

Toad Patrol 2018. Some observations and the practicalities of assisting local toad migration.

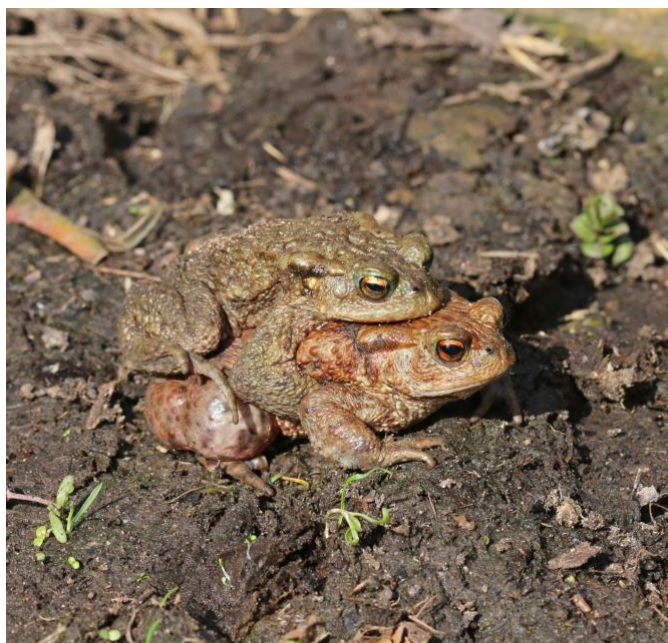
Andy Young



01. Common Toad *Bufo bufo*. Wendy Carter.

For many, the season of spring starts with the first snowdrops, woodpeckers drumming or even the first sighting of a Hairy-footed Flower Bee. However, for us, it's an email or phone call from our local toad patrol coordinator excitedly proclaiming that the temperature and moisture levels are just right for the annual migration of toads to start.

As I'm sure most of the Worcestershire Recorders will know, when conditions are right, toads *Bufo bufo* will migrate using well established routes back to their ancestral breeding pond, sometimes from distances of up to 2km. Human activity has affected many of these migration routes, not least by the building of roads across the routes.



02. Common Toad *Bufo bufo* in amplexus. Wendy Carter.

The objective of the toad patrol is to try and protect as many toads (and any other amphibians we happen to find in imminent danger) as possible that are moving on the roads on their journey back to their pond. Froglife is a national wildlife conservation charity that is concerned with the conservation of the UK's amphibian and reptile

species and their associated habitats, and as such, promote toad patrols via local coordinators. Toad patrollers are all volunteers that will respond to a call to go out and help toads once they have been observed to be on the move, and who will also keep a good lookout and raise the help of other volunteers as required. Records of numbers of toads and other amphibians helped are kept and sent back to Froglife via the local coordinator along with details of sites and conditions during the patrol.

The general advice is that the conditions are good for toad migration from early February onwards when the temperature is above or around 8°C, and the road and verge surface is damp or wet. However, not all toads follow the general advice!

We have been involved in the local toad patrol for three years now, and it's been interesting to note some of the behaviour of the amphibians we come across. However, it's not a straightforward activity to conduct a robust scientific study into, mainly because the key objective is to protect the animals rather than stand and observe whilst they get run over by frequent passing vehicles! Another compounding factor is also the need to keep ourselves safe whilst on patrol. Going out on dark evenings wandering along rural roads in fine drizzle or rain and expecting passing motorists to give us a wide berth is not something where you can relax or drop your guard.

Ideally you need at least two persons to conduct a toad patrol, although it can be done on your own as long as you take sensible precautions as provided by Froglife. If I should be passing a crossing point when I am by myself and I see activity, I will stop and move them unaided. This just highlights that there are clear (dare I say it?) "health and safety" issues around any toad patrol activities and I like to think that we are all well aware of our local crossings and the hazards involved.

On some occasions, we do meet up with other toad patrol volunteers, and having extra pairs of eyes, and the ability to cover a larger stretch of the crossing is very useful, but it is probably more important to cover more likely crossing times with less people than have a lot all at one time and at the same crossing.

Locally, there are five recognised crossings that we regularly monitor, and each has its own different characteristics. When you start looking for amphibians on the road, you do start to notice them in other areas too, and that can lead to a potential new crossing. To register a new crossing Froglife require us to record at least 100 animals on the road.



03. Bucket of toads. Jurjen Annen.

Toad crossing activity has been reported in the *Worcestershire Record* before by Harry Green and this includes a technique of using fencing and collection pits to collect toads and transport them to safety en masse (Green 2008). This system has obvious advantages, but there are a couple of drawbacks, one being, as Harry reported that when the toads had finished mating and were on the return journey, the fence now prevented the toads from getting off the road, so a change of fencing arrangements needs to be made at a time

when more toads are returning from, rather than going to the pond. There is an argument that protecting toads on their way to the pond to allow them to mate is perhaps more important than protecting them on their way back, but given that a toad in the wild may live up to 12 years (Smirina 1994), I do feel that they should be protected for both their journeys. The other drawback that I see, particularly at the New Farm crossing we have been monitoring is that a continuous fence could not be erected as it would cross several access driveways for local residents, thus negating any real benefit of being able to stop the toads accessing the road directly. Indeed, observations this year saw several toads using the driveways to access and cross the road, presumably because they can make faster progress on the smoother surfaces.

This leaves us with the more traditional approach to our patrolling activities. Normally, we prefer to go out as a pair and depending on the conditions when we arrive at the site by car we will use one of two techniques. If there are only a few toads about, my wife Jean will walk in front of the car, wearing a high visibility jacket and head torch. She will also be wearing nitrile disposable gloves, mainly to protect the toads. I will be following slowly in the car behind Jean, with the hazard lights on, and full beam lights to help pick out any amphibians over the next 30 metres or so and I will alert Jean if a car is approaching from behind. If we come across several toads I will stop the car in a position to protect them from any other vehicles whilst we can get them off the road. If there are no toads or other amphibians in the foreseeable distance, Jean will get back in the car and we move slowly on keeping a look out for any others. This approach works well on the Chevington Lane crossing where the numbers have been down recently, and the crossing covers over half a mile in distance that has long stretches with no toads. It takes a little experience to “get your eye in” to be able to discern toads from leaves and other objects on the road in front of you but you soon get used to it whilst driving.

The other technique is far more conventional in that we park up the car as far off the road as we can, and both of us will be out, suitably attired and using gloves and bucket we will move all that we can find.

It sounds pretty straight forward in helping a toad across a road, but the one problem all toad patrollers have, is in trying to decide which direction the toad is moving in. The easiest ones to decide upon are where you can actually see the toad striding out across the road, so that’s a simple matter of just helping it on its way, but more often, a toad will just be sitting stationary as if it had no worries in the world!. It’s then a matter of making a judgement for each one – generally, helping them across the road in the direction they are facing is a reasonable idea, but some will be facing just along the road. Often some can be seen walking along rather than across the road, so in these cases a safer option may just be to return them to the side where the pond is. However, even that is fraught with problems at sites where the pond is not evident, or where there may be several ponds, on both sides of the road. In this respect, at least the New Farm crossing is fairly clear with one large pond right next to the road, but even here, a study by aerial satellite view reveals what may be a small ornamental pond amongst farm buildings on the opposite side of the road.

It is always interesting to hear the “squeaking” sounds that some toads will make whilst you are gently handling them, and sometimes a toad will grip your fingers quite tightly and refuse to let go very easily! Some pairs in amplexus need to be moved from imminent danger too, although it seems rather intrusive, it is for the best and they seem unperturbed by the experience and just carry on with their business once relocated.

I have become convinced that many toads will, in their haste to get to a pond, try to get there by the easiest means possible, and I’m sure that many will travel along the smoothest available path. That perhaps explains why we see so many moving along the road in places, and at New Farm will be seen coming along private driveways and paths so that they can make better progress.



04. Toads in amplexus. Andy Young.

In the past we have generally thought of the toad crossing event as lasting over just a few evenings when toads will cross in large numbers, but in 2017 the crossing season lasted from 21st February to 15th March, some three weeks, and I suspect there were more movements outside those times. In 2018 the season was delayed by cold weather and we also had a late cold spell that may have seen some of the earlier produced toad spawn frozen, but the high activity season lasted from 9th to 16th March.

Interestingly, given the large variation in times that toads have been observed to conduct their migration, it probably comes as no surprise to hear that we have also found toads crossing in dry conditions, and even at temperatures down to not much above freezing. This means it pays to keep a good look out for any crossing activity no matter what the conditions are, there may be some on the move.

As well as toads, during many, if not most of our toad patrols, we have come across Common Frogs *Rana temporaria*, Smooth and Great-crested newts *Lissotriton vulgaris* and *Triturus cristatus*. We treat these in exactly the same way as we do for toads, i.e. move them out of the way of any harm on the road and help them in the direction they are headed, or toward the pond if their direction is not obvious. The data that goes back to Froglife includes not only the numbers of toads, but also any other amphibians that are helped, along with any number of those that we find dead on the roads.

Inevitably, we do come across many that don’t make the crossing, and have been squashed by a passing car. As mentioned, the numbers do get recorded, but to avoid any duplication where possible we remove the dead individuals from the road surface where they most probably end up being a meal for a bird or other local wildlife. An additional benefit is that it avoids other wildlife that is feeding on the dead toads getting run over too! It is often quite disheartening to see so many that do get squashed despite our best efforts, but at least the live animals that are helped make it all worthwhile.

The crossings that we patrol in our locality with figures for 2018 toads saved are:
 Chevington Lane, Grid Ref SO920471; 42 toads saved, 15 dead on three patrol nights
 Earl’s Croomie Village, Grid Ref SO869422; 175 toads saved, 20 dead on four patrol nights
 New Farm, Grid Ref SO905464; 205 toads saved, 74 dead on 14 patrol on one nights
 Croomie D’Abitot/High Green, Grid Ref SO887453 to SO871450; 34 toads saved, 46 dead on 14 patrol nights
 Mill Lane, Grid Ref SO906476 to SO915481; 38 toads saved, 50 dead on six patrol nights

At the New Farm crossing this year we also had 23 frogs (five of which were dead), 65 Smooth Newts (of which 15 were dead) and 37 Great-crested Newts (eight dead). Smaller numbers of the other amphibians were also found at the other crossings.

Thanks are due to Wendy Carter for organising the local toad patrols and to my fellow patrollers who in 2018 were Jayne & Martin Bache, John & Pat Hodson, Sandra Young, Jean Young and of course, Wendy. We are always looking for volunteers to join our ranks so if you are interested, please contact Wendy or any of the other patrollers for more details or email worcestershire.recorders@gmail.com.



05. A Toad in hand. Wendy Carter.



06. A Toad in hand. Wendy Carter

References.

- Green, G.H. 2008. Toads crossing roads. *Worcestershire Record* 24:13-14
Smirina. 1994. Age determination and longevity in amphibians, *Gerontology* 40:133-146.

Images

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