

Derbyshire Amphibian & Reptile Group

Guidelines for volunteers helping with road crossing patrols for toads organised by Derbyshire Amphibian and Reptile Group (DARG) through a local co-ordinator

Introduction

In spring, adult toads migrate to their breeding ponds to spawn, following the same route each year. Some of these migration routes cross roads and many animals are killed by vehicles. Volunteers can reduce the numbers of toads killed by collecting them as they reach the roadside, moving them to the other side or to the breeding pond if it is nearby. At many of the regular crossing points there is an annual volunteer patrol organised by DARG. The name, address and telephone number of the coordinator of the patrol nearest to you will be attached to these guidelines.

Personal safety

Please remember that, whilst the aim of crossing patrols is to help toads across the road, **the personal safety of each volunteer is paramount.** Whilst we hope to move as many toads as possible, it is impossible to save every animal, **so never take a risk with your own safety on the road.** The instinct to save every toad must be curbed, especially on some of the busy roads, where chance means that some toads will always walk onto the road just in front of an approaching vehicle. It is important that every volunteer takes complete responsibility for their personal safety, whilst taking the advice of the co-ordinator when available. At many sites there will be a rota system of volunteers, so the co-ordinator will not be present on every evening

Once you have contacted the crossing coordinator or elected to help at a new site, it is advisable to visit it in daylight. This will enable you to familiarise yourself with the area, note the traffic conditions and enable you to decide on safe places to stand when traffic is passing, ie verges, field gates, pavements etc. Every toad crossing site is different in terms of the particular hazards that are present. Remember that although many motorists on the road passing through the site are helpful and do slow down in the vicinity of the patrol, there will always be some who will not slow down.

If possible, always let someone know where and when you are going to be helping on a toad patrol. Remember that at some of the sites there may be poor mobile phone reception.

Safety precautions

Most toads move at dusk or after dark and therefore volunteers should take the following precautions to ensure their safety:

- ◆ **Wear reflective jackets or tabards** and if possible light coloured clothes with the use of reflective arm-bands. The Group may have stocks of reflective clothing and the coordinator of your crossing site will be able to advise you if items such as reflective tabards are available.

- ◆ Always **use a powerful torch** (the majority of sites are situated on unlit roads), as this assists personal safety, enables you to spot toads and makes you more visible to approaching motorists. Do not shine bright torches directly at cars as they may dazzle the driver and increase the risk of an accident.
- ◆ If bringing a bucket you can stick reflective tape around the outside.
- ◆ **Wear non-slip boots or shoes**, as ideal conditions for toad movement occur on damp nights when the road surface is likely to be wet.
- ◆ **Do not attempt to pick up animals on the carriageway**, unless the road is clear of approaching vehicles.
- ◆ **Disease and infection**, you will not catch any amphibian disease from toads but you need to take sensible precautions. In the vicinity of water be aware of the risks of catching water borne infections, such as Weil's Disease though cuts and grazes on your skin. Any such areas on your hands must be securely covered by waterproof plasters before taking part in a toad crossing.
- ◆ Do not take any food or drink whilst carrying out toad patrols, always thoroughly wash you hands after the activity.

Children

Although children will wish to be involved they are less aware of the hazards of fast moving traffic, **so children under 16 years of age can not take part**. You may bring children between 16 and 18 with you but it is your responsibility to supervise their safety.

Warning signs

The Group has some standard road signs warning approaching motorists of toads and these are affixed to lamp posts, telegraph poles etc at the ends of the stretches of road where most of the toads are found. There are insufficient signs for every toad crossing patrol location and they are only placed on the road for the period of the spring migration.

At some locations volunteers use other temporary warning signs or notices to advertise their presence. Some sites have a number of orange flashing beacons that can also be used to alert motorists to the volunteers on the road. Careful use of parked cars with their lights on can also assist in warning motorists. However, in all these cases volunteers need to ensure that they abide by all legal requirements and do not compromise road safety for other road users.

Helping toads across the road

The aim is to pick up the toads as they approach or appear on the edge of the road and to move them to the other side. If the breeding pond is nearby, the animals can be released on the margins but otherwise they can be placed on the opposite side of the road. It is better if they can be released either behind a barrier such as a drystone wall or fence, or in a feature that would form a natural migration route such as a ditch or a hedge line.

Rather than make a journey with each single toad it is better to collect a number in a bucket and move them all at once. A shallow wide bucket or container is

better than a narrow deep one, as otherwise toads at the bottom might be crushed under the weight of others above.

Toads have a dry skin and they cannot bite people so it is safe to pick them up by hand. However, as a protection against predators, their skin does contain glands that exude distasteful chemicals. A few people may develop an allergic skin reaction to these so that you may wish to wear thin disposable plastic gloves.

Male toads may give a warning cry when picked up by grasping their sides between the front and back legs. This is a natural reaction to warn off other males that might grab them in mistake for females.

Recording the results

It is important to record the numbers rescued and those killed on the road, since this gives an indication of the numbers moving on each occasion, and over the years any trends in population and importance of the site. Later in the year the Group prepares a report with the totals for each of the crossing sites and this is circulated to the volunteers.

You will either be sent a record sheet from the Group or given one by your crossing patrol co-ordinator. Please note on it the date, time of patrol, weather conditions and the numbers of toads rescued or found dead on the road. In order to prevent repeat counting of casualties it is important to remove dead toads from the road. When traffic conditions permit they should either be picked up by a limb and thrown onto the verge or kicked into the gutter. Please also note any other amphibians that you find on the road, as breeding ponds are often used by frogs or newts. At the end of the patrol please return the recording form to the co-ordinator so that they can complete a total record for the site for the Group.

Toad migration - when & why they move

Toads hibernate in dry sheltered locations on land, often some distance from their breeding ponds, but the increase in day length and temperature in early spring brings on their breeding behaviour. This causes them to migrate back to the ponds in order to mate and spawn. Weather conditions play a major part in determining the migration patterns. Mild damp weather with daytime air temperatures in the region of 9 or 10 °C are the most suitable to encourage migration. Cold dry weather will put a stop to the migration and toads will stop moving until the conditions are again more conducive. If there is a prolonged cool dry spell the toads might eventually migrate on warm nights, even if it is dry, and some may also move during the day. In general toads spawn two or so weeks later than frogs, although in some years changeable weather conditions lead to a prolonged spawning season. In that case the retreat from the pond by the early spawning toads can cross with late arrivals still on their way to the pond. Normally the return of toads to their terrestrial habitat is less noticeable than their arrival at the pond as it is spread over a longer period.

To predict the starting date of the migration and when toads will appear on the roads depends on the weather. In some years it can be as early as mid February but it has also been as late as early April. A prolonged spell of ideal conditions

can result in a very short period of migration and toads appearing on the roads. In other years however, a fluctuating weather pattern with only occasional mild damp nights can cause the migration to stretch over as much as a month, with virtually no toads to be found on most nights. Once volunteers are aware of the combination of weather conditions then they are better able to ascertain on which nights patrols are most likely to be needed.

Most toad movement starts around dusk and usually continues into the middle of the evening before tailing off. However, ideal conditions can prolong the movement, whereas a sharp fall in temperature after dark can curtail it. An early season often means that the appearance of toads on the road coincides with the evening traffic rush hour and this can cause a higher number of casualties. In approaching a pond, toads tend to converge on natural corridors such as ditches, walls, hedges and field boundaries. This can cause more animals to appear at certain points on the road where it intercepts such features. In some cases, a damp road forms an attractive corridor and toads might appear on it some distance from the pond and then attempt to travel down its length. In addition, male toads may wait some distance from the pond in order to mount females before they reach the water. Sometimes they may wait on the road surface, which increases their vulnerability to traffic.

Insurance

The Group and its members are covered by an insurance policy organized by ARG-UK (Amphibian & Reptile Groups of the UK) and volunteers need to complete the ARG UK Volunteer Working Agreement form and return it to the Group's secretary, usually via the crossing co-ordinator. Provided you have signed the form, comply with these guidelines and follow any health & safety instructions from the crossing co-ordinator, you will be covered by the insurance .

Other matters

Ponds play an important part in the natural environment and there has been a steady decline in their abundance in the wider countryside. If you know of any other locations where toads are seen on the roads during the spring migration, please let the Group know. Such locations can be registered by Froglife for the Department of Transport, which makes them eligible to have official highway toad warning signs erected during the migration period. Unfortunately, at present the highway authorities in Derbyshire (Derbyshire County Council and Derby City Council) do not erect signs but the Group is seeking to persuade them to do so in future. In addition if you know of other ponds that support breeding amphibians, good populations of dragonflies or other species please pass this information onto the Group.

The Group is sometimes consulted by local authorities, ecological/environmental consultants about planning applications that could affect ponds or the wildlife they support. Without adequate information it can not provide detailed comments to safeguard the habitats and species. If you become aware of any such threats, please let the Group know. In particular, for developments affecting toad migration routes there are proven techniques, such as amphibian fencing and toad tunnels under roads, that can reduce the effect on the animals.