

BBC ARG Newsletter

Welcome to our first BBC ARG Newsletter!

The past 12 months have seen the Birmingham and Black Country Amphibian & Reptile Group grow from monitoring core sites to helping EcoRecord with a successful social media campaign to get more amphibian records, teaching new members about eft (baby newt) identification and running a reptile workshop for Wildlife Trust Site Officers and volunteers. All with the help of our new Committee and members. We hope you enjoy reading about some of the highlights and look forward to seeing you at an event soon!



© Katy Perry Back to the warm days of summer

This stunning female toad shows just how variable the colouration of toads and frogs can be. Her reddish hue may reflect the sandstone habitat she was found in.

We know the common toad is declining, but we need to know more about where we've lost populations, and where they are still thriving. See how you can help in the SpawnWatch report.



February 2019

Even in the winter months we can look at survey opportunities on new sites.

AGM Wolverhampton University 14/02/19 6pm-8pm

SpawnWatch



SpawnWatch was designed as a citizen science project to encourage members of the public to report any frog or toad spawn spotted in garden ponds or other local ponds. The survey was carried out as a collaboration between EcoRecord (the Local Environment Records Centre for Birmingham and the Black Country), BBC ARG and the Wildlife Trust.

Why are we carrying out this survey?

Many of our frog and toad records are now over 15 years old, so the new records generated will be useful in helping us to update our knowledge of the distribution and breeding sites of these key species, so we can better protect them.

We need our information to be current and comprehensive

As well as reporting on the presence of spawn we also asked participants to tell us about the date it was first sighted. We intend to run SpawnWatch annually, so we should hopefully be able to see if there are any year on year trends in the timings of spawn laying.

We are also collecting information on the amount of spawn laid in each pond, as well as other details about the pond, to see if we find out more about habitat preference and identify ponds that are particularly good for these species.

The information we gather will help us to understand more about amphibian populations across the urban area, and help organisations such as the Wildlife Trust and BBC ARG to target future conservation efforts and survey.

Breeding frogs in Walsall (c) Anna Webster Frogspawn is laid in clumps and toadspawn in strings.





SpawnWatch

When did the first frogspawn appear in 2018?

Winter and early spring 2018 were a bit of a rollercoaster in terms of weather, with two short wintery spells particularly impacting on frogs laying spawn.

Our first report of frogspawn-laying activity began on the 22nd February and lasted until 25th when temperatures dropped, and snow storms arrived. The freezing temperatures are thought to have killed off at least some of the spawn.

By the 3rd March temperatures began to rise again and this was accompanied by reports of frogspawn appearing at a number of ponds across the area. Interestingly, in the ponds where frogspawn had been laid before the cold snap, a second batch of spawn was then laid once night-time temperatures improved.

Reports of frogspawn continued until the 8th April, and tadpoles were reported emerging from 3rd April onwards.





Frogspawn with snow

SpawnWatch

Frogspawn vs. Toadspawn?

We received only one record of toadspawn via the online form - and this was in a park pond rather than a garden pond. As toads are known to favour larger ponds for breeding, this doesn't come as a complete surprise. Toadspawn is also often more difficult to spot than frogspawn.



Breeding toads (c) Amber Hopwood

As well as records of spawn, we are interested in sightings of breeding adults, especially toads. Toads are more faithful to their breeding grounds than opportunistic frogs, and tend to be found in larger water bodies, as they can co-exist with fish to some extent. This also makes them vulnerable more to habitat fragmentation and the risks of crossing roads.

What next?

SpawnWatch managed to engage a good number of people in the survey and it generated an impressive number of breeding frog records, especially given that the resource investment in the survey was relatively low.

The records generated as part of the survey provided us with up-to-date records for a number of 1x1km squares on our map, some of which had no recent records and seven squares for which we had no existing frog records.

The survey is running again in 2019 for 'Froguary' in order to begin to create a comparable yearon-year breeding frog dataset. We will also look at ways of specifically targeting areas with no recent records to help fill in some of the gaps.

Do you have any other ideas on how to further develop the project for next year?



How to submit records:

You can send your records to EcoRecord via their online form, or even using Twitter or Facebook. Just remember to include where, when, what and your name. And if you can include a photo and other habitat information, then all the better! Go to: www.ecorecord.org.uk

Newt survey

Looking for newts

At the end of July, which was one of the hottest and driest summers I have experienced, we went on the hunt to find some newt tadpoles to learn how to identify them in their young stages.

We went to a site near the border in South Staffs, which we knew had healthy populations of amphibians, but given the weather, several of the ponds we were investigating were close to drying up. As a licence holder for protected species, Paul Wilkinson (the longest standing member of the ARG group and biggest enthusiast) was in charge of pond dipping and disturbance.



Ponds

Although the importance of ponds lies in them providing much needed water for breeding and drinking in the landscape, it can also be good if they dry up from time to time for amphibians, as this keeps down competition from fish. This is also why it is important for there to be a network of ponds in an area. Our concern was whether the newts would be far enough advanced to have sufficiently strong legs and feet to progress to the terrestrial stage.



Froglet in the undergrowth © Katy Perry

Newt survey

Smoothies and cresties

Kitted out with trays, water and smaller tubs for close up identification we all found a spot on the grass to learn about our native species. Smooth newt efts were found quite quickly and we all gathered for a closer inspection. Smooth and palmate newt efts are generally indistinguishable, but we knew the species from previous recording.

The efts (young newts) are small newts, with mottled colouring. Efts have these large, and adorable, gills on each side of their heads to be enable them to breathe in the water. As young, they are predominantly aquatic and as they develop, lose the gills to be able to survive on land.



Smooth newt efts with visible gills



Great crested newt efts (above) are larger, with broader heads, bushier gills, and broad tails with black blotches. The toes are also noticeably longer.

Young newts usually leave the water in late summer or autumn, although sometimes they remain as larvae over the winter.



Comparison in size and shape of smooth newts (left) and great crested newts (right)

Ponds had rich invertebrate fauna including dragonfly nymphs and pond snails



Scrub Management

Winter habitat management for reptiles

In the winter months when our native reptiles are hibernating and so less vulnerable to disturbance, we have the opportunity to conduct habitat management work, which is exactly what we do every year in and around our region. There are a number of ways in which we can improve reptile habitats (such as heathland), all with the aim of providing areas for reptiles to bask, shelter from predators, feed and breed. In the past we have created structures for species such as common lizards, adders and grass snakes to use for hibernation, these are called 'hibernacula' - and in a natural setting you would expect these to occur in mammal burrows, tree root systems, grass tussocks and under natural debris like fallen trees. In order to create an artificial hibernacula (like the one seen in the picture right), we dug out a trench and filled it with branches, leaf mulch and stones – making sure to leave gaps for the animals to move through – before covering the trench with leftover branches and cut bracken, protecting the underlying hibernation space, and creating a permeable layer in which snakes and lizards alike can move through.

We also do a lot of scrub management, which is a near constant task in heathland habitats. Every winter we dedicate as much time as we can into clearing areas of emergent birch trees, thinning out dense gorse stands and helping to create rides in open woodland habitats. Although cutting down trees and shrubs may sound like the opposite of conservation work, it is absolute necessary to maintain valuable heathland areas - particularly for reptiles, as they thrive in early to mid-successional



habitats that are abundant in basking spots and low-lying scrub that they can use for shelter.

Our work aims to maintain a mosaic of open and sheltered areas, which helps to create a network of favourable habitat and allows reptiles to disperse throughout large areas. In the long term this will keep populations healthy by connecting more individuals. In all of our management work, we try our best to re-use as many natural resources as possible – and this is something we have been able to do with great success in our most recent work. Unfortunately, there are a number of sites that we work at where the species present face high levels of disturbance from people. One of our solutions is to create natural barriers using the young birch trees and scrub materials that we remove (as seen in the picture below).



Simple solutions such as this help to reduce and even remove human disturbance; create habitats for insects, birds and small mammals alike; and also serves as a more eco-friendly method of dealing with 'vegetation waste' from management work than things such as burning.

Despite our success, there is always more work to be done! If you are interested in helping with this kind of work, please get in touch via our Facebook or Twitter channels, or by emailing us at: **bbcarg@gmail.com**

By Charlene Jones

Focus on...Lizards

The common lizard – Zootoca vivipara

There are 6 native reptile species in the UK, three of which are currently confirmed in Birmingham and the Black Country: common lizard, slow-worm and grass snake. The common lizard is a bit of a misnomer, however, as it is not that common at all, and even where it is found, can be rather elusive.

Lifecycle

Common lizards hibernate from October through to late February (depending on the weather), choosing underground burrows or deep leaf litter/rocks. Mating occurs around April and the young are born in July-August. The latin name 'vivipara' alludes to the fact that lizards give birth to 5-9 live young, that are black and then develop a copper colour before the first hibernation.

Identification

The adults are up to 15cm (6 in) long and can range in colour from brown, ginger to greenish. The females tend to have darker dorsal and lateral lines, which at first glance appear as 'stripes', whereas the male appears more 'spotted'. Males have a broader head, and females may look fatter in the body, especially when gravid with eggs. On the underside, males are bright orange with dark flecks, whereas females have pale, plain bellies. Lizards can shed their tail if caught or under distress, and when it regrows is shorter and darker.



Male common lizard © P-O Rehnberg – Own work, CC BY-SA 4.0

Food

All of our reptile and amphibians are carnivorous and lizards feed on a variety of invertebrates, including worms, spiders and small insects.

Behaviour

Reptiles are 'homeothermic', which means they need to be warmed up externally, rather than rely on the internal combustion engine of mammals and birds. They bask in sunny, sheltered spots, but close to cover that they can quickly dart into if disturbed. This is why structured vegetation is so important to them. Lizards are small and a tasty meal for predators such as buzzards, crows and larger reptiles, so vigilance is key. That said, they have preferred basking spots, and will return quite soon after disturbance, or the same individual found repeatedly under a certain mat.



Female common lizard © Orangeaurochs – Own work, CC by 2.0

Focus on...Lizards

Habitat

Common lizards are widespread throughout the UK, but like many of our species, are sadly in decline. They can thrive in a variety of habitats, such as heathland, scrubland, woodland edge, rough grassland and brownfield sites, but as mentioned in Amber's article, they need structured vegetation and ideally a mosaic of habitats where they can exist relatively undisturbed. They also need a high abundance of invertebrate prey, which can be impoverished by insecticide use or lack of suitable flora. Common lizards do not range particularly far, and habitats, especially in urban areas, easily become fragmented by roads, housing estates or land management changes. Populations therefore become isolated and even more threatened.

Where to find lizards in Birmingham and the Black Country

Records are sparse for common lizards, and aggregate around larger nature reserves with surviving heathlands. Hotspots are Sutton Park in north Birmingham, Brownhills in Walsall and Saltwells in Dudley.

How to spot them

Even though lizards will bask on logs and walls, they are skittish and you have to be patient to spy them. Walk slowly and look a few feet ahead. If you hear a rustling noise, it may be a lizard in the undergrowth. If you come across refugia on your walks, then we ask that, despite temptation, to not disturb them, as they will be part of a monitoring scheme and the effectiveness of the scheme is reduced if the mats are lifted too often.

Records

If you're lucky enough to see a common lizard out and about, we urge you to submit your records to EcoRecord or our website.:

http://www.ecorecord.org.uk/ https://groups.arguk.org/bbcarg

Coroline mats at a site in Dudley.

This corrugated bitumen-based roofing material provides good refugia for reptiles and other species they may feed on, such as voles. They retain heat throughout the day, and the undulating shape provides a varied microclimate as well as some protection from trampling.

How to get involved

If you know of a site that may be suitable for reptile surveys, then please get in touch as we have mats that we can donate and members of the group can provide guidance on survey techniques. Contact us at: **bbcarg@gmail.com**