

DERBYSHIRE AMPHIBIAN & REPTILE NEWS

Issue No 9. August 2007

This newsletter is produced for members of the Derbyshire Amphibian and Reptile Group and other interested persons on an occasional basis and includes news items, advice and information and results from toad crossing patrols. If you have any items that you wish to be included in future editions please send them to Secretary at the address on the back page.

FAREWELL & THANKS

Our thanks are due to Philip Precey for the support and advice he has given the Group since January 2003. He is leaving Derbyshire at the end of the August as the Water for Wildlife Project at the Derbyshire Wildlife Trust has finished due to lack of funding. His help and knowledge will be greatly missed by not only this Group but also many others across the County.

TOADS AND REPTILES ARE PRIORITY SPECIES

In June the national Species and Habitats Review of the UK Biodiversity Action Plan published proposals to update the lists of priority species and habitats covered by the Plans. Up to now the only priority amphibian or reptile species found in Derbyshire was the great crested newt, which has its own national Species Action Plan. The proposed list put to the Government now adds all the reptile species found in Derbyshire and also the common toad.

The actions proposed for these species include for the common toad

- ◆ Research into conservation actions
- ◆ Surveying known sites
- ◆ Landscape or strategic regional planning
- ◆ Landscape or regional level projects

For the reptiles, actions include most of the above but with some additional proposals.

For the adder they are also recommending:

- ◆ Priority habitat based action
- ◆ Management action to benefit the species
- ◆ Communications to organisations

For the common species found in Derbyshire (slow-worm, grass snake and common lizard) they also propose:

- ◆ Wider scale agricultural or habitat actions

The Habitats review recommends that Ponds have their own Habitat Action Plan rather than be just part of the existing Standing Open Water and Canals plan. In Derbyshire the Peak District Biodiversity Action Plan already includes a Pond Habitat Action Plan largely based on the requirements of the great crested newt. Now the Lowland Derbyshire BAP should consider a plan for ponds in the remainder of the County.

DERBYSHIRE AMPHIBIAN & REPTILE GROUP A MEMBER GROUP OF



Amphibian and Reptile
Groups of the UK

www.arg-uk.org.uk

Derbyshire Group contacts:

Chair - Helen Metcalfe

Secretary - Chris Monk

Treasurer - Jayne Thompson

Committee Members -

Bob Baker, Philip Precey, Trevor Taylor

A6 ALVASTON BYPASS - GREAT CRESTED NEWT PONDS UPDATE

Following last year's meetings reported in the previous newsletter, AMScott (the Highways Agency's contractors) tested the two failed mitigation ponds in the autumn of 2006 by using tankers to fill them with water. Within 24 hours all the water had drained away, showing that the fault lay with the installation of the bentonite liner. Therefore both ponds were reconstructed over the winter with new waterproof liners and have held water ever since.

Unfortunately newt surveys by AMScott and by Trevor Taylor revealed literally a handful of newts returning to the pond. After 6 years of breeding failure, due to no water in the ponds since the 286 great crested and 1940 smooth newts were moved from the original pond on the road line, that is hardly surprising. If next year's survey is similar, then it may be worth considering a licence application to restock the pond with newt eggs from the pond in the Peak District. 32 great crested newts were moved there from the original pond on the road line and the population is thriving. Further bad news is that no management work was carried out on the other ponds along the bypass and the Elvaston Lane pond appears to have sprung a leak and dried out this spring.

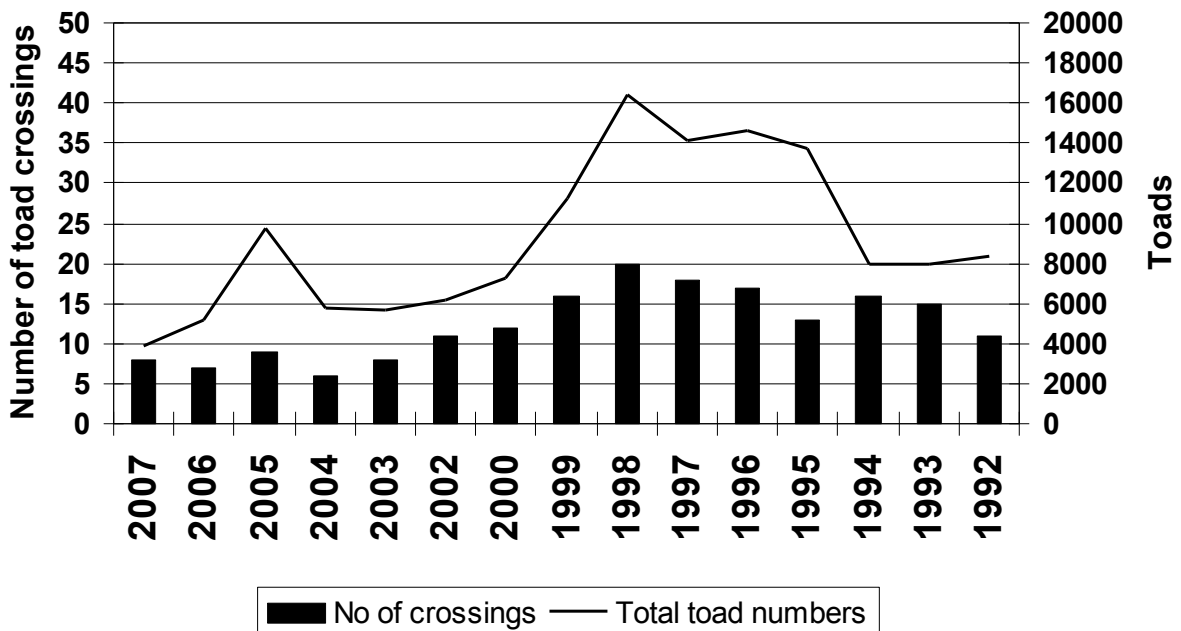
Toads on Roads - crossing returns for 2007

Site Name	No of nights covered	Toads		Other amphibians	Dates covered
		Rescued	Dead		
Belper John O'Gaunts Rd	13			483 frogs plus smooth newts	19.2.07 to 5.3.07
Buxworth Basin	8	104	37	1 frog	15.3.07 to 13.4.07
Combs Reservoir	21	536	185		12.3.07 to 17.4.07
Foremark	22	546	88	2 frogs. 1 newt	22 2.07 to 9.4.07
Furness Vale	20	716	75		4.3.07 to 4.4.07
Grangemill	5	22	21	2 smooth newts	15.3.07 to 10.4.07
Repton Shrubs	23	355	68	10 frogs, 57 newts	20 2.07 to 24.4.07
Radbourne	16	820	30		26.3.07 to 13.4.07
Rodsley	10			Many toads and frogs in pond, large numbers of tadpoles	12.3.07 to 24.3.07
Whaley Bridge	12	260	13	1 frog	14.3.07 to 9.4.07
Totals		3359	517		
<i>2006 Totals (from 7 sites)</i>		<i>4211</i>	<i>702</i>		

2007 - a poor year for toads ?

From the results above and the graph shown below, 2007 was the worst year for toad numbers at the crossings, even allowing for fewer sites being patrolled compared to 10 years ago. (2001 is not

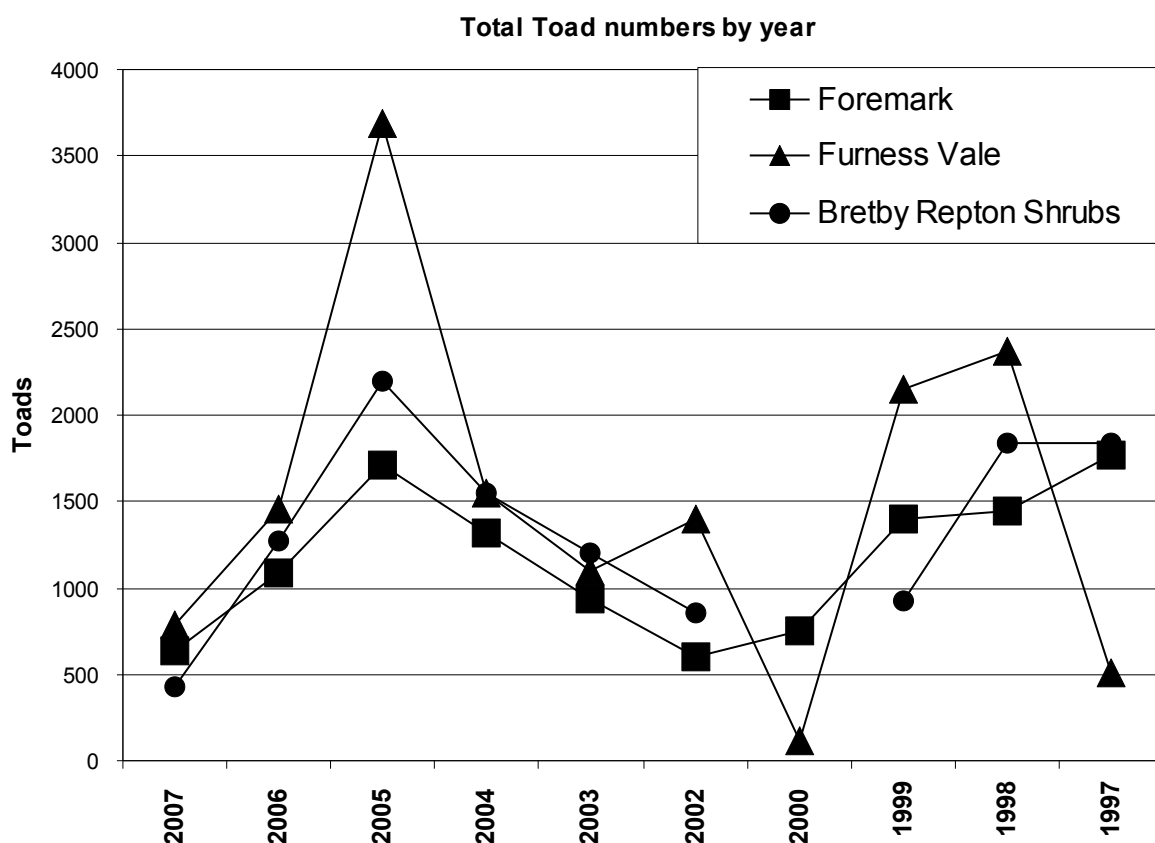
Toad Crossings - Annual numbers



included, as because of the foot & mouth epidemic all but two crossings were cancelled at the request of the Derbyshire Wildlife Trust). The extremely dry weather with virtually no rain, frequent strong drying north-easterly winds and cold nights in late March and for most of April 2007 meant that the mild damp conditions that encourage large numbers of toads to migrate to their breeding ponds did not occur. Therefore the counts at all toad crossing sites were down on the previous year, despite no decrease in volunteer effort. The weather will have undoubtedly have reduced the numbers of animals but some did change their behaviour. At several sites there were very few or no movements just after dark but some toads were reported crossing in the middle of the night or during the day. Their breeding season was also extended by the unusual weather, with toads still gathering in a dewpond at Wensley to spawn on the 17th May, whilst the same evening at ponds higher up in the Peak District there were already large numbers of hatched toad tadpoles swimming in the water.

In addition like all amphibians, toad numbers do vary from year to year based on factors such as breeding success in previous seasons, mortality due to bad weather etc. The graph below shows comparison on the numbers from three of the longest running crossing sites (Foremark & Bretby - Repton Shrubs in the south of the county and Furness Vale in the north-west). Over the last 10 years (again ignoring 2001 when no patrol was carried out at Furness Vale due to the Foot & Mouth epidemic) the trends in numbers of toads at one site are broadly reflected at the others. Therefore next year may see a surge in numbers again, especially if there is favourable weather at the time of the toads migration.

We have detailed records of toad crossing numbers since 1992 and in that time volunteers at the crossings have recorded 139,800 toads, of which on average the toad casualty rate on the roads has been around 13%. Therefore, in that time we have assisted over 121,000 toads to reach their breeding ponds successfully, many of whom would have perished on the roads without your assistance.



FOOTNOTE - Toads and Climate Change.

Research over 23 years by Chris Reading at the Centre for Ecology & Hydrology has shown two adverse factors affecting toads from milder winters. Warm weather especially mild winters has led to a decline in survival rates and the interrupted hibernation pattern has led to a loss of body condition (weight). Smaller weights in female toads mean that they produce less eggs and therefore there is a reduction in the numbers of tadpoles and less recruitment of new animals to the toad population.

GRASS SNAKE NEWS

Further sighting of a black grass snake

Last year's findings of two melanistic (black) grass snakes near Clay Cross at Danesmoor and Stretton less than 2 kilometres apart raised the possibility that there was a genetic link. Now this year there has been the report of yet another black grass snake this time further north on the southern outskirts of Chesterfield in July. A three foot black snake was seen by the pond in a house garden near the River Rother north of Storforth Lane. It strengthens the theory that there could be a genetic trait in the population that inhabits the upper reaches of the Rother catchment above Chesterfield.

More records from the north-east part of the county

2007 has produced quite a few records of grass snakes in the north-eastern part of Derbyshire. Some of these records were from known sites like Whitwell Woods where Jim Alder saw 6 females at one location in the wood in mid-May, with a male snake not far away. Whilst Tim Brooks, apart from seeing them at the known site of Pennytown Ponds LNR also found one in the nearby industrial estate and another at the Hammersmith Meadows LNR at Ripley. Several sightings were made over a period of days at Peter Fiddler Reserve just near Carr Vale, around Poulter Country Park at Langwith and beside the recreation ground at South Normanton. An ecological survey for possible widening of the M1 motorway near Tibshelf also found a grass snake using the motorway embankment. Three juvenile grass snakes had a lucky escape at Sleetmoor Plantation north of Swanwick, as they were sheltering in a pile of brash from woodland thinning carried out over the preceding winter. Luckily the woodland team noticed them before feeding the brash into their machinery in mid-April so they escaped being turned into chippings.

Threats around Swadlincote

Meanwhile the links between the populations of grass snakes around the Swadlincote area are threatened by increasing development pressure. Preliminary proposals by South Derbyshire District Council for the Woodville to Swadlincote Area Action Plan would see a mass of new development that would break the link between the Swadlincote Woodlands and the open country to the south. The main part of their proposals is a "regeneration route", ie a new road, and that is planned to run straight through the pond north of Occupation Lane where grass snakes, toads, smooth newts are found together with large numbers of dragonflies. Already large areas around Woodville and Occupation Lane are disappearing under new housing.

ADDER SURVEYS 2007

The very dry, sunny weather in the spring bought a premature end to the Make the Adder Count Survey on the Eastern Moors this year. The animals did not need to bask openly on top of the vegetation in order to warm up, so there were very few good days for surveying after the training day on the 17th March. The adders were present but moving around under the vegetation cover. Despite the poor recording season, several new hibernation areas were discovered on the Eastern Moors with confirmed or possible sightings obtained from other areas of the National Park, especially on the eastern margins in South Yorkshire.

Thanks to all those who took part in the survey and contributed records. For those who didn't see one this year, here is a picture of a male adder taken by Dave Mallon in April last year.



DATES OF NEXT MEETINGS

There is a field meeting proposed doing pond work at Chellaston Brickworks LNR, Derby on Sunday 18th November 2007. If you would like to help please contact the Secretary.

Other tasks may also be organised at short notice over the winter.

The next indoor meeting of the Group is on Saturday 19th January 2008 at 2.00pm at the DWT Whistlestop Centre Education Room, Matlock Bath (adjacent to the railway station).

GROUP CONTACT

Chris Monk (Hon Secretary), Hilburn, Middleton, Matlock, Derbyshire, DE4 4NF. Tel: 01629 823136

The views expressed in this newsletter are solely those of the Derbyshire Amphibian and Reptile Group. However, thanks are due to the Derbyshire Wildlife Trust for assistance in the distribution of the newsletter. For details of the Wildlife Trust, please contact them at East Mill, Bridgefoot, Belper, Derbyshire, DE56 1HX, Tel: 01773 881188.