

Earth Trust Survey & Monitoring Report 2024

By Charley Scales

Butterflies (Lepidoptera)

UK Butterfly Emergency Declared



Our fantastic team of surveyors have been busy this summer recording butterfly numbers across 5 of our community reserves. With intentions of establishing surveys at both Tuckmill Meadows and Besselsleigh next year. The results of these surveys are

important for informing our reserve management and butterfly conservation. Butterflies are a key indicator species for environmental health and a vital part of the food chain. This year numbers across the majority of our reserves have halved compared to results from 2023 (see Fig. 1).

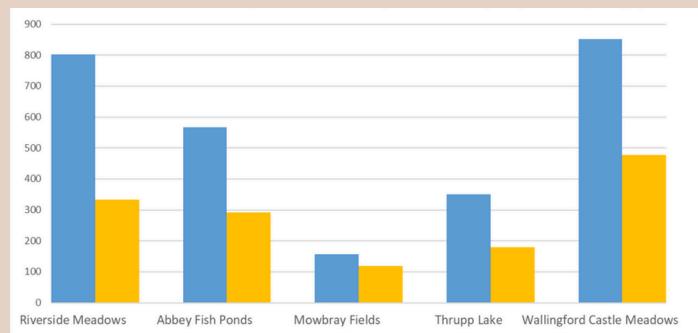


Fig. 1: Butterfly numbers across 5 of our community reserves in 2023 (blue) compared with 2024 (orange).

This marked decline is not only on our reserves but has also been observed across the whole of the UK (see Fig. 2). In response to these declining numbers, Butterfly Conservation have declared a national 'Butterfly Emergency'. Stating that 2024 was the Count's worst summer with most species showing a decline compared with last year.



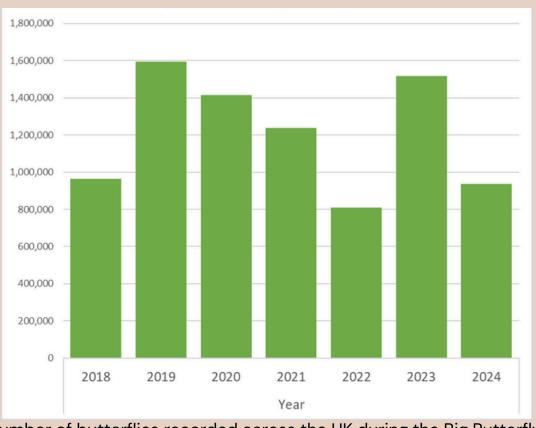


Fig. 2: The number of butterflies recorded across the UK during the Big Butterfly Count from 2018 to 2024².

Great crested newts (Triturus cristatus)

Newt Monitoring is Back in Action



Newts have been surveyed for the first time in Little Wittenham Woods (LWW) in 5 years. Great crested newts (GCN) are a European Protected Species and are the reason the woods are designated as a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). It is important for us to monitor the population living in the woods so we can understand what management might be required to ensure the population remains healthy.

Recording of the newts in Little Wittenham Woods began in the 1980s. With surveys historically taking place in ponds 1 and 2 (see Fig 3.). Over time more ponds have been created and the population has expanded across these ponds. With the latest additions being Lucy's Pond in 2021 (Ponds 6, 7 & 8). These 3 ponds were surveyed for the first time this year and have now all got confirmed presence of great crested and smooth newts.

Table 1: Peak GCN count at each pond surveyed in Little Wittenham Woods in 2024.

Pond Number	Peak GCN Count	
Pond 1	73	
Pond 2	95	
Pond 4	0	
Pond 5	13	
Pond 6	2	
Pond 7	3	
Pond 8	1	



Fig. 3: Little Wittenham Woods pond numbers.

The population of great crested newts within ponds 1 & 2 has fluctuated over the years. So, it is encouraging to see that this year both ponds have achieved a 'good' population score according to the Nature Conservancy Council's guidelines³. With pond 2 just shy of reaching an 'exceptional' population status. As newt population size is known to fluctuate between years, long-term monitoring is required to reveal meaningful trends.



Bats (Chiroptera)

New Species Recorded in Little Wittenham Woods

The UK is home to 18 species of bat, 17 of which are known to breed here. That equates to almost a quarter of our species of mammal. Bat populations have suffered serious declines over the past century with efforts being put in place to slow the decline. Little Wittenham Woods provides a great home to a number of bat species with it's gnarled old trees and abundance of insects.



During the newt surveys this year a static bat detector was left out between ponds 1 & 2. A total of 7 bat species were recorded during those 3 surveys, including:

Table 2: Bat species recorded in Little Wittenham Woods in 2024.

Common Name	Latin Name	
Common pipistrelle	Pipistrellus pipistrellus	
Soprano pipistrelle	Pipistrellus pygmaeus	
Leisler	Nyctalus noctula	
Noctule	Nyctalus noctula	
Serotine	Eptesicus daubentonii	
Daubenton	Myotis daubentonii	
Barbastelle	Barbastella barbastellus	

The most exciting recording was the barbastelle which before now had never been officially recorded in the woods. Making it an Earth Trust first. Since the discovery we have had a research scientist from the Bat Conservation Trust come out to the woods and put out a series of static detectors. With the aim of finding more barbastelles and also bechstein's and determining where their roosts are located. We are currently waiting for the results to be released from these surveys.

Common lizards (Zootoca vivipara)

Surprise Lizards at North Farm



On a cold November morning our Monday Land Management volunteers were out at North Farm doing some tree work. When returning back to the vehicle a common lizard was spotted by a rotten log. On closer inspection a further 3 lizards were found curled up inside the log hibernating. An exciting find as lizards can be hard to spot and there are not many recordings of them here at the Earth Trust. Common widespread lizards are throughout the UK but numbers are thought to be delcining.

Hazel dormice (Muscardinus avellanarius)

Are Dormice Living in the Woods?

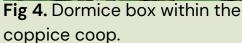


surrounding landscape.

Earlier this year Earth Trust partnered up with BSG Ecology to investigate the presence or likely absence of hazel dormice within Little Wittenham Woods⁴. There are records of hazel dormice in Oxfordshire but none within Little Wittenham Woods or within the immediate

The woodlands behind the clumps are considered to provide high quality habitat for dormice. This includes actively managed hazel coppice, woodland rides with fruiting scrub, and areas of unmanaged woodland. In May, 25 dormouse boxes (see Fig 4.) were installed within the woods. These boxes have been checked every month for signs of nesting dormice. This year we have not found hazel dormice but have recorded wood mice (*Apodemus sylvaticus*).







Invertebrates

New Planthopper Record on the Clumps

John Bloomfield has been busy this year monitoring different invertebrate species across Earth Trust farm (see Fig 5.). Poor weather this year has meant recordings have been down from previous years with a total of 278 invertebrates recorded. Despite this, he discovered a new record on the clumps. The tall fescue planthopper (*Ribautodelphax imitans*) of which there have only been 18 previous records in the UK. The record details of the tall fescue planthopper found on the clumps can be accessed here and national details here.



Fig 5. Invertebrates photographed by John Bloomfield at Earth Trust farm this year.

1) Spotted firebug (*Corizus hyoscyami*) 2) Banded demoiselle (*Calopteryx splendens*)

3) Acorn weevil (Curculio glandum) 4) Wasp beetle (Clytus arietis).

Wetland Birds

Highlights from surveys at River of Life II

Ranger Jake has been busy this year undertaking wetland bird surveys at River of Life II at Clifton Meadows. Highlights from his surveys include:

Table 3: Highlights of bird species recorded at River of Life II (Clifton Meadows) in 2024.

Common Name	Latin Name	Peak Count	UK Conservation Status
Common tern	Sterna hirundo	1	Amber
Kingfisher	Alcedo atthis	1	Green
Long-tailed tit	Aegithalos caudatus	2	Green
Mistle thrush	Turdus viscivorus	1	Red
Oystercatcher	Haematopus ostralegus	1	Amber
Redwing	Turdus iliacus	2	Not assessed
Reed bunting	Emberiza schoeniclus	2	Not assessed
Reed warbler	Acrocephalus scirpaceus	1	Green
Sedge warbler	Acrocephalus schoenobaenus	1	Amber
Skylark	Alauda arvensis	4	Red
Snipe	Gallinago gallinago	1	Amber
Stonechat	Saxicola rubicola	2	Green
Yellowhammer	Emberiza citrinella	10	Red



A small group of volunteers also undertake bird surveys at River of Life II. Full results from these surveys can be viewed here by searching for 'River of Life' in the location tab.

Photographs 5 and 6 were taken at River of Life II by Jake during his surveys and show: 5) a Eurasian teal (*Anas crecca*) and 6) a buzzard (*Buteo buteo*).

Barn Owls (<u>Tyto alba</u>)

Rescued Barn Owls Released at Earth Trust

In September, Earth Trust welcomed friends from the Owl Conservation Project (OCP) and Oxfordshire Wildlife Rescue (OWR). Who have teamed up with the British Trust for Ornithology (BTO) regarding the soft release of four hand-reared barn owlets at Earth Trust. OWR rescued, treated, and



rehabilitated the birds in preparation to be released back into the wild. Then, BTO ringed the barn owls for observation and research purposes. While OCP helped to set up the temporary aviary at Earth Trust and monitored the owls while they acclimatised to their new home. The location of the aviary was carefully selected due to it's suitable habitat and rich feeding grounds. The owls were supplementary fed until they were ready for release. With the aviary left open should they wish to return for food for the first few weeks after release. We are happy to report the owls were successfully released at the end of September.





Finally, a massive thank you to all of our volunteers who dedicate their time to helping the Earth Trust. Without our volunteers none of the work we do here would be possible. Thank you!

