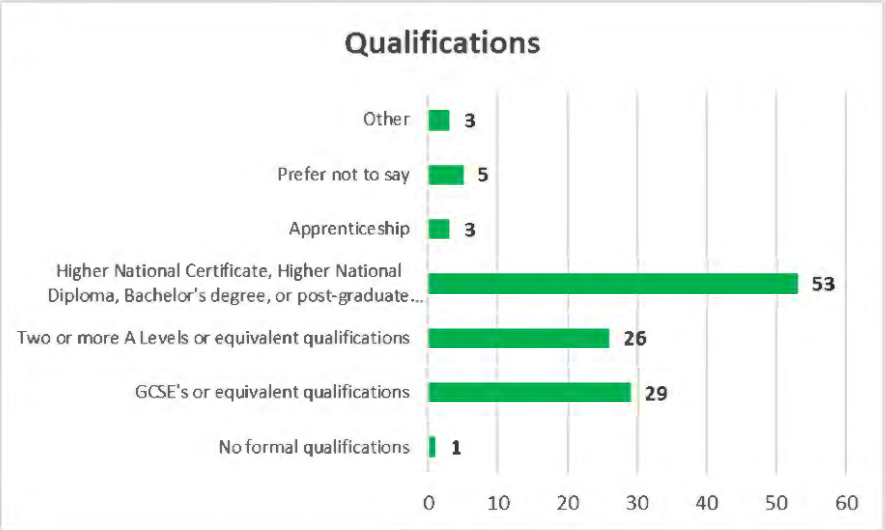


Figure 9 Number of responses to the options for Demographic Question 8 - *Please record any qualifications you have ever achieved in the UK or abroad, even if you are not using them now.*

Q9. Employment status

Nearly half of the 69 respondents (43%) are retired, which aligns with the higher older age group results. While a similar number, 42%, are in employment (full-time, part-time or self-employed).

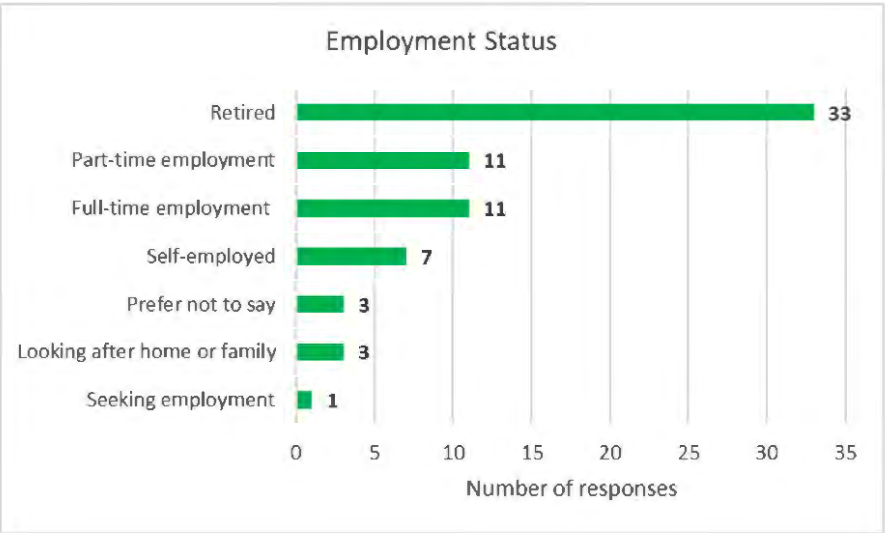


Figure 10 Number of responses to the options for Demographic Question 9 - *What is your current employment status?*

Q10. Universal Credit

Most of respondents (94%) said they aren't in receipt of Universal Credit. No-one answered yes and 4 people (6%) preferred not to say.

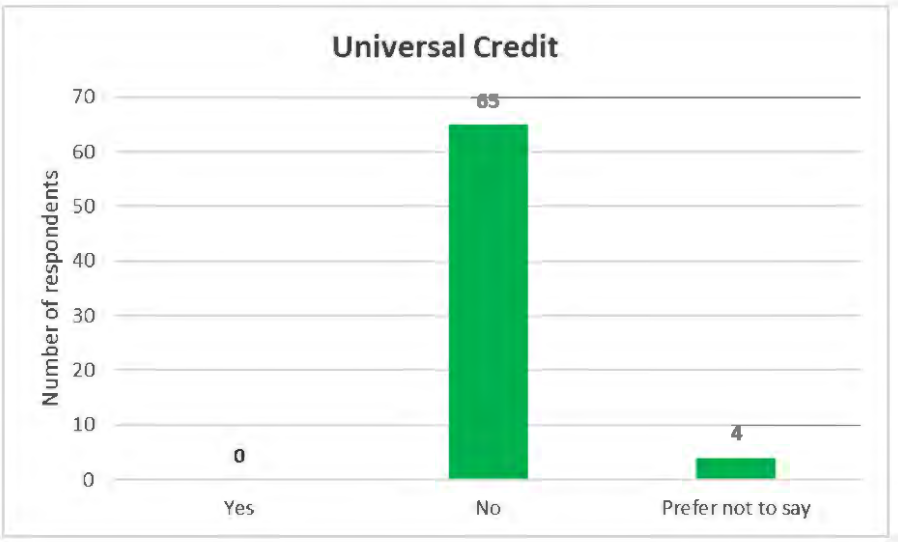


Figure 11 Number of responses to the options for Demographic Question 10 - *Are you currently in receipt of Universal Credit?*

Q11. Household Occupancy

More than half of respondents (55%) live in a two-person household, which again aligns with the age range and retiree result, showing older households of lower occupancy.

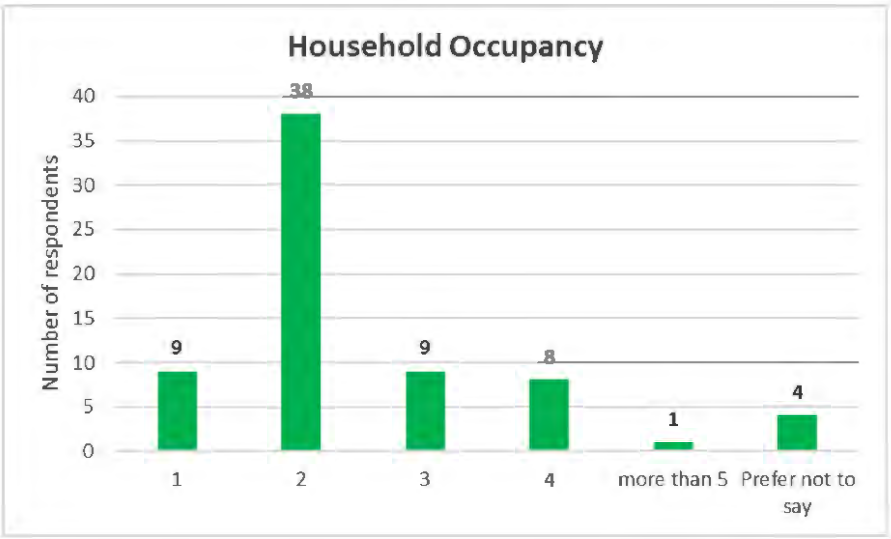


Figure 12 Number of responses to the options for Demographic Question 11 - *How many people live in your household, including you?*

3.2.2 Wildlife Sightings Questions

Almost all 69 respondents answered all the wildlife sightings questions in the survey even though they were not compulsory.

Q12. Where respondents make wildlife sightings

For Parish options, respondents were provided with a map of the Mend the Gap area, divided into parishes and labelled (see Appendix 2, page, 75). And a Table of the parishes with number options (see Appendix 2, page.76). Respondents were asked to state all Parishes that apply, using numbers or names, so some respondents gave multiple responses (see Appendix 6 page.133). For this survey, 'wildlife sighting' meant any time when they observe wildlife in a way that would allow you to identify them, whether from your garden, on a walk, or a dedicated outing'.

Based on the responses given, the highest concentration of observations are being made in the northern and central area of the Mend the Gap project area, in particular in Wallingford, Cholsey, Goring, Ewelme, Benson, Streatley, Blewbury, Crowmarsh and Dorchester. With less people making observations in the south of the project area, and very northern parishes. This is also noticeable within only the Mend the Gap area (not including the 5km buffer). The main parishes in the south where people are making observations are Reading, Burghfield, Sulham, Pangbourne, Theale and Mapledurham. The respondents aren't making any observations in: North Moreton, South Moreton, Berinsfield, Drayton St Leaonard, East Ilsley, Newington, and Marsh Baldon in the north; Eye and Dunsden, Yattendon, Hampstead Norreys, Bucklebury, Frilsham and Stanford Dingley, to the south. But many of these parishes are on the outskirts of the project area boundary, and only partly within the project area.

Within the Mend the Gap area only (excluding the 5km buffer), respondents are making significantly more observations in the parishes located in the middle. And none of the respondents are making observations in North Moreton and South Moreton, and very few in Puxley on Thames.

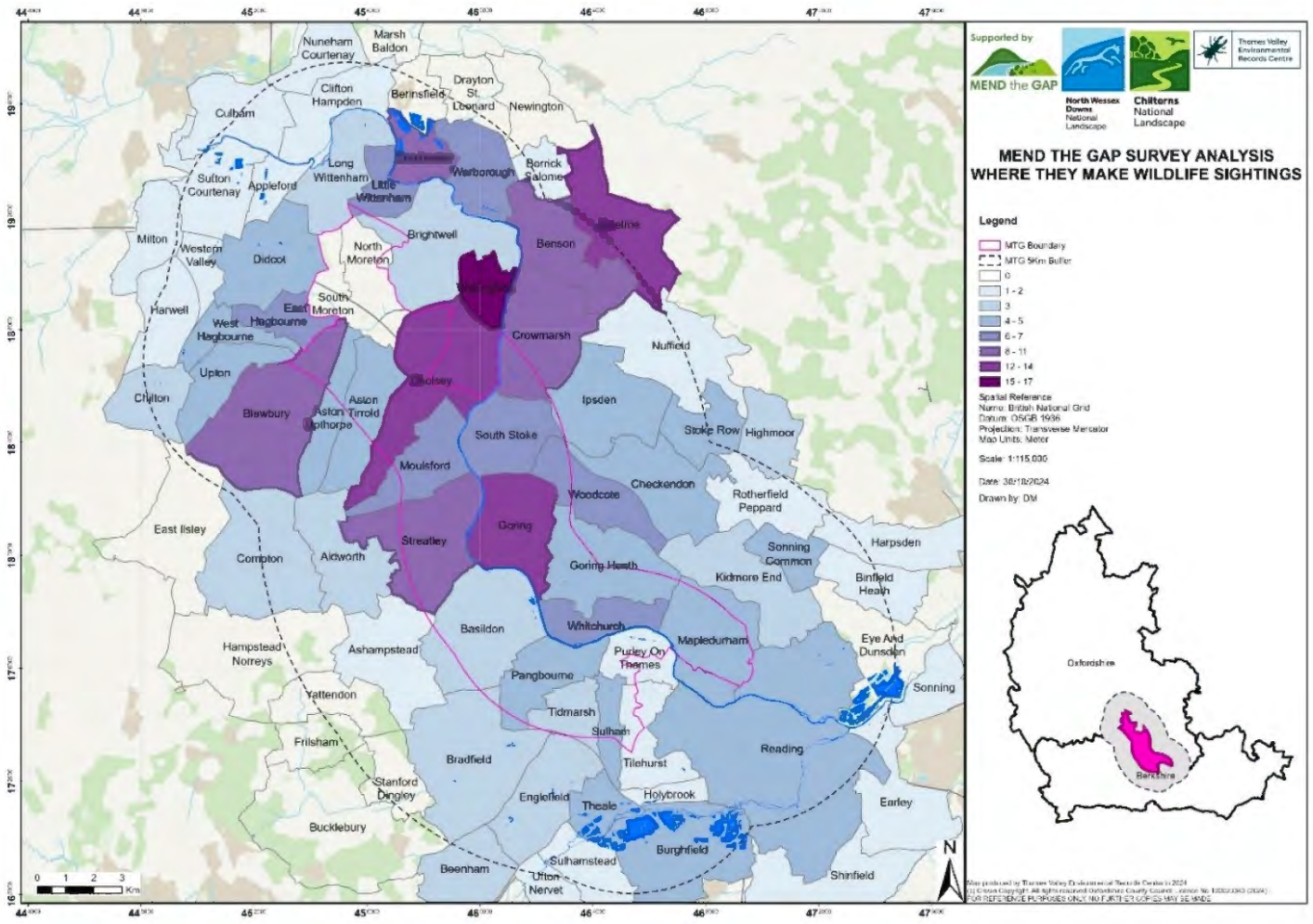


Figure 13 Spatial representation of where respondents make wildlife sightings. Responses were in answer to Wildlife Sightings Question 12 - *Where do you make *wildlife sightings in the Mend the Gap area?*

Q13. Travel

Walking is the main way that people get to where they make wildlife sightings, selected by 60 of the 69 respondents (87%). Other methods which suggest local observations were bicycle (15 people), it's my own garden (21 people) and two people selected 'other', and described this as "My home overlooks a new landscaped Wildlife area" and "It is our farms". However, 52 responses were given for using a vehicle or public transport - 46 use their own vehicle, 4 use someone else's vehicle, 2 people use public transport (bus or train).

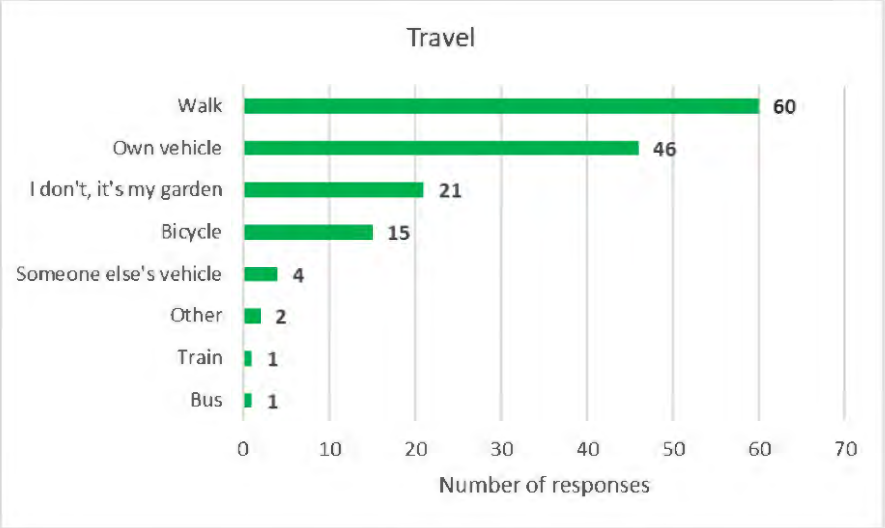


Figure 14 Responses to Wildlife Sightings Question 13 - *How do you travel to where you make wildlife sightings?* Respondents were asked to select all that apply to them.

There was the option to select multiple modes of travel and in total 150 responses of travel method were given by the 69 respondents. Only 18 respondents only use one method of travel, while the remaining 51 respondents use more than one method. With 86% of these using two to three different methods of travel. Further information about the responses given can be found in Appendix 6, page.129.

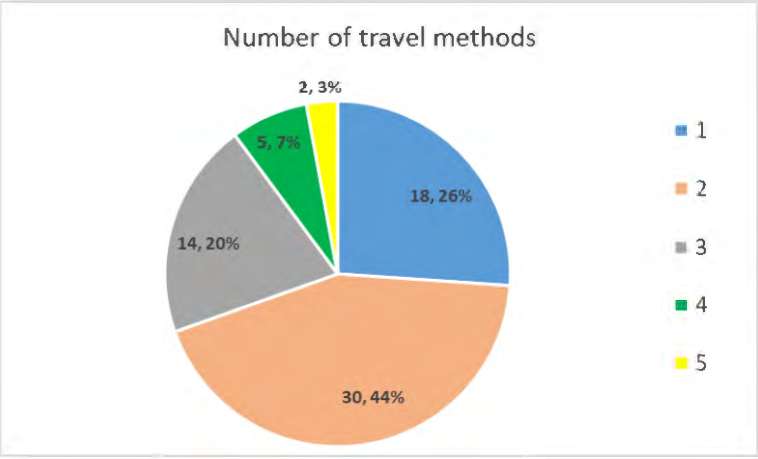


Figure 15 The number of different travel methods that respondents use to get to where they make wildlife sightings, in response to Wildlife Sightings Question 13

Q14. Wildlife Groups

Birds, butterflies and mammals are the main wildlife groups being recorded. Least recorded are beetles, flies, lower plants and molluscs. Five people did say other, but the type of wildlife group(s) is unknown. More than half of respondents record flowering plants (non trees) and dragonflies (odonata). Nearly half record trees, damselflies and moths. While amphibians, reptiles and general invertebrates are recorded by around only a third of respondents.

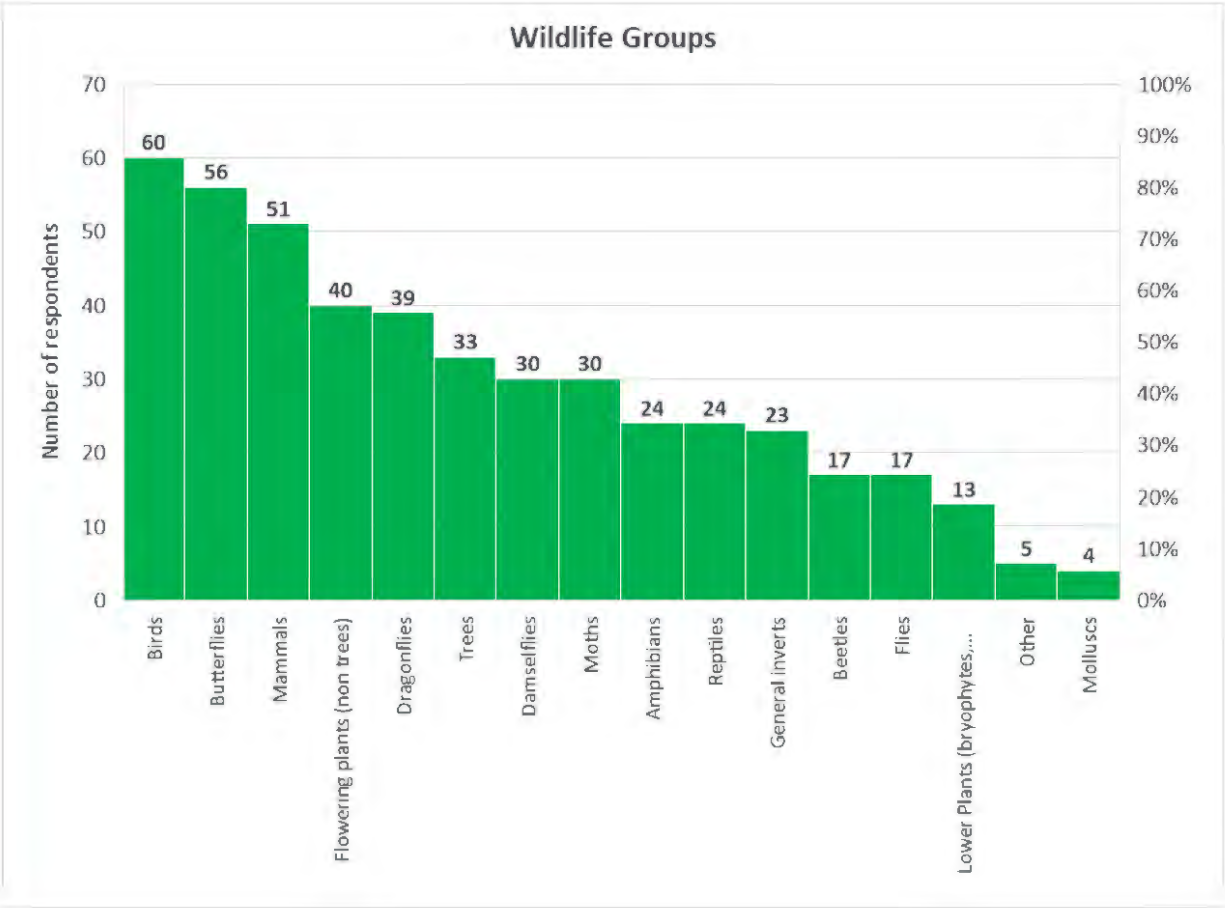


Figure 16 The number of respondents that make observations for each of the 16 listed wildlife groups options, in response to Wildlife Sightings Question 14 - *Which wildlife groups do the respondents observe*. Respondents were asked to select all wildlife groups that they make observations for.

There were 16 wildlife group options, including 'other' where respondents could specify any group that hadn't been listed. Respondents could select more than one wildlife group (and all but one did). The results show that people are making wildlife sightings of multiple taxon groups. Four respondents ticked 'other' and these groups included: bats, riverfly larvae, all arthropods, fungi. Fungi was included in the lower plants grouping.

We can see that 80% of respondents obseve four or more wildlife groups when making their sightings. A quarter of respondents observe 10 or more, with only eight repondents recording two or fewer wildlife groups.

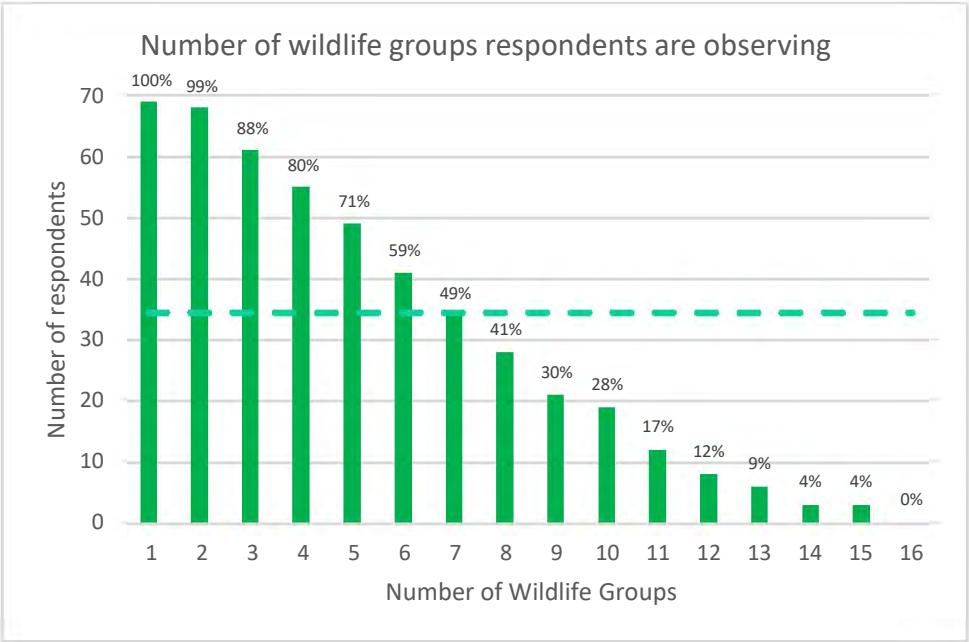


Figure 17 The number of wildlife groups respondents are observing, from the list of options given in Wildlife Sightings Question 14 - *Which wildlife groups do the respondents observe.*

Q15. Wildlife Identification Skills

Respondents feel more confident identifying amphibians, birds, butterflies, flowering plants (non trees), mammals, reptiles, trees. They feel less confident identifying beetles, damselflies, dragonflies, flies, general invertebrates, lower plants, molluscs and moths. Respondents were asked to give a rating for all, but it wasn't made compulsory, and 15 chose not to give a rating to all 15 groups. Further information about respondents' ratings of their wildlife skills, for each wildlife group, can be found in Appendix 7, page.131.

0 = no experience,
1 = I observe this animal or plant but am not able to identify it
5 = I can confidently identify the animal or plant I have observed

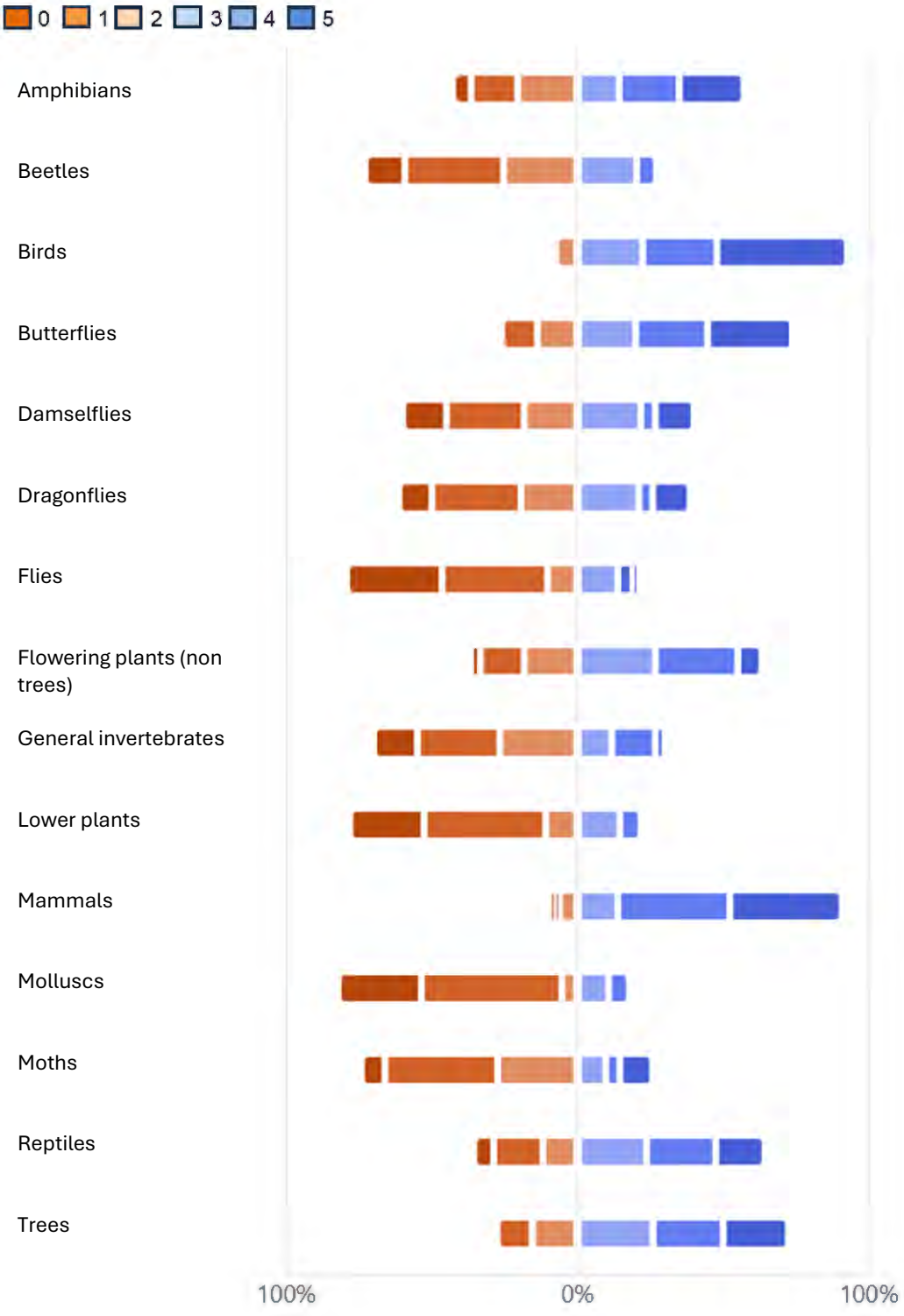


Figure 18 How respondents rated their wildlife ID skills of fifteen wildlife groups. In response to Wildlife Sightings Question 15 - *How would you describe your wildlife identification skills of the following groups?* Respondents were asked to give a rating for all, but not all did.

Q16. Frequency of wildlife sightings

More than half of the respondents (40) make wildlife sightings on a daily basis and 15 people on a weekly basis. Overall, people are making regular and frequent sightings. Ad hoc sightings are also being made by 12 of the respondents. Only 3 people said they make sighting as part of recording schemes. Respondents could give multiple answers, but only 10 people gave multiple answers, and this was no more than two options.

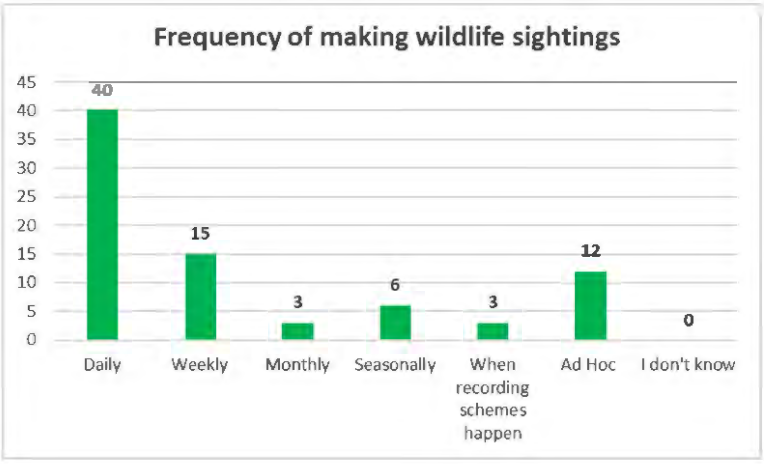


Figure 19 How often respondents are making wildlife observation. In response to Wildlife Sightings Question 16 - *How often are you making wildlife sightings?*

Q17. Reasons for recording

Nearly all the respondents (62 out of the 69 respondnts, 90%) said they are making wildlife sightings for personal interest reasons. A third are making wildlife sightings for local or national recording schemes. For the option of 'other', reasons given included: enjoyment, photographer, just on my daily walks for my own interest, photography, as part of my children's home education and as part of scouting.

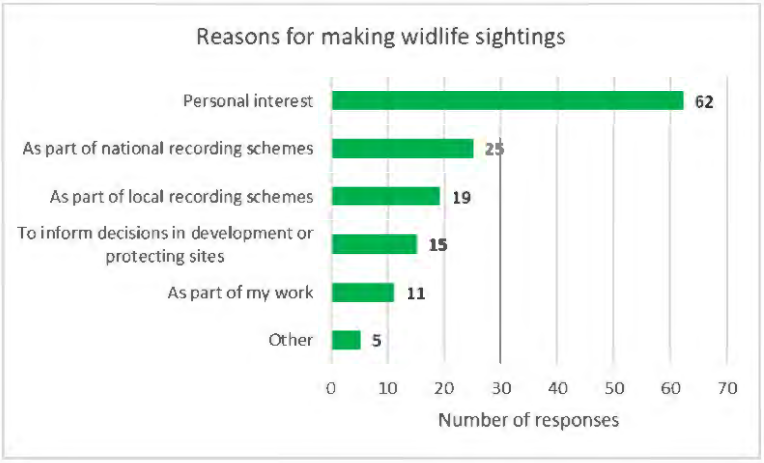


Figure 20 How often respondents are making wildlife observation. In response to Wildlife Sightings Question 17 - *Why do you make wildlife sightings*? Respondents were asked to tick all options that apply, and an option of 'other' was given.

Q18. Sharing wildlife sightings

Nearly three quarters of the respondents (49, 71%) share their sightings, 19 said they don't. The respondents mainly share their signings with local groups, recording scheme(s) or iRecord, and a similar number selected 'other'. The information given for 'other' is in Appendix 9.

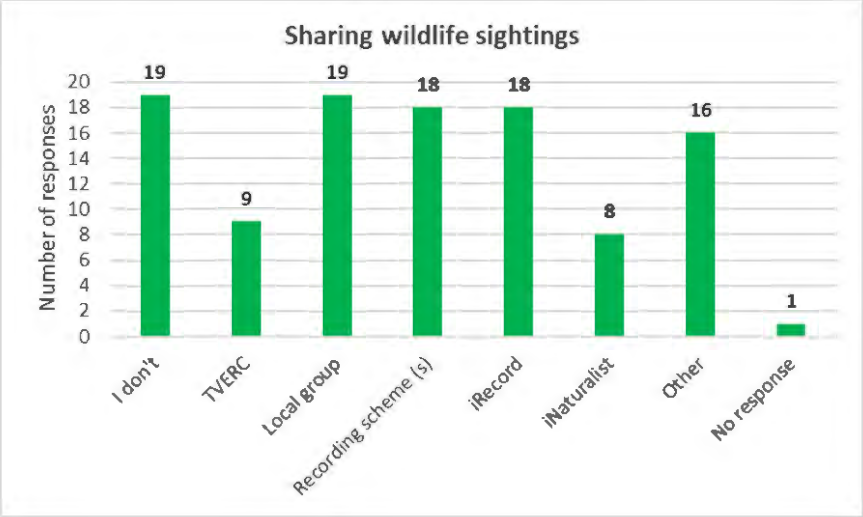


Figure 21 Who respondents share their wildlife observation. In response to Wildlife Sightings Question 18 - *Who do you share your wildlife sightings with?* Respondents asked to select all options that applied to them.

Q19. Reasons for not sharing wildlife sightings

Respondents were asked to select all options that applied to them. The main reason given by nearly a third of respondents (20) was "hadn't thought about sharing them". A similar number (17) said they don't know who to share their wildlife sightings with or how to share them. Further information about 'other' is in Appendix 10).

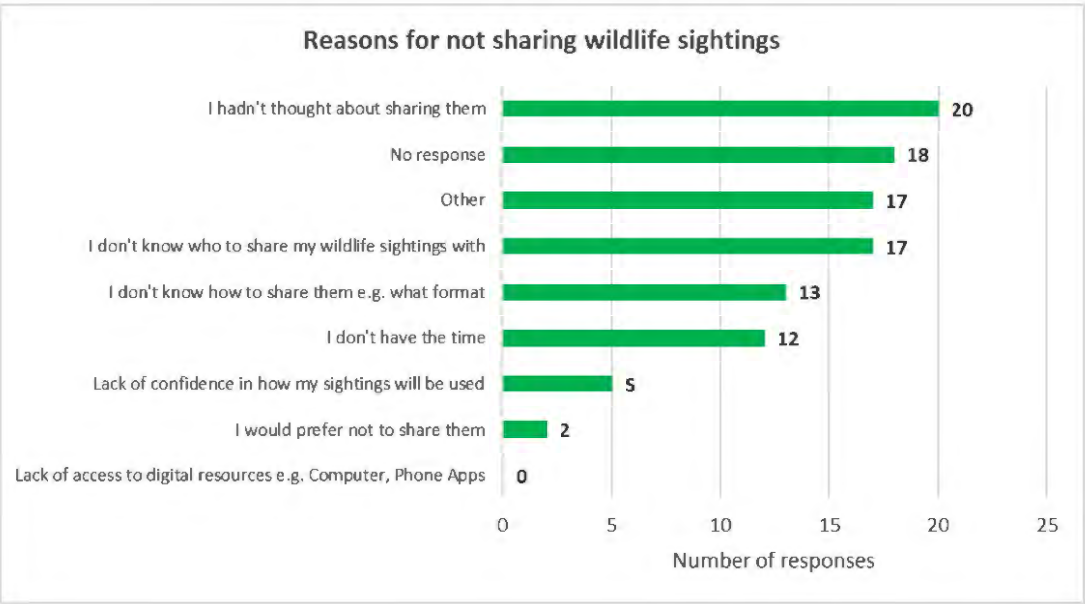


Figure 22 Reasons why respondents may not share their wildlife sightings. In response to Wildlife Sightings Question 19 - *Could you tell us the reasons why you might not share your wildlife sightings*?

Q20. Other wildlife groups of interest, but not currently recording

While 33 people (48%) are interested in make sightings for wildlife groups that they currently don't, 36 people (52%) didn't give a response. Respondents were asked to select all options that applied to them. Of the 33 who gave a response, 12 (36%) are only interested in one further group, and 21 (64%) are interested in more than two groups. Some of the groups, such as mammals, weren't separated, but kept general, and one respondent specified bats. Both respondents who answered 'other', said they would be interested in any of the groups they don't currently observe, but it depended on time and support.

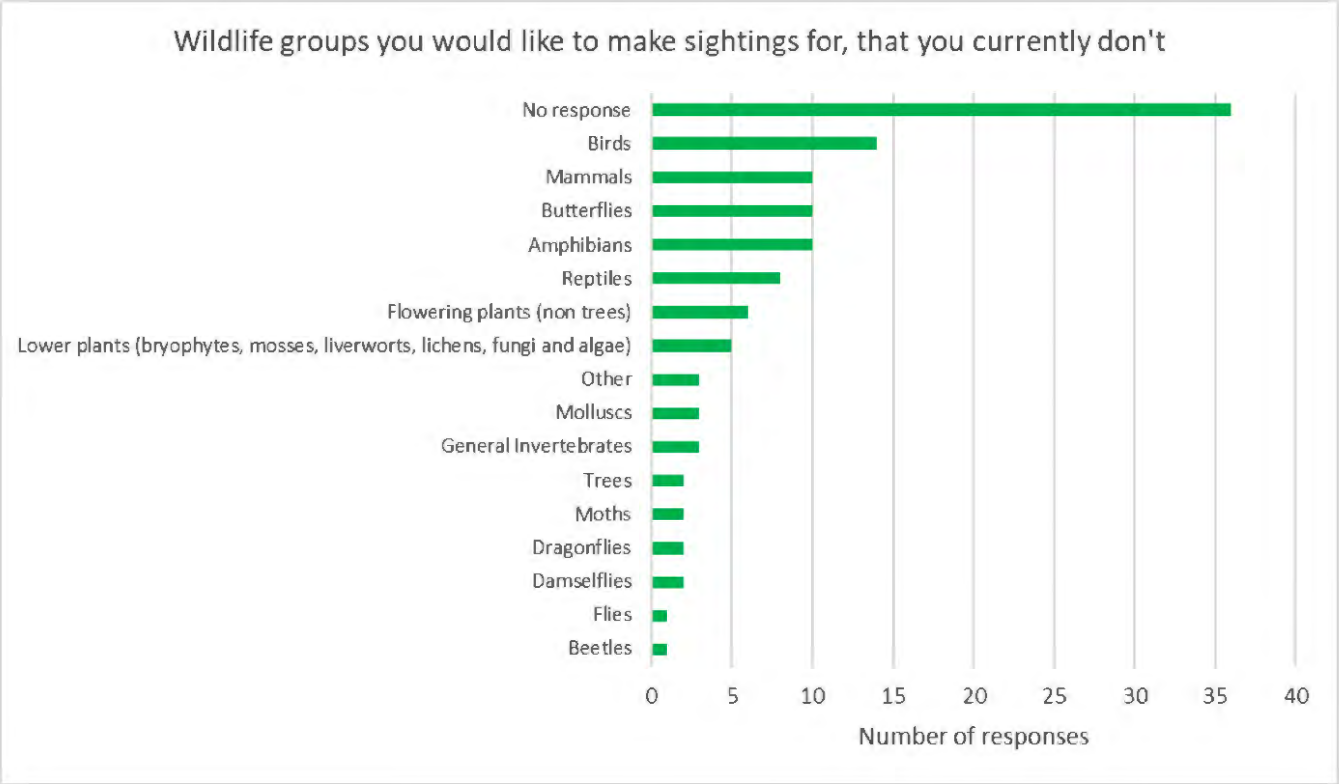


Figure 23 Reasons why respondents may not share their wildlife sightings. In response to Wildlife Sightings Question 20 - *Are there any wildlife groups you would like to make sightings for, that you currently don't?*

Q21. Support for making wildlife sightings

Training in identifying wildlife and in how to share sightings are the main types of support people would find useful. With a theme of connectivity being the next group of support types: connectivity with other people, advice about who can help, and mentors. With practical support then grouped together: equipment and printed forms to add sightings to. Many answers for 'other' are technology related, or training or connectivity.

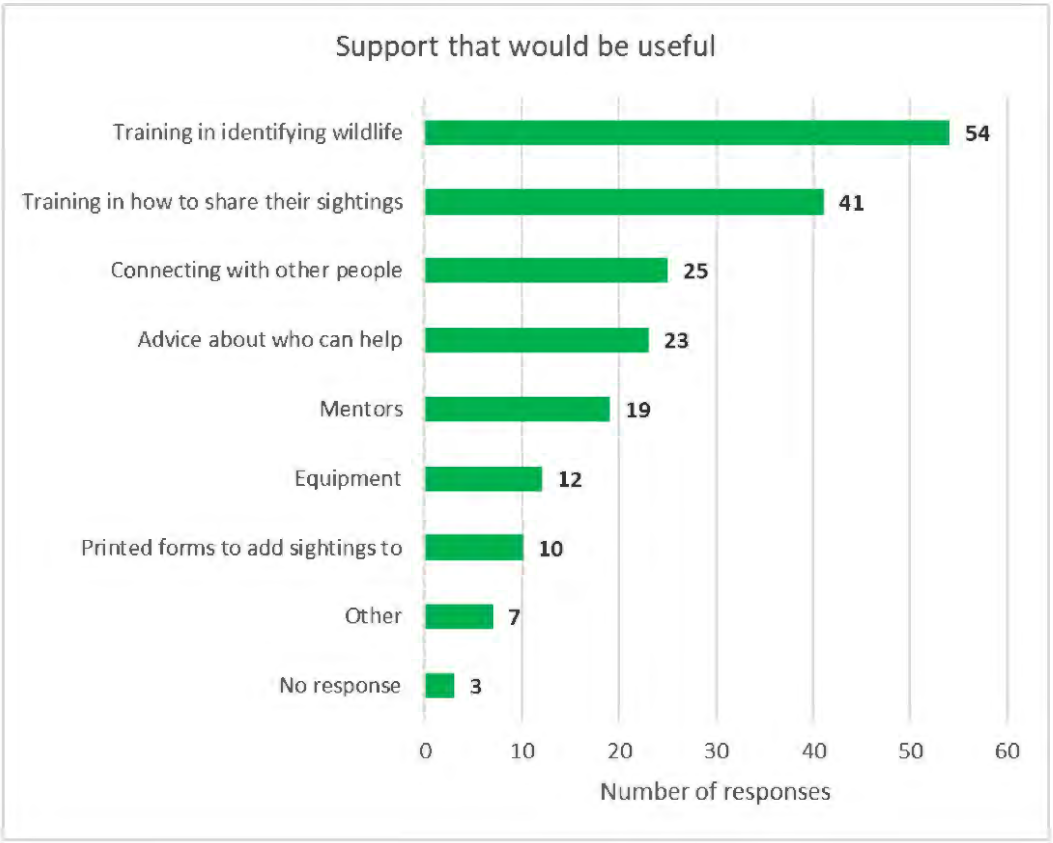


Figure 24 Reasons why respondents may not share their wildlife sightings. In response to Wildlife Sightings Question 21 - *What support do you think would be useful for people making wildlife sightings?*

Other
How it helps. What opportunities there are
Easier and better apps - voice driven?
QR codes - to link to forms to complete on phone
Easier on-line portals (BerksBirds is a good example of how to do it)
link to experts to confirm sightings (cf iNaturalist)
Recording app(s)
anything that builds confidence

Table 3 Further details given for the 'other' option for Wildlife Sightings Question 21 - *What support do you think would be useful for people making wildlife sightings?*

Q22. Barriers preventing participation

Time was mentioned by 36 people. 7 people didn't give a response. Further information in Appendix 11, page.146.

Some recurring comments were:

Knowing how to participate

Knowing what the information they collect will be used for

Lack of awareness of the importance of recording and how it is used.

Lack of confidence in identification skills

Health

Time

Hassle and complexity of recording systems

Education

Engagement

Not wanting to be on the phone whilst out in nature

4 Discussion

4.1 Species Analysis and Mapping

TVERC has carried out a comprehensive analysis and mapping of the records for the selected key indicator species in the Mend the Gap area and its 5km surrounding buffer. The illustration of hotspots and analysis of changes over time is particularly valuable for understanding trends and gaps in data collection. Tracking the number of records over time and identifying recent data collection efforts can provide valuable insights into trends and gaps in biodiversity monitoring. However, there is the challenge of data coming from multiple sources and the anonymized nature of the data. This can make it difficult to distinguish between one-off sightings and repeated observations.

Analysis of the species and parishes found that some parishes were hot spots for activity. These could be good parishes to start with for setting up local community groups if they don't already exist, and focal areas for bringing people together (see Appendix 4). As activity is already happening here, there is an existing foundation of interest to build on. This would hopefully spill over into neighbouring parishes. The species hot spot maps also show were little or no activity is occurring, and these could be good areas for having events and educational activities to widen engagement.

Reviewing the species records highlighted several themes that should be considered in the future.

1) There are areas and species that are under-recorded or reported in the MTG area. There is an opportunity to highlight these gaps and find ways to ensure they are covered in the future.
2) A number of the key species had regular records for most years, but some were missing for the last year or two. This highlights for some species groups, and record sources the flow of data from observation, through submission, verification and distribution to TVERC can be slow and can take two or three years. There is an opportunity to investigate this further and find initiatives and actions that can reduce this delay.
3) The impact of changes in the amount of recording activity affects the data we have available. If a recorder has to stop their efforts it would be great for someone else to be able to continue, so the value of the records can be continued in the longer term. We can see this clearly in the records for Grass snake. This also

illustrated that when you get more people involved in observing a larger area can be covered. As in later years although the number of records are smaller they are from a wider area.

4) Specific initiatives can create good and valuable records but being able to repeat them at some regular interval would make them more useful. This is illustrated by our findings for Himalayan Balsam and also Otter.
5) There are some Species that are rare or difficult to identify, these records are very sparse so may need specific initiatives to ensure a regular set of data. Summer snowflake provides and example of where although not visited every year, they are checked periodically. Many of the Elm species and the Desmoulins Whorl snail show that if this happening then the records are not being shared.

4.2 Wildlife Sightings

The survey has given us some useful insights into Wildlife Sightings within the Mend the Gap area.

Most of the respondents make Wildlife Sightings for personal interest, but also around a third do it for Local or National recording schemes. Many of them make wildlife sightings daily and locally, from or near their home, often by walking. Additionally, many of them will also travel normally by car, occasionally by cycle and rarely by public transport.

The survey has shown us that respondents' homes are not evenly spread around the MTG area. Many postcode areas only have either one or two respondents living there. Most are likely to be based within the OX10 postcode area accounting for 40% of respondents, with less than 20% having their home in RG8 and 12% being based in OX11.

Unsurprisingly parishes that are local to where most respondents live have more activity there. It is very helpful that most of the respondents are prepared to travel to make their sightings. We can see that all parishes apart from North and South Moreton and Eye and Dunsden are places that respondents make wildlife sightings.

These findings indicate that convenience and accessibility play significant roles in wildlife observation. Regularly walking around their immediate surroundings is an easy way for people to observe wildlife. Most of our respondents will also travel to make sightings, although we have not analysed how long a journey they are prepared to make. These two factors could mean that having opportunities to observe wildlife locally and knowing the location of useful places to travel to are important. These insights can be useful in support of the wildlife sightings community and increasing the impact of future data collection and conservation efforts.

Most of this community make wildlife sightings for personal interest, but around a third may also do it for a recording scheme. The additional structure and support of this more formalised wildlife observation may have several benefits including, encouraging more regular recording, visiting other locations, interaction with like-minded people as well as sharing of records.

Only five respondents were younger than 35. Almost two-thirds of respondents are aged 55 or over, with nearly 50% being 65 or above. There is a fairly equal split in gender. All respondents that provided an ethnic group and main language were white and English speakers.

More than three quarters of respondents are well educated having a higher qualification. More than 40% of respondents are retired, with a similar number in employment, with 16% being part-time. Over half of those who responded live in a two-person household.

These results are what we would expect from the wildlife observers within the MTG area that we know well. It could be that the survey did not capture the full diversity. However, we should seek opportunities to help other parts of our local communities participate in wildlife recording these include those who are younger or more ethnically diverse and those without a higher education. This will help increase the numbers participating in these activities as well as helping create a succession of people who can take different roles.

Almost all respondents indicated that they observe more than two or three wildlife groups. Almost half observe seven or more and a quarter observe 10 or more. Birds, butterflies and mammals are groups observed by most of the respondents, with beetles, flies, lower plants and molluscs being the least recorded. It is interesting that 11 out of the 16 wildlife groups are recorded by at least one third of the respondents.

Half the respondents gave no response when asked if there were any additional Wildlife Groups, they would like to make sightings for. The rest indicated the greatest interest in birds, mammals, butterflies, amphibians and reptiles. The other groups being requested by less than 10% of the respondents.

When asked about their confidence in identifying the animal or plant they have observed, again birds, mammals and butterflies were groups that the vast majority of respondents are most confident in identifying. molluscs, lower plants, flies, moths and beetles were groups the respondents were least confident in identifying.

It is pleasing that many respondents to our survey each observe multiple wildlife groups, and that most groups are observed by at least a third of them. This may reflect the breadth and expertise of the recording community around the MTG area. We are lucky to have organisations and individuals with these skills nearby, and we would not expect to see such a strong representation in other areas. There may be the opportunity for some of these respondents to help support other less experienced wildlife observers, enhance and expand their confidence and proficiency with identification and record sharing for multiple wildlife groups.

Just over a quarter of respondents do not share their sightings, but more than two thirds do. With around 25% sharing their records with local groups, recording schemes or iNaturalist. Only 13% share them directly with TVERC. When we asked why they did not share their wildlife records, for those that did not share any records most, 75% hadn't thought of sharing them, 50% didn't know who to share them with or in what format.

To try to understand how to improve the state of wildlife recording we asked what support would be useful. The three most important themes were training in wildlife identification and how to share their sightings alongside helping respondents to connect with others including for help and mentorship. Only about a sixth of respondents selected providing equipment.

We also found that time was raised by half the respondents as a barrier that might prevent more people from participating in wildlife recording. About a quarter indicated lack of knowledge or confidence in identification skills or how to share sightings.

The survey highlights the need for better communication and accessible information to encourage people to share their observations, understand why it's important, and learn how to make their recordings available. Providing training and resources for species identification is crucial for both new and experienced wildlife observers to improve their skills. It's also important to help wildlife observers connect, share information, build confidence, and expand their interests, observation locations, and the organisations they share their records with.

4.3 Community

The analysis of wildlife sightings records that TVERC hold for key species within the MTG area has shown that although a useful resource, there are gaps both spatially and for some species. This could be caused because

current wildlife sightings activities miss out some areas and wildlife groups or the observations are not being shared as good quality records. Further analysis to highlight these gaps would be helpful. It could be useful to create an interactive map overall MTG project area enabling people to find out:

1. what projects already exist
2. ongoing and upcoming activities to get involved in
3. local groups and communities that are already active, and how to make contact to get involved.

The Wildlife Sightings survey has shown that in the MTG area there is already a good and skilled community of wildlife sighters. There is an opportunity to expand their numbers and increase the participation of recording in the area. They can become even more effective if we support both new and existing participants to build connections with one another and engage at different levels with wildlife sighting activities.

We have started to build a tool to help visualise the different ways someone might get involved with Wildlife Sightings. Inspired by work trying to represent community engagement[5] we have created a draft of an engagement pyramid (figure 25 below). This helps us to think about different roles, and what their goals might be and what they need to be successful. It is likely that more people will get involved when the level of commitment is lower. People that want to provide a deeper level of involvement will need different sorts of support and motivation.

We have split the community by six actions and have then created a table of initiatives (table 4.1) to support them. Currently this is a draft but will be a useful framework for the planning and tracking the next steps that follow on from this research.

[5] https://volpro.net/levels-of-engagement/ and The Six Levels of the Engagement Pyramid – The Vital Edge by Gideon Rosenblatt

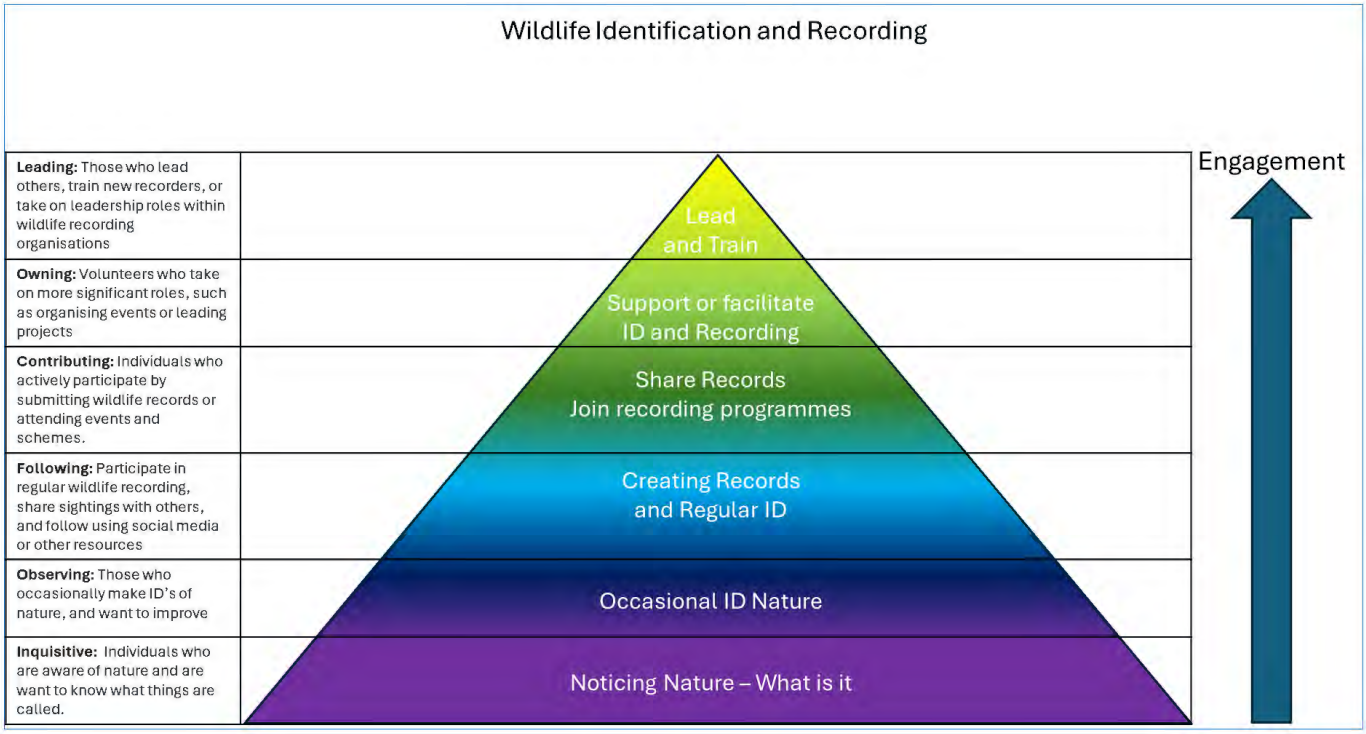


Figure 25 Wildlife Identification and Recording community engagement pyramid.

Community Actions	Detail	Identification of Wildlife	Making and Sharing Sightings Records
Lead and Train	**Leading:** Those who lead others, train new recorders, or take on leadership roles within wildlife recording organizations	Ensure state of Wildlife and Sightings activities are widely understood, and valued. Make the community, broad, diverse and resilient. Ensure the community has all the skills, expertise and motivation required. Make sure there is excellent communication. **Community Building**: Foster a sense of community by organizing meet-ups, both virtual and in-person, where people can share their experiences and learn from each other. Encourage people to share photos and experiences of making wildlife observations, to encourage new and existing observers. **Offer Incentives**: Provide incentives for sharing, such as recognition, rewards, or even small competitions. This can add a fun element and encourage more participation.	Ensure state of Wildlife and Sightings activities are widely understood, and valued. Make the community, broad, diverse and resilient. Ensure the community has all the skills, expertise and motivation required. Make sure there is excellent communication. **Support existing local wildlife groups and organisations:** Through helping with publicity, equipment, grants. The Trust for Oxfordshire's Environment (TOE) offer grants for this https://www.trustforoxfordshire.org.uk/grants-nature-recovery . TVERC have equipment that can be borrowed. **Collaborate with Local Organizations**: Partner with local wildlife organizations, nature reserves, and schools to expand the reach and impact of initiatives. Support existing community events. CEH are local to the project area and have existing projects such as the UK Centre for Ecology and Hydrology (CEH), UK Pollinator Monitoring

			Scheme https://www.ceh.ac.uk/our-science/projects/uk-pollinator-monitoring-scheme .
Support or facilitate ID and Recording	**Owning:** Volunteers who take on more significant roles, such as organizing events, leading projects, championing initiatives.	Support others with Identification, recording schemes and places to make observations Organise or Assist with ID training Take a lead on specific local wildlife recording initiatives. Advance the Community with regular communication and activities **Offering targeted ID training sessions** for specific groups could encourage more people to participate in wildlife recording. **Educating** on existing Apps and Tools available for identification. **Mentorship Programs**: Linking local specialists with individuals and local groups for ID support. **Community Building**: Foster a sense of community by organizing meet-ups, both virtual and in-person, where people can share their experiences and learn from each other. Encourage people to share photos and experiences of making wildlife observations, to encourage new and existing observers	Facilitate & Support Verification and support record sharing **Collaborations**: Linking landowners with recorders, like the Chiltern Project. Local projects and bioblitzes. **Mentorship Programs**: Pair less experienced wildlife enthusiasts with more experienced mentors who can provide guidance and support. This could begin with linking up those who responded to the survey and expressed an interest in being connected with others and reaching out to known local experts and recorders to create a programme. **Facilitate Observation Sharing**: Ensure there is information, talks and workshops about sharing wildlife observations – why they should share sightings and how they should share them. Share information about the existing ways people can easily share their sightings e.g. Apps, TVERC, Recording Schemes.
Share Records, Join recording programmes	**Contributing:** Individuals who actively participate by regularly submitting wildlife records or attending events and schemes.	**Facilitate Observation Sharing**: Ensure there is information, talks and workshops about sharing wildlife observations – why they should share sightings and how they should share them. Share information about the existing ways people can easily share their sightings e.g. Apps, TVERC, Recording Schemes. **Promote Recording Programmes:** Provide information about what local and national recording schemes exist and how they can take part, along with which Wildlife Groups, areas and times they cover.	**Facilitate Observation Sharing**: Give talks and host workshops on sharing wildlife observations – how and why to share sightings. Share information about the existing ways people can easily share their sightings e.g. Apps, TVERC, Recording Schemes.
Creating Records and Regular ID	**Following:** Participate in regular wildlife recording, share sightings with others, and follow	**Facilitating access:** helping people find and access training. Share information about current and existing wildlife identification training and knowledge sharing e.g. Biological Recording Company online and in-person events,	**Facilitate Observation Sharing**: Give talks and host workshops on sharing wildlife observations – how and why to share sightings. Share information about the existing ways people can easily share their sightings e.g. Apps, TVERC, Recording Schemes.

	using social media or other resources	FSC, Mammal Society, BBOWT, local organisation events. Utilise social media and email to facilitate sharing details of upcoming events, as well as potentially facilitating making more training available. Host workshops focusing on different groups of species. These can be in-person or virtual sessions led by experts. **Offering targeted ID training sessions** for specific groups will give more people confidence to participate in the recording of more wildlife groups. Breaking down some wildlife groups, such as mammals, into more specific groups, such as bats, could help enthusiasts and volunteers focus on their areas of interest and improve the accuracy of their sightings. **Educating** on existing Apps available for identification. **Community Events**: Organize events like bioblitzes, where people come together to record as many species as possible in a specific area over a short period. This can be a fun way to learn and connect with others. This again could be linked with the CNC. Create local walking recording projects and routes.	**Promote existing local wildlife groups and organisations**: Through social media, talks, local community events and groups and community forums. To raise their profile and increase people's awareness of what is happening in their local area. **Collaborate with Local Organizations**: Partner with local wildlife organizations, nature reserves, and schools to expand the reach and impact of initiatives. Support existing community events. **Provide Feedback**: Give feedback on the shared observations. This can help participants feel valued and improve their skills, making them more likely to share in the future.
Occasional Wildlife Sighting	**Observing:** Those who occasionally make sightings and identification of nature, and want to improve their knowledge and skills.	**Facilitating access:** helping people find and access training. Share information about current and existing wildlife identification training and knowledge sharing e.g. Biological Recording Company online and in-person events, FSC, Mammal Society, BBOWT, local organisation events. Utilise social media and email to facilitate sharing details of upcoming events, as well as potentially facilitating making more training available. Host workshops focusing on different groups of species. These can be in-person or virtual sessions led by experts. **Community Building**: Foster a sense of community by organizing meetups, both virtual and in-person, where people can share their experiences and learn from each other. Encourage people to share photos and experiences of making wildlife observations, to encourage new and existing observers.	**Facilitating resources:** Want to know where to look, want to remind themselves what they saw before. Offering training sessions on how to record. Methods for recording and where the data goes and what it could be used for. So general data training rather than specific species could also help address the gap where people are interested in making sightings but currently don't feel confident enough to do so. **Community Events**: Organize events like bioblitzes, where people come together to meet like minded people and record as many species as possible in a specific area over a short period. This can be a fun way to learn and connect with others. This again could be linked with the CNC. Create local walking recording projects and routes. **Linking people with existing wildlife projects and groups:** E.g. Tracking the Impact. Linking with local fisherman. **Promote existing local wildlife groups and organisations**: Through social media, talks, local community events and groups and

			community forums. To raise their profile and increase people's awareness of what is happening in their local area. **Linking with non-wildlife groups and classes:** e.g. photography, art, WI, Brownies, Scouts, walking groups. **Simplify the Sharing Process:** Make it as easy as possible for people to share their observations. There are Apps and Resources already available, so educating people about the options could help. TVERC have a recording sheet for those who don't use Apps or have a smart phone. **Simplifying Data Submission**: Develop or promote easy-to-use tools and apps that allow people to quickly and easily submit their sightings, even if they're casual observations.
Noticing Nature – An interest in what they are seeing	**Inquisitive:** Individuals who are aware of nature and want to know what they are seeing and it is called.	Noticing that nature is different and diverse and want to know what the different things are. Can start to identify somethings. **The City Nature Challenge** will be happening 25-29th April 2025, and this uses iNaturalist and can be a good way to start people recording what they are noticing and showing you don't have to be an expert to do so. CNC Oxfordshire: https://www.inaturalist.org/projects/city-nature-challenge-2025-oxfordshire. CNC Berkshire: https://www.inaturalist.org/projects/city-nature-challenge-2025-berkshire. **Create a Supportive Community**: Foster a sense of community where people feel comfortable sharing their observations. This can be done through social media groups, forums, or regular meetups. **Extend the audience:** local events, workshops, linking up with other local groups, schools. Creating projects that people can do from home in their garden or nearby area – accessibility and transport reasons. Promoting existing projects e.g. Garden Bird Watch. Organise training events prior to existing National Monitoring Schemes e.g. birds, butterflies, **Storytelling**: Encourage people to share the stories behind their sightings. Personal stories can make the data more engaging and relatable, encouraging others to share their experiences as well. **Engaging Content**: Share stories and examples of how casual sightings have made a difference. This can inspire more	Talk to people about what they have seen. The City Nature Challenge will be happening 25-29th April 2025, and this could be an opportunity to reach a wider a audience and encourage local community activities as part of the weekend. **Linking with non-wildlife groups and classes:** e.g. photography, art, WI, Brownies, Scouts, walking groups **Promoting Citizen Science Projects**: Highlight existing recording schemes and citizen science projects that people can easily join. Make sure they understand how simple and rewarding it can be to contribute. **Community Challenges**: Organize local challenges or events that encourage people to make and share more structured observations in their area. This can create a sense of community and purpose.

		people to take that extra step to record and share their observations.	

Table 4.1 Draft Wildlife Identification and Recording community actions, focuses and initiatives.

5 Summary and Recommendations

5.1 Recommendations for further work

The survey into Wildlife Sightings in the MTG area has provided valuable insights into this recording community's motivations, challenges, and opportunities. This understanding will help us support and expand these activities in the MTG area and beyond. Our objectives are to:

1. Increase participation in Wildlife Sightings.
2. Enhance skills and confidence in wildlife identification and record sharing.
3. Provide support, guidance, and mentorship for recording.
4. Facilitate connections among people interested in wildlife sightings.
5. Increase the speed that records are available from Observation to TVERC and other organisations
6. Fill knowledge gaps about wildlife species in the MTG area by encouraging sightings and recording in underrepresented locations or groups.

Progress in these areas will deepen our understanding of the MTG area's wildlife, allowing us to appreciate nature and make informed decisions about its conservation.

About TVERC

Thames Valley Environmental Records Centre (TVERC) are a not-for-profit organisation covering Berkshire and Oxfordshire. We are run by a partnership and are one of a national network of local records centres. We are a member of the Association of Local Records Centres (ALERC) and the National Biodiversity Network (NBN). Our funding partners include all the local authorities in Oxfordshire & Berkshire plus the Environment Agency. We also work closely with the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust.

What we do

We provide our funding partners with annually updated species and sites information and undertake surveys of local wildlife sites. We also carry out data analysis for the monitoring of local authority Local Plans. We provide information to parish councils, local people, conservation bodies, land-owners, students and commercial organisations such as ecological consultants and utilities companies via data searches, data licensing and data exchanges. We provide other services such as ecological surveys, data analysis & presentation and training.

Our records

We hold over 4.8 million records of flora and fauna in Berkshire and Oxfordshire plus information about Local Wildlife and Geological Sites, NERC Act S41 Habitats of Principal Importance (previously called UK Biodiversity Action Plan (BAP) habitats) and Ecological Networks (Conservation Target Areas and Biodiversity Opportunity Areas). We collect this data from the general public, skilled volunteer /amateur recorders, professionals working for wildlife charities (BBOWT and RSPB), professionals working for government agencies (the Environment Agency & local authorities) and ecological consultants. This information is used: by planning authorities and developers to make informed decisions on the design and location of sustainable development to help farmers, landowners and conservation organisations manage land in the best way to enhance biodiversity by nature, partnerships to direct wildlife conservation work by teachers, students and scientists for education and scientific research.

For more information, please visit our website: www.tverc.or

6 Appendices

6.1 Appendix 1 – Species Analysis and Mapping – Rationale for species selection

Taxon Group	Common Name	Scientific name	Rationale
Bird	Kingfisher	*Alcedo atthis* Kingfisher | BTO - British Trust for Ornithology	Charismatic.
Bird	Coot	*Fulica atra* Eurasian Coot Bird Facts | Fulica Atra	Distinctive.
Bird	Grey wagtail	*Motacilla cinerea* Grey Wagtail | BTO - British Trust for Ornithology	Charismatic. Opportunity to educate on the different wagtail species.
Bird	Yellow Wagtail	*Motacilla flava* Yellow Wagtail | BTO - British Trust for Ornithology	Charismatic. Opportunity to educate on the different wagtail species.
Bird	Water rail	*Rallus aquaticus* Water Rail | BTO - British Trust for Ornithology	Numbers have decreased in the area.
Bird	Barn owl	*Tyto alba* Barn Owl | BTO - British Trust for Ornithology	Charismatic. Possible project coming.
Bony Fish	Perch	*Perca fluviatilis* Perch | Types of fish	Fisherman links
Bony Fish	Roach	*Rutilus rutilus*	Fisherman links

		Roach | Types of fish	
Higher Plants - Flowering Plants	Himalayan balsam	*Impatiens glandulifera* Impatiens glandulifera Royle in BSBI Online Plant Atlas 2020	Invasive species.
Higher Plants - Flowering Plants	Lodden lily	*Leucojum aestivum* Leucojum aestivum L. in BSBI Online Plant Atlas 2020	Important species on this stretch of the river. relatively easy to ID once in flower. Good indicators of quality.
Higher Plants - Flowering Plants	Purple Loosestrife	*Lythrum salicaria* Lythrum salicaria L. in BSBI Online Plant Atlas 2020	Important river and wetland habitat species. relatively easy to ID once in flower. Good indicators of quality.
Higher Plants - Flowering Plants	Common Reed	*Phragmites australis* Phragmites australis (Cav.) Trin. ex Steud. in BSBI Online Plant Atlas 2020	Easy one to quickly determine a wet area.
Higher Plants - Flowering Plants	Black poplar	*Populus nigra* Populus nigra (fastigiate cultivars) in BSBI Online Plant Atlas 2020	Area specific. These species have been decided on following discussion, advice and initial analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	Black poplar	*Populus nigra subspecies betulifolia* Populus nigra subsp. betulifolia (Pursh) Dippel in BSBI Online Plant Atlas 2020	Area specific. These species have been decided on following discussion, advice and initial analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	Wild pear	*Pyrus communis* Pyrus communis s.l. in BSBI Online Plant Atlas 2020	Area project. signature wild pear are being planted in the area. there will be a map etc to share longer term. These species have been decided on following discussion, advice and inititial analysis of TVERC's existing records for MTG area.

Higher Plants - Flowering Plants	Wild pear	*Pyrus pyraster* Pear (Pyrus communis) - British Trees - Woodland Trust	Area project. signature wild pear are being planted in the area. there will be a map etc to share longer term. These species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	Ragged robin	*Silene flos-cuculi (syn. Lychnis flos-cuculi)* Silene flos-cuculi (L.) Clairv. in BSBI Online Plant Atlas 2020	Important river and wetland habitat species. relatively easy to ID once in flower. Good indicators of quality.
Higher Plants - Flowering Plants	Greater Reedmace / Bulrush	*Typha latifolia* Typha latifolia L. in BSBI Online Plant Atlas 2020	Easily recognisable. Lots of character.
Higher Plants - Flowering Plants	Elm	*Ulmus* Elm | Description, Uses, Diseases, & Major Species | Britannica	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	Narrow leaved Elm	*Ulmus ademuz* Ulmus minor Ademuz | Resistant Elms	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area. **NB**: TVERC have no existing records but this would create a baseline. Planting projects are planned. "a map without any or very few records would show the impact of Mend the Gap who will all of a sudden supply records for newly planted trees."
Higher Plants - Flowering Plants	Dutch Elm	*Ulmus glabra x minor x plotii = Ulmus. X hollandica* Ulmus glabra x minor x plotii = U. x hollandica : Dutch Elm | NBN Atlas	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area.

Higher Plants - Flowering Plants	European White Elm	*Ulmus laevis* Ulmus laevis Pall. in BSBI Online Plant Atlas 2020	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area. **NB**: TVERC have no existing records but this would create a baseline. Planting projects are planned. "a map without any or very few records would show the impact of Mend the Gap who will all of a sudden supply records for newly planted trees."
Higher Plants - Flowering Plants	Elm - disease resistant hybrid	*Ulmus Lutece* Lutece | Resistant Elms	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area. **NB**: TVERC have no existing records but this would create a baseline. Planting projects are planned. "a map without any or very few records would show the impact of Mend the Gap who will all of a sudden supply records for newly planted trees."
Higher Plants - Flowering Plants	Small Leaved Elm	*Ulmus minor* Field Elm (Ulmus minor) · iNaturalist	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	Field Elm	*Ulmus minor agg.* Ulmus minor agg. in BSBI Online Plant Atlas 2020	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initital analysis of TVERC's existing records for MTG area.
Higher Plants - Flowering Plants	English Elm	*Ulmus procera* English Elm (Ulmus procera) - British Trees - Woodland Trust	Disease resistant project in the area. Signature Elm are being planted in the area. There will be a map etc to share longer term. These Elm species have been decided on following discussion, advice and initial analysis of TVERC's existing records for MTG area.
Insect - butterfly	White-letter hairstreak	*Satyrium w-album* White-letter Hairstreak | Butterfly Conservation	Link with Elms.

Insect – dragonfly (Odonata)	Common clubtail	*Gomphus vulgatissimus* Common Clubtail - British Dragonfly Society	BBOWT link
insect - dragonfly (Odonata)	White-legged damselfly	*Platycnemis pennipes* White-legged Damselfly - British Dragonfly Society	Not doing well and is river specific so would be good to include.
Insect - moth	Burnished brass moth	*Diachrysia chrysitis* Burnished Brass | UKmoths	Interesting moth species. Moth trapping. Rare reedbed specialist
Mammals - Terrestrial	Water vole	*Arvicola amphibius* Water vole — Mammal Society	South Moreton is a hot spot
Mammals - Terrestrial	European Otter	*Lutra lutra* Eurasian Otter (Lutra lutra) | IUCN SSC Otter Specialist Group	Links to other projects
Mammals - Terrestrial (bats)	Daubenton bat	*Myotis daubentonii* Daubenton's bat - UK Bats - Bat Conservation Trust	Waterways link.
Mollusc	Desmoulin's whorl snail	*Vertigo moulinsiana* Desmoulin's whorl snail (Vertigo moulinsiana) - Special Areas of Conservation	Key local sites. BBOWT links. Links to other projects
Reptiles	Grass snake	*Natrix helvetica* Grass snake | Amphibian and Reptile Conservation	Local interest. Education opportunity to dispel misconceptions / fear.

6.2 Appendix 2 – Wildlife Sightings Survey

Thames Valley Environmental Records Centre (TVERC) would like to learn more about the people who observe wildlife in this part of South Oxfordshire and West Berkshire. For the specific area of interest, kindly refer to the project area map provided below in section 1 or click here https://tinyurl.com/y4ddcv9y to download. The project area includes the area within the Mend the Gap boundary and a surrounding 5km buffer.

If you spot wildlife within the Mend the Gap boundary or its surrounding 5km buffer, as a hobby, or just as part of your everyday life, we would appreciate your feedback.

There is a national shortage of wildlife identification skills, particularly in the younger population, and this survey will help us better understand who is currently spotting wildlife in this area, and what training, and support, might be beneficial to them.

This survey is funded by the Mend the Gap (MTG) programme, a joint programme of the Chilterns and North Wessex Downs National Landscapes, and the Railway Action Group. The vision of Mend the Gap is that the outstanding national landscape that links the Chilterns and the North Wessex Downs will be enhanced and enriched for wildlife, residents and visitors. To find out more visit www.mendthegap.uk or follow www.facebook.com/MendtheGapProgramme

The survey should take around 10 to 15 minutes to complete. Please note that the survey will be **open for responses until September 30, 2024.**

Thank you for taking the time to fill out the form. Thames Valley Environmental Records Centre, www.tverc.org, tverc@oxfordshire.gov.uk

Disclaimer

The results of this survey will be used for the purposes of the Mend The Gap Wildlife Sightings Project, which will be made public by TVERC and MTG.

No personally identifiable information will be published by TVERC or shared with any other party.

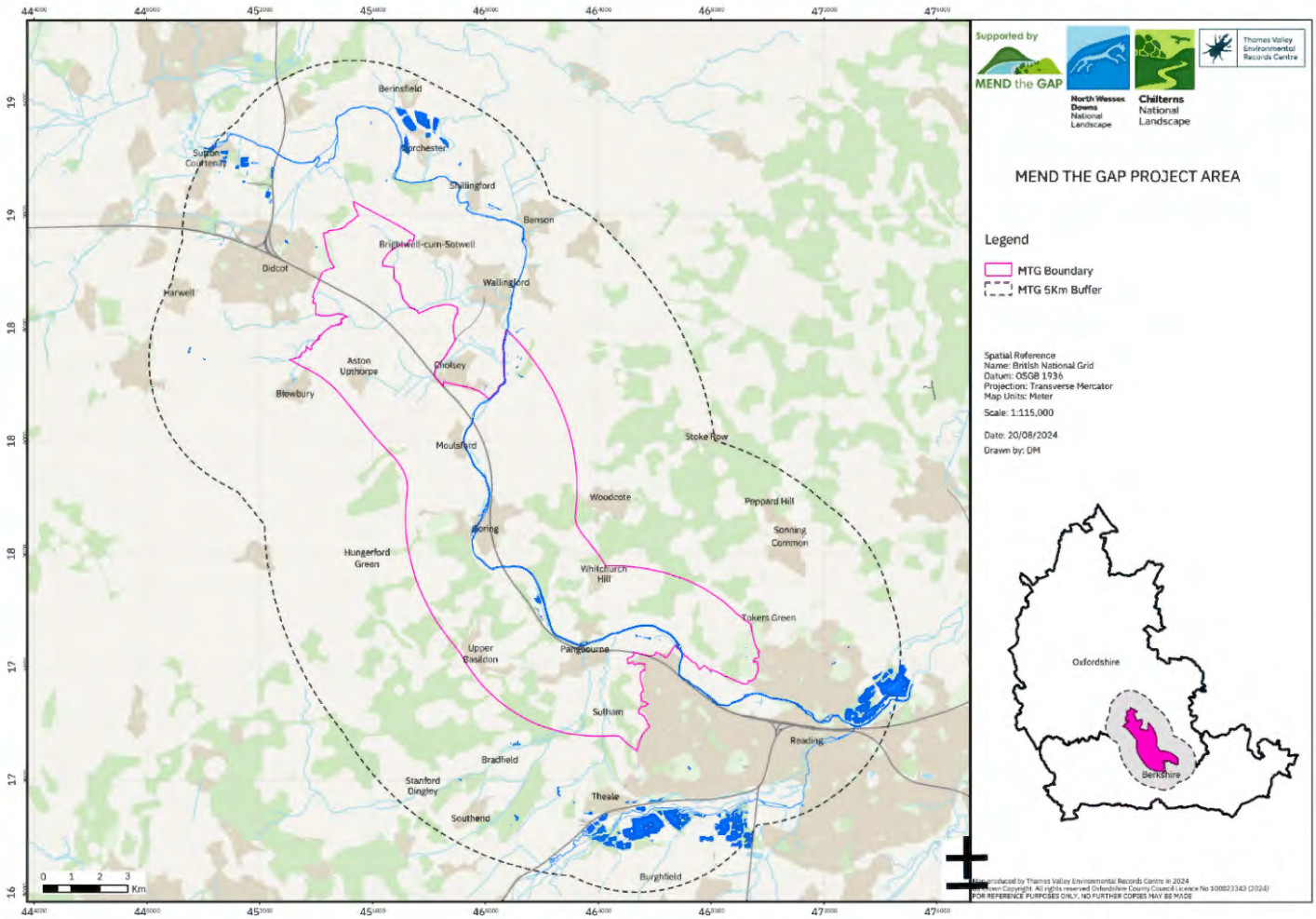
If you provide your email address, and give consent for TVERC to contact you, we will only contact you regarding this survey.

Answers to the following questions will be used for analytical purposes, and to inform possible future project work

* Required

Mend the Gap Project Area

(includes a 5km buffer from the MTG boundary)



1. **Name – optional:**
   Click or tap here to enter text.

Demographic Questions

2. Where do you live? - please provide the first part of your postcode e.g. OX10 *

3. Please select the category that includes your age: *

   ☐Under 18

   ☐ 18 – 24

   ☐ 25 – 34

   ☐ 35 – 44

   ☐ 45 – 54

   ☐ 55 – 64

   ☐ 65 or above

   ☐ Prefer not to say

4. Which gender do you identify most with? *

   ☐ Female

   ☐ Male

   ☐ Other

   ☐ Prefer not to say

5. Which gender do you identify most with? *

☐ Yes

☐ No

☐ Prefer not to say

6. What is your main language? *

   ☐ English

   ☐ Other

   ☐ Prefer not to say

7. What is your ethnic group? *

☐ White

☐ Mixed or multiple ethnic groups

☐ Asian of Asian British

☐ Black, Black British, Caribbean or African

☐ Prefer not to say

☐ Other Click or tap here to enter text.

8. Please record any qualifications you have ever achieved in the UK or abroad, even if you are not using them now. Tick all that apply. *

☐ No formal qualifications

☐ GCSE's or equivalent qualifications

☐ Two or more A Levels or equivalent qualifications

☐ Higher National Certificate, Higher National Diploma, Bachelor's degree, or post-graduate qualifications

☐ Apprenticeship

☐ Prefer not to say

☐ Other Click or tap here to enter text.

9. What is your current employment status? *

☐ Full-time employment

☐ Part-time employment

☐ Unemployed

☐ Self-employed

☐ Looking after home or family

☐ Student

☐ Retired

☐ Prefer not to say

☐ Other Click or tap here to enter text.

10. Are you currently in receipt of Universal Credit? *

☐ Yes

☐ No

☐ Prefer not to say

11. How many people live in your household, including you? *

☐ 1

☐ 2

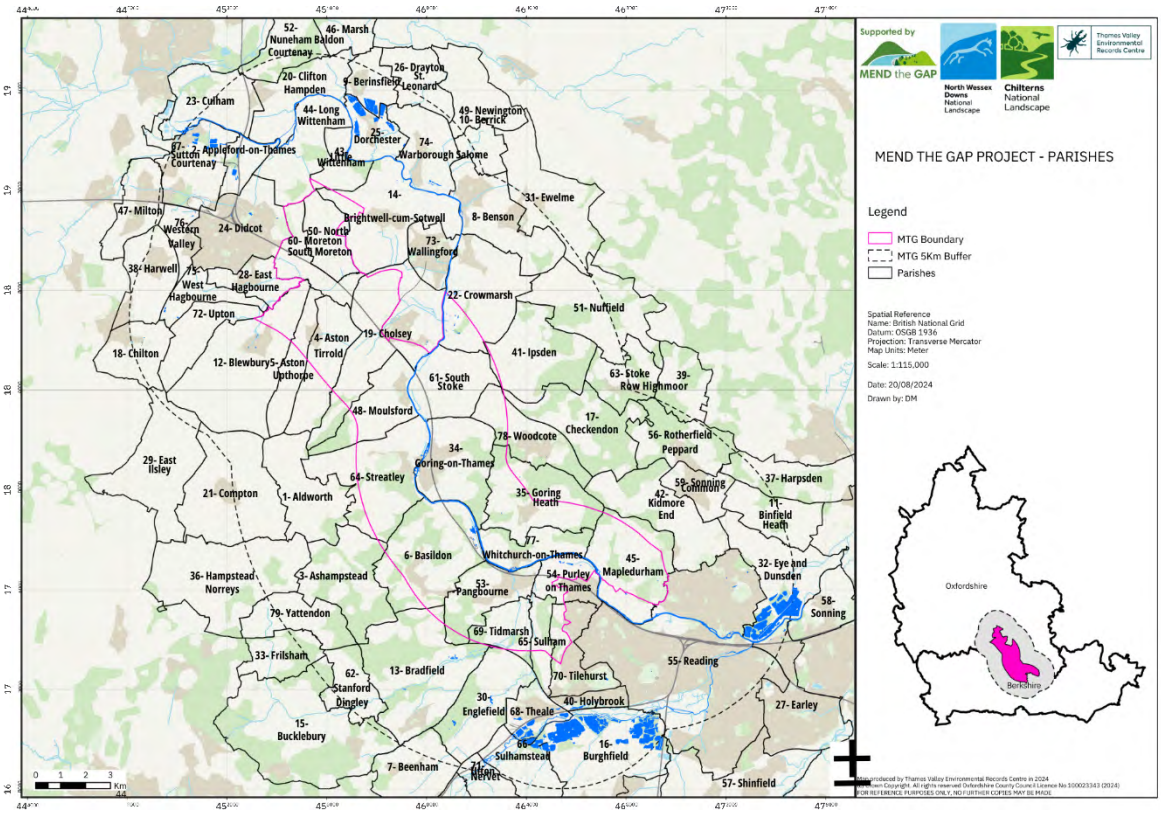
☐ 3

☐ 4

☐ 5 or more

☐ Prefer not to say

Wildlife Sightings Questions



12. Where do you make *wildlife sightings in the Mend the Gap area?

For Parish options please see the Parishes map above in section 3, or you can download it here https://tinyurl.com/33caj76m. Alternatively, please see the Parishes Table below. Please state all Parishes that apply, using numbers or names. **For this survey, 'wildlife sighting' means any time when you observe wildlife in a way that would allow you to identify them, whether from your garden, on a walk, or a dedicated outing'*

Parishes

1- Aldworth	11- Binfield Heath	21- Compton	31- Ewelme	41- Ipsden	51- Nuffield	61- South Stoke	71- Ufton Nervet
2- Appleford-on-Thames	12- Blewbury	22- Crowmarsh	32- Eye and Dunsden	42- Kidmore End	52- Nuneham Courtenay	62- Stanford Dingley	72- Upton
3- Ashampstead	13- Bradfield	23- Culham	33- Frilsham	43- Little Wittenham	53- Pangbourne	63- Stoke Row	73- Wallingford
4- Aston Tirrold	14- Brightwell-cum-Sotwell	24- Didcot	34- Goring-on-Thames	44- Long Wittenham	54- Purley on Thames	64- Streatley	74- Warborough
5- Aston Upthorpe	15- Bucklebury	25- Dorchester	35- Goring Heath	45- Mapledurham	55- Reading	65- Sulham	75- West Hagbourne
6- Basildon	16- Burghfield	26- Drayton St. Leonard	36- Hampstead Norreys	46- Marsh Baldon	56- Rotherfield Peppard	66- Sulhamstead	76- Western Valley
7- Beenham	17- Checkendon	27- Earley	37- Harpsden	47- Milton	57- Shinfield	67- Sutton Courtenay	77- Whitchurch-on-Thames
8- Benson	18- Chilton	28- East Hagbourne	38- Harwell	48- Moulsford	58- Sonning	68- Theale	78- Woodcote
9- Berinsfield	19- Cholsey	29- East Ilsley	39- Highmoor	49- Newington	59- Sonning Common	69- Tidmarsh	79- Yattendon
10- Berrick Salome	20- Clifton Hampden	30- Englefield	40- Holybrook	50- North Moreton	60- South Moreton	70- Tilehurst	

13. How do you travel to where you make wildlife sightings? Please tick all that apply.

☐ Walk

☐ Bicycle

☐ Bus

☐ Train

☐ Own vehicle

☐ Someone else's vehicle

☐ I don't; it's my garden

☐ Other Click or tap here to enter text.

14. What wildlife groups do you observe? Please tick all that apply. *

☐ Amphibians
☐ Beetles
☐ Birds
☐ Butterflies
☐ Damselflies
☐ Dragonflies
☐ Flies
☐ Flowering plants (non trees)
☐ General invertebrates
☐ Lower plant (byrophytes, mosses, liverworts, lichens, fungi and algae)
☐ Mammals
☐ Moths
☐ Molluscs
☐ Reptiles
☐Trees
☐ Other

15. How would you describe your wildlife identification skills of the following groups? **Please give a rating for all.**

(0 = no experience, 1 = I observe this animal or plant but am not able to identify it 5 = I can confidently identify the animal or plant I have observed)

	0	1	2	3	4	5
Amphibians	☐	☐	☐	☐	☐	☐
Beetles	☐	☐	☐	☐	☐	☐
Birds	☐	☐	☐	☐	☐	☐
Butterflies	☐	☐	☐	☐	☐	☐
Damselflies	☐	☐	☐	☐	☐	☐
Dragonflies	☐	☐	☐	☐	☐	☐
Flies	☐	☐	☐	☐	☐	☐
Flowering plants (non trees)	☐	☐	☐	☐	☐	☐
General Invertebrates	☐	☐	☐	☐	☐	☐
Lower plants	☐	☐	☐	☐	☐	☐
Mammals	☐	☐	☐	☐	☐	☐
Molluscs	☐	☐	☐	☐	☐	☐
Moths	☐	☐	☐	☐	☐	☐
Reptiles	☐	☐	☐	☐	☐	☐
Trees	☐	☐	☐	☐	☐	☐

16. How often are you making wildlife sightings?

☐ Daily

☐ Weekly

☐ Monthly

☐ Seasonally

☐ When recording schemes happen

☐ Ad hoc

☐ I don't know

☐ Other Click or tap here to enter text.

17. Why do you make wildlife sightings? Please tick all that apply. For 'other', please specify.

☐ As part of my work

☐ As part of local recording schemes

☐ As part of national recording schemes

☐ Personal interest

☐ To inform decisions in development or protecting sites

☐ Other Click or tap here to enter text.

18. Who do you share your wildlife sightings with? Please tick all that apply.

☐ TVERC

☐ iRecord

☐ iNaturalist

☐ Local group

☐ Recording scheme(s)

☐ I don't

☐ Other Click or tap here to enter text.

19. Could you tell us the reasons why you might not share your wildlife sightings? Please tick all that apply. For 'other', please specify.

☐ I don't have time

☐ I don't know how to share them e.g what format

☐ I don't know who to share my wildlife sightings with

☐ Lack of confidence in how my sightings will be used

☐ Lack of access to digital resources e.g. Computer, Phone Apps

☐ I hadn't thought about sharing them

☐ I would prefer not to share them

☐ Other Click or tap here to enter text.

20. Are there any wildlife groups you would like to make sightings for, that you currently don't? Please tick all that apply.

☐ Amphibians

☐ Beetles

☐ Birds

☐ Butterflies

☐ Damselflies

☐ Dragonflies

☐ Flies

☐ Flowering plants (non trees)

☐ General invertebrates

☐ Lower plant (byrophytes, mosses, liverworts, lichens, fungi and algae)

☐ Mammals

☐ Moths

☐ Molluscs

☐ Reptiles

☐Trees

☐ Other Click or tap here to enter text.

21. What support do you think would be useful for people making wildlife sightings?

☐ Training in identifying wildlife

☐ Training in how to share their sightings

☐ Advice about who can help

☐ Printed forms to add sightings to

☐ Mentors

☐ Equipment

☐Connecting with other people

☐ Other Click or tap here to enter text.

22. What do you think are the barriers that might prevent more people from participating in wildlife recording? e.g. time, travel, costs, health.

Thank you for taking the time to complete this survey.

If you have any questions, please contact Thames Valley Environmental Records Centre www.tverc.org tverc@oxfordshire.gov.uk

23. Are you happy for TVERC to contact you about this survey? We will not share your details with anyone else.

☐ Yes

☐ No

24. If yes, please provide an email address

Click or tap here to enter text.

6.3 Appendix 3 - Rationale for Wildlife Survey Questions

Demographic questions

Question	Topic	Rationale
1	Name	Optional
2	Location of respondents	To show where people are located. This can then be cross-referenced with where they record.
3	Age	*"Given the differences in life experience between different age groups, as well as people's changing tastes and behaviour as they get older, it can be very useful to include a survey age question"*. *Age Groups for Surveys - SmartSurvey*
4	Gender	Asking gender questions enables you to ensure that your sample is representative or to study the gender effects on your research. Understanding and recognizing our varied cultures requires gender-related questions in questionnaires. Gender Survey Questions For Questionnaires | QuestionPro
5	Disability	To ensure inclusivity - https://www.questionpro.com/blog/demographic-survey-questions/
6	Language	Based on paper questionnaire for Census 2021 for England and Wales, for individuals: Census 2021 paper questionnaires - Office for National Statistics - englishindividual (2).pdf
7	Ethnic Group	Based on the Office for National Statistics 2021 Census of England and Wales. It is recognised that these ethnic groups do not represent how all people identify. An 'other' option was provided for people to write in their ethnicity using their own words if they don't identify with any groups in the list. List of ethnic groups - GOV.UK Based on paper questionnaire for Census 2021 for England and Wales, for individuals: Census 2021 paper questionnaires - Office for National Statistics - englishindividual (2).pdf
8	Qualifications	Based on the Office for National Statistics "Education, England and Wales: Census 2021: 3.Highest level of qualification", where "Residents of England and Wales aged 16 years and over (48.6 million) were asked to record any qualifications (including academic, vocational, and professional qualifications) they had achieved in England, Wales or worldwide. This is used to calculate the highest level of qualification (so, the highest level of qualification that an individual reported irrespective of previous qualifications listed) using the following categories: • no qualifications: no formal qualifications

		• Level 1: one to four GCSE passes (grade A* to C or grade 4 and above) and any other GCSEs at other grades, or equivalent qualifications • Level 2: five or more GCSE passes (grade A* to C or grade 4 and above) or equivalent qualifications • apprenticeships • Level 3: two or more A Levels or equivalent qualifications • Level 4 or above: Higher National Certificate, Higher National Diploma, Bachelor's degree, or post-graduate qualifications • other qualifications, of unknown level" Education, England and Wales - Office for National Statistics
9	Employment Status	Based on paper questionnaire for Census 2021 for England and Wales, for individuals: Census 2021 paper questionnaires - Office for National Statistics - englishindividual (2).pdf
10	Universal Credit	Socio-economic indicator.
11	Household occupancy	Based on paper questionnaire for Census 2021 for England and Wales, for individuals: Census 2021 paper questionnaires - Office for National Statistics - englishindividual (2).pdf

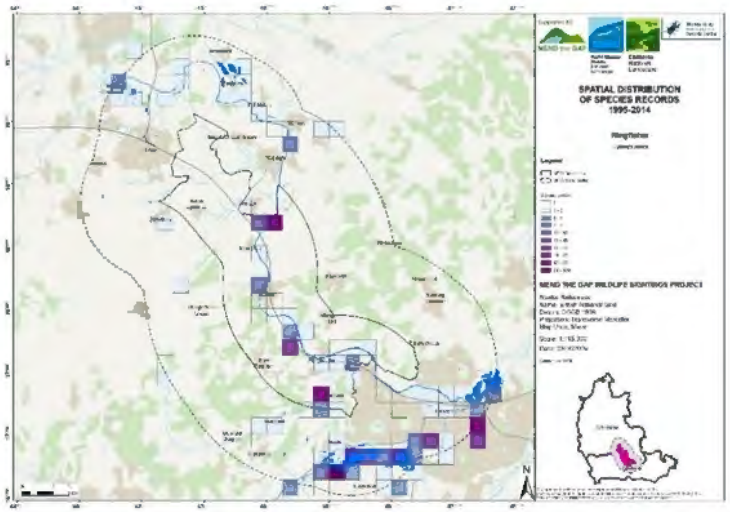
Wildlife Sightings questions

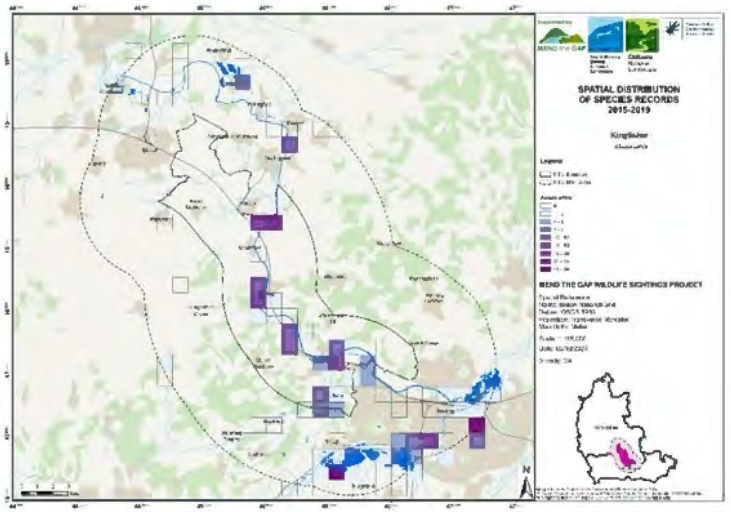
Question	Topic	Rationale
12	Location of sightings	Map of the Mend the Gap area was provided, split into parishes (see Appendix 2, page.75). There were 79 parishes in total. A Table of the parishes was also given (see Appendix 2, page.76. People were asked to state all parishes that applied to them, for where they make wildlife sightings, either by name or number. It was clarified, that f*or this survey, 'wildlife sighting' means any time when you observe wildlife in a way that would allow you to identify them, whether from your garden, on a walk, or a dedicated outing*'
13	Travel	How are people travelling to where they record. Do they stay local to where they live, or do they travel further afield. Or do they use multiple methods.
14	Which wildlife groups	15 groups, plus an 'other' option. To try and keep the list form being too long, mammals for example wasn't broken down to a separate group for bats. Respondents could give multiple answers. Wildlife Groups chosen – linked to LNRS. 16 including other. Mammals wasn't broken down, for example to have bats separately, as we gave the option for 'other' if anyone wanted to specify the wildlife they make sightings of. And to take this approach across taxon would have

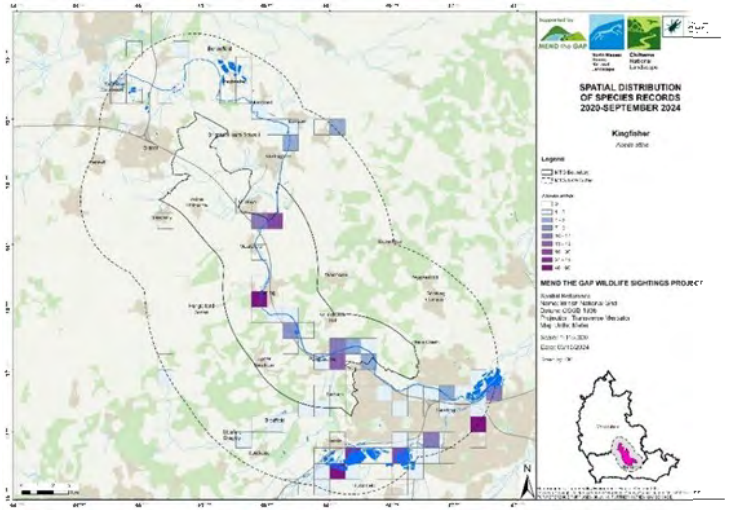
		created a very extensive list. At this stage we are trying to gauge an overall understanding of what wildlife people are making sightings of, and something further could be to then break down any specific taxon groups further and ask for more detail.
15	ID skills of the wildlife groups	Respondents were asked to give themselves a rating for their skills of each group, from 0 to 5. 0 = no experience,1 = I observe this animal or plant but am not able to identify it, 5 = I can confidently identify the animal or plant I have observed.
16	Frequency of making sightings	Are people making sightings on a daily basis, or just ad hoc.
17	Why do they make wildlife sightings	What motivates people to make wildlife sightings. Is it for personal interest, is it part of their work, are they taking part in recording schemes, or do they do it to contribute to wildlife protection and decision making. Again multiple answers could be given.
18	Do they share their sightings	Are people sharing their observations and how. This will help to give an indication of whether there is a recording gap that could be filled.
19	If not, are there reasons why not.	This will help to see how any recording gaps could be filled.
20	Potential to record other groups	Are there any wildlife groups they are interested in recording, that they don't currently.
21	Support	Is there any support they would like, which can help to identify next possible steps.
22	Barriers to participation	Do they have any suggestions for actions that could help remove or reduce barriers to people observing wildlife and sharing their observations.

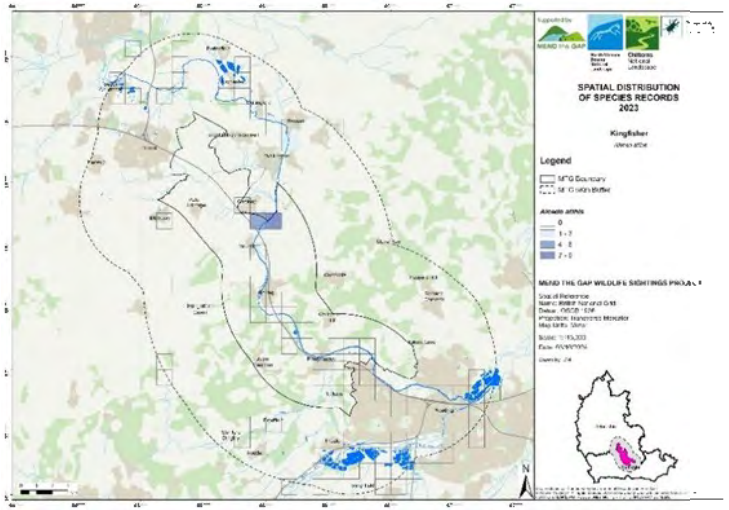
6.4 Appendix 4 – Species Spatial Distribution Maps

Kingfisher Alcedo atthis

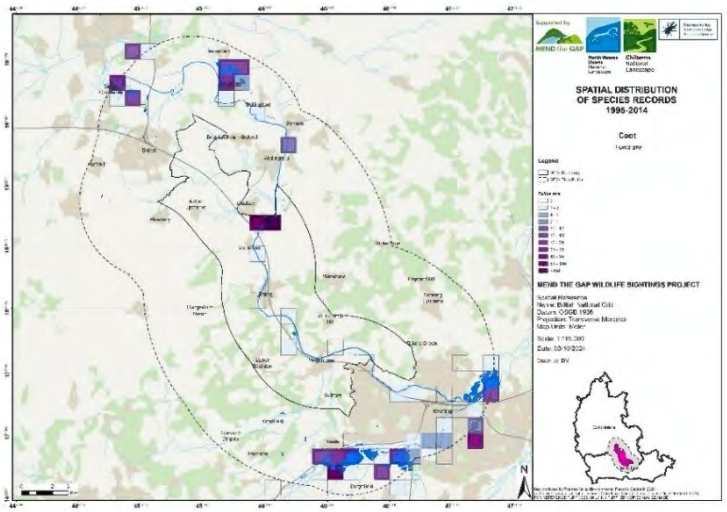


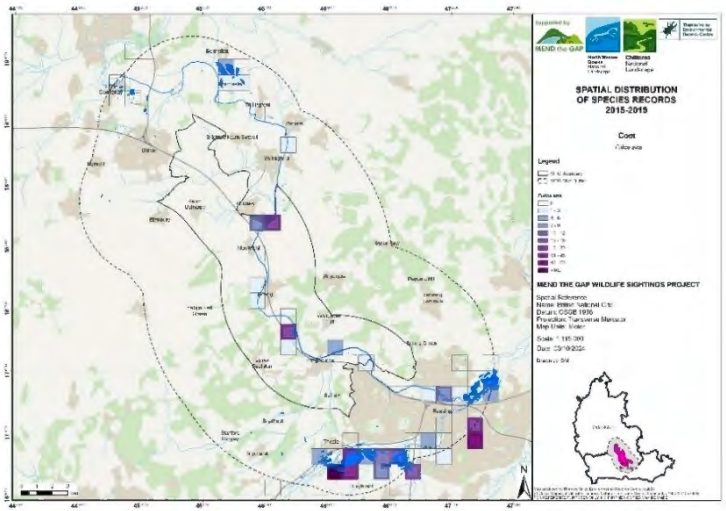


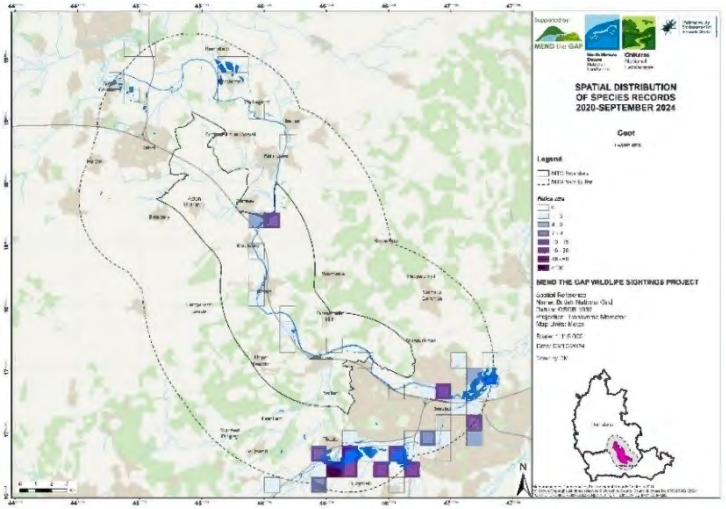

SPATIAL DISTRIBUTION
OF SPECIES RECORDS
2020-SEPTEMBER 2024
Kingfisher
Legend
MEND THE GAP WILDLIFE SIGHTINGS PROJECT
N

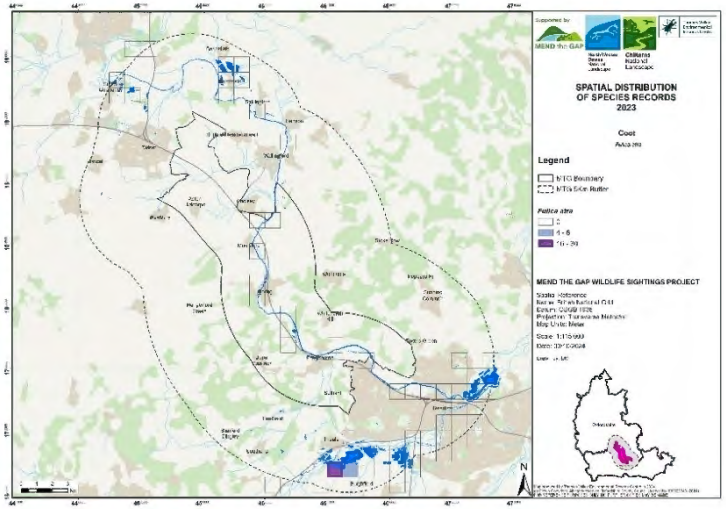

SPATIAL DISTRIBUTION
OF SPECIES RECORDS
2023
Kingfisher
Legend
N

Coot Fulica atra

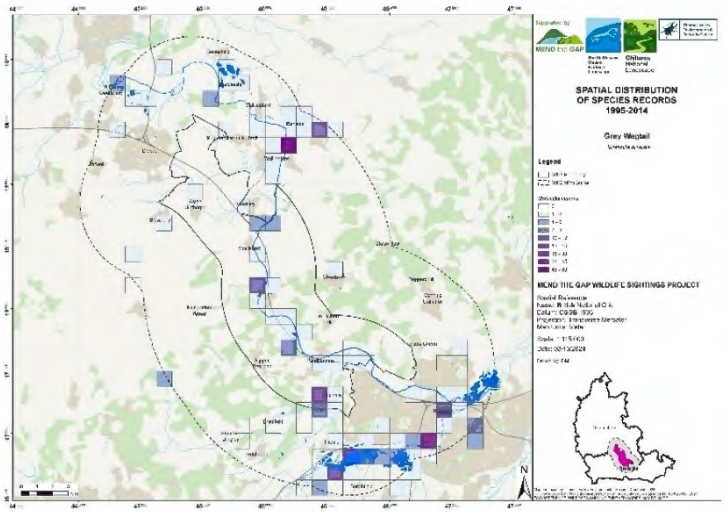


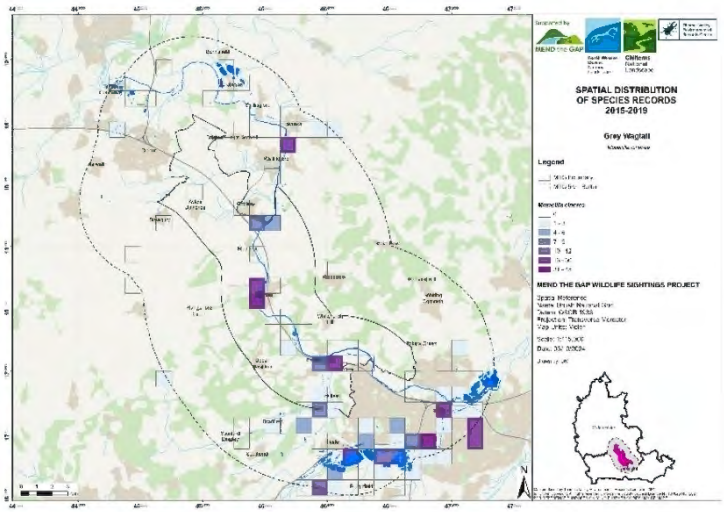


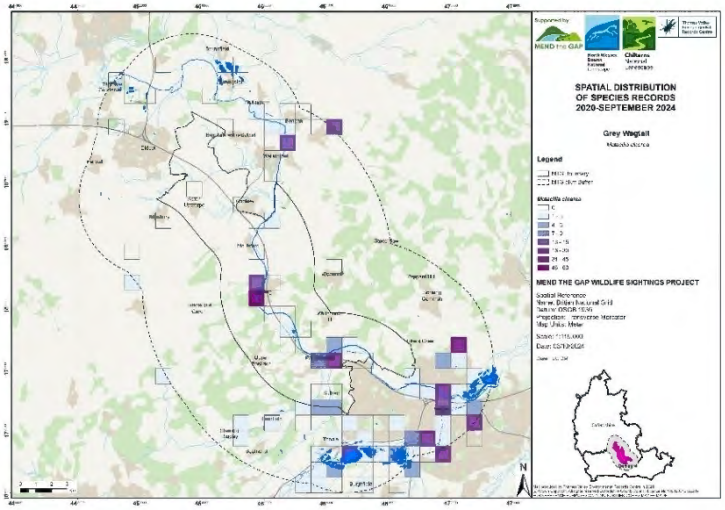


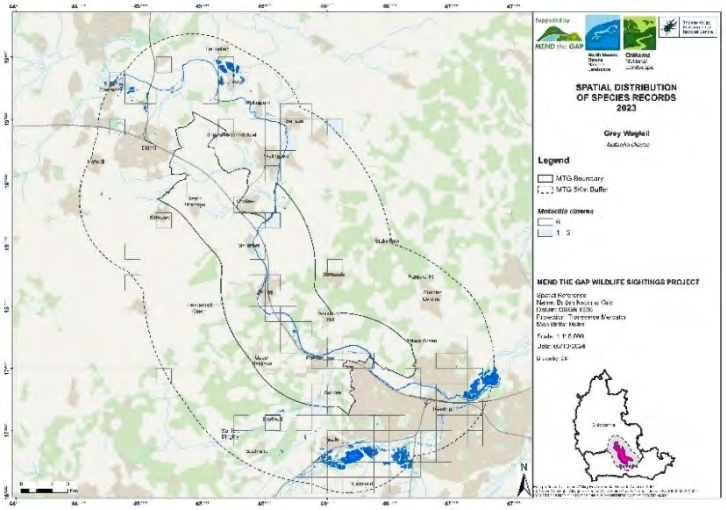


Grey wagtail Motacilla cinerea

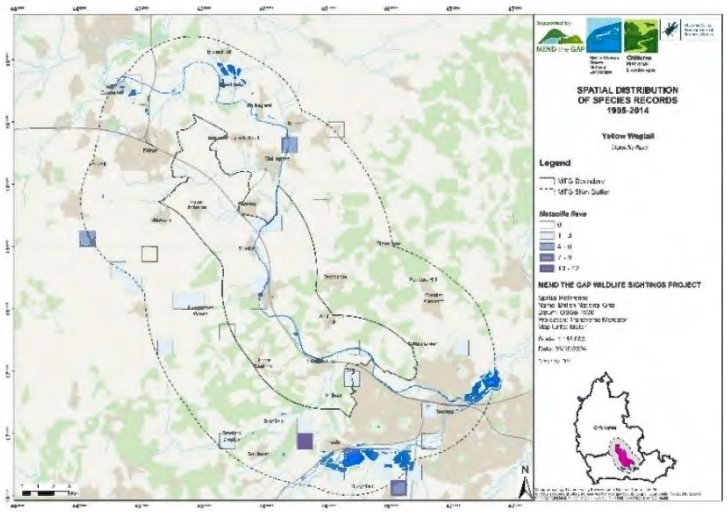


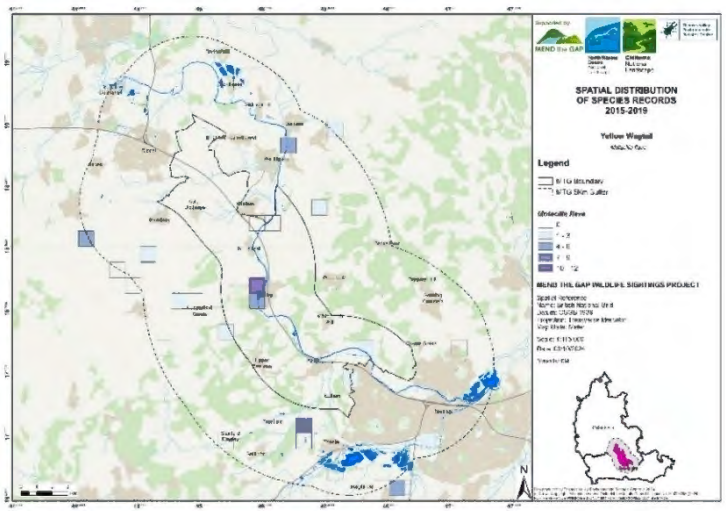


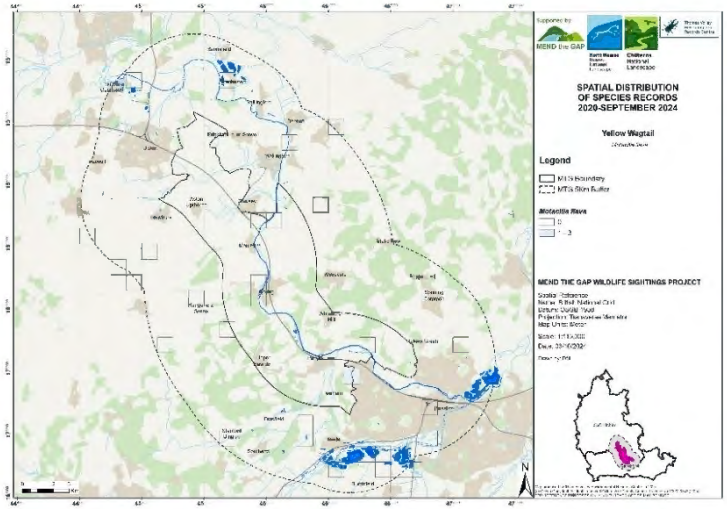


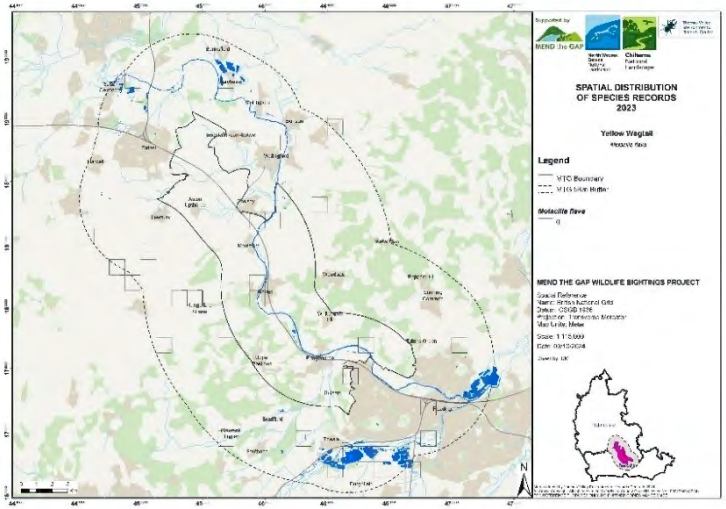


Yellow Wagtail **Motacilla flava**

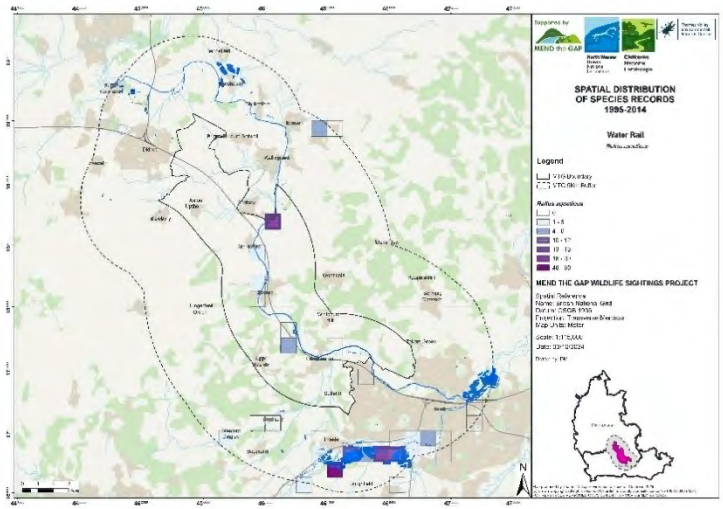


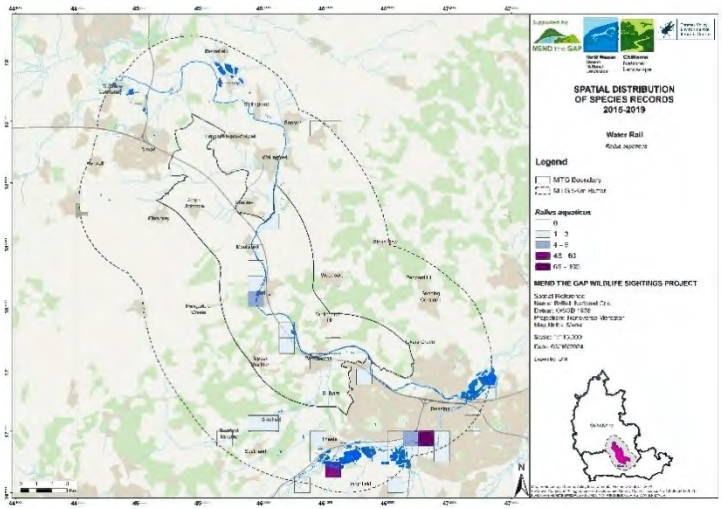


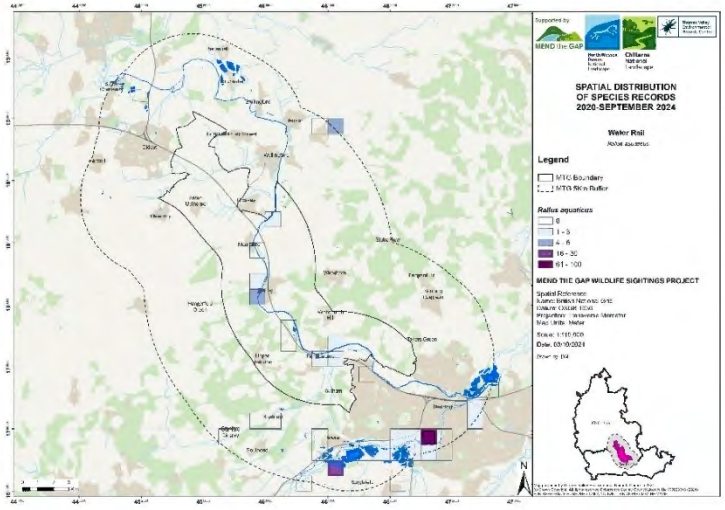


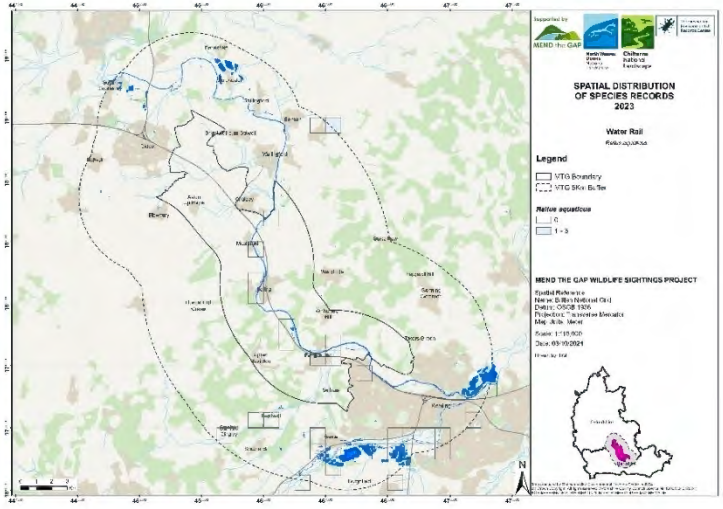


Water rail Rallus aquaticus

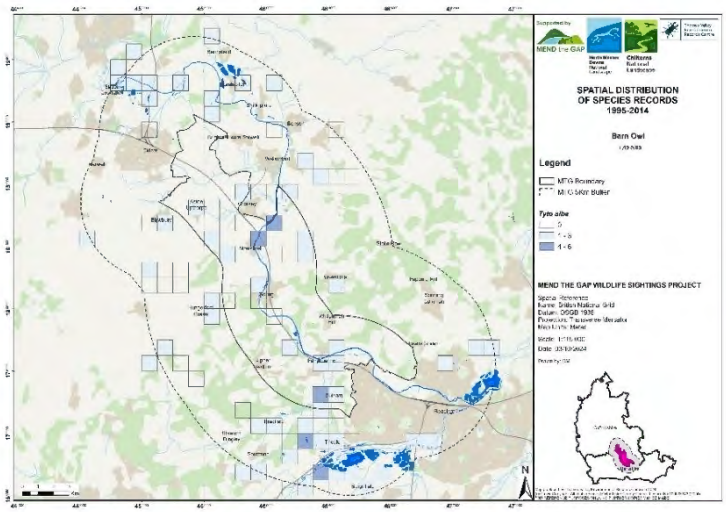


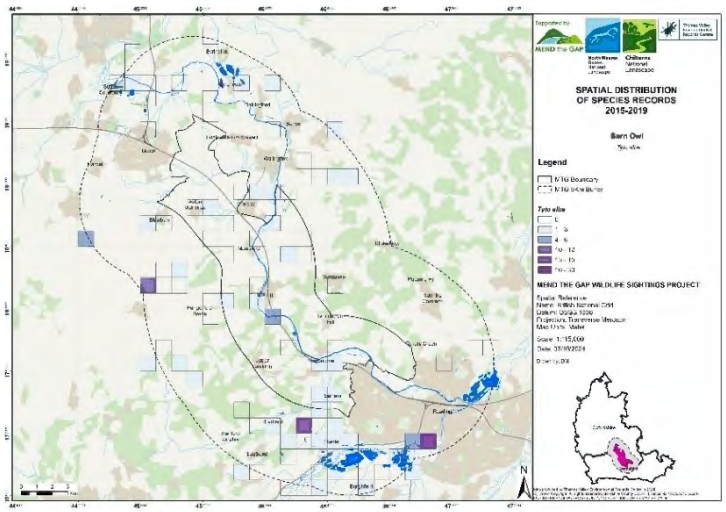


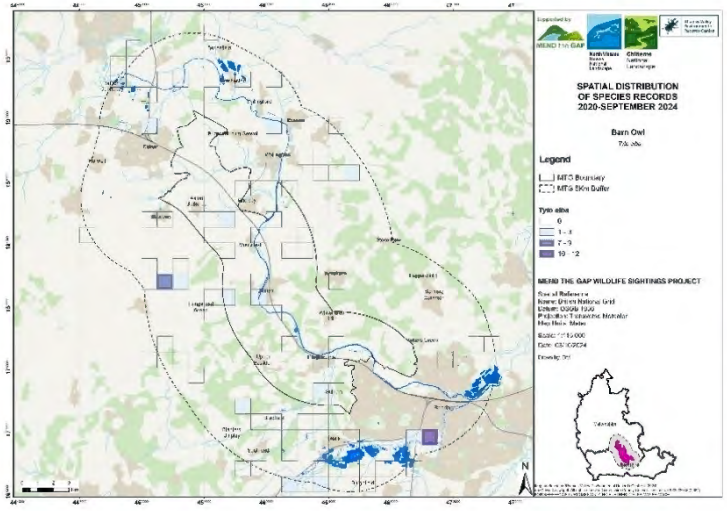


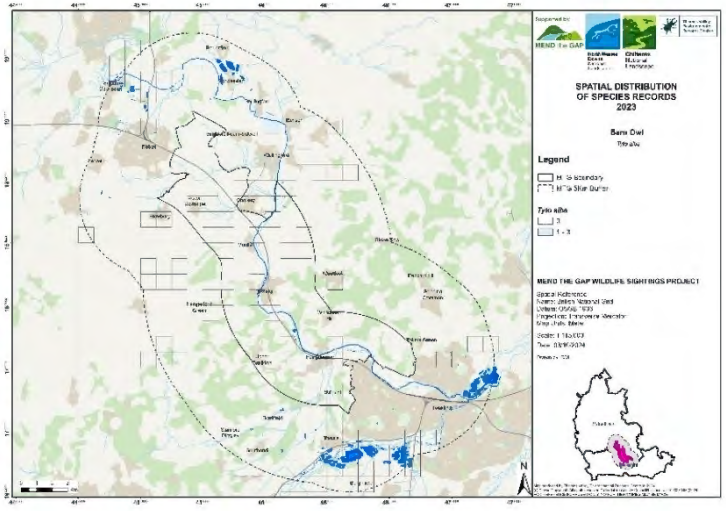


Barn owl **Tyto alba**

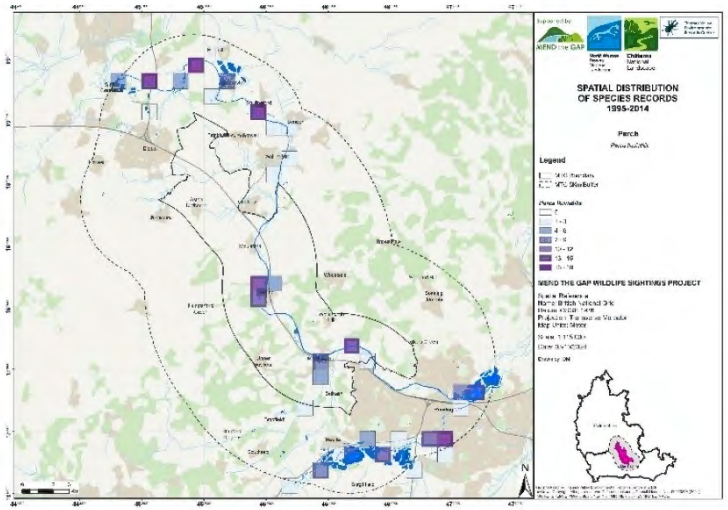


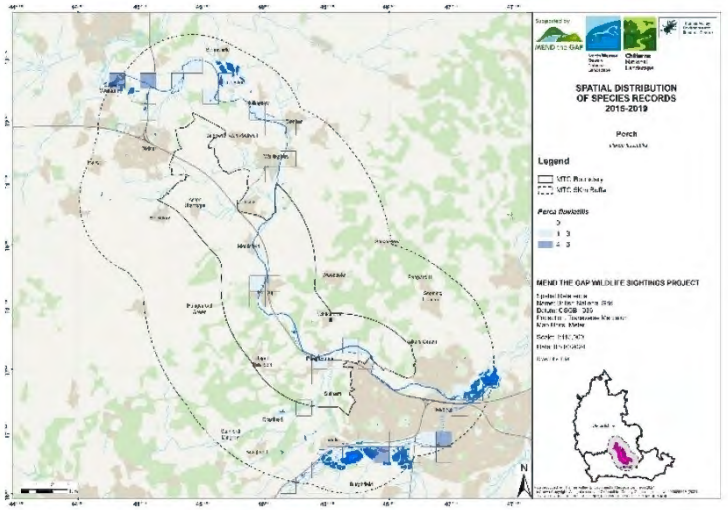


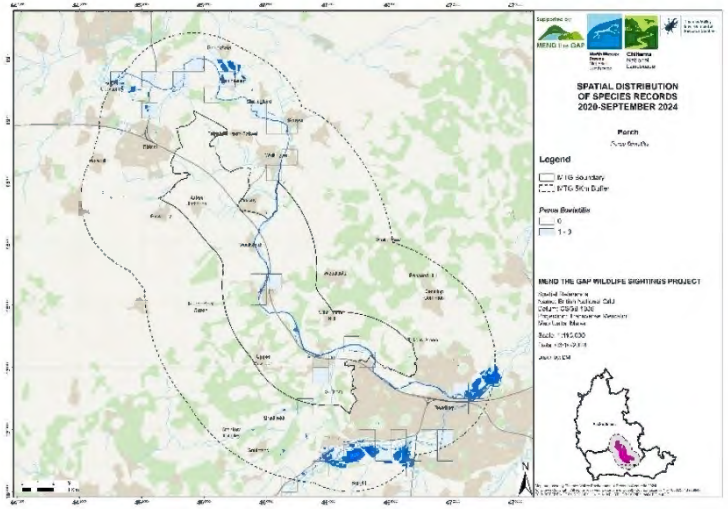


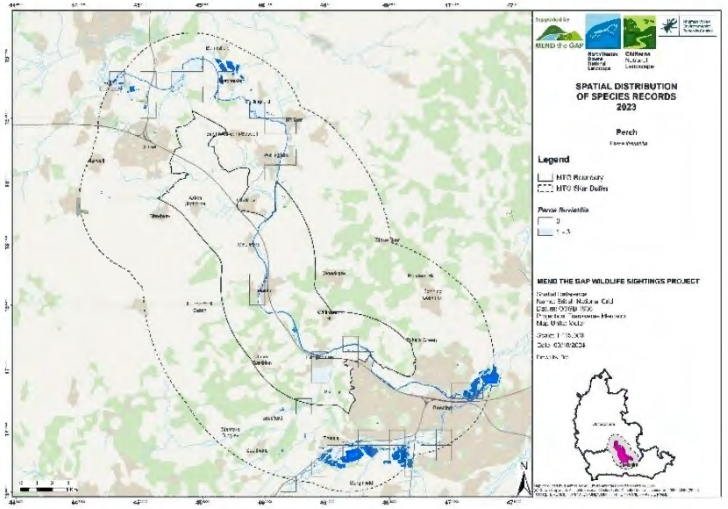


Perch Perca fluviatilis

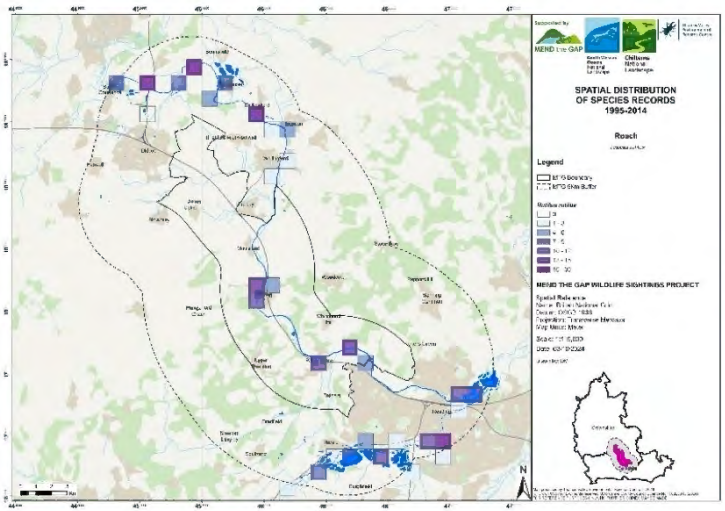


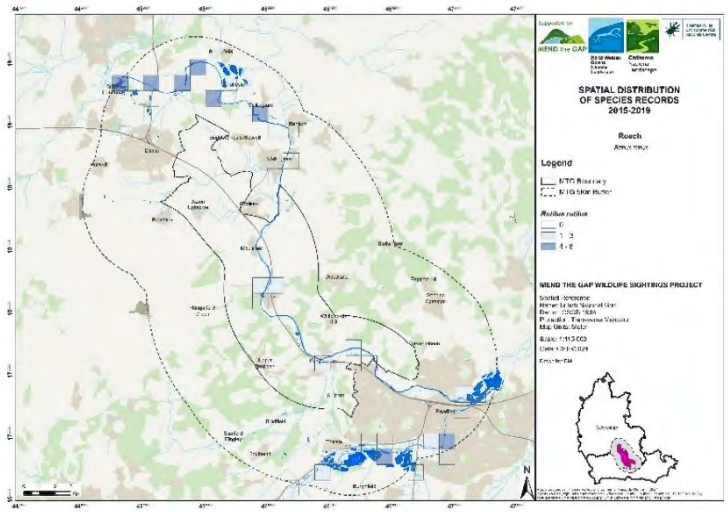


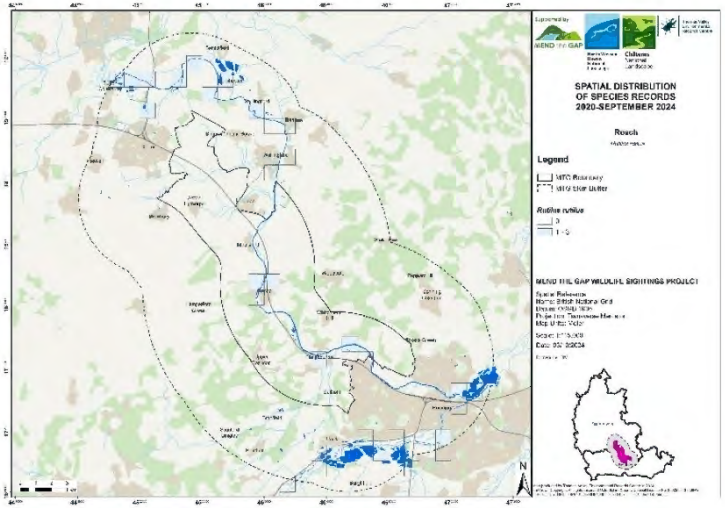




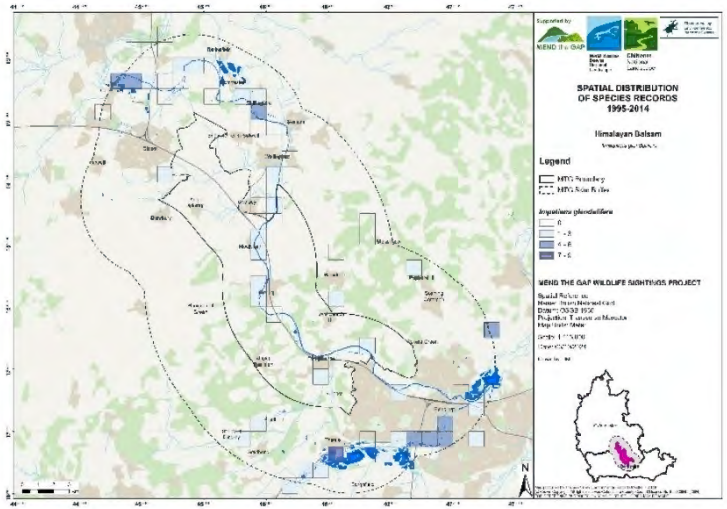
Roach Rutilus rutilus

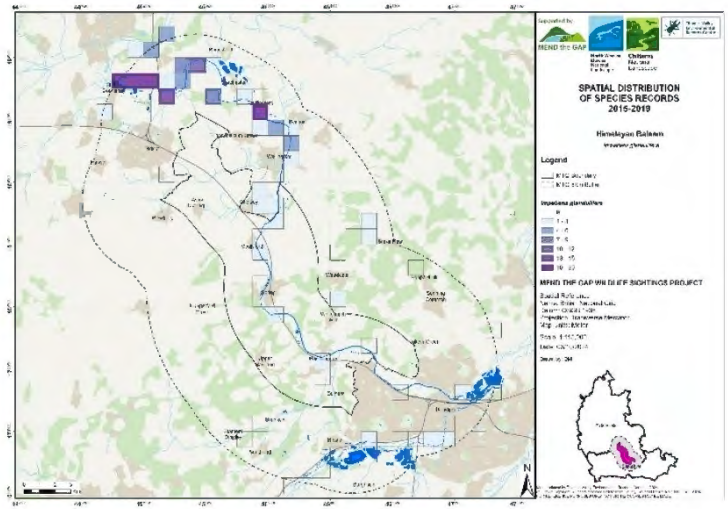


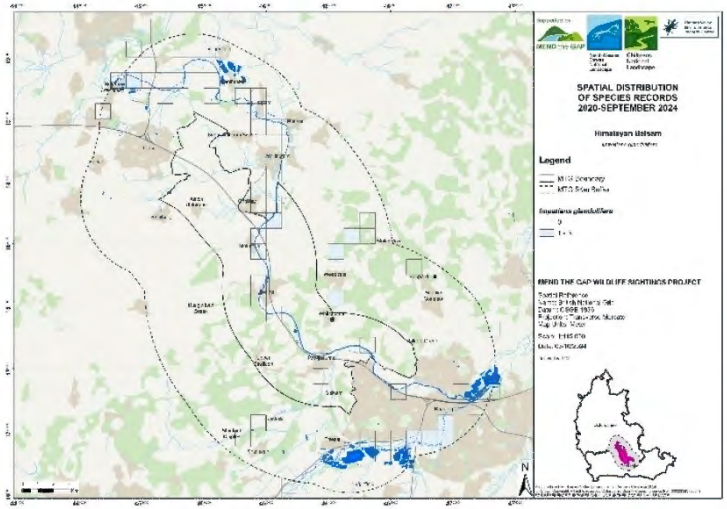


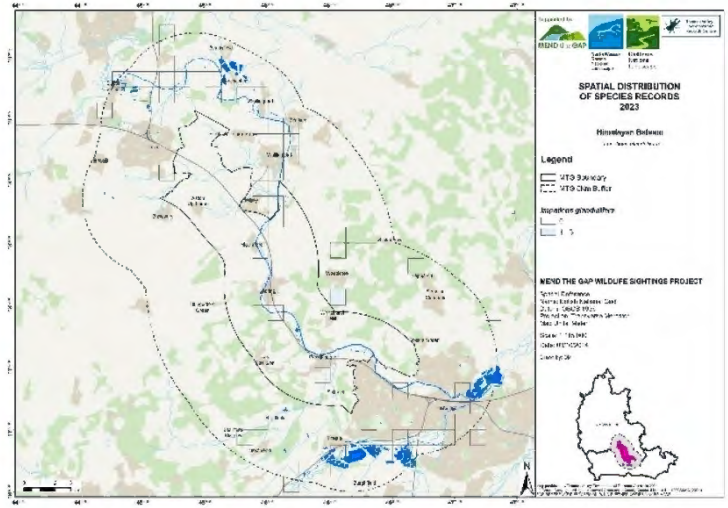


Himalayan balsam Impatiens glandulifera

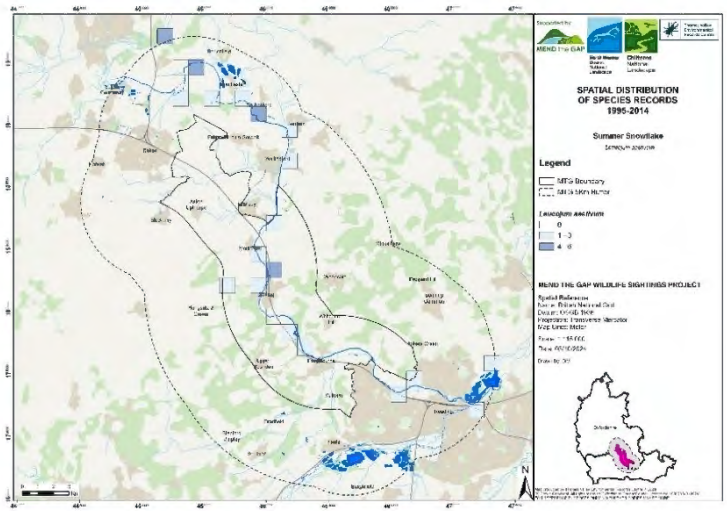


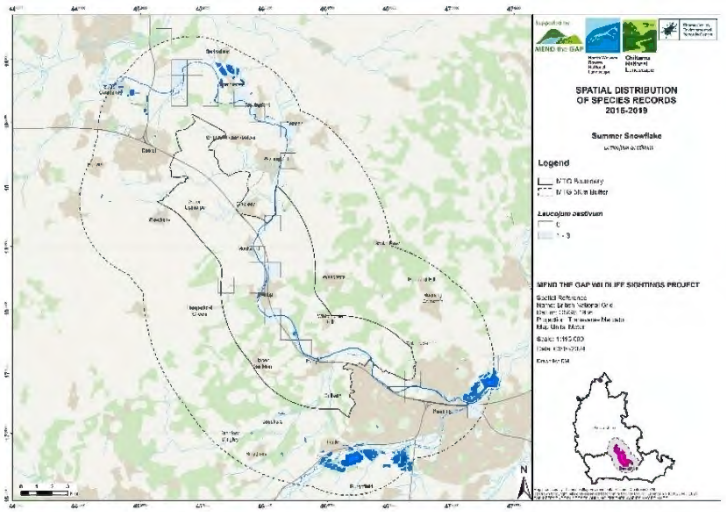


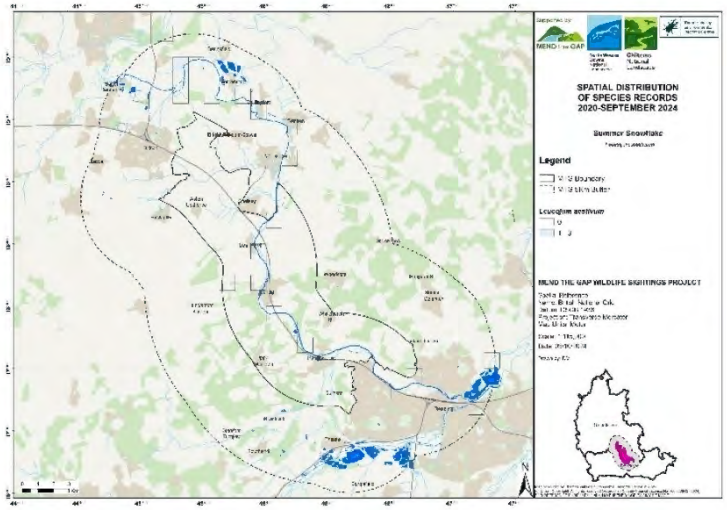


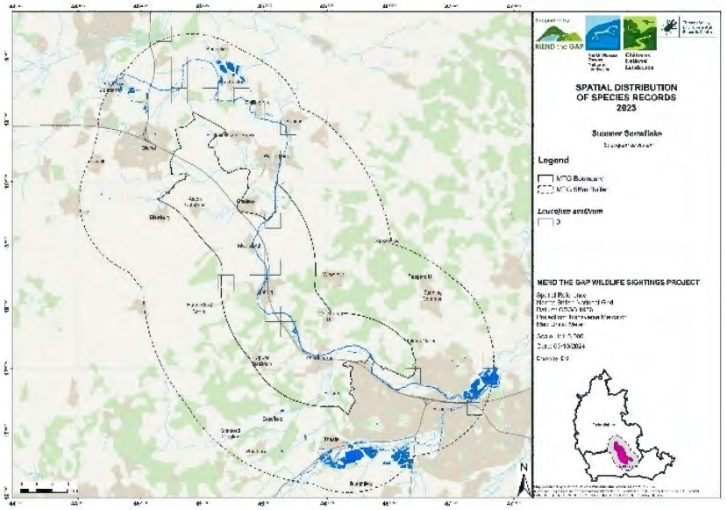


Lodden lily Leucojum aestivum

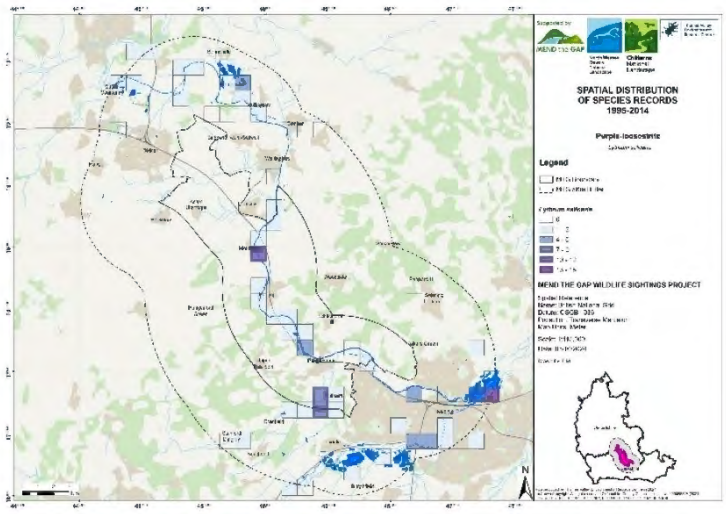


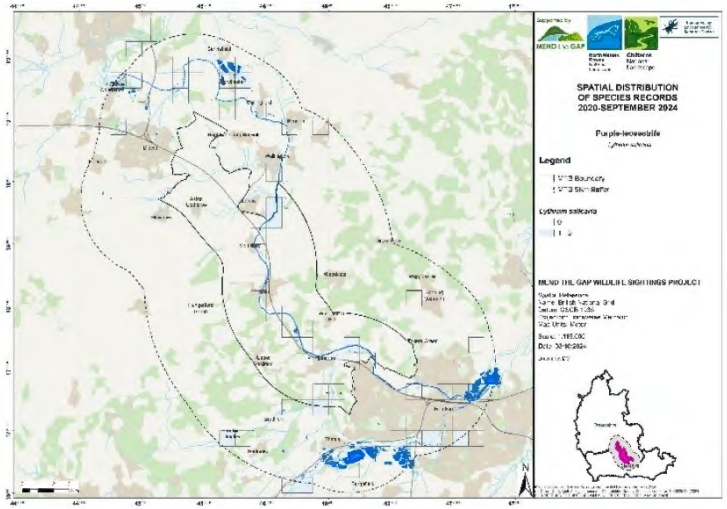


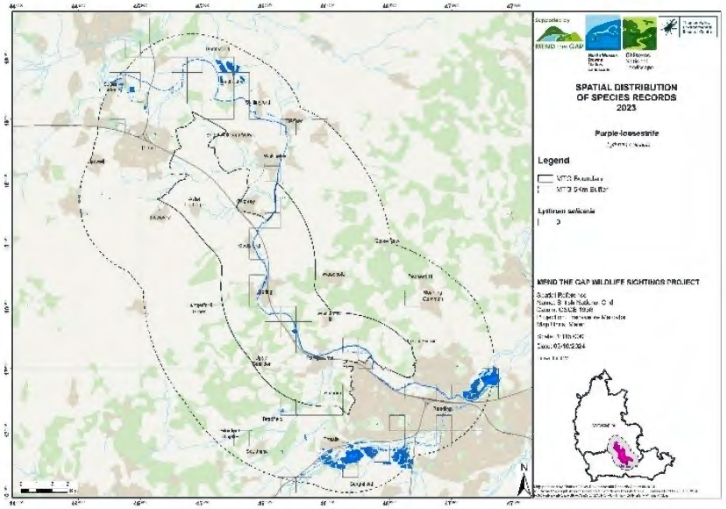




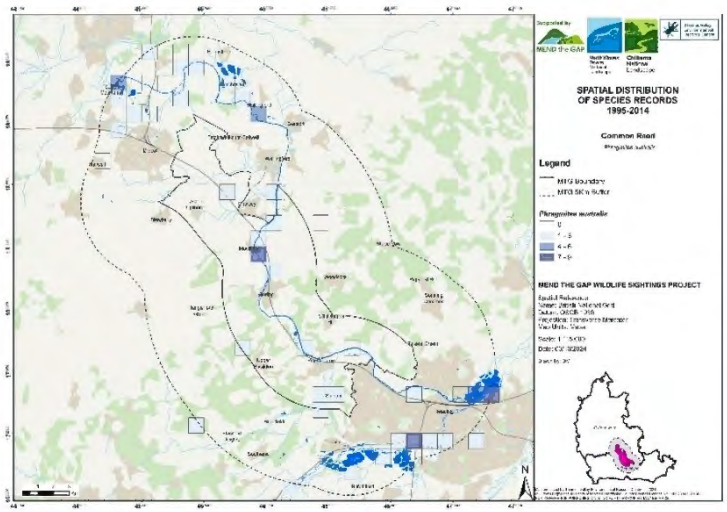
Purple Loosestrife Lythrum salicaria

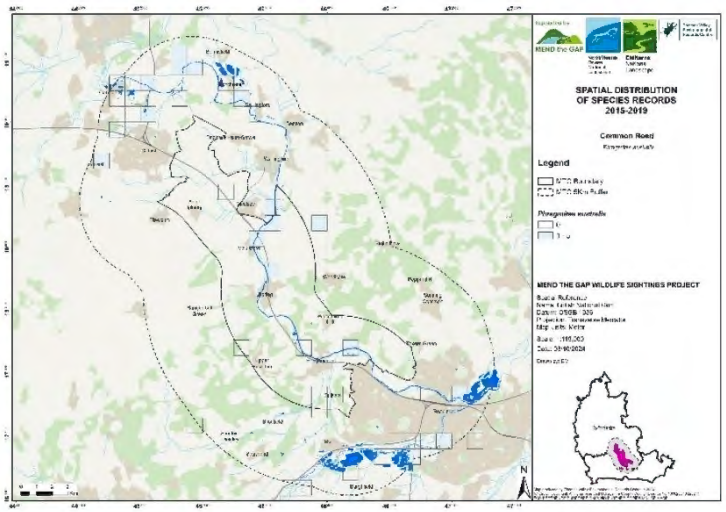


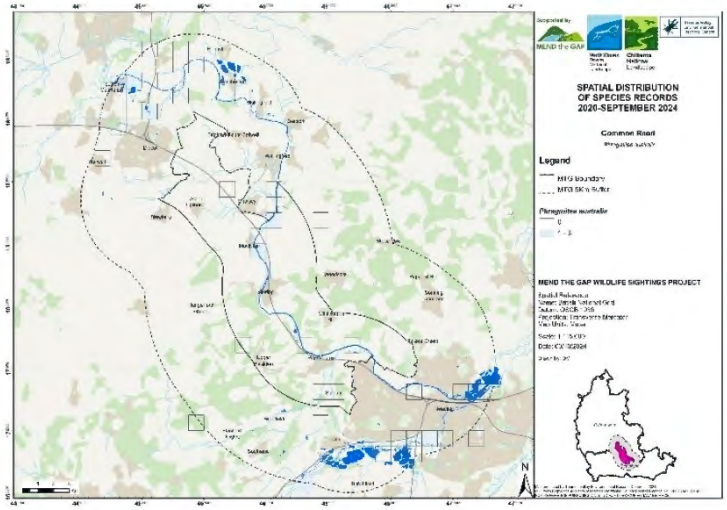


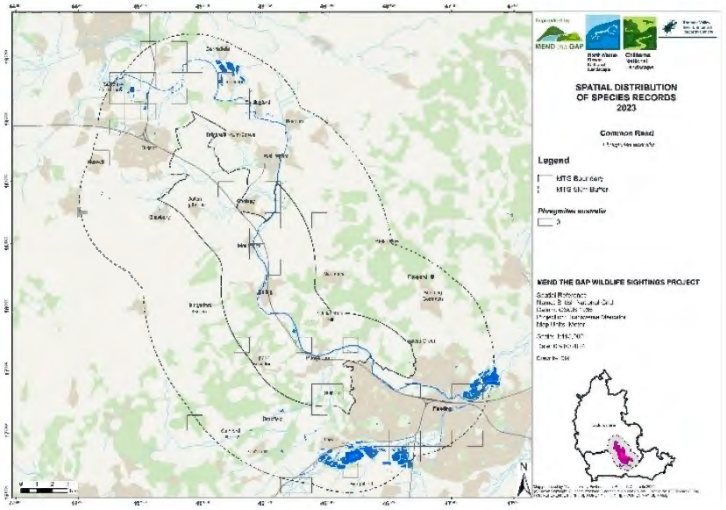


Common Reed **Phragmites australis**

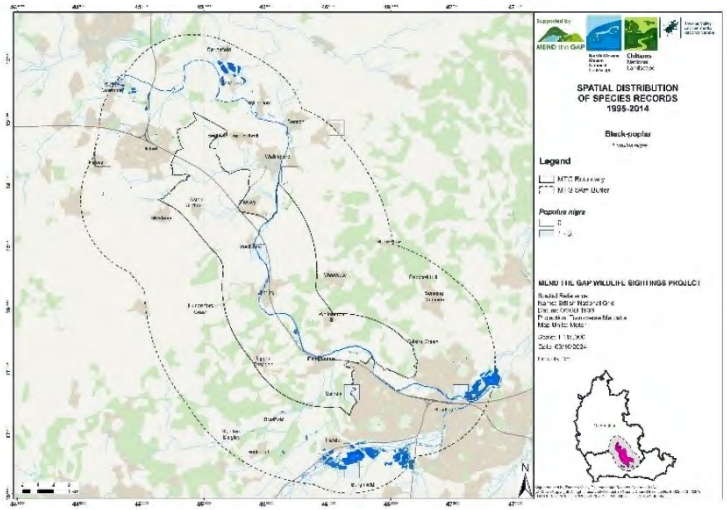


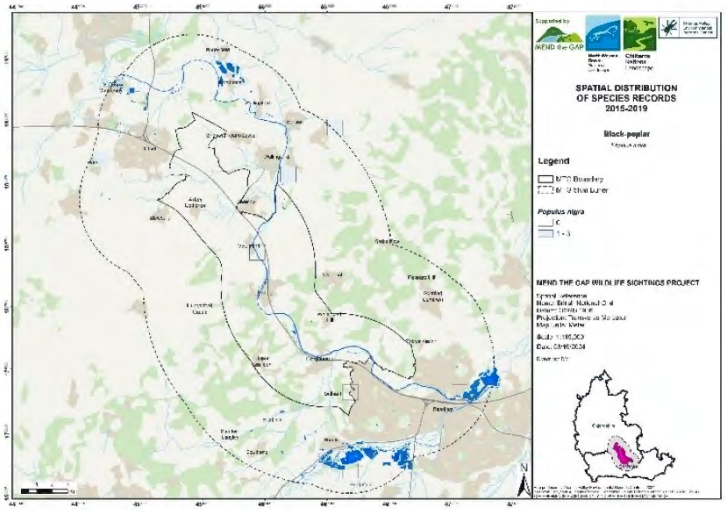


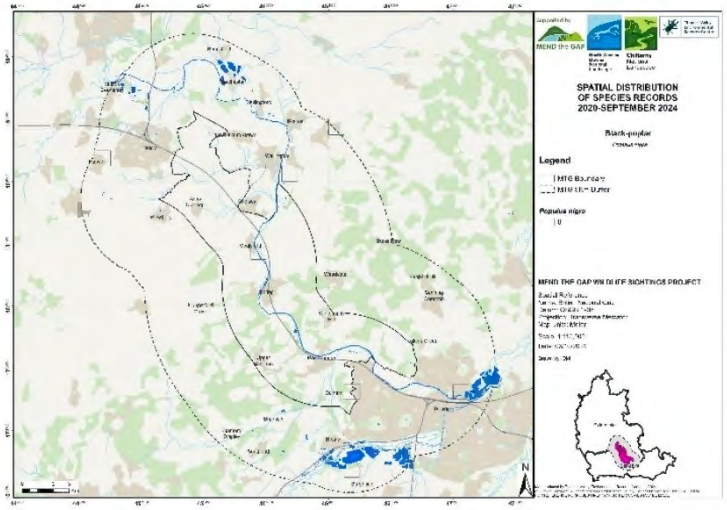


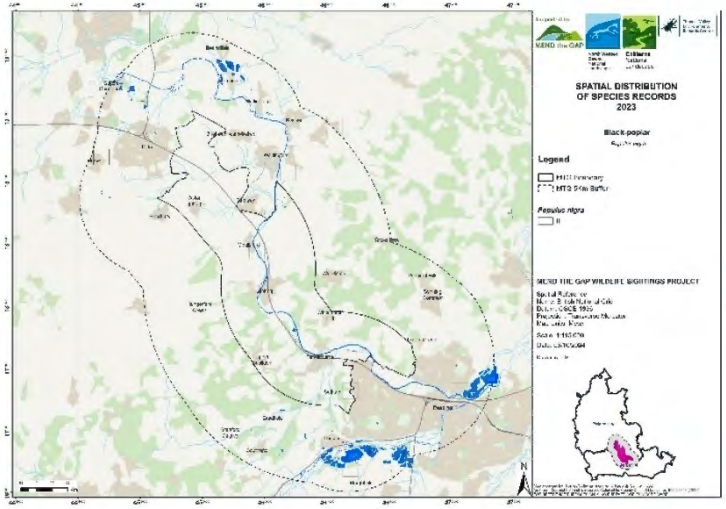


Black poplar Populus nigra

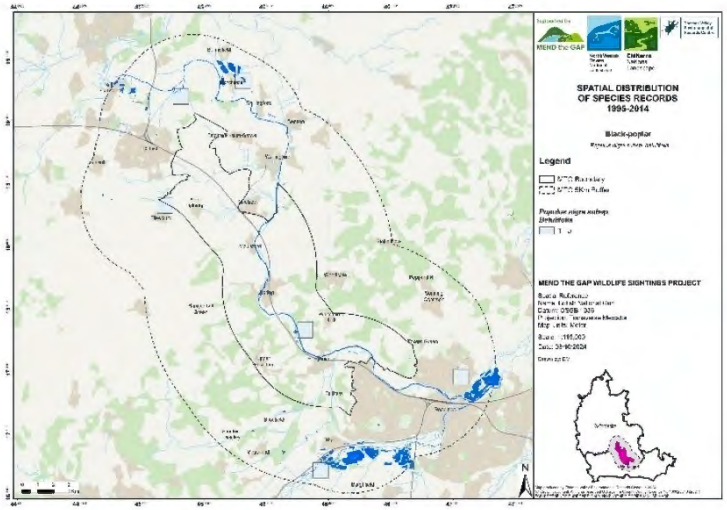


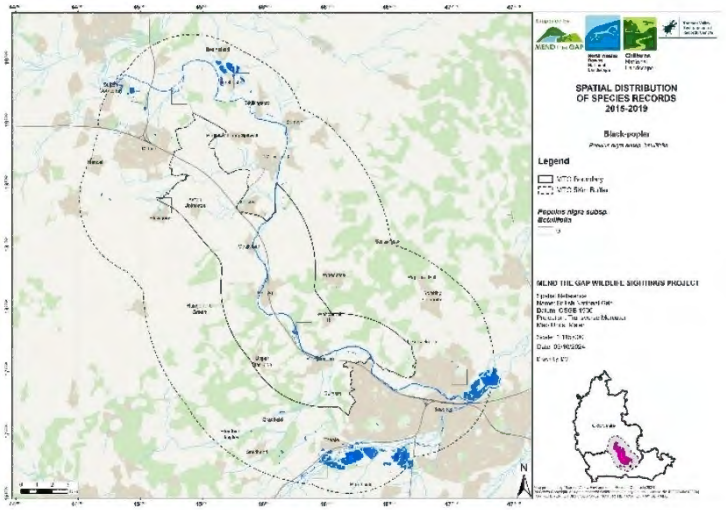


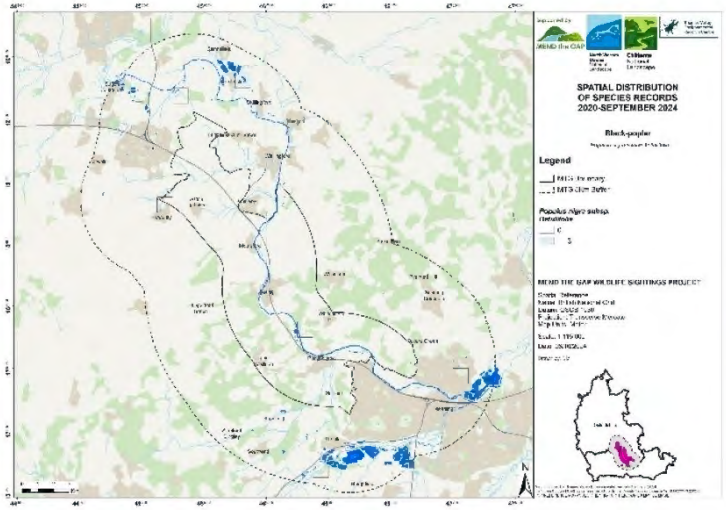


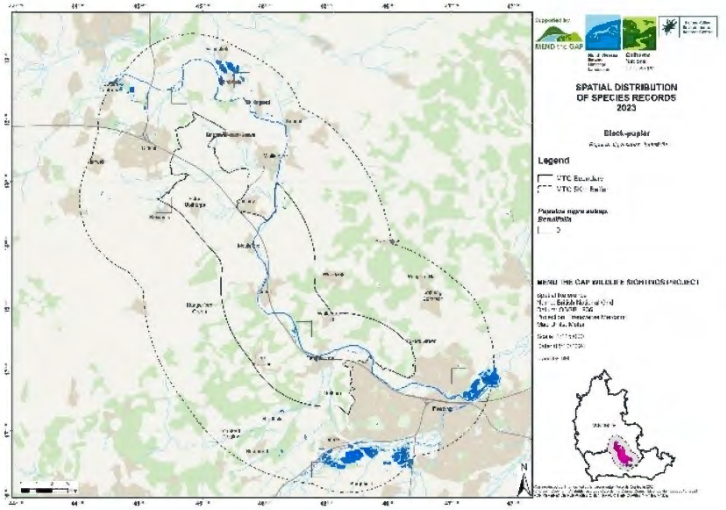


Black poplar Populus nigra subspecies betulifolia

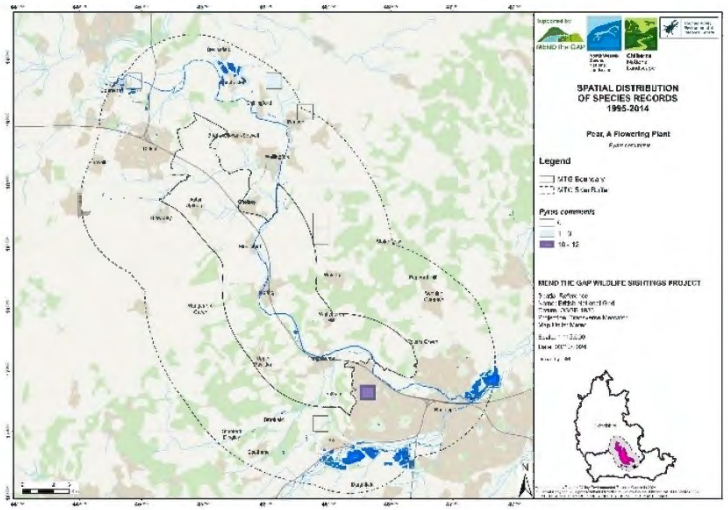


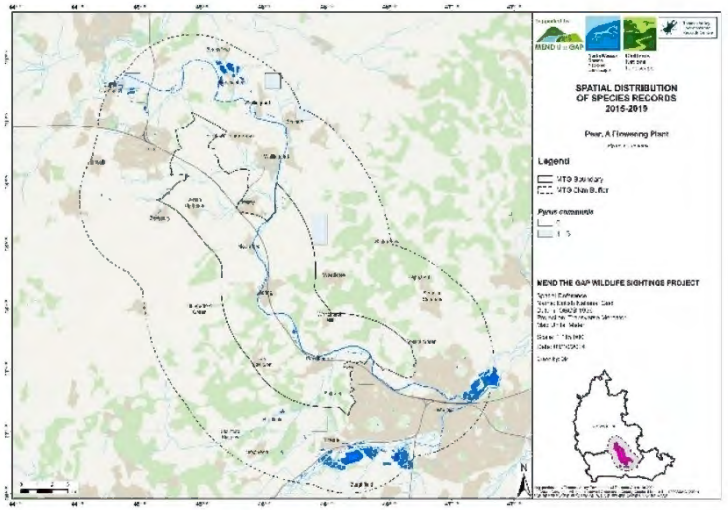


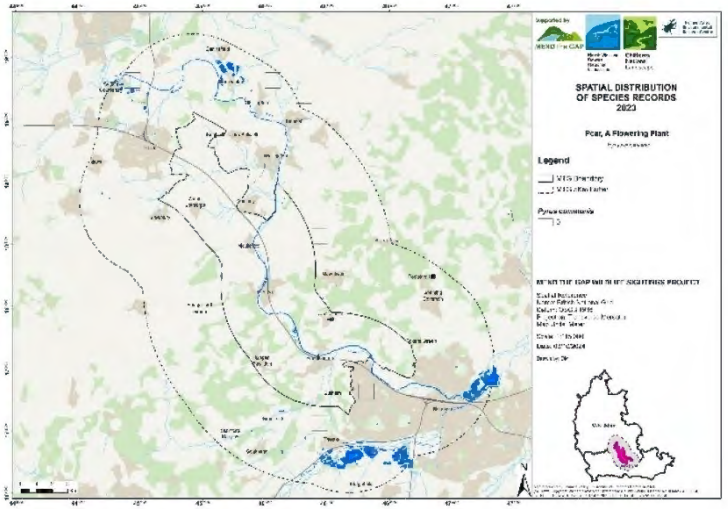




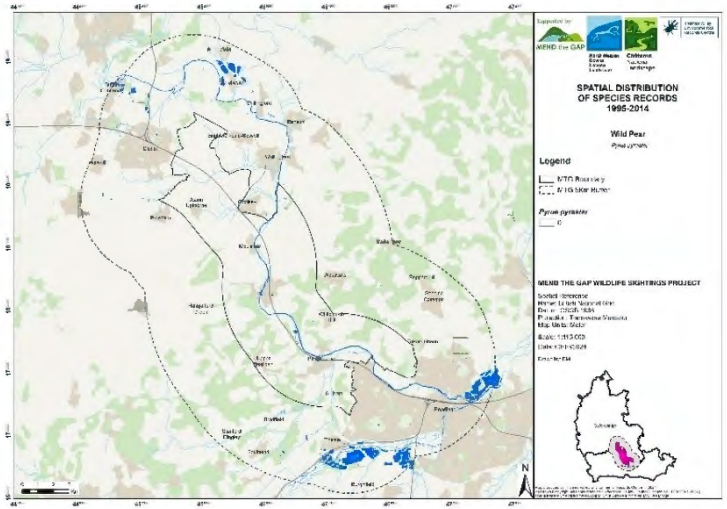
Wild pear Pyrus communis

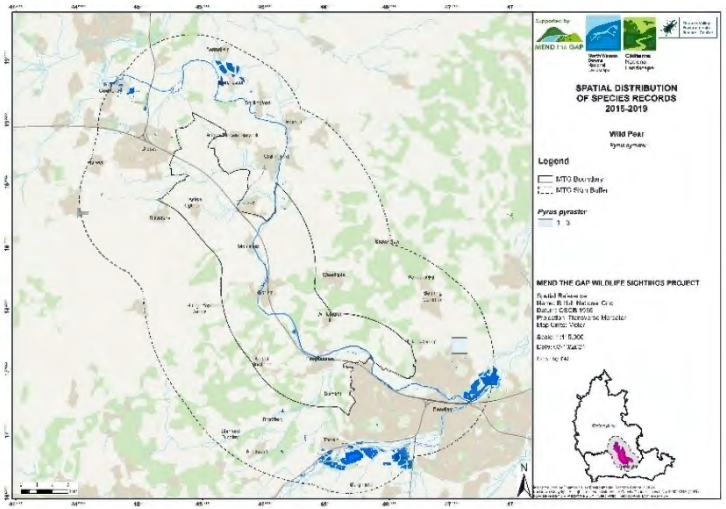


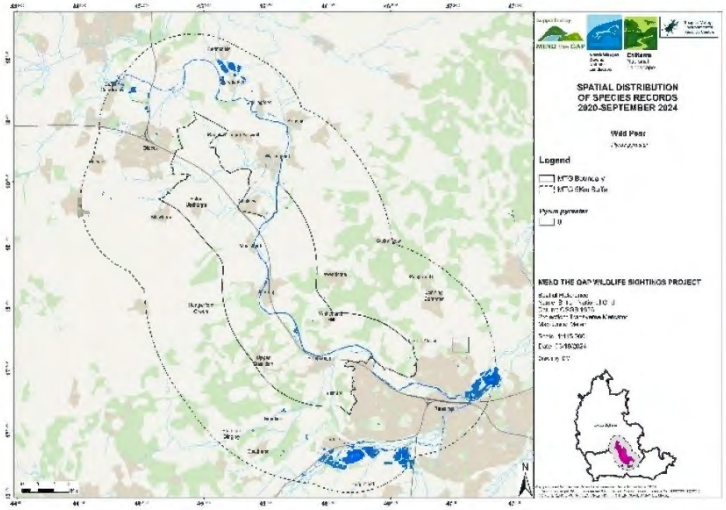


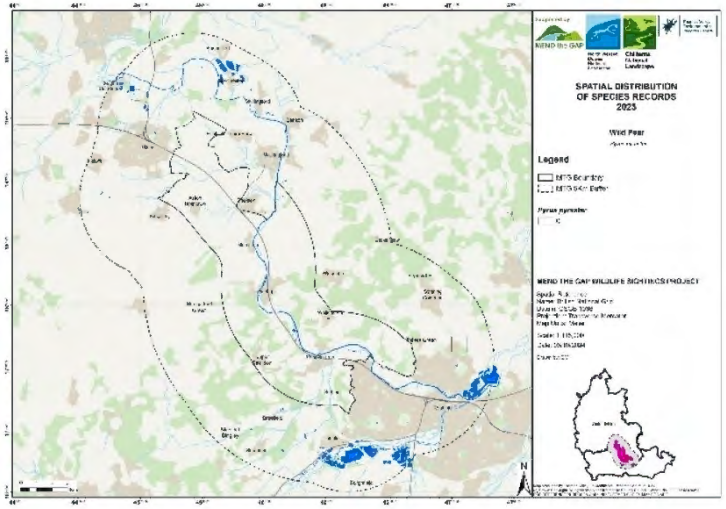


Wild pear **Pyrus pyraster**

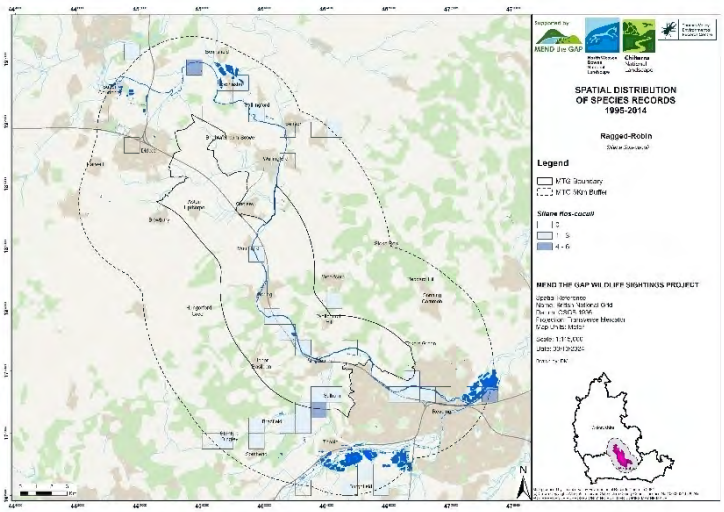


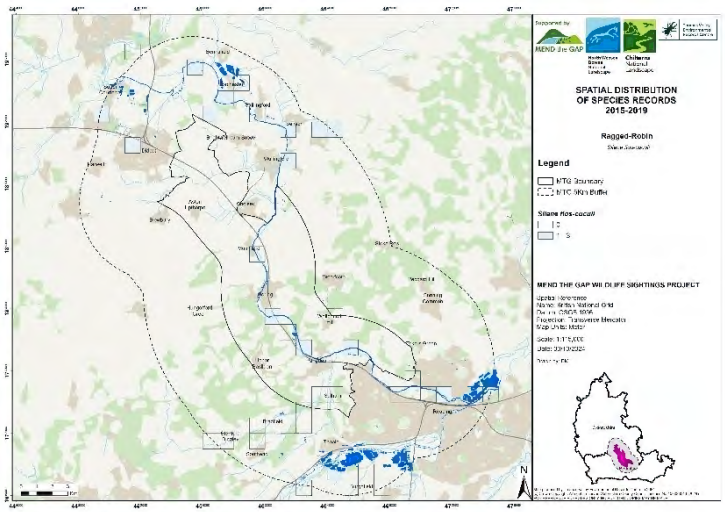


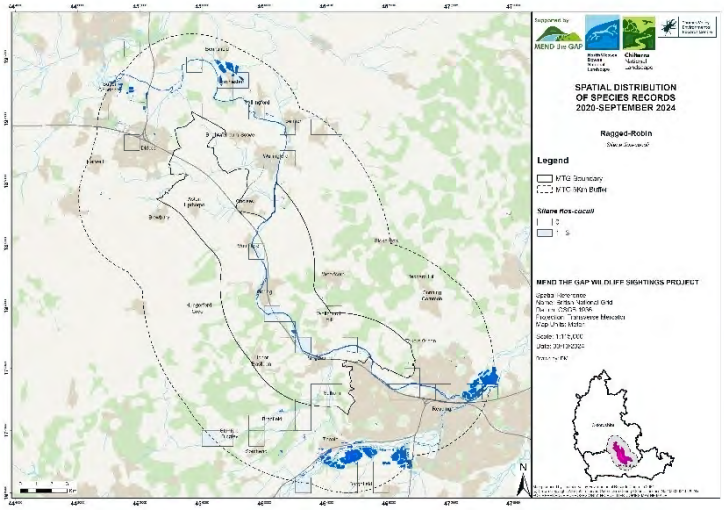


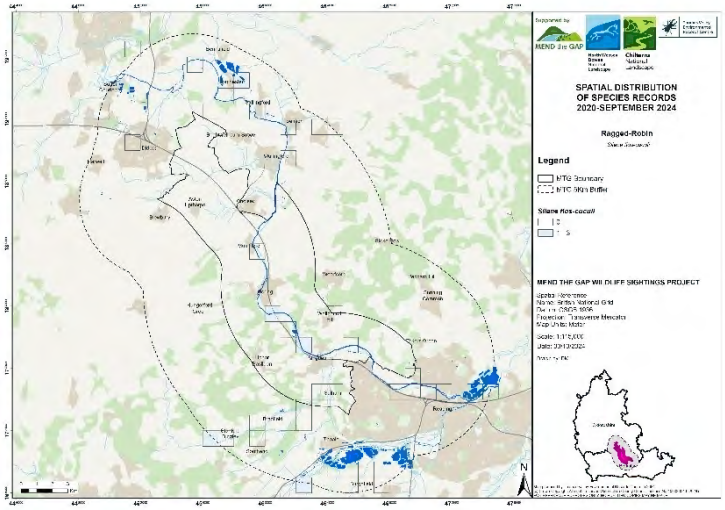


Ragged robin Silene flos-cuculi (syn. Lychnis flos-cuculi)

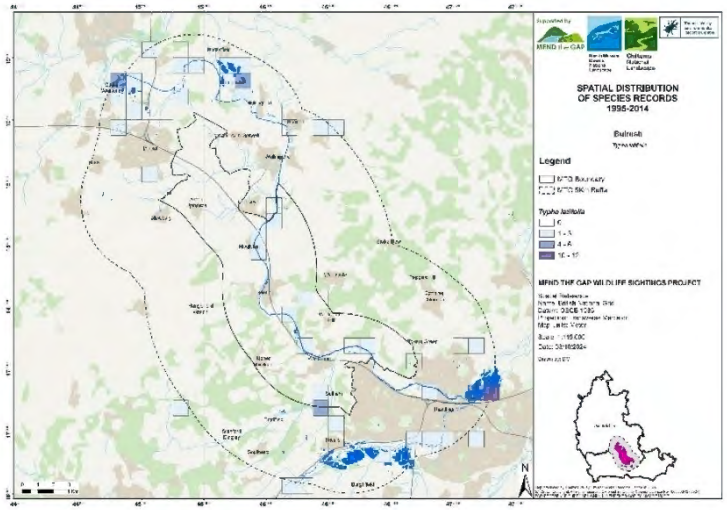


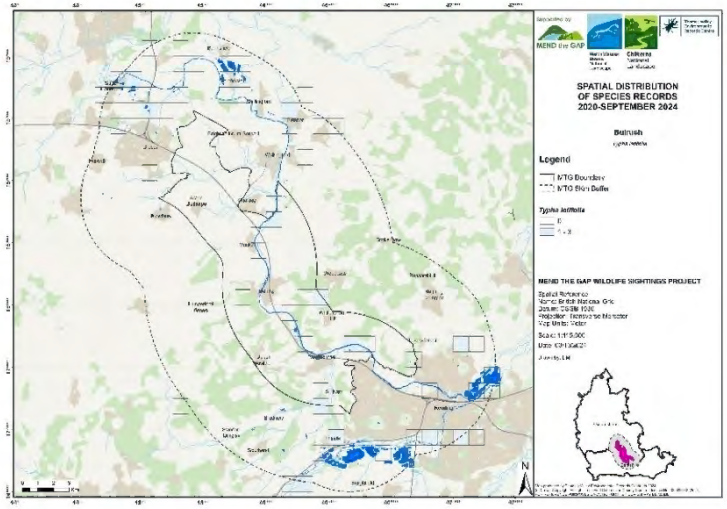


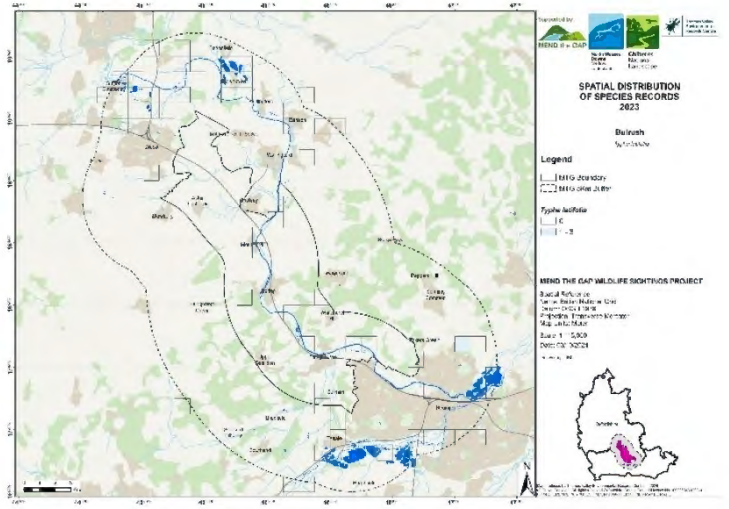




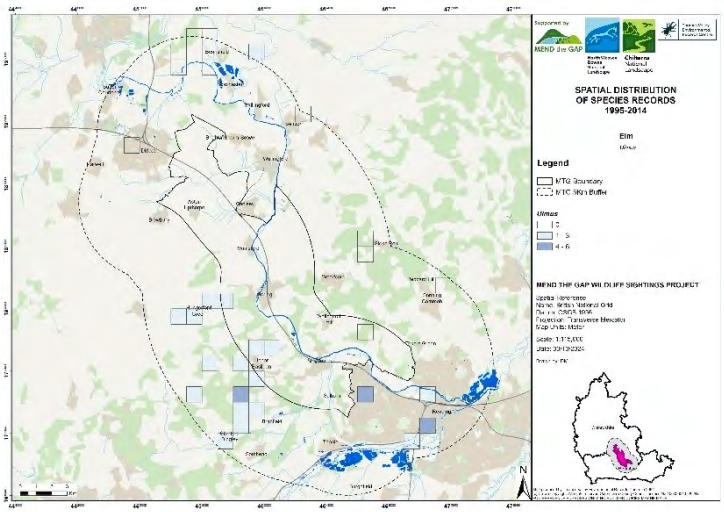
Greater Reedmace Typha latifolia

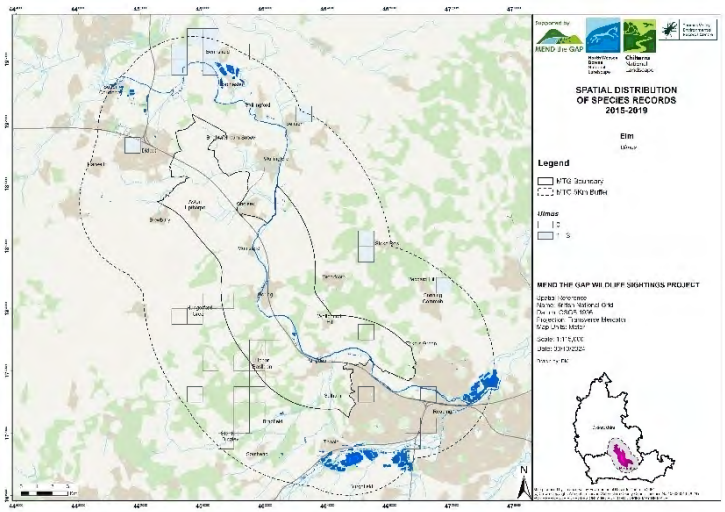


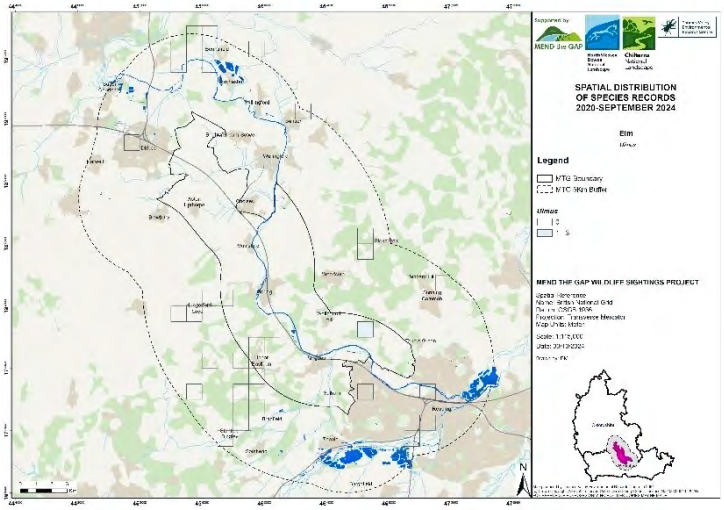


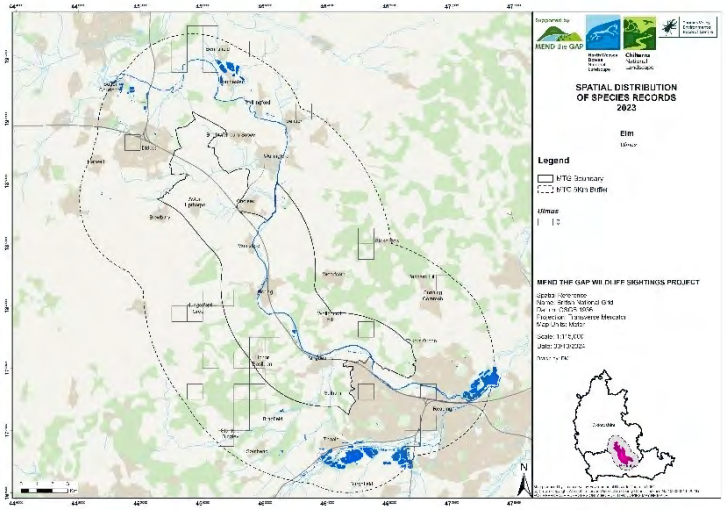


Elm (disease resistant) **Ulmus**

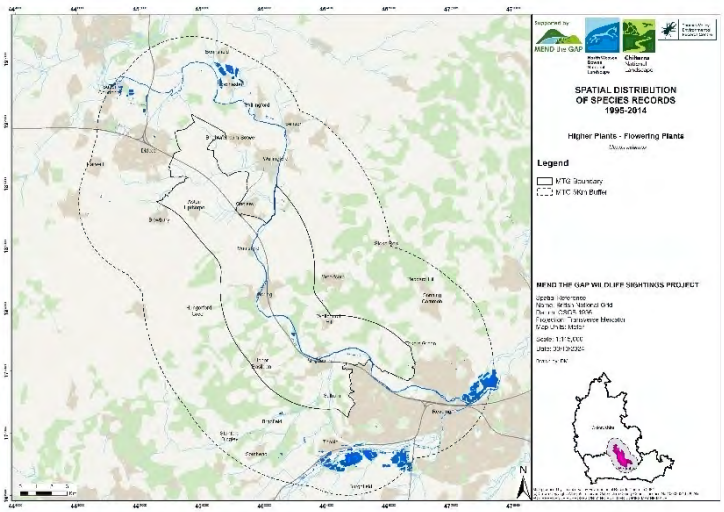


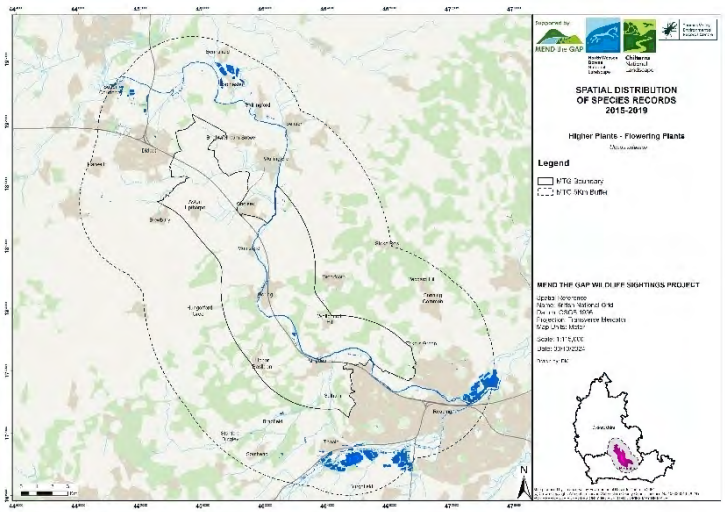


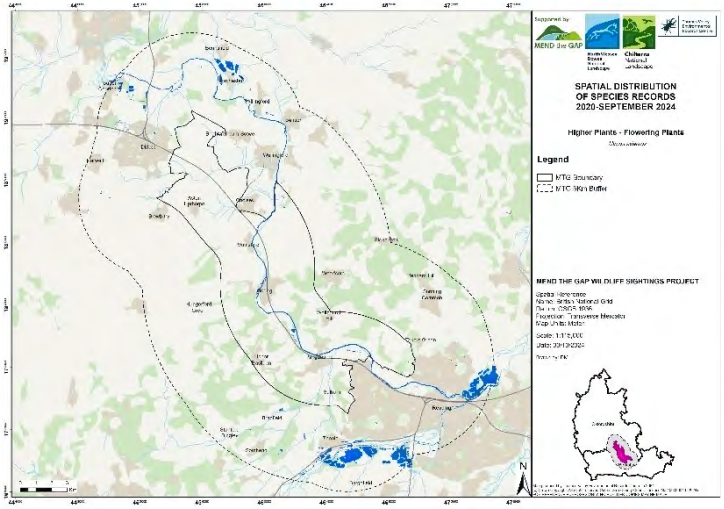


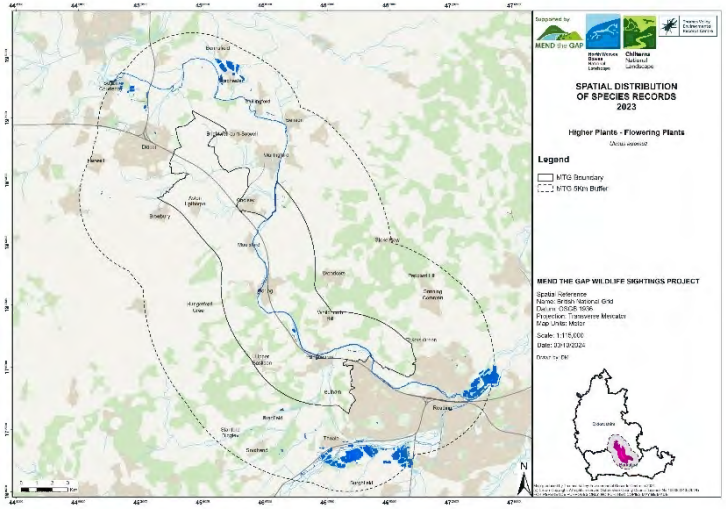


Elm (disease resistant) **Ulmus ademuz**

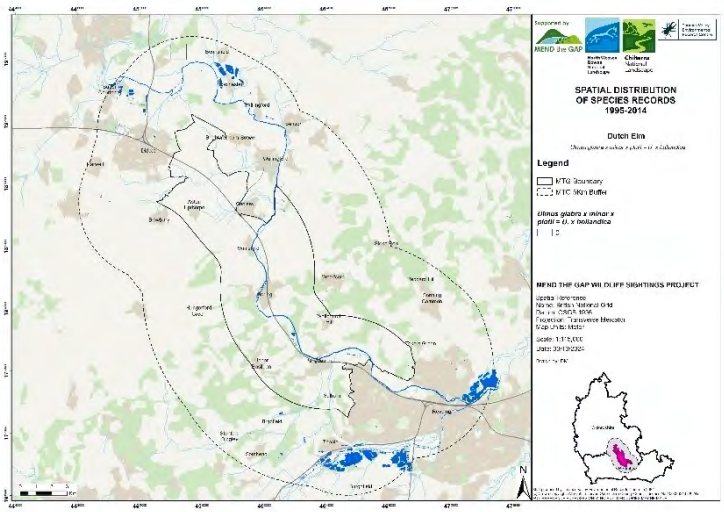


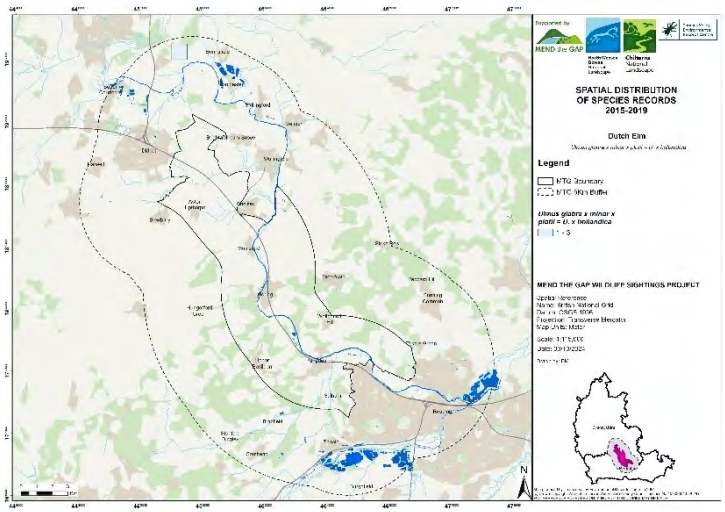


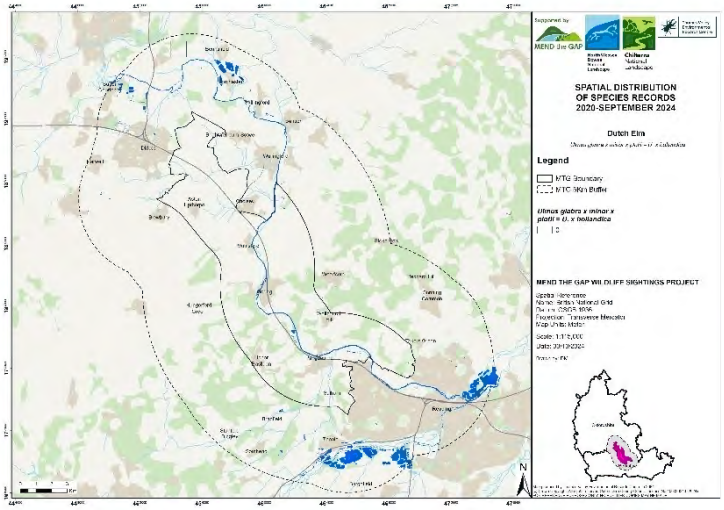


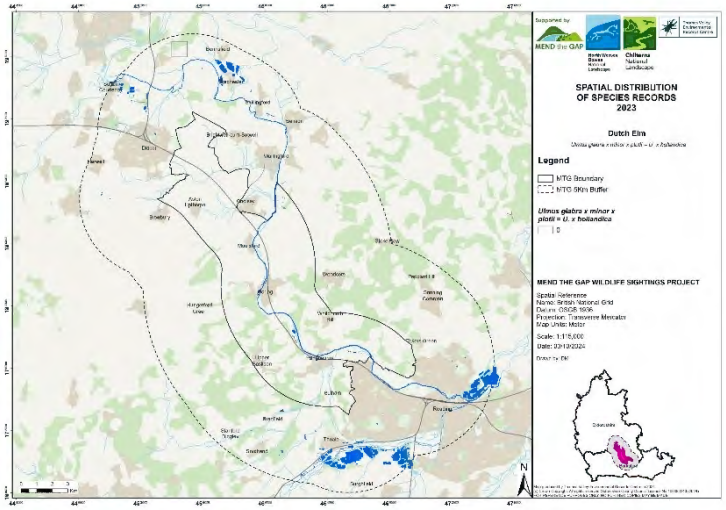


Elm (disease resistant) **Ulmus glabra x minor x plotii = Ulmus. X hollandica**

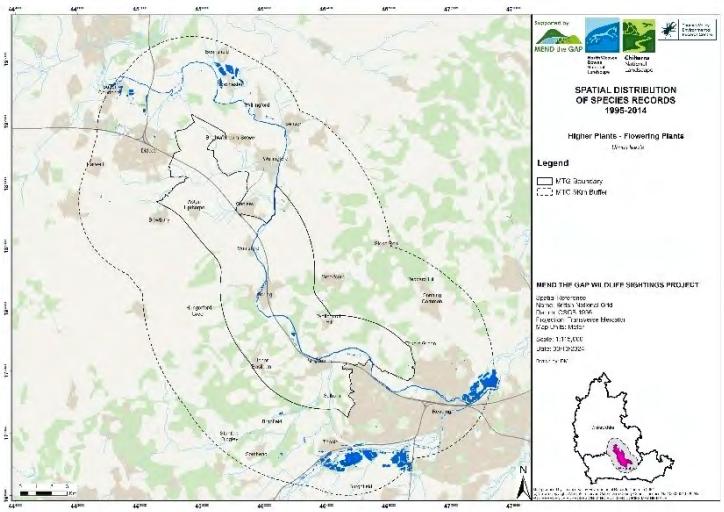


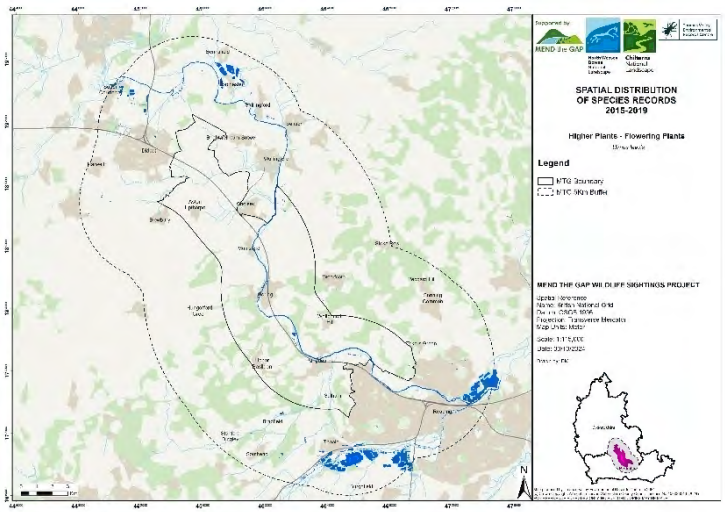


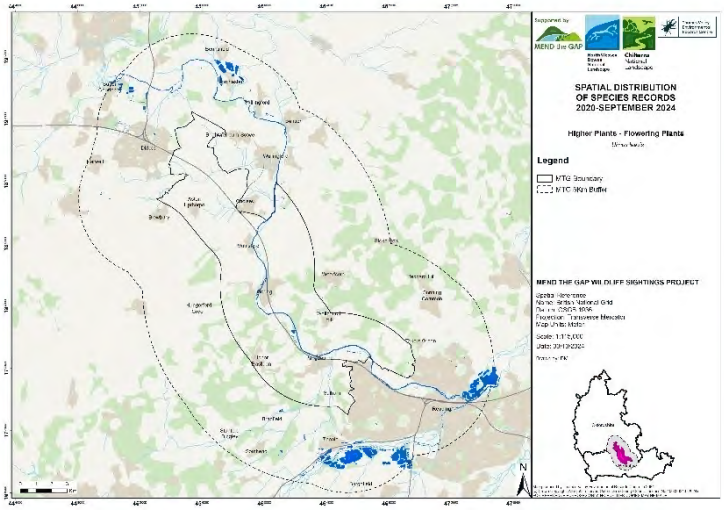


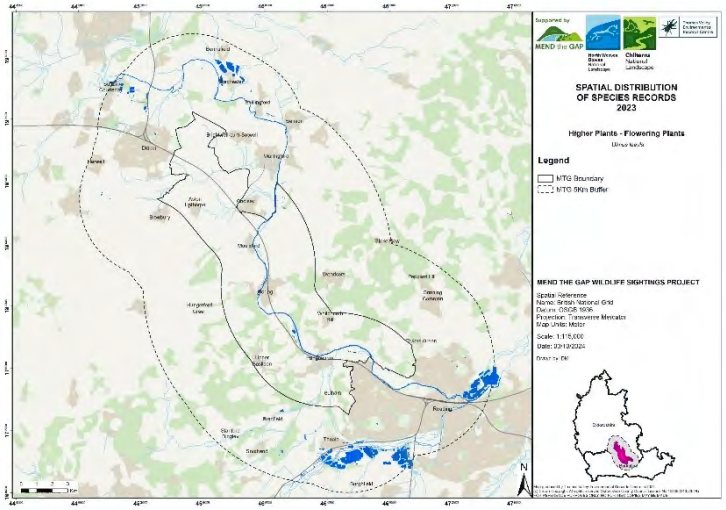


Elm (disease resistant) **Ulmus laevis**

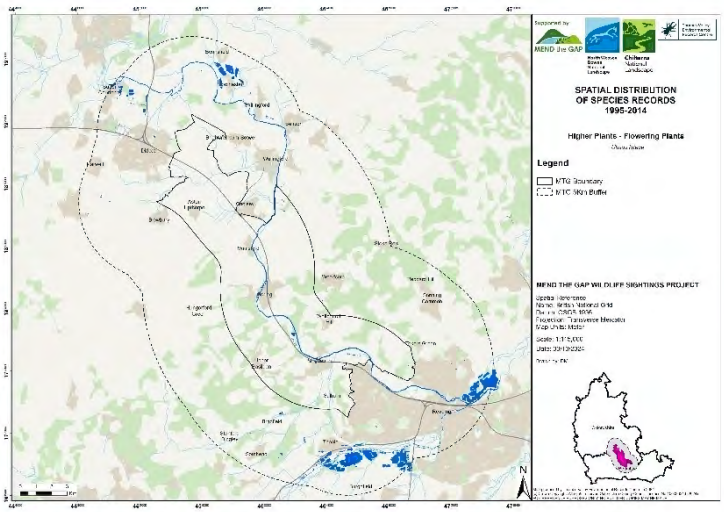


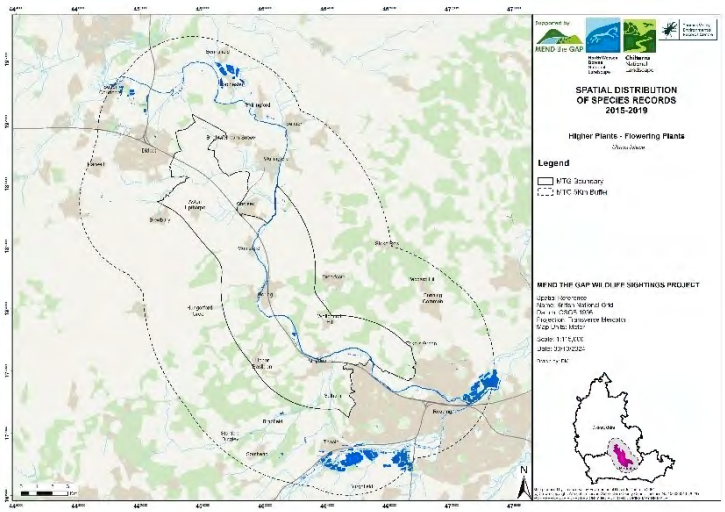


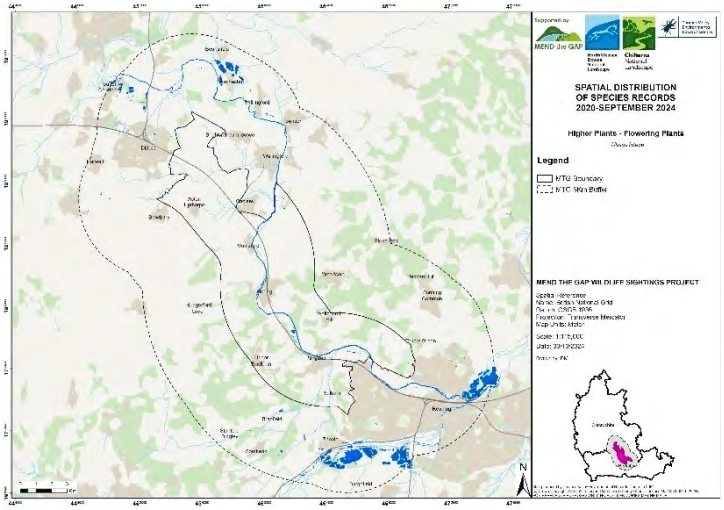


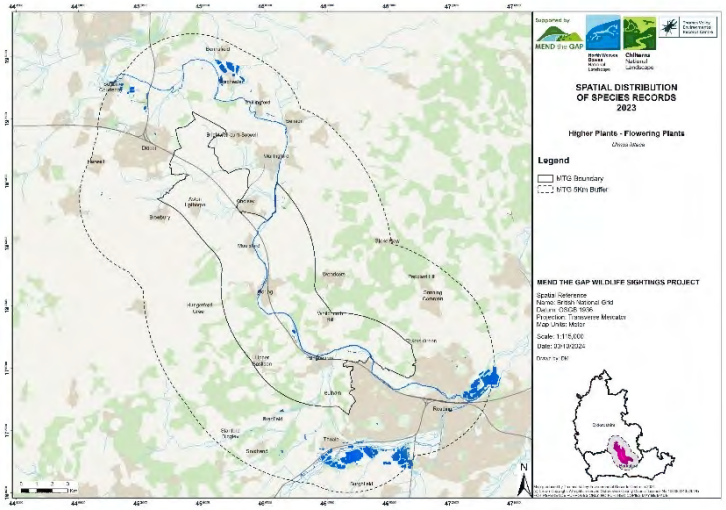


Elm (disease resistant) **Ulmus lutece**

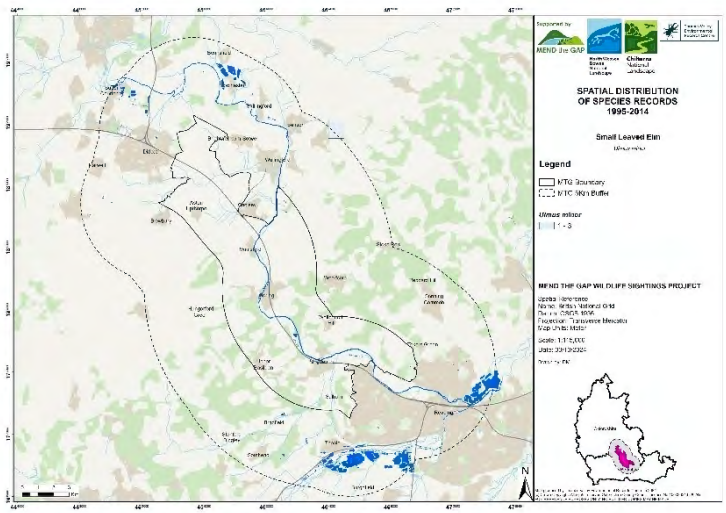


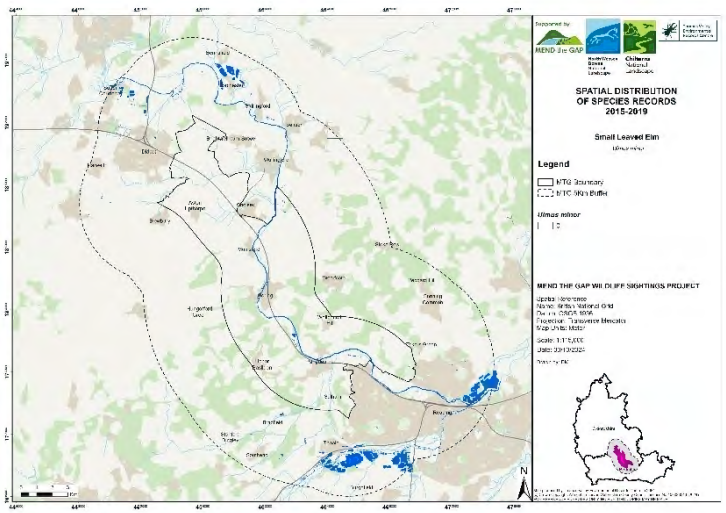


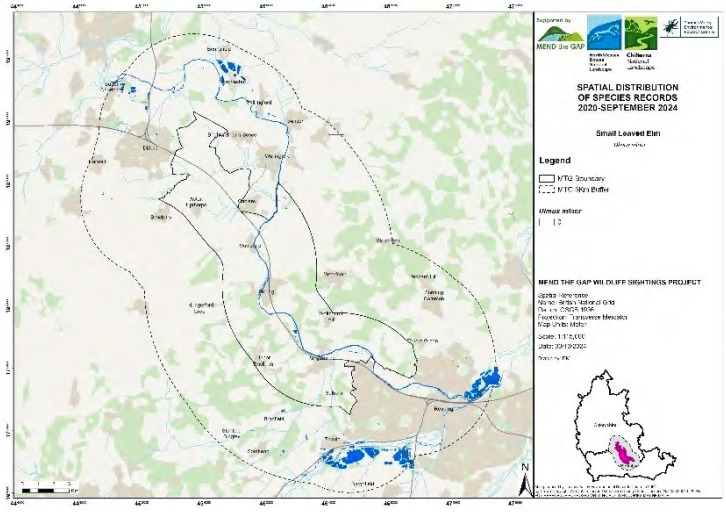


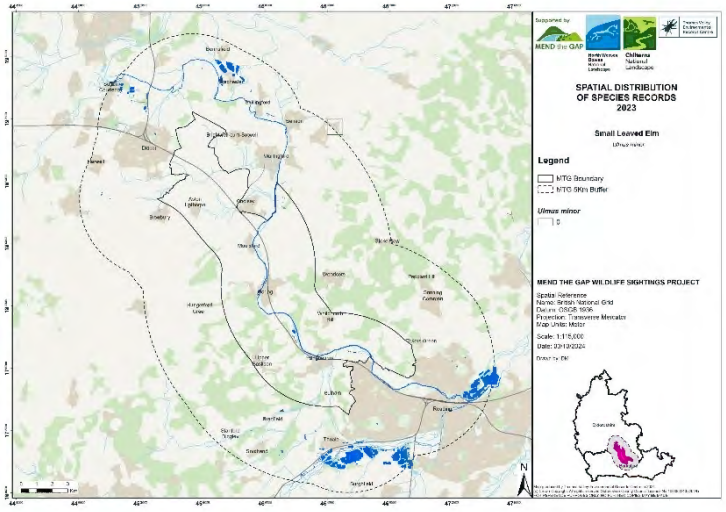


Elm (disease resistant) **Ulmus minor**

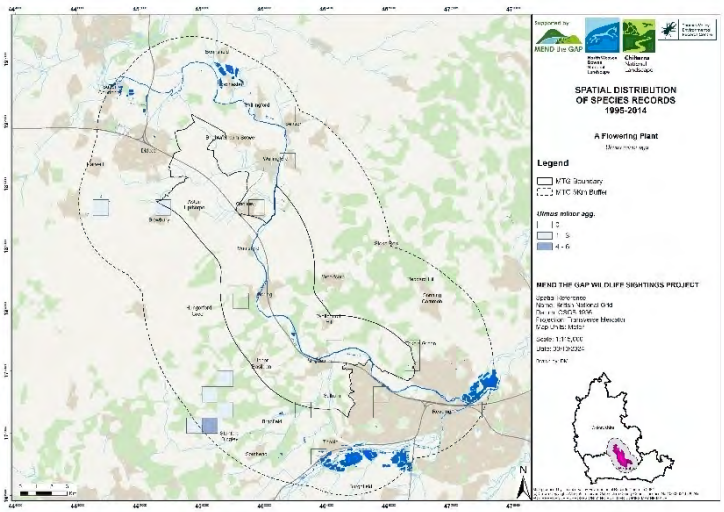


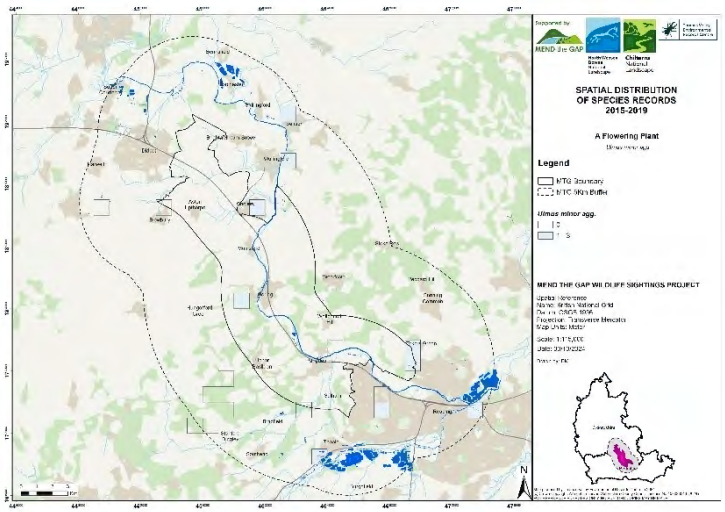


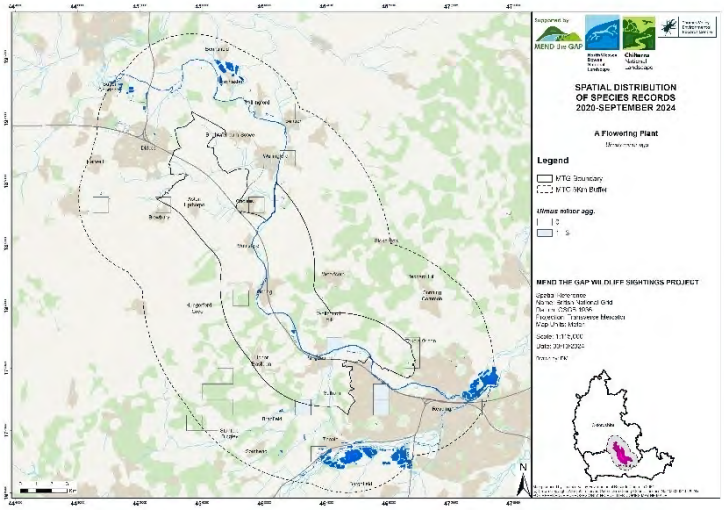


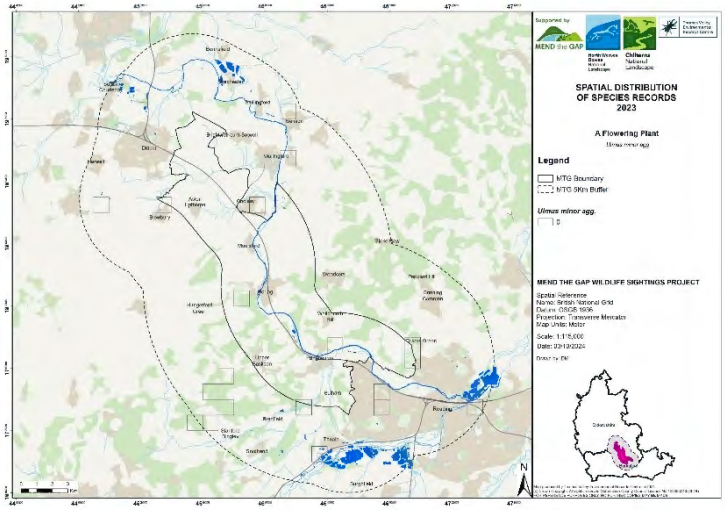


Elm (disease resistant) **Ulmus minor agg.**

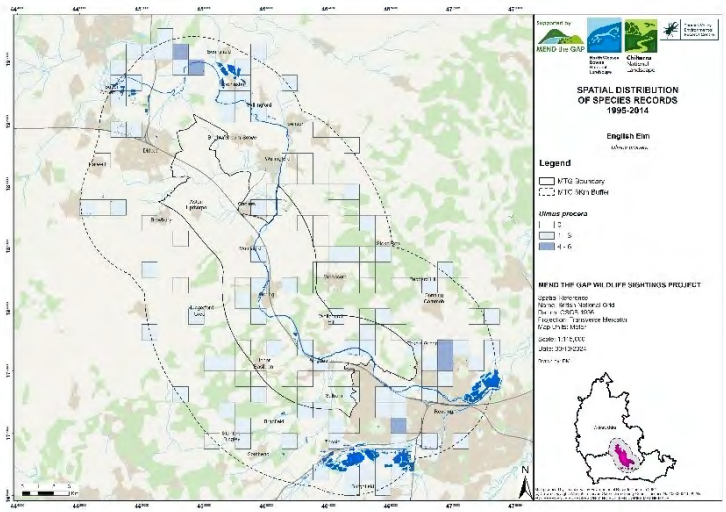


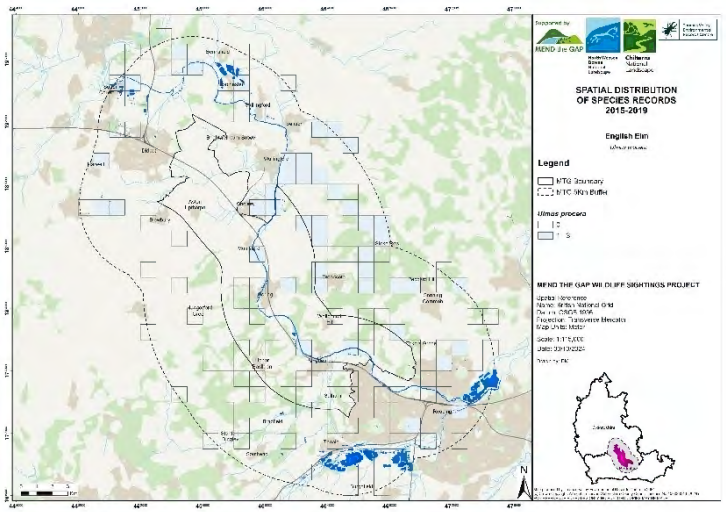


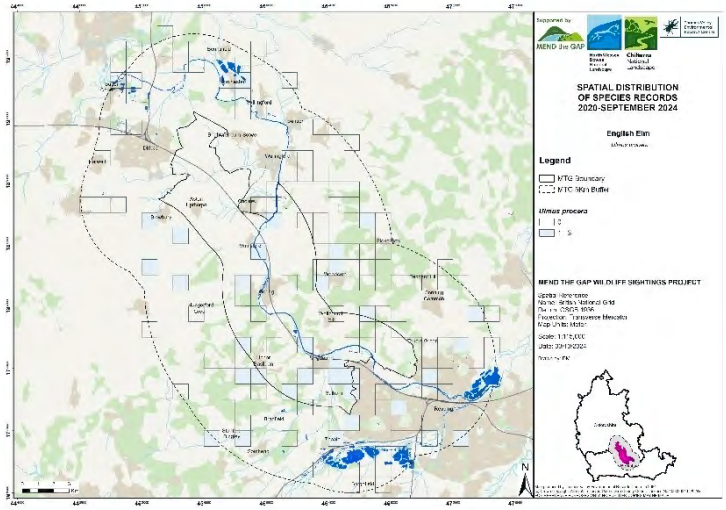


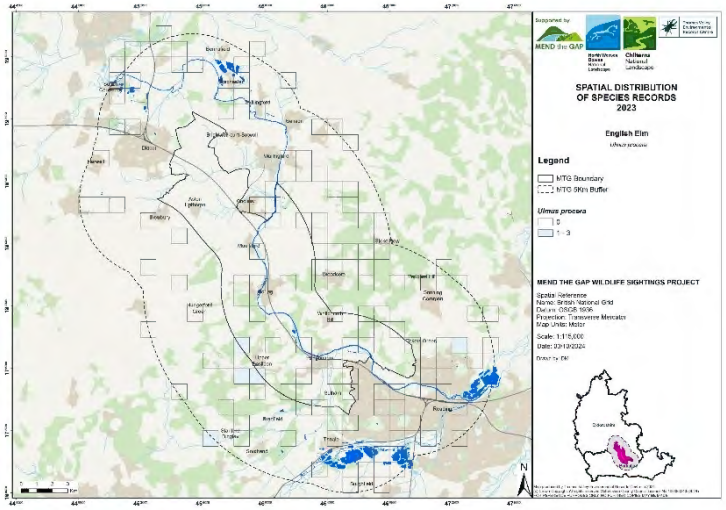


Elm (disease resistant) **Ulmus procera**

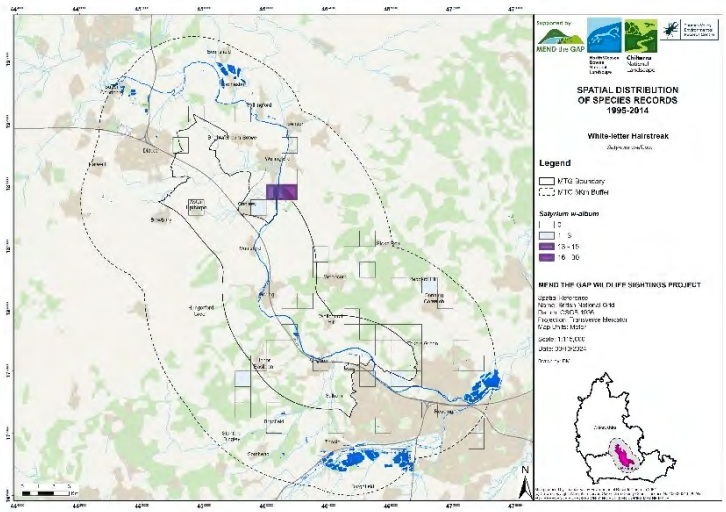


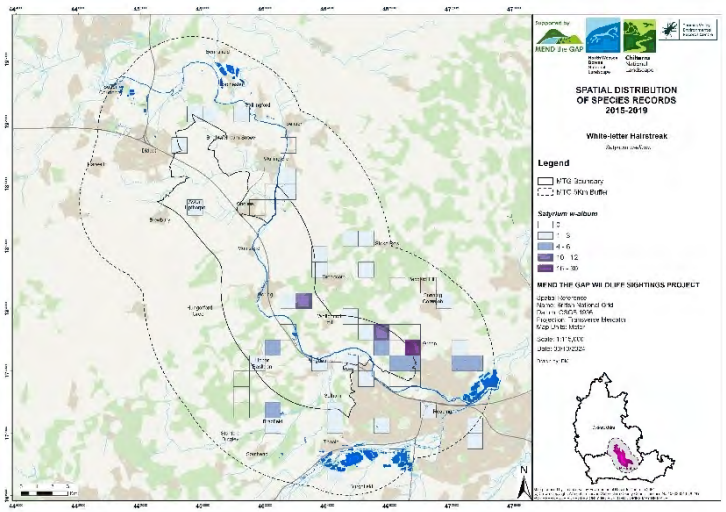


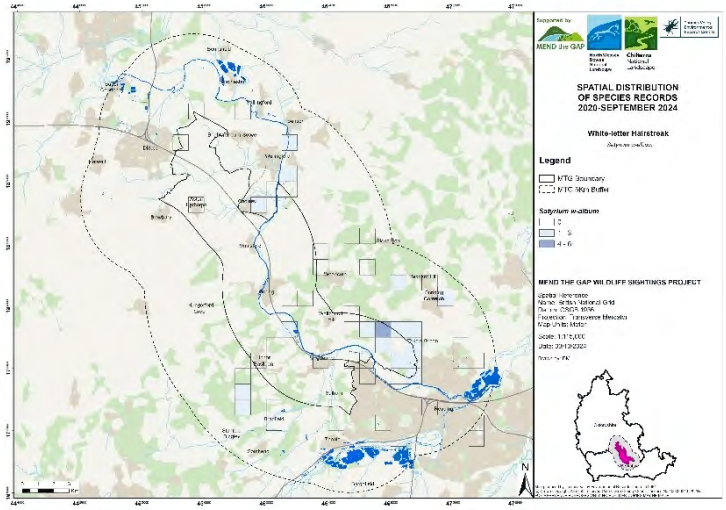


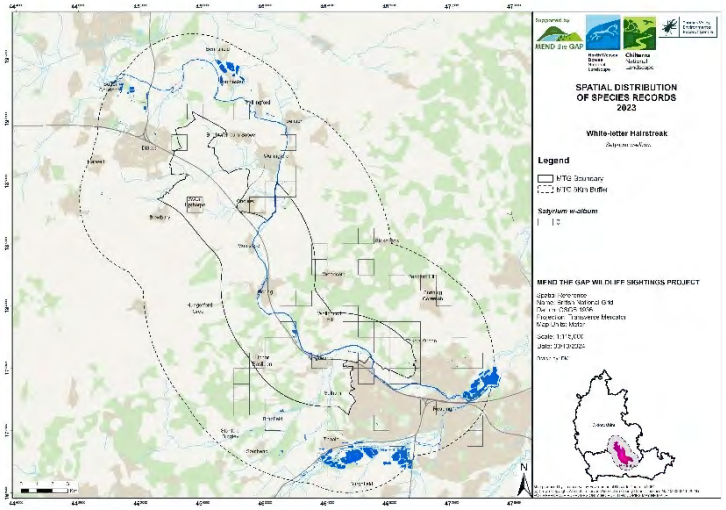


White-letter hairstreak **Satyrium w-album**

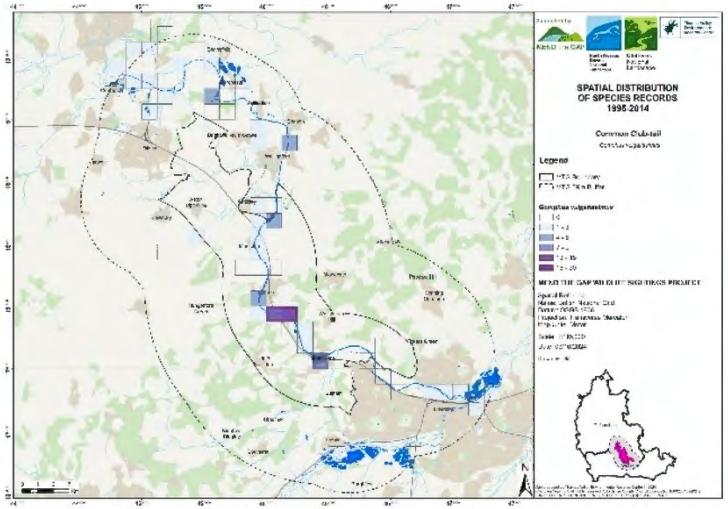


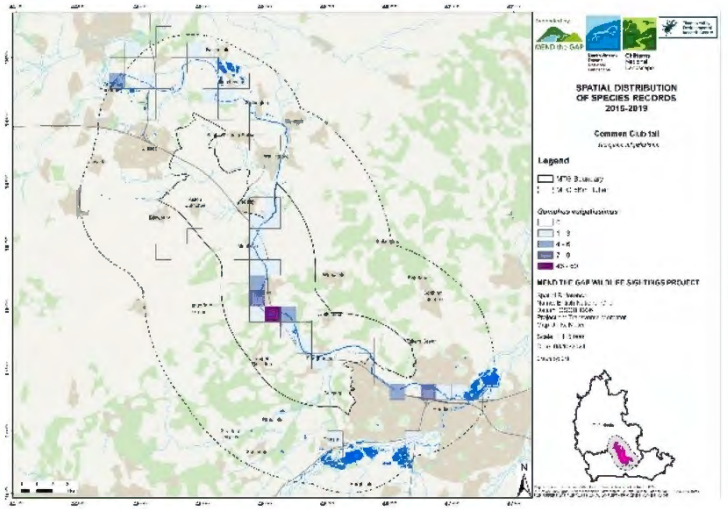


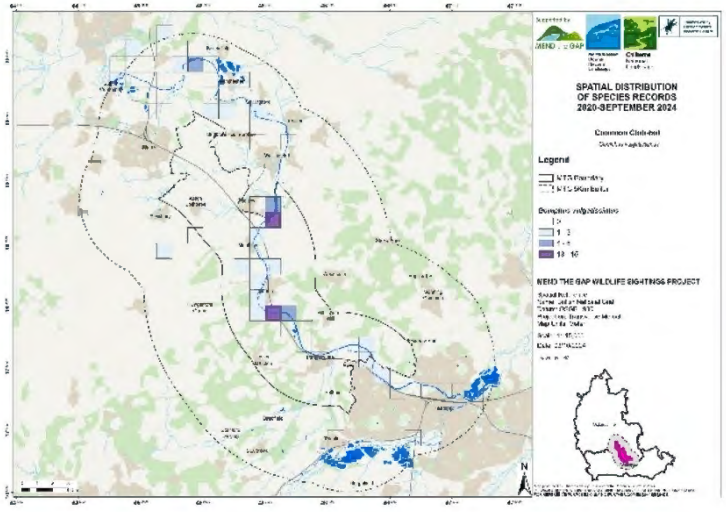


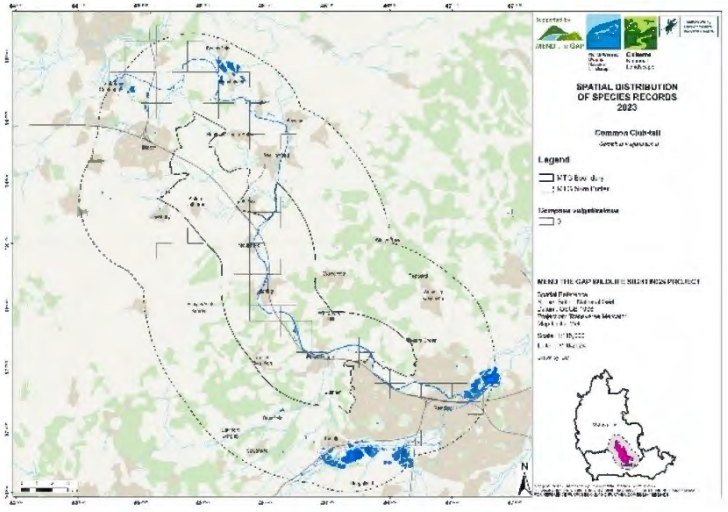


Common clubtail Gomphus vulgatissimus

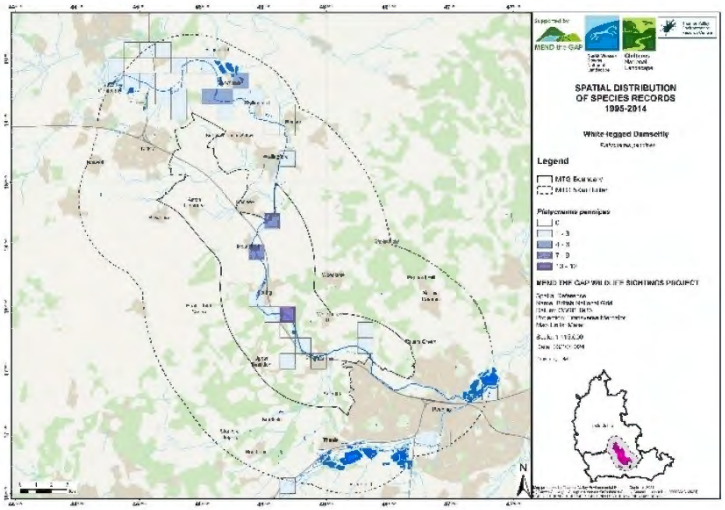


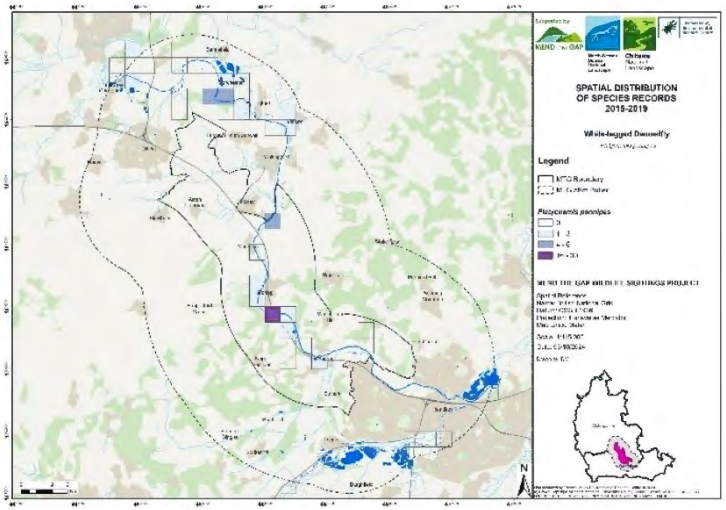


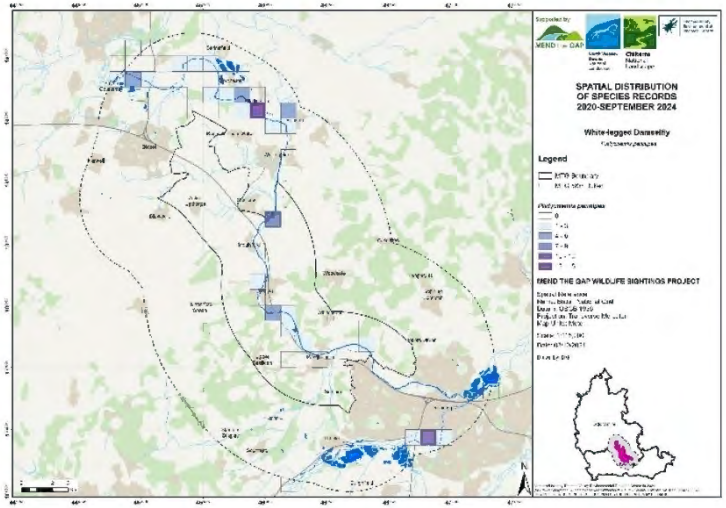


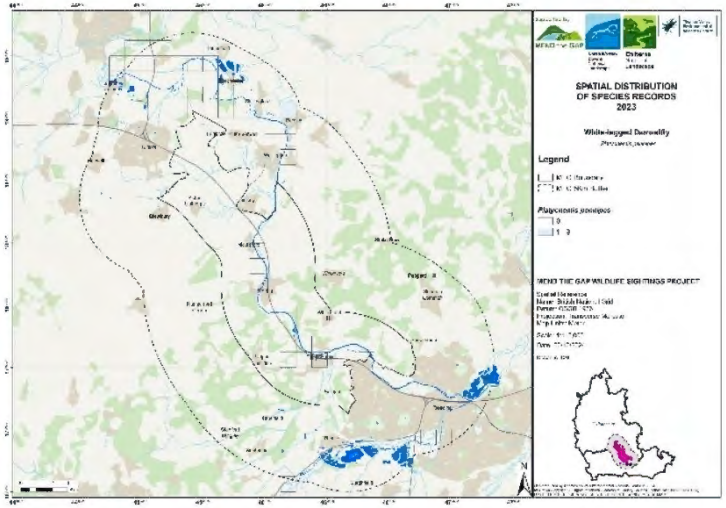


White-legged Damselfly **Platycnemis pennipes**

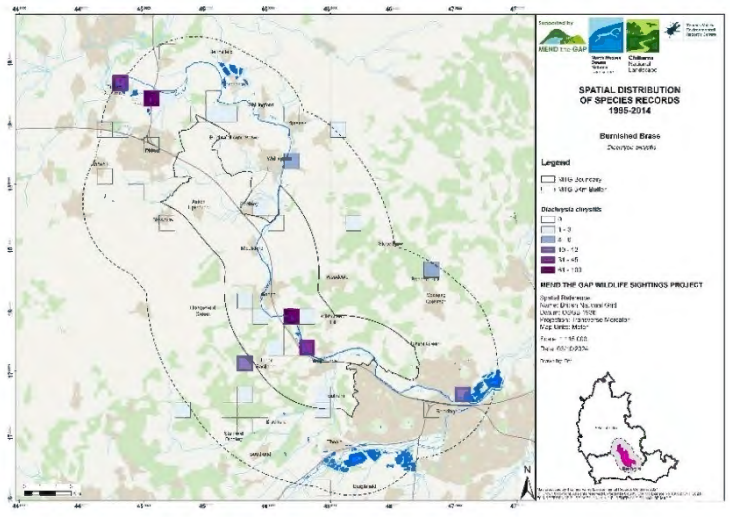


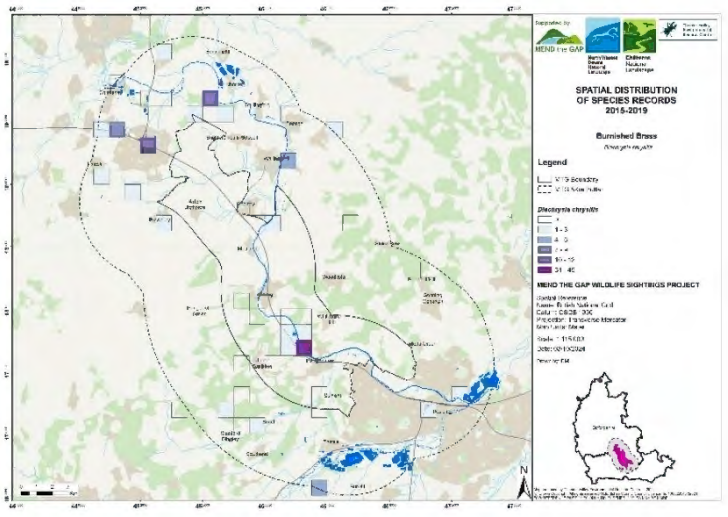


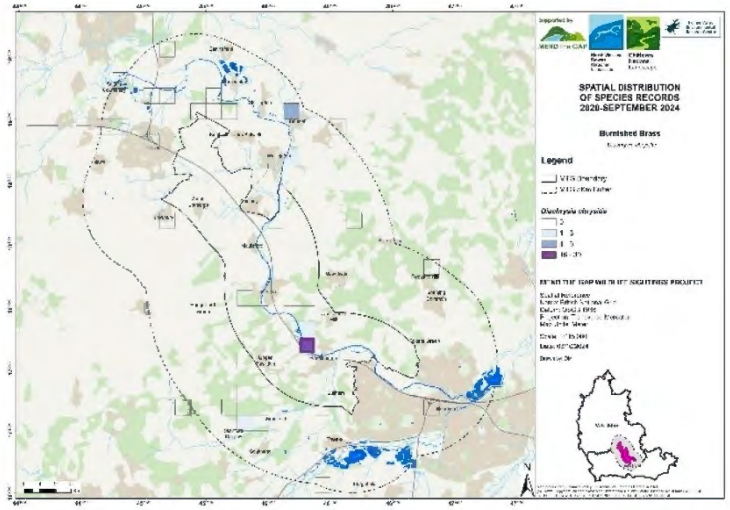


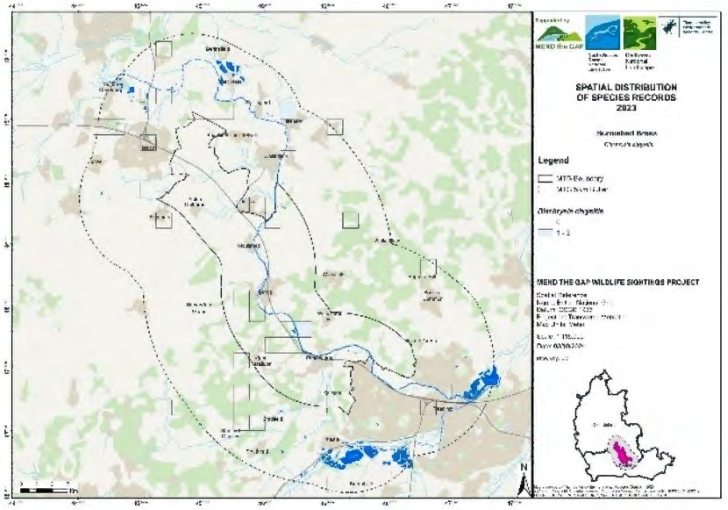


Burnished brass moth **Diachrysia chrysitis**

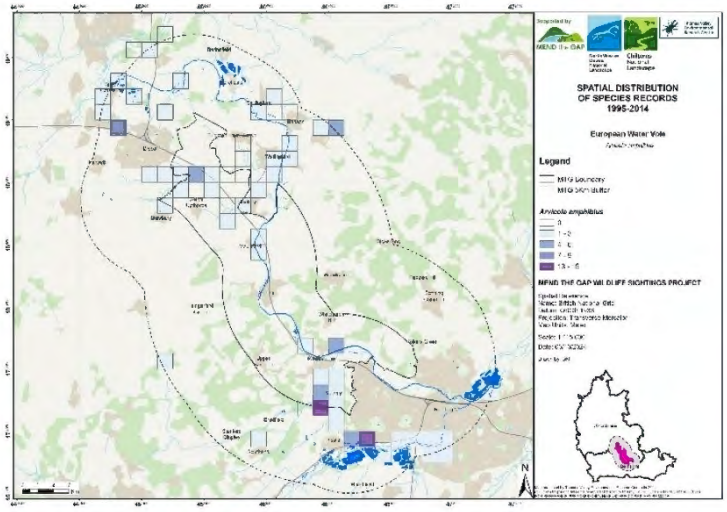


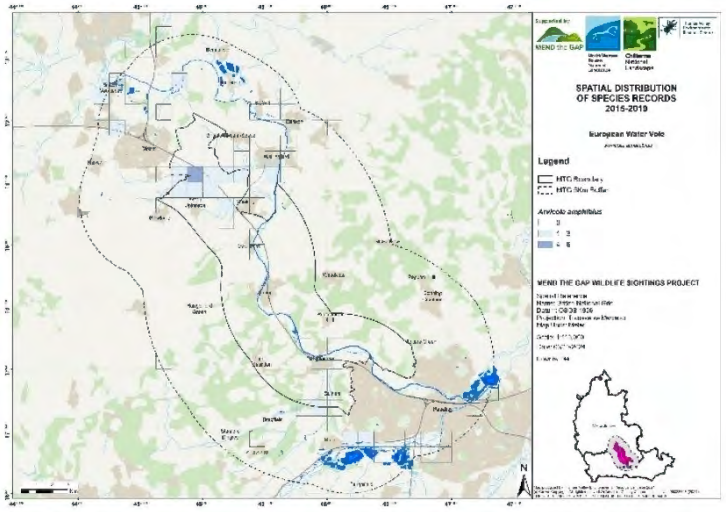


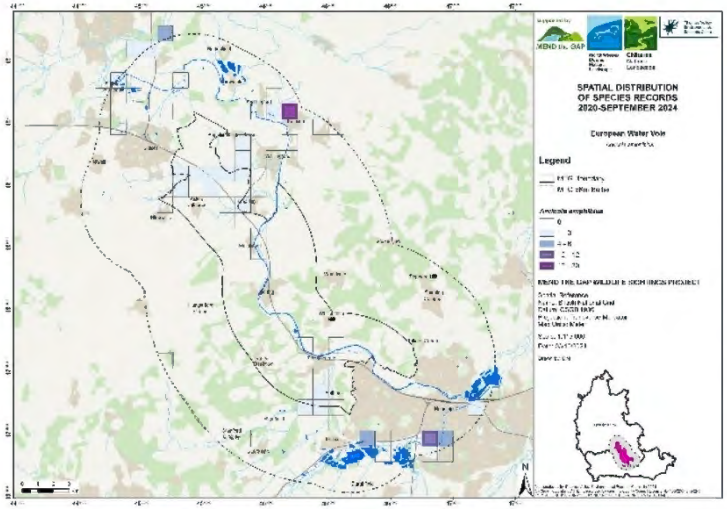


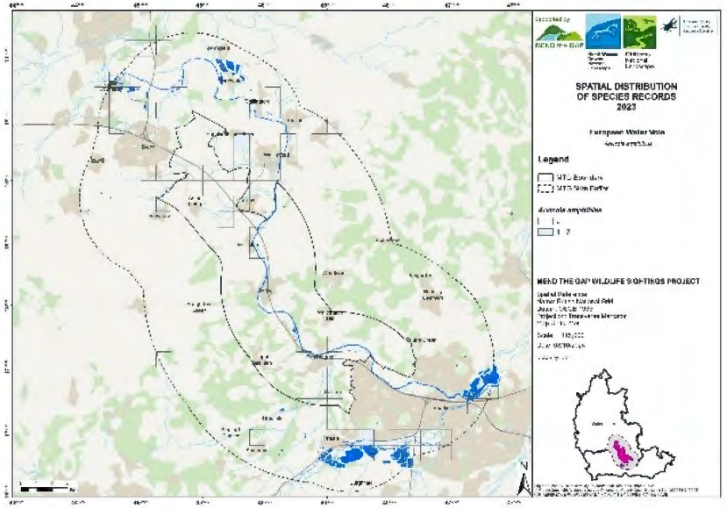


Watervole Arvicola amphibius

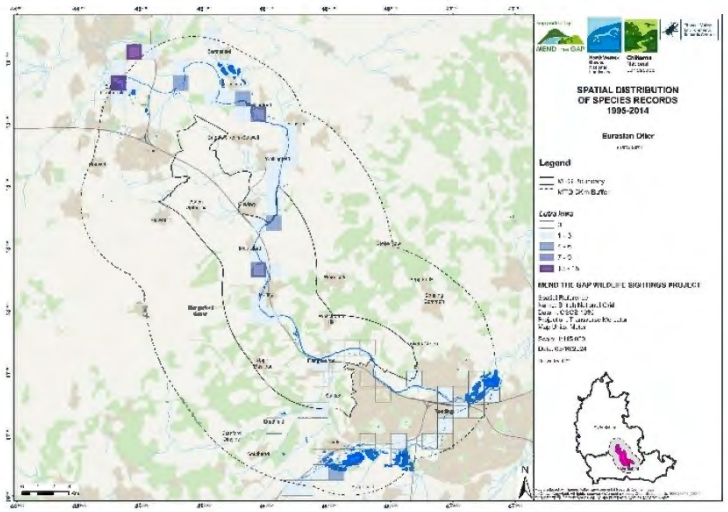


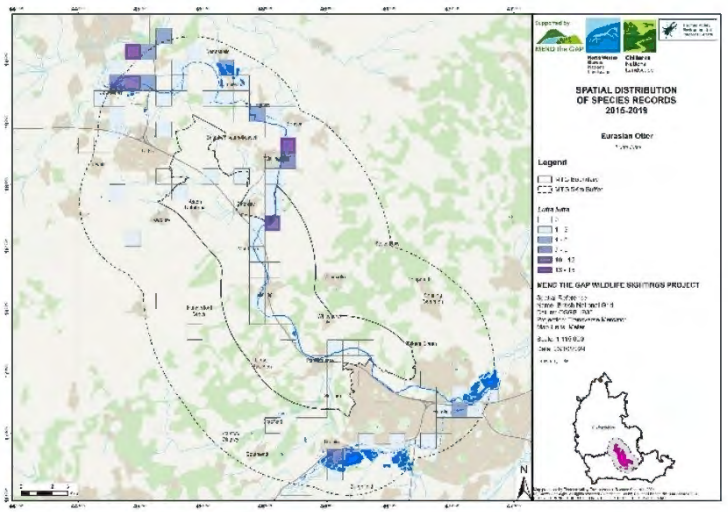


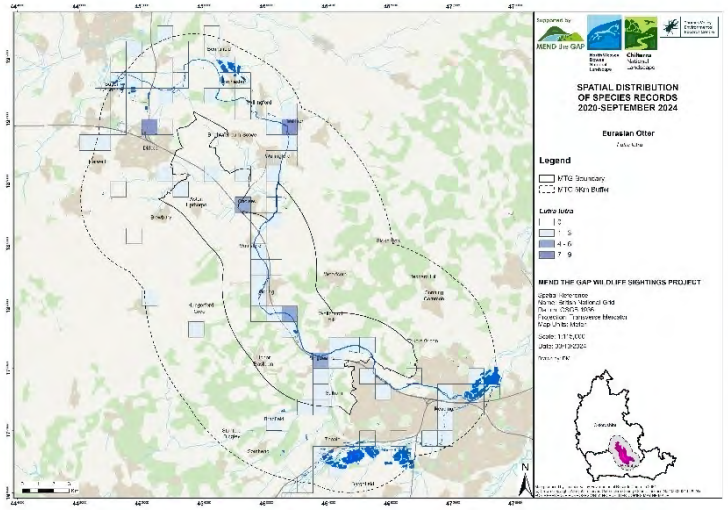


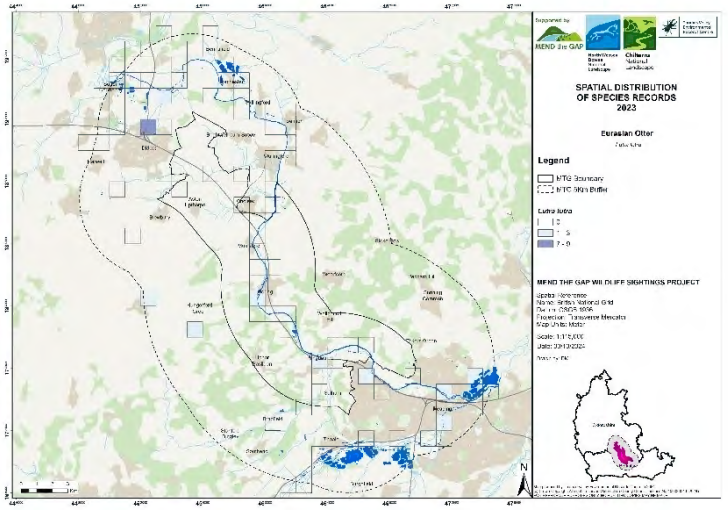


European Otter **Lutra lutra**

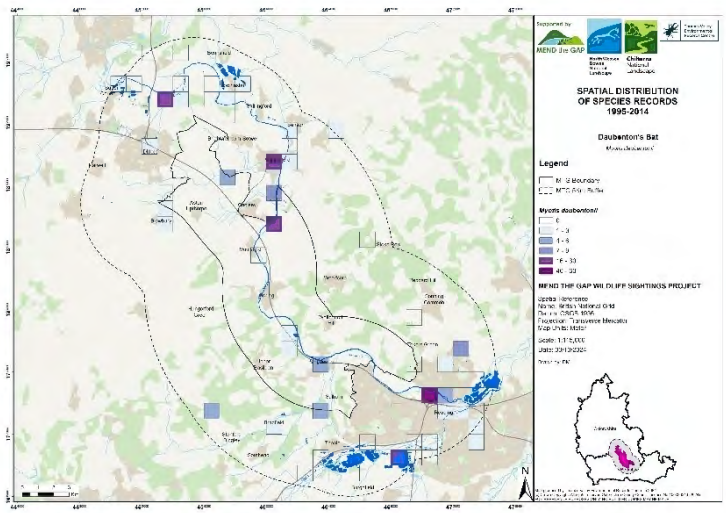


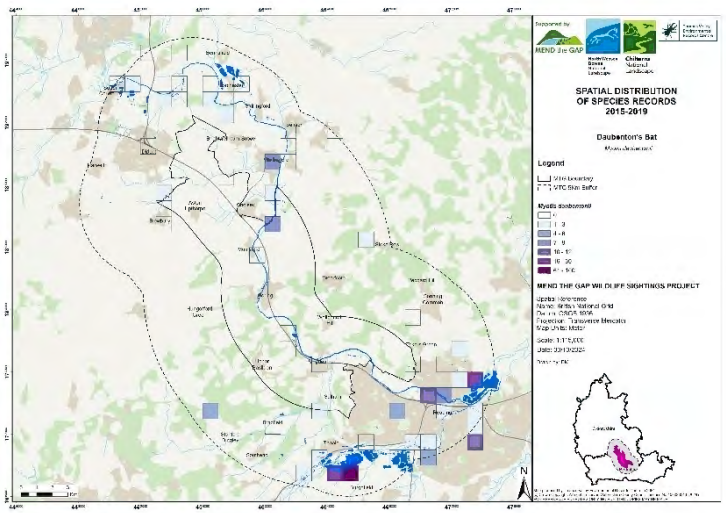


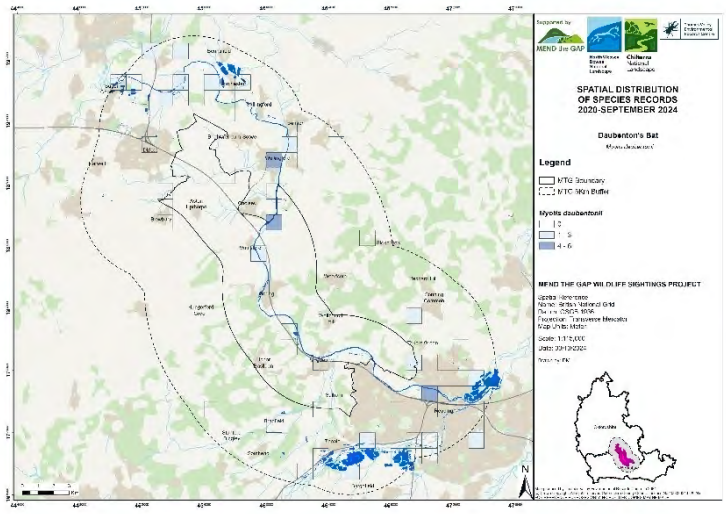


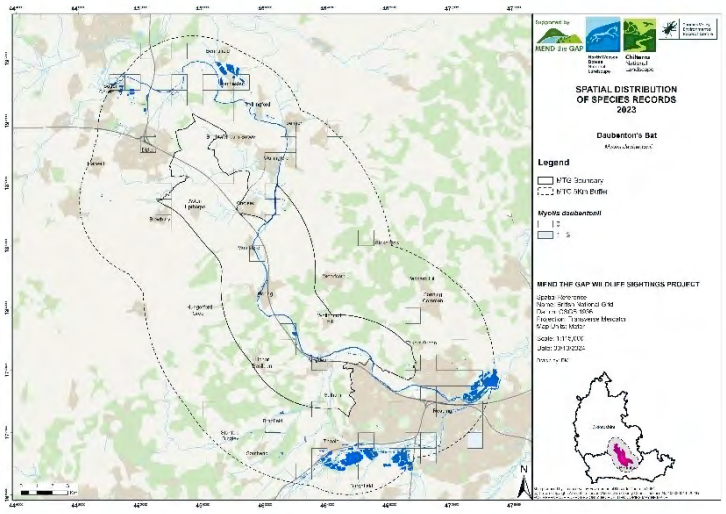


Daubenton bat **Myotis daubentonii**

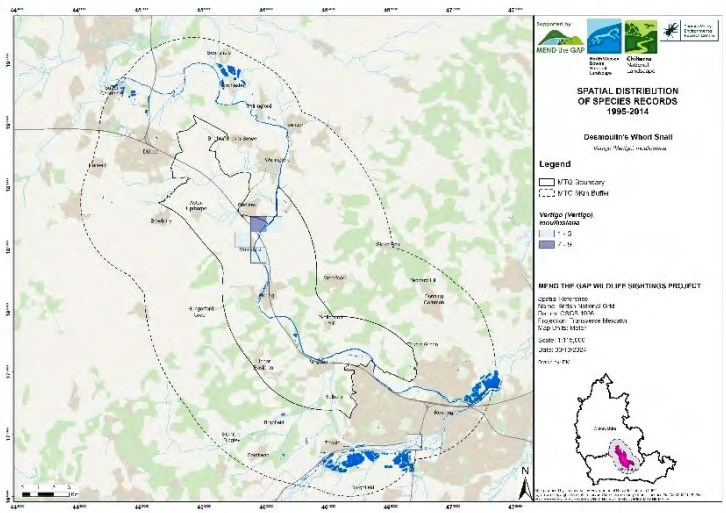


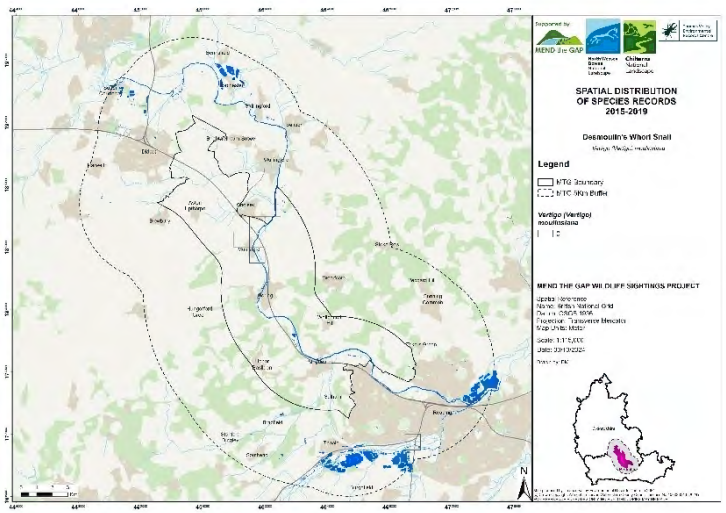


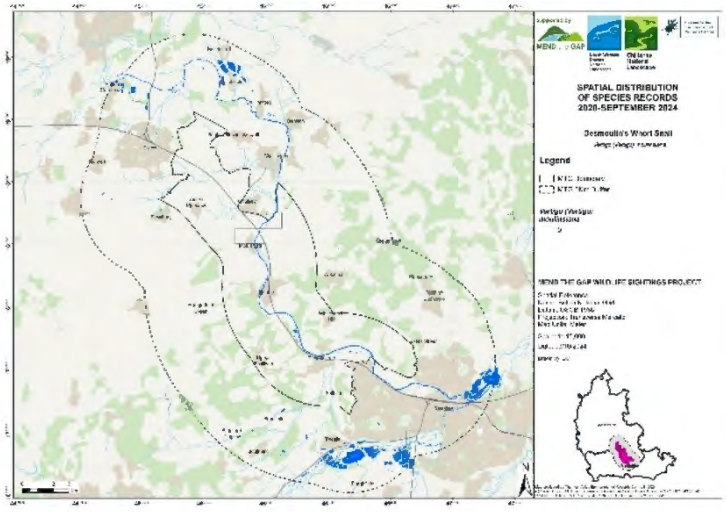


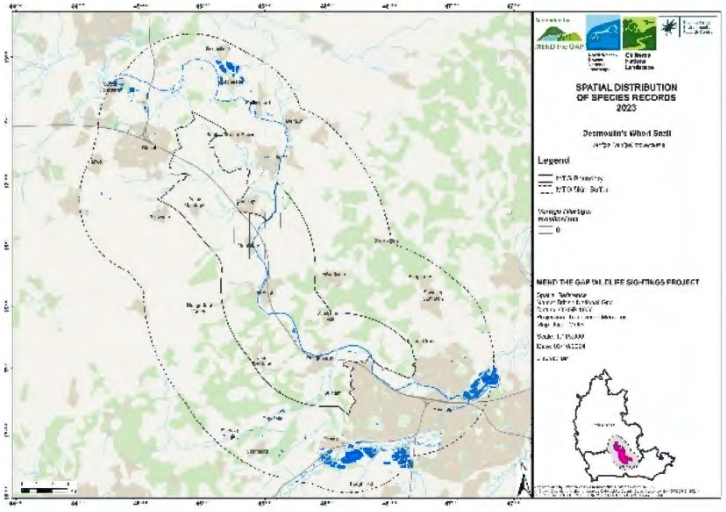


Desmoulin's whorl snail **Vertigo moulinsiana**

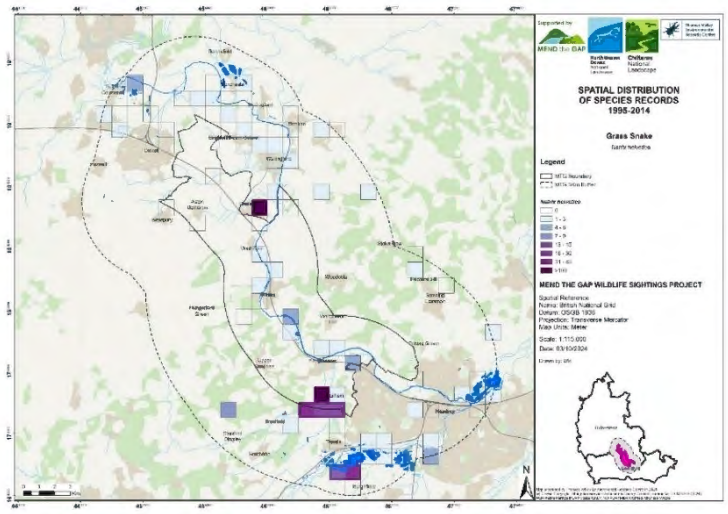


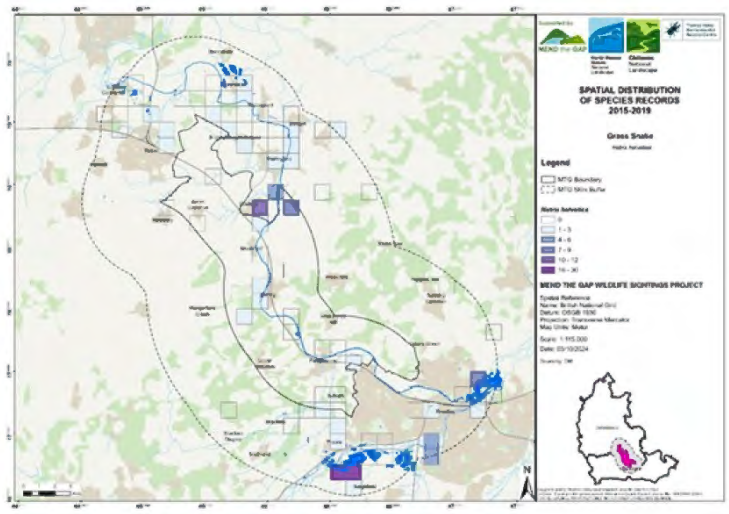


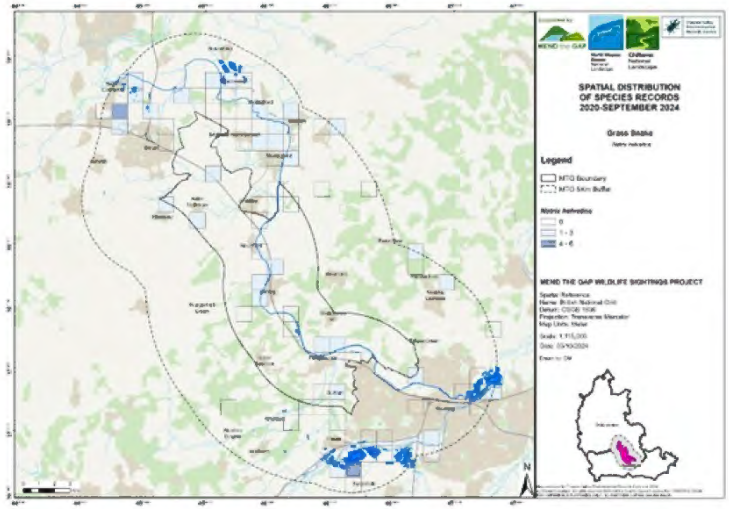


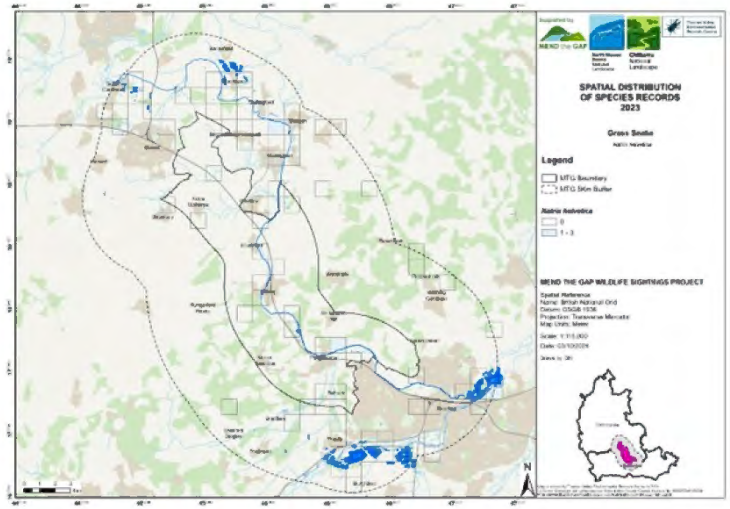


Grass snake Natrix Helvetica









6.5 Appendix 5 – Species Record Trends

Taxon Group	Scientific Name	Common Name	Year_interval	*Records	**No_GridRef
Bird	Alcedo atthis	Kingfisher	1995-2014	550	67
			2015-2019	400	43
			2020-(September_2024)	383	46
Bird	Fulica atra	Coot	1995-2014	780	41
			2015-2019	424	29
			2020-(September_2024)	370	28
Bird	Motacilla cinerea	Grey Wagtail	1995-2014	317	72
			2015-2019	352	45
			2020-(September_2024)	395	55
Bird	Motacilla flava	Yellow Wagtail	1995-2014	61	24
			2015-2019	54	15
			2020-(September_2024)	1	1
Bird	Rallus aquaticus	Water Rail	1995-2014	159	16
			2015-2019	167	18
			2020-(September_2024)	149	18
Bird	Tyto alba	Barn Owl	1995-2014	103	61
			2015-2019	107	44
			2020-(September_2024)	35	16
Bony Fish	Perca fluviatilis	Perch	1995-2014	266	33
			2015-2019	43	17
			2020-(September_2024)	16	14
Bony Fish	Rutilus rutilus	Roach	1995-2014	282	31
			2015-2019	55	19

			2020-(September_2024)	26	18
Higher Plants - Flowering Plants	Impatiens glandulifera	Himalayan Balsam	1995-2014	85	36
			2015-2019	189	35
			2020-(September_2024)	10	9
Higher Plants - Flowering Plants	Leucojum aestivum	Summer Snowflake	1995-2014	35	19
			2015-2019	10	7
			2020-(September_2024)	1	1
Higher Plants - Flowering Plants	Lythrum salicaria	Purple-loosestrife	1995-2014	126	45
			2015-2019	29	22
			2020-(September_2024)	9	9
Higher Plants - Flowering Plants	Phragmites australis	Common Reed	1995-2014	79	34
			2015-2019	19	17
			2020-(September_2024)	6	6
Higher Plants - Flowering Plants	Populus nigra	Black-poplar	1995-2014	5	4
			2015-2019	3	3
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Populus nigra subsp. betulifolia	Black-poplar	1995-2014	9	6
			2015-2019	0	0
			2020-(September_2024)	1	1
Higher Plants - Flowering Plants	Pyrus communis	Pear	1995-2014	12	2
			2015-2019	5	5
			2020-(September_2024)	1	1

Higher Plants - Flowering Plants	Pyrus pyraster	Wild Pear	1995-2014	0	0
			2015-2019	2	1
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Silene flos-cuculi	Ragged-Robin	1995-2014	51	28
			2015-2019	19	14
			2020-(September_2024)	5	5
Higher Plants - Flowering Plants	Typha latifolia	Bulrush	1995-2014	73	38
			2015-2019	27	25
			2020-(September_2024)	12	12
Higher Plants - Flowering Plants	Ulmus	Elm	1995-2014	37	20
			2015-2019	12	11
			2020-(September_2024)	2	1
Higher Plants - Flowering Plants	Ulmus ademuz	Narrow leaved Elm	1995-2014	0	0
			2015-2019	0	0
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Ulmus glabra x minor x plotii = U. x hollandica	Dutch Elm	1995-2014	0	0
			2015-2019	1	1
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Ulmus laevis	European White Elm	1995-2014	0	0
			2015-2019	0	0
			2020-(September_2024)	0	0

Higher Plants - Flowering Plants	Ulmus Lutece	Elm	1995-2014	0	0
			2015-2019	0	0
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Ulmus minor	Small Leaved Elm	1995-2014	1	1
			2015-2019	0	0
			2020-(September_2024)	0	0
Higher Plants - Flowering Plants	Ulmus minor agg.	Field Elm	1995-2014	12	7
			2015-2019	11	9
			2020-(September_2024)	4	4
Higher Plants - Flowering Plants	Ulmus procera	English Elm	1995-2014	136	84
			2015-2019	50	43
			2020-(September_2024)	39	32
Insect - butterfly	Satyrium w-album	White-letter Hairstreak	1995-2014	41	7
			2015-2019	108	39
			2020-(September_2024)	27	17
Insect - dragonfly (Odonata)	Gomphus vulgatissimus	Common Club-tail	1995-2014	94	33
			2015-2019	120	28
			2020-(September_2024)	68	22
insect - dragonfly (Odonata)	Platycnemis pennipes	White-legged Damselfly	1995-2014	74	30
			2015-2019	63	15

			2020-(September_2024)	81	24
Insect - moth	Diachrysia chrysitis	Burnished Brass	1995-2014	263	22
			2015-2019	90	22
			2020-(September_2024)	31	6
Mammals - Terrestrial	Arvicola amphibius	European Water Vole	1995-2014	122	52
			2015-2019	34	16
			2020-(September_2024)	79	23
Mammals - Terrestrial	Lutra lutra	Eurasian Otter	1995-2014	120	43
			2015-2019	161	50
			2020-(September_2024)	96	50
Mammals - Terrestrial (bats)	Myotis daubentonii	Daubenton's Bat	1995-2014	222	30
			2015-2019	224	29
			2020-(September_2024)	30	17
Mollusc	Vertigo (Vertigo) moulinsiana	Desmoulin's Whorl Snail	1995-2014	15	5
			2015-2019	0	0
			2020-(September_2024)	0	0
Reptiles	Natrix helvetica	Grass Snake	1995-2014	1763	44
			2015-2019	122	32
			2020-(September_2024)	50	32

Appendix 5 – Summary Table of the number of records and number of 1km grid squares with records, for all 35 species, for each time interval

*Records – the number of records TVERC holds
**No_GridRef – the number of 1km grid squares with records

6.6 Appendix 6 – Where respondents make wildlife sightings within the Mend the Gap Project Area

Parish	Number of responses	Parish	Number of responses	Parish	Number of responses	Parish	Number of responses
Aldworth	3	Compton	3	Ipsden	5	South Stoke	7
Appleford	2	Crowmarsh	10	Kidmore End	3	Stanford Dingley	0
Ashampstead	1	Culham	1	Little Wittenham	6	Stoke Row	4
Aston Tirrold	5	Didcot	5	Long Wittenham	3	Streatley	11
Aston Upthorpe	5	Dorchester	9	Mapledurham	4	Sulham	4
Basildon	3	Drayton St. Leonard	0	Marsh Baldon	0	Sulhamstead	1
Beenham	3	Earley	2	Milton	2	Sutton Courtenay	1
Benson	11	East Hagbourne	6	Moulsford	7	Theale	4
Berinsfield	0	East Ilsley	0	Newington	0	Tidmarsh	3
Berrick Salome	2	Englefield	3	North Moreton	0	Tilehurst	1
Binfield Heath	1	Ewelme	12	Nuffield	2	Ufton Nervet	1
Blewbury	10	Eye And Dunsden	0	Nuneham Courtenay	1	Upton	4
Bradfield	3	Frilsham	0	Pangbourne	5	Wallingford	17
Brightwell	3	Goring	13	Purley On Thames	2	Warborough	7
Bucklebury	0	Goring Heath	4	Reading	4	West Hagbourne	5
Burghfield	4	Hampstead Norreys	0	Rotherfield Peppard	2	Western Valley	1
Checkendon	4	Harpsden	1	Shinfield	2	Whitchurch	6
Chilton	3	Harwell	2	Sonning	2	Woodcote	6
Cholsey	14	Highmoor	3	Sonning Common	5	Yattendon	0
Clifton Hampden	2	Holybrook	1	South Moreton	0		

Appendix 6 - Table showing responses to where respondents make wildlife sightings within the Mend the Gap Project Area, in answer to Wildlife Sightings Q12. Respondents were asked to give all parishes that applied to them, by name or number.

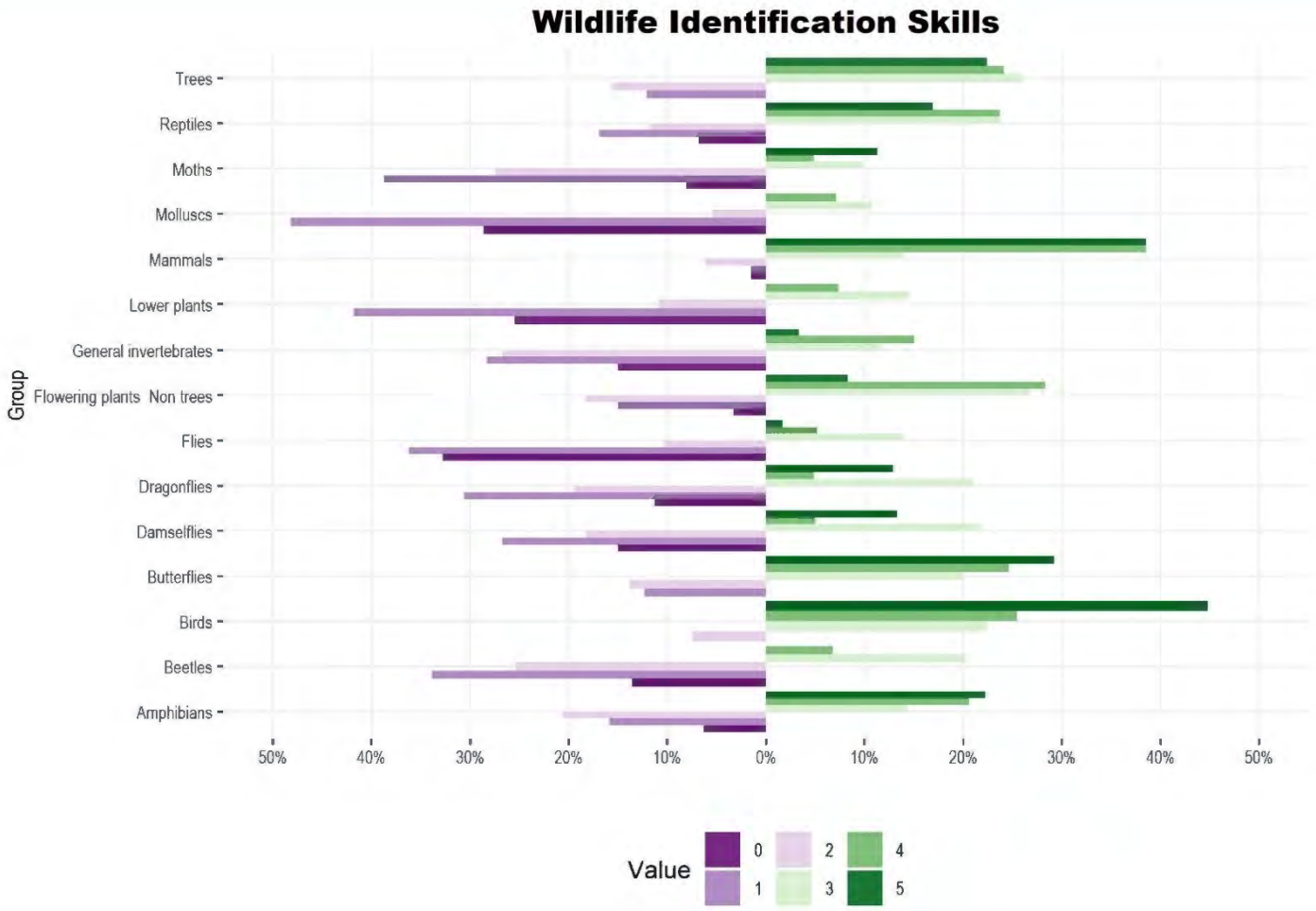
6.7 Appendix 7 – Responses to Wildlife Sightings Survey Q13 - Travel

How do you travel to where you make wildlife sightings? Please tick all that apply.
It is our farms;
Walk; Own vehicle;
Walk; Bicycle;
Walk; Own vehicle; I don't, it's my garden;
Walk; Bicycle; Own vehicle;
Walk;
I don't, it's my garden; Walk; Own vehicle;
I don't, it's my garden;
Walk; Bicycle; Own vehicle;
Walk ;I don't, it's my garden;
Walk ;Own vehicle;
Walk;
Walk; Own vehicle;
Walk; I don't, it's my garden;
Walk; Own vehicle;
Walk; Bicycle; Own vehicle; I don't, it's my garden;
Walk;
Walk; I don't, it's my garden;
Walk; Own vehicle;
Walk; I don't, it's my garden;
Own vehicle; Walk;
Own vehicle;
Walk; Own vehicle;
Walk; Own vehicle;
Walk; Own vehicle; I don't, it's my garden;
Own vehicle; Walk;
Walk; Own vehicle;
Walk; Own vehicle;
Walk; Bicycle; Someone else's vehicle; I don't, it's my garden;
Walk; Own vehicle;
Walk;
Walk; Own vehicle;
Own vehicle;
Walk; Own vehicle;
Walk; Someone else's vehicle;
Walk;
Own vehicle;
Own vehicle;
Walk; Bicycle; Own vehicle;
Walk; Bicycle; Own vehicle;
Walk; Own vehicle;

Walk; Own vehicle;
Walk; Own vehicle; Bicycle; I don't, it's my garden; Someone else's vehicle;
Walk; Bicycle; Own vehicle; I don't, it's my garden;
Walk; Own vehicle;
Walk; Own vehicle;
Walk; Bicycle; Own vehicle;
Bus; Walk;
Own vehicle; I don't, it's my garden;
Walk ;I don't, it's my garden;
Walk; Own vehicle; I don't, it's my garden;
Walk;
Walk;
Walk;
Walk; I don't, it's my garden; Own vehicle;
Walk; Bicycle; Own vehicle;
I don't, it's my garden;
Walk; Bicycle; Own vehicle; My home overlooks a new landscaped Wildlife area;
Walk; Own vehicle;
Walk;
Own vehicle;
Walk ;Own vehicle; I don't, it's my garden;
Walk; Bicycle; Own vehicle;
Walk; Own vehicle;
I don't, it's my garden; Walk;
Walk; Bicycle; Own vehicle; I don't, it's my garden;
Walk;
Walk; Train; Own vehicle; Someone else's vehicle; I don't, it's my garden;
Bicycle; Own vehicle; Walk;

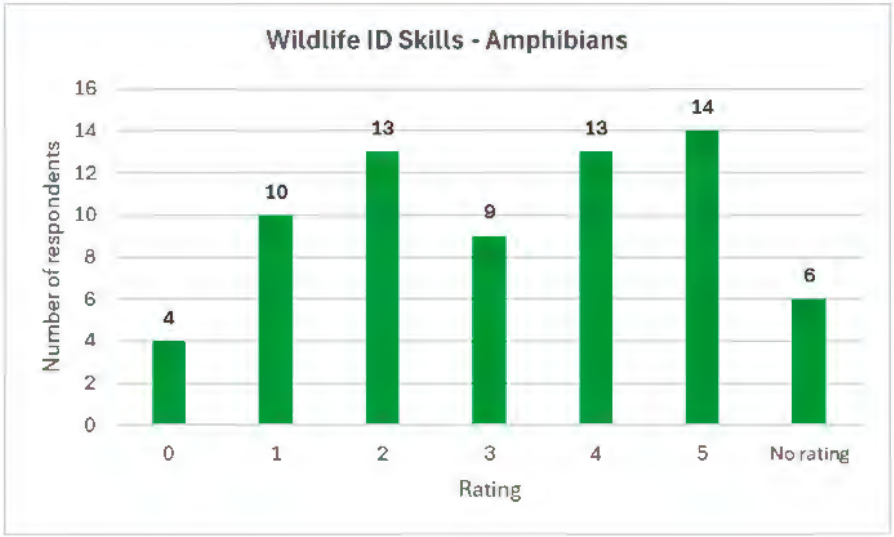
Appendix 7. Table showing the responses given to how respondents travel to where they make observations. These are in response to Wildlife Sightings Question 13 - *How do you travel to where you make wildlife sightings?* Respondents were asked to select all that apply to them.

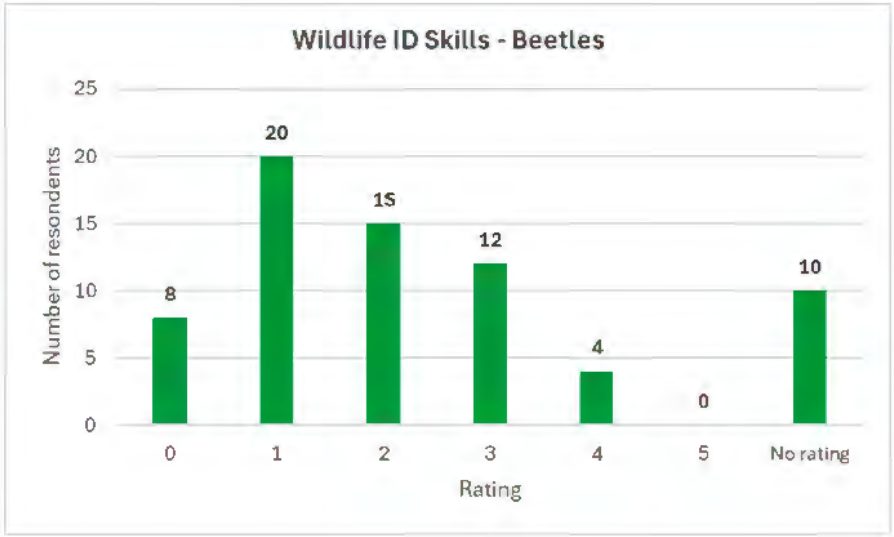
6.8 Appendix 8 – Responses to Wildlife Sightings Survey Q15 Wildlife ID Skills Ratings, all groups

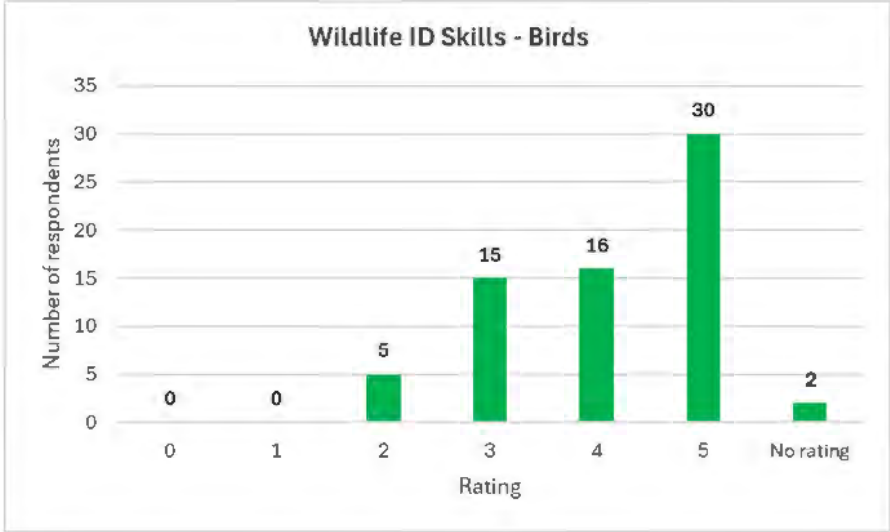


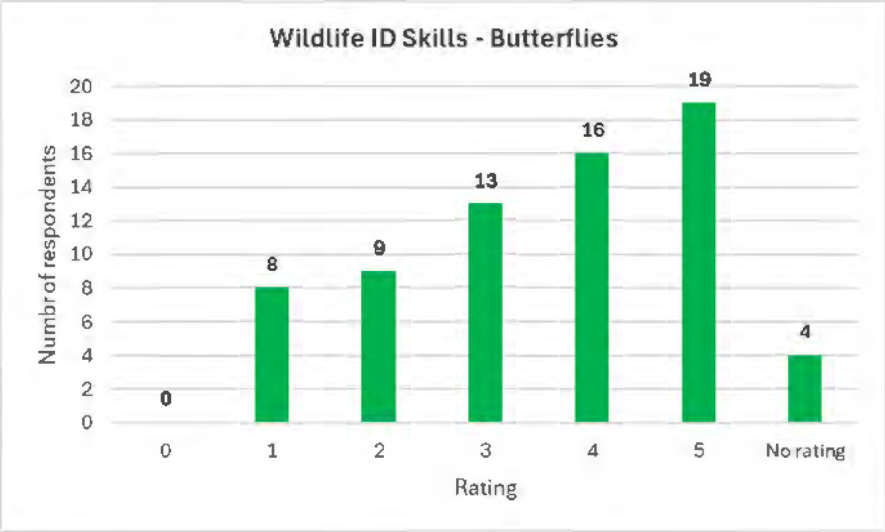
Appendix 8. Additional analysis of how respondents rated their wildlife ID skills of fifteen wildlife groups. In response to Wildlife Sightings Question 15 - *How would you describe your wildlife identification skills of the following groups?* Respondents were asked to give a rating for all, but not all did.

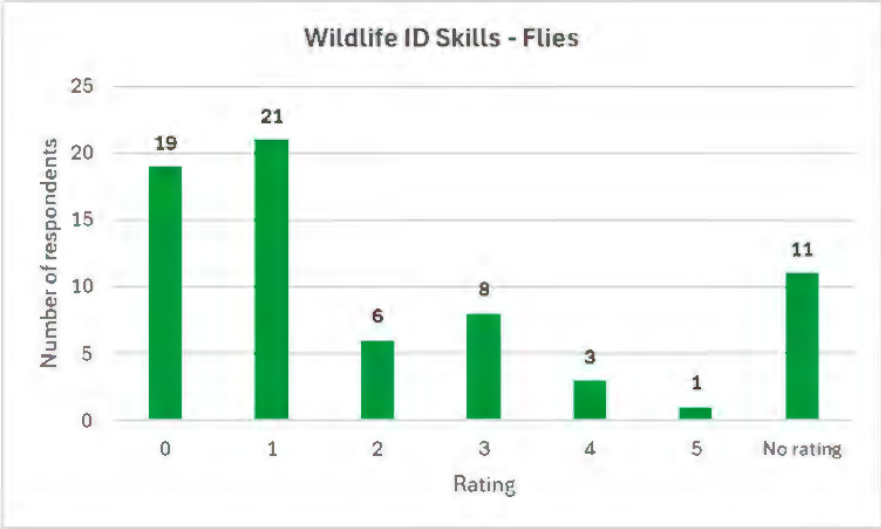
6.9 Appendix 9 - Respondents ratings of their Wildlife ID Skills by Wildlife Group

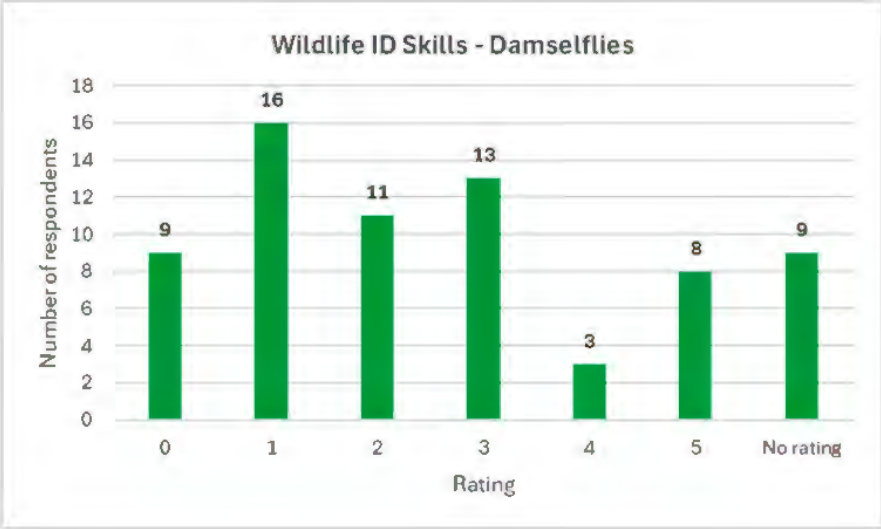


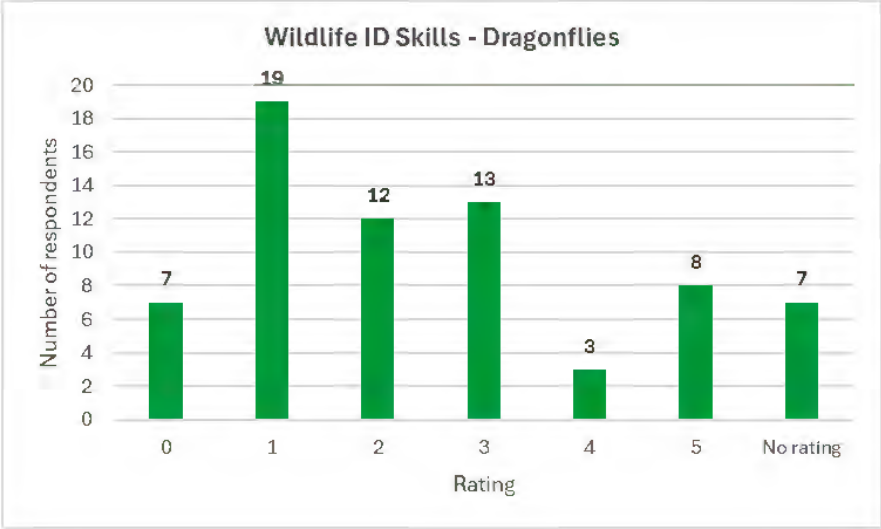


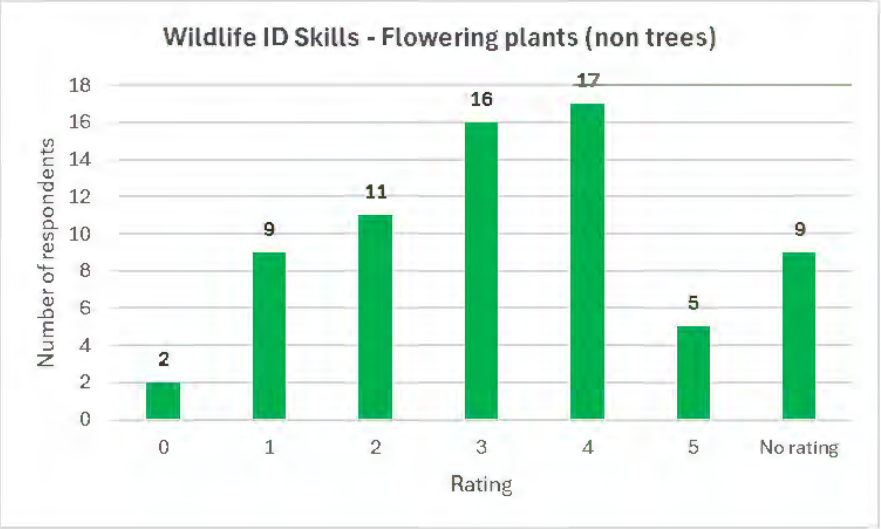

Wildlife ID Skills - Birds
Number of respondents
35
30
25
20
15
10
5
0
0
0
5
15
16
30
2
0
1
2
3
4
5
No rating
Rating

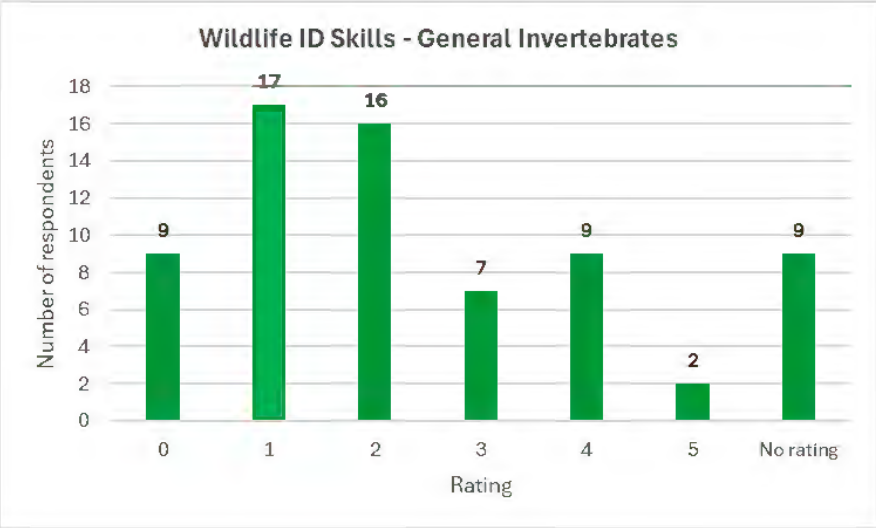

Wildlife ID Skills - Butterflies
Numbr of respondents
20
18
16
14
12
10
8
6
4
2
0
0
8
9
13
16
19
4
0
1
2
3
4
5
No rating
Rating

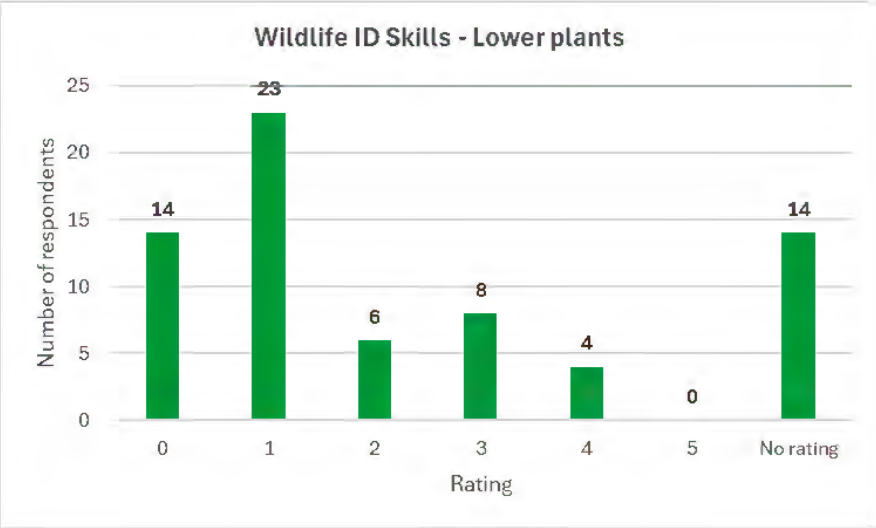

Wildlife ID Skills - Flies
Number of respondents
25
20
15
10
5
0
19
21
6
8
3
1
11
0
1
2
3
4
5
No rating
Rating

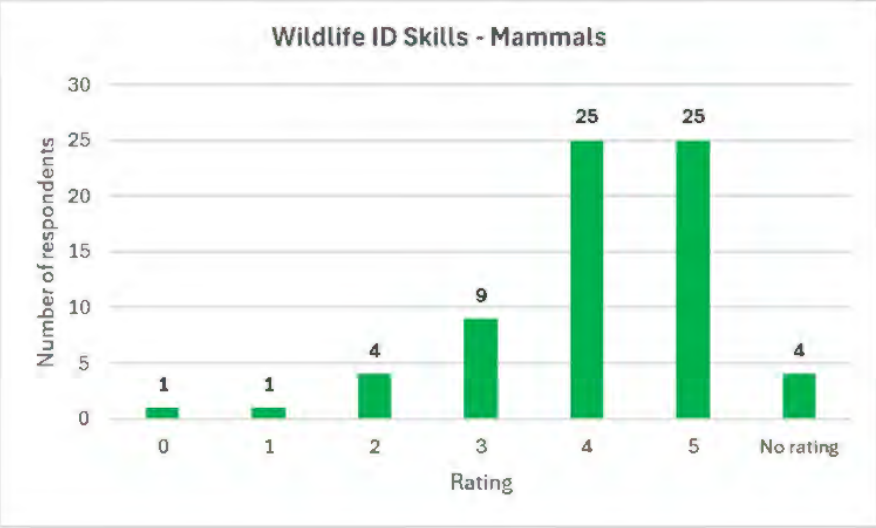

Wildlife ID Skills - Damselflies
Number of respondents
18
16
14
12
10
8
6
4
2
0
9
16
11
13
3
8
9
0
1
2
3
4
5
No rating
Rating

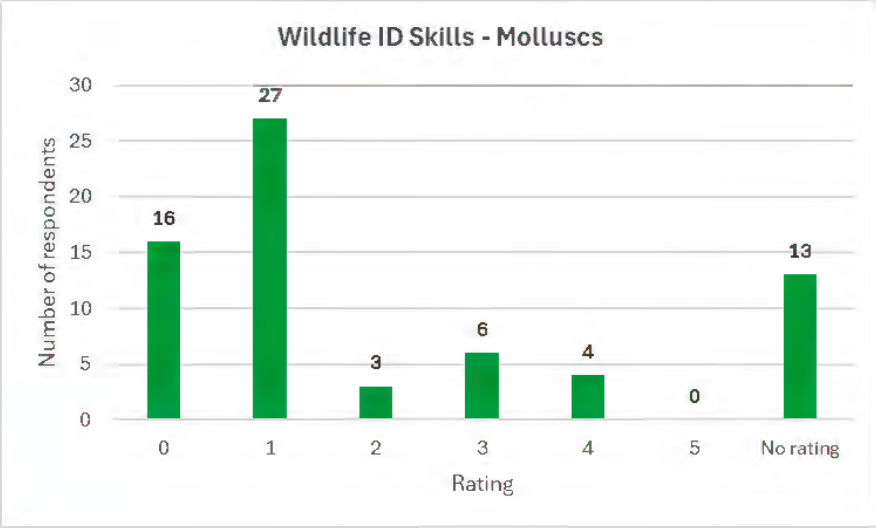

Wildlife ID Skills - Dragonflies
Number of respondents
20
18
16
14
12
10
8
6
4
2
0
7
19
12
13
3
8
7
0
1
2
3
4
5
No rating
Rating

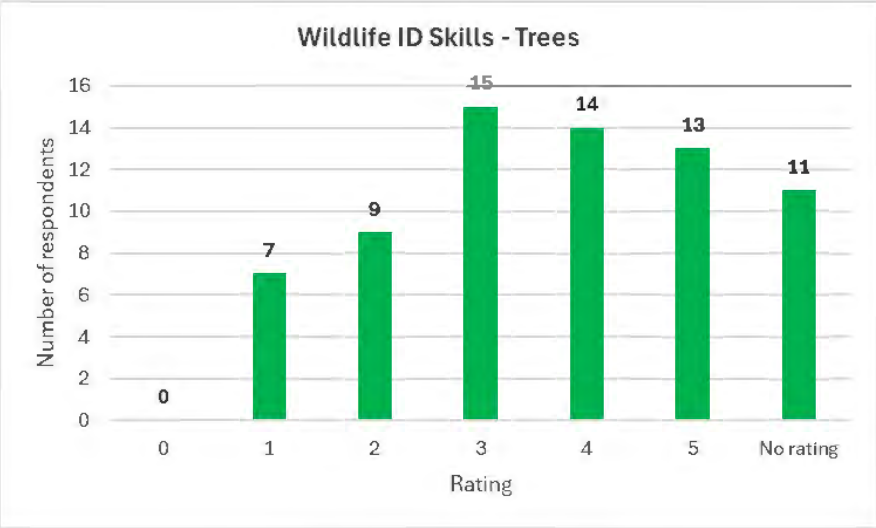

Wildlife ID Skills - Flowering plants (non trees)
Number of respondents
18
16
14
12
10
8
6
4
2
0
2
9
11
16
17
5
9
0
1
2
3
4
5
No rating
Rating

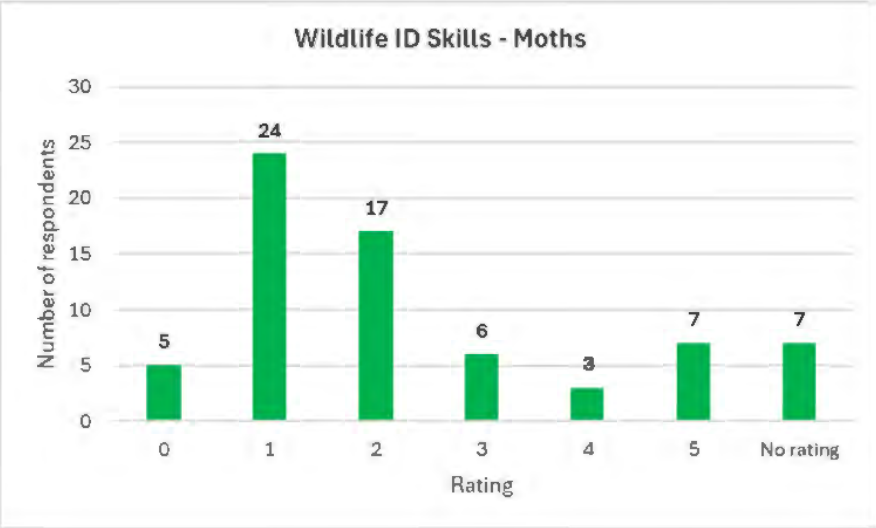

Wildlife ID Skills - General Invertebrates
Number of respondents
Rating
0
1
2
3
4
5
No rating
9
17
16
7
9
2
9

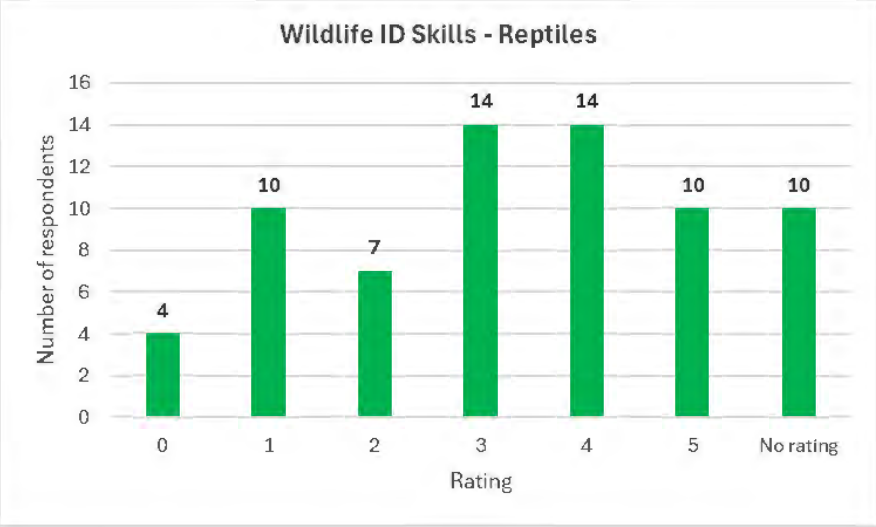

Wildlife ID Skills - Lower plants
Number of respondents
Rating
0
1
2
3
4
5
No rating
14
23
6
8
4
0
14


Wildlife ID Skills - Mammals
Number of respondents
Rating
0
1
2
3
4
5
No rating
1
1
4
9
25
25
4


Wildlife ID Skills - Molluscs
Number of respondents
Rating
0
1
2
3
4
5
No rating
16
27
3
6
4
0
13


Wildlife ID Skills - Trees
Number of respondents
16
14
12
10
8
6
4
2
0
0
7
9
15
14
13
11
0
1
2
3
4
5
No rating
Rating


Wildlife ID Skills - Moths
Number of respondents
30
25
20
15
10
5
0
5
24
17
6
3
7
7
0
1
2
3
4
5
No rating
Rating


Wildlife ID Skills - Reptiles
Number of respondents
16
14
12
10
8
6
4
2
0
4
10
7
14
14
10
10
0
1
2
3
4
5
No rating
Rating

6.10 Appendix 10 – 'Other' reasons given for who respondents share their wildlife sightings with

Other
Family
Facebook wildlife groups
Berksbirds, Goingbirdinghampshire
Have occasionally reported significant species to relevant bodies eg giant stag beetle larvae
the majority are private clients who may pass records on
Birdtrack
Blog
Facebook
Occasionally with other local people
iSpot
Birdtrack
Action for the River Kennet
Current site personel
My children and friends we walk with; noTable bird sightings I share with Oxon Birding
Instagram and facebook

Appendix 9 Table showing the further detail given by respondents who selected 'other' for Q18 Who do you share your wildlife sightings with?

Appendix 11 'Other' reasons given for why respondents may not share their wildlife sightings

Other
Some Apps I have tried are too complicated
Hassle of doing it for 15 species after a walk
The majority are private clients
Difficulties with Apps
Birds, category A (Breeding time)
iRecord is very tedious and slow to use
Knowing what is worth sharing or noTable and what might be common
Not systematic enough to be useful as data?
I do typically share them
Work may prefer I do not to avoid disturbance risk
It is quite a complicated processed submitting recordings as so much detail is required so I find it takes too much time and effort
Not applicable
I do share
I'm new to the specific area
Happy to share my sightings
Not confident that I have identified the wildlife correctly

Appendix 10 Table showing the further detail given by respondents who selected 'other' for Q19 - *Could you tell us the reasons why you might not share your wildlife sightings?*

6.11 Appendix 12 - Barriers preventing participation

What do you think are the barriers that might prevent more people from participating in wildlife recording? e.g. time, travel, costs, health.
Time is the biggest constraint for me including time to do ID work and time to organise and submit records
Time and confidence in accurate recording of species
Time
Time, lack of knowledge
Time issues,
Having to use social media when you don't want to, sharing identifiable data online
Time, knowledge, what to do with the information
Time
Time, health and lack of interest
Knowing how to participate Knowing what the information they collect will be used for The facility to do so - ie online recording facility
Time
Care of nature and the environment should be on the national curriculum. My love of nature and knowledge was passed down by my grandparents and parents, and I have taught my children. If families do not have knowledge of the countryside then it cannot be passed on in this way.
Lack of awareness that they could/should share their sightings
Knowing how to
Knowledge and time
Lack of confidence in identification skills Unsure of usefulness of ad hoc records/one-off sightings
Hassle
They need to know about irecord- it makes your wildlife sightings useful and turns a hobby into something bigger
Time is an issue for many people and also knowledge. It sounds like work until you get interested and then its a hobby. The recording part is less appealing as it feels like it takes you out of nature for the moment (i don’t feel like im ever in nature enough, so dont want to waste it) Also it would be good to be more aware of the use of recording as i forget that anyone else is even interested
Time is restricted due to busy lives and needing more experience and connection with like-minded individuals.
Knowledge and time. Few young people seem interested in natural world.

Lack of interest in the world around us which is terrifically sad
time, if there was an app that could be quickly accessed and basic information recorded i think more would do it. if it is a long process or asking too many questions then people would stop doing it. Awareness, lots of people walk and observe but dont think about recording, if there was a QR code that gave instant access to a form of what you saw whilst walking more would do it i believe
Time
Time, other interests, general unawareness of wildlife
Probably expience and time
Time consuming to add individual iRecord entries and never any feedback (e.g. confirming or correcting an identification). Facebook specialist groups are more interactive and can be good learning tools.
I think there is a large void in wildlife education and engagement with the general public regarding wildlife.
hassle of fiddling with phone and answers at same time - then not knowing where to send. have it all on one QR code.
A combination of multiple factors continue to detract people from participating in wildlife recording - the solutions are complex - societal, political, economic etc.
Access to natural areas and education on identification
Time and not understanding the importance of recording and helping wildlife adapt to the changing climate and loss of habitat
I notice wildlife everywhere I go - I don't think many other people do, until you start a conversatjon about something you have seen. Suddenly they might share something too. I think a barrier is having someone to share it with
Lack of interest, time, health
time
Time, confidence,
Lack of knowledge/ mentors, mobile phone obsession, lack of spare time
Level of interest
Lack of confidence, lack of training in using apps/knowing how to share records, not being aware of importance of recording and how it is used.
Wildlife recording requires technical knowledge and accuracy so it can be difficult to start especially when enthusiasm carries you away and you make your mistakes. Entering the records can be very time consuming and some data entry can be fiddly.
Not knowing there is an interest in wildlife recordings being useful or what to look for.
The variety of recording systems and the lack of automatic integration/strategic sharing across key organisations - eg for birds RSPB, BTO, Wildlife Trusts and TVERC!
Can be time-consuming to record sightings

understanding the value/significance of wildlife recording, so that more people to have a better understanding of the value of habitats that different wildlife need in order to survive
Time
Time, confidence, needing one system that is easy to access and use
Time, fiddliness of entering records, repetitiveness of entering same species time after time
confidence
Lack of knowledge, lack of interest
If not retired, earning a living
Time
Time and distractions from daily activities
Time, not having anyone to go with / limited awareness of group activities
Confidence, time
Time. Lack of confidence in ID skills.
Knowledge time
Time, lack of awareness.
Time and knowledge
lack of skill, lack of confidence, requirement to record to the species level (in many cases), don't realise how valuable they can be
Complex to navigate where to record the right data. What helps is having your records verified which gives you confidence that you are helping to make a difference. So many people are not aware that they even need to record the wildlife they see.
Lack of knowledge and lack of interest/passion for wildlife (feeding into one another!)

Appendix 12 – Table showing the text responses given by respondents, in answer to Question 22 - *What do you think are the barriers that might prevent more people from participating in wildlife recording? e.g. time, travel, costs, health*.