

Improving biodiversity & socioeconomic returns in the Cotswolds

Sapperton Wilder Reptile Report

Winter 2024

Background - Why is this important?

Reptiles and amphibians are an important part of the ecosystem, filling the role of both predator and prey within the food web. Birds, foxes, badgers and other reptiles predate upon reptiles, while reptiles eat frogs, birds' eggs, small mammals and insects. Slow worms and toads eat common agricultural pests like slugs and snails. According to scientific studies, reptiles are in decline, as they are sensitive to land use changes and habitat fragmentation. This report will focus mainly on reptiles, although the occasional amphibian can be found on site. To monitor any changes to the reptile populations on site as the project progresses, a baseline assessment of the reptiles was necessary. This year's results gave us a snapshot of what is present at what locations and helped us to establish a long-term monitoring strategy.

Methods - What did we do?

Our methods were based on the Froglife Surveying for Reptiles methodology. We acquired 30 refugia as part of the Farming in Protected Landscapes (FiPL) grant through the Cotswold National Landscape. These refugia are a standard tool for monitoring reptiles, as they absorb and trap heat, offering reptiles a means to gain warmth, while also providing protection from predation and disturbance. The refugia are evenly spread across the site and were checked once a month April through October. Any reptiles seen outside the refugia and surveys were also recorded.



**If you come across one of these refugia, please do not disturb. If you are interested in joining in the reptile surveys, please get in touch. We are always keen to have people join.



Results - What did we find?

All records were submitted to the Amphibian and Reptile Group of the UK (ARG UK) and Amphibian and Reptile Conservation. This national scheme collects data to make it available, locally and nationally, for conservation purposes.



The four reptile and one amphibian species one would expect to find in this part of the country and habitat were recorded at Sapperton Wilder during this first season. In total, 124 records over 8 visits were recorded across the site. Of that, nearly 70% were slow worms. Surveys in July and August found the most records, while September and October had the least. The majority of the records were found in the Central Block (80%), with 17% in the Southern Block and only 3% found in the Northern Block.





Species Descriptions

Adder

Males generally grey with black markings Females generally light brown with dark brown markings Zigzag pattern always visible even on juveniles Adults 60-80cm in length Reddish iris with vertical pupil Feed primarily on small mammals, amphibians, and small birds





Grass Snake

Adults up to 150cm in length Grey-green in colour with cream, yellow or light green belly Distinctive yellow and black collar behind the head Dark markings along the side and belly Circular pupil Feed on amphibians, small mammals, and birds

Common Lizard

Adults up to 15cm in length Scaly skin and move away very quickly when disturbed Feed on small invertebrates, such as flies, spiders and snails





Slow Worm

Legless lizard Unlike snakes, they can blink, have a flat forked tongue and can drop their tails if attacked Adults up to 50cm in length Shiny, smooth skin Feed on invertebrates, including slugs, worms, snails and spiders



Common Toad (Amphibian)

Generally brown or olive-brown, belly usually pale Skin is warty and relatively dry Oval, horizontal pupil Tend to crawl rather than hop Feed on a variety of invertebrates and even small vertebrates Threatened by a loss of breeding ponds and disruption of migration routes



All photos by Chenie Prudhomme

(Above information from Froglife and the Woodland Trust)

Discussion - What does it mean?

2024 was the first year of reptile monitoring. The results collected provide us with a suite of information. First, the presence of these four species we expected to find has been confirmed. Second, this data will allow us to monitor distribution and population change over time. Third, future data will inform site management, as well as contribute to local and national reptile datasets. The fact that these reptiles are present is likely a testament to a variety of factors, including suitable habitat such as old stone walls, healthy, connected hedgerows and surrounding woodland.

What are the next steps?

The project will aim to maintain a diverse vegetation structure, areas of sunlight at ground level, continuity of sufficient and appropriate habitat over time, connectivity of areas occupied and used by reptiles, features for breeding/egg-laying, and hibernation areas. Allowing the hedgerows to slowly expand, gapping up hedgerows, leaving rough margins, maintaining old stone walls, and leaving brush and wood piles will hopefully all contribute to an increase in reptile abundance and movement across the site.

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Resources

ARG UK Record Pool https://www.recordpool.org.uk/

Froglife - Surveying for Reptiles https://www.froglife.org/surveying-for-reptiles/

Woodland Trust - Reptiles and Amphibians <u>https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/animals/reptiles-and-amphibians</u>



