



# ARG *today*

www.arguk.org

Newsletter of the Amphibian and Reptile Groups of the United Kingdom

Autumn 2007

## Alien Encounters?

Dr. Chris Glead-Owen  
Research and Monitoring Officer at HCT.

Have you ever been kept awake by noisy frogs in your garden? Have you ever seen a terrapin basking in a pond near you? Have you seen a lizard scaling a vertical wall? If so, then you have probably encountered a species that is not indigenous to the British Isles – an alien. Incredibly, at least a dozen species of non-native amphibian and reptile have established themselves in the UK, and more may be present locally. Most will have no negative impact on our native fauna, but keeping an eye on them is wise. A new survey called 'Alien Encounters' has been launched by The Herpetological Conservation Trust, which asks the public to record sightings and help build a distribution database. The website has photographs and sound recordings to help identification, and observations can be submitted online.

Reports of non-native amphibians and reptiles are becoming increasingly common in the UK. The newcomers include pet red-eared terrapins dumped after the *Teenage Mutant Ninja Turtle* craze, noisy marsh frogs popping up



Edible frog, photo by Fred Holmes

all over the country, and wall lizards spreading from private vivaria. It also seems that garden centres and fish farms could be inadvertently introducing alien frog tadpoles. The main concern is that the North American bullfrog may become established; it carries a fungal disease that has devastated amphibian populations in other parts of the world. People living near ponds would be

aware of alien frogs due to their noisy nocturnal mating calls.

So if you have seen terrapins in your local pond or canal, heard unusual frogs calling at night, or encountered what you believe to be a non-native reptile or amphibian, please help by visiting the *Alien Encounters* website at [www.alienencounters.org.uk](http://www.alienencounters.org.uk)

## Herpetofauna Workers Meeting 2008

**Amphibian & Reptile Groups of the United Kingdom annual conference  
Coventry, Saturday 9th – Sunday 10th February**

Presentations and workshops will include:

Changes in European protected species legislation, Do translocations work? Reptile habitat suitability index, *Crassula* control, The pond HAP and Widespread species SAPs.

For the full conference programme see page 18.

**Early registration is advised!**

**The full programme and registration form is available at [www.arguk.org](http://www.arguk.org)**

Conference generously sponsored by: Natural England, The HCT, Froglife and the Esmée Fairbairn Foundation

## Editorial

David Orchard  
Editor of ARG Today

Welcome to the third edition of ARG today!

Since our last newsletter, the ARG UK network has continued to grow and develop. One of the most significant steps forward is that John Baker has been appointed Widespread Species Officer with HCT. Approximately 50% of John's role is dedicated to supporting the ARG UK network and this is already providing significant support to groups all over the country. John has a detailed knowledge of amphibians and reptiles and a wealth of experience in working with volunteers. If your group is thinking about developing new projects or initiatives, or simply want a second opinion on something, he'll be very pleased to hear from you.

Some other good news is that over the last six months a new group, North-east Reptile and Amphibian Group, has been formed so a big welcome to all those new volunteers!

The next major event on the ARG UK calendar is the Herpetofauna Workers Meeting and this will take place on February 9-10<sup>th</sup> in the tried and tested location of Coventry. This weekend will be a valuable networking opportunity and an enjoyable social event for all those interested in amphibian and reptile conservation. As always, it will be one of the best places to learn about new developments in UK herp conservation.

In addition to these developments at national level, groups and individuals all over the country have been continuing to work for amphibian and reptile conservation. All these efforts together make a significant difference, so please keep up the good work!

Thanks to all of those people who've contributed articles to this edition. If you'd like to pass on your enthusiasm to others by submitting items for the spring edition, please send them to David Orchard at [Dorchard@arg-uk.org.uk](mailto:Dorchard@arg-uk.org.uk)

## Top Tips for Reptile Surveyors

Matt Clarke and Claire Purnell  
Hampshire ARG

### Where to look

When planning a survey visit, look at the habitat in the chosen area first. You may want to research individual reptile species' habitat preferences to determine whether the site has the potential to support certain reptiles. Some reptiles such as sand lizards have very specific habitat needs, whereas others such as slow-worms are more widespread and can be found in varied habitats. It is useful to have an idea of what you may spot, as this will help you 'get your eye in'. Although a key reptile habitat is heathland, don't overlook what is right on your doorstep, back gardens, woodland edges, allotments etc all have the potential to harbour reptiles.

### Timing your survey

Weather conditions and time of year may be crucial to your success in spotting reptiles. During the spring choose sunny days with warm and dry conditions. During the summer you may have to survey early in the morning or in the evening, as the temperature can get too high for reptiles in the middle of the day. If the temperature is high reptiles will have no need to bask in the sun and are therefore harder to spot. Overcast days with sunny spells can provide good survey weather in the summer. Generally

the optimum temperature range for reptile surveying is 8-18°C. However animals tend not to read the books and you may be surprised at what you can find in hot conditions!

### Where to look

Reptiles in the U.K need to bask, therefore sunny spots that are sheltered from the wind are perfect places to look. Reptiles also like to bask in spots with good surrounding cover; therefore they have somewhere to hide if they feel threatened by potential predators. The edges of scrub are therefore perfect spots for reptiles. South facing slopes are particularly good, especially in early spring. And on heathland look for areas with more mature heather.

### Method

Everyone has their own way of surveying, so do what works best for you and what you feel most comfortable with. However, it is good to get into a routine of walking with the sun behind you. That way you don't have the sun in your eyes and you can spot the reptiles on the sunny side of cover. Tread softly and walk slowly so as not to disturb or startle reptiles. Always look ahead and scan the habitat before you get to it, that way you may see the reptile before it sees you and makes its escape. Use your ears as much as your eyes, listen for any rustles in the vegetation and try and home in on the sound.

### Refugia

You may be in a position where there are tins or felts already placed on a site, or you may be able to put some down yourself. Check with the landowner first. If so it is always good to have a mixture of corrugated tin and roofing felt. Roofing felt is often not given enough credit for its capabilities, and it is especially good as a refuge for slow-worms and common lizards. When lifting up a felt or tin during surveying, do it quickly then scan the area underneath systematically for animals. If the reptiles are hot they are likely to bolt straight away, however if the temperature is cooler you may have the opportunity to study the animal more closely. A good tip is to fold a corner of the felt over; these folds are favourite spots for common lizards to hide in and heat up.

## How many great crested newts are there in Kent?

This question has been the subject of recent controversy, not helped by a somewhat misleading article in the October issue of *BBC Wildlife*. Estimating numbers of great crested newts is important so that conservation measures can be planned effectively. It's therefore important that the correct messages are publicised, so if you'd like to find out some of the facts behind this recent controversy you can read more by going to:  
<http://homepage.mac.com/calumma/iblog/index.html>.





Grass snake under tin, photo by Natalie Rogers

## Patience

Above all the best top tip we can offer the reptile surveyor is patience. Reptiles do not always read the books and even in seemingly perfect conditions, in good habitat on one visit you may not see any reptiles. It is important to visit a site a few times in order to get a good understanding of it. You may not see anything the first or second time, then spot lots of reptiles on the third visit. With some persistence and enthusiasm reptile spotting and surveying can be very rewarding.

## A Million Ponds

Rebecca Cleaver  
Pond Conservation

At the turn of the 20<sup>th</sup> century, there were around 1.25 million ponds in the UK. A hundred years later there are only about 400,000, many of them polluted and of little benefit to wildlife. In an ambitious and inspirational new initiative, Pond Conservation plans to remedy this dire situation. By working in partnership with other organisations, Pond Conservation aims to create 600,000 new, high quality, unpolluted ponds in the next 50 years.

In its first phase - from 2008-2012 - the Million Ponds Project will create at least 5,000 high quality ponds targeted in two areas:

(i) designated "hotspots" - to achieve specific biodiversity benefits for BAP species and high quality HAP ponds

(ii) clean microcatchments, scattered across many landscapes - to protect and increase the diversity of freshwater species at the landscape level.

The project will have significant, long-term, benefits for freshwater biodiversity, and will:

- begin to reverse a century of decline in pond numbers and quality
  - create sustainable patches of clean water in many landscapes where this resource is now at a premium
  - contribute to protecting and increasing the populations of 40-50 freshwater BAP species, and many other freshwater species of conservation concern
  - contribute to national Pond HAP and SAP targets
  - create a wide range of different types of pond: seasonal, permanent, grazed, wooded, heathland etc. – the rich mix that is essential to maintain and increase biodiversity
  - increase connectivity between ponds and other waterbodies – providing stepping-stones and helping to "climate-proof" the freshwater landscape.
- Partnerships will be the key to the success of this project. The 'doers', organisations or individuals who manage land or can create these ponds, will be important, but there is also the need for 'influencers', people, organisations or networks that will influence others to make high quality ponds and

increase general public awareness and appreciation of ponds.

There is a role for everyone in this scheme; if you would like to know more about becoming a partner, or manage a site where high quality ponds could be created, contact Pond Conservation on 01865 483249, email [info@pondconservation.org.uk](mailto:info@pondconservation.org.uk). Find out more about conserving ponds at [www.pondconservation.org.uk](http://www.pondconservation.org.uk).

## The North-west Slow-Worm Hunt

David Orchard  
Chair of ARG South Lancashire

In September 2007, the Amphibian and Reptile Group of South Lancashire (ARGSL) was awarded £8 150 by the Heritage Lottery Fund for a north-west slow-worm project. The aims of the project are to:

- Raise awareness and understanding about these elusive animals.
- Produce information about slow-worms for the public
- Find new slow-worm sites in the north-west.

Slow-worms are found at three sites in north-west England though records are few and far between. (Two records centres in the area have fewer than 10 records between them.) This is undoubtedly due to a scarcity of slow-worms but probably also due to under-recording. This project aims to gather together all the existing records as well as finding new ones.

Because of the scarcity of slow-worms in the region, the project is targeting those people with the greatest likelihood of finding them by chance. Gardeners and allotment holders will therefore be the focus of the project. A number of training sessions will be held for those interested in finding out more about slow-worms and these will be held in areas where the animals are known to exist.

Information produced during the project will be made available to other ARGs, so if your group would like to run a similar project, ARGSL would be happy to help and advise. For further details contact David Orchard at [argsl@btinternet.com](mailto:argsl@btinternet.com).

## Calling All Toad Patrols!

Lucy Benyon

Wildlife and Information Officer, Froglife

Froglife's *Toads on Roads* project has been running for over 20 years and currently there are over 660 registered amphibian migratory crossings in the UK. There has been some confusion about the



Toad on road, photo by Nick Meade

project in the past – who is coordinating it, where to send crossing data, etc – so Froglife wishes to re-establish contact with all patrols, to update the database of crossings and to better coordinate collection of information from crossing sites. To this end Froglife is working in partnership with ARG UK. Froglife can provide central coordination of the project and support for toad patrols while ARGs are ideally placed to provide local information on crossings; some ARGs include crossing coordinators within their groups.

Froglife are making a plea for all active patrols to get in touch before the next migratory season. Despite the large number of registered crossings, we know of only around 130 that are definitely still active, and for some of them the data is patchy.

Do you know of, or are you involved with, a Toad Patrol during the spring? Is the patrol registered with Froglife? If not simply get in touch with me and we can start the simple process of registering the site as an amphibian migratory crossing. Once the site has been added to the database you can ask your local authority's highways department to erect warning signs at the appropriate times of year.

An important aspect of *Toads on Roads* is the collection of data that may help assess the status of toads more generally. Froglife will liaise with The HCT and NARRS ([www.narrs.org.uk](http://www.narrs.org.uk)) to see that any such data is used to this end. If you are already, or were, part of a registered

patrol do you have any information that may be of use to us - old crossing data, observations about the site, documented changes in the area? We are trying to collate as much information as possible, including your theories on why toad populations may be changing in your area. If you used to take part in a patrol but there are no longer any toads crossing in the breeding season this is also important information, so please let us know.

It is important that we get the *Toads on Roads* project back on track, especially now that the common toad has been listed as a BAP species. Froglife is keen to expand the project, as well as supporting Toad Patrols, we want to be able to collate data that could supply vital clues to the status of this widespread, but now declining amphibian.

### Order Your High Visibility Vests from ARG UK



**Order your high visibility vests and stay safe during next year's Toad Patrolling and survey activities.**

**The vests can be printed to order with your ARG name on the front and back of the vests, as pictured.**

**Individual vests are £10.00 with a reduced rate for bulk orders.**

**Please contact Jon Cranfield for more information on**

**07769 644354**

**jonathan.**

**[cranfield@btinternet.com](mailto:cranfield@btinternet.com)**

For further information please contact me on 01733 558960 or [info@froglife.org](mailto:info@froglife.org).

## Conserving the Hungarian Meadow Viper

Jan Clemons

Chair of ARG UK

The Meadow Viper (*Vipera ursinii*) is Hungary's most endangered vertebrate with perhaps only 500 individuals left within 11 small, isolated populations. Its decline is mainly due to habitat loss for cultivating crops and rearing livestock. Its critical situation is recognised both nationally and internationally under the Berne Convention, Appendix I, IUCN 'threatened' status and it is also listed in CITES Annex I.

This summer I visited the Hungarian meadow viper conservation centre in Kiskunsag National Park, Hungary and would like to share a conservation success story with you. The centre is not open to the public but with the help of Matra Wildlife Tours I met the Director Tamas Pechy and his team at the centre.

The main goal of the Centre is to breed vipers from several small, genetically homogenous populations to increase the overall genetic diversity and release them back into the wild. The Centre is 50:50 funded by the Hungarian government and the EU Life Fund. We were shown the large outdoor vivaria where the vipers live and breed. Each vivarium contains a network of uniquely designed ceramic hibernacula tubes. This enables the team to 'spy' on their guests during hibernation using an endoscope attached to a camera. We watched a video and were amazed to see lizards and newts sharing the hibernaculum with the vipers, which were frequently seen flicking their tongues.

The Centre started with 10 vipers and now has over 105 individuals (including 40 females). The females are moved indoors prior to giving birth to 6-17 babies. A viper birth had been filmed showing the babies born in a membranous sac. They are not hibernated the first year in order to put on weight ready for introduction. Meticulous records are kept including DNA fingerprinting to confirm paternity.

The Centre is also carrying out adjacent grassland habitat restoration in the



National Park to receive the captive bred vipers and is working closely with local farmers and the wider community to raise the conservation status of this very attractive viper.

Tamas Pechy told me that 49 young vipers had been released last year and the target is now 80 per year. I instantly thought we could do something similar



A ceramic hibernaculum tube, photo by Nigel Clemons

for our adder (*Vipera berus*) particularly for the West Midlands but then I realised that the meadow viper is not as aggressive or venomous as *V. berus* and can easily be fed on insects.

Nevertheless I felt inspired by the Centre's hard work and effort into effectively saving this species from possible extinction and wondered if we in the UK will need to take such drastic measures in the future.

I am particularly grateful to Colin Penney, Matra Wildlife Tours for organising the visit and Tamas Pechy and the team at the Meadow Viper Conservation Centre for their friendly welcome and sharing their experiences with us.

## Midwife Toad's Return to Cambridge

John Baker

Widespread Species Project Officer, ARG UK/The HCT.

This summer midwife toads were discovered in a new location – the back gardens between two rows of terraced houses in Cambridge. The new location was recorded following up a report from a local resident of 'Japanese frogs'. The resident was concerned that these non-native frogs might become established

and threaten native species. However, the description of the frogs calling from terrestrial habitat and sounding 'like a computer game' suggested that they might be the more familiar midwife toad, rather than some exotic species hitherto unknown to be established in the UK.

A site visit, made after dark on a warm evening in August, confirmed the suspicion. No toads were seen, but calling could be heard from the rear gardens lying between the terraced houses of two adjacent roads, near to the railway station. Identification of the animals as midwife toads, rather than some novel species, went some way towards alleviating the concerns of the original reporter. As did reassurance that the many roads surrounding the population made it unlikely that the toads would be able to spread far.

This is not the first time that the midwife toad has been to Cambridge. In 1923 the Cambridge Natural History Society hosted a lecture from Paul Kammerer, an Austrian biologist who had created a stir among the scientific community through experiments supposedly supporting the theory of Lamarckian inheritance. In contrast to the Darwinian view of evolution, that of differential survival and reproduction of variants, Lamarckian theory holds that individual animals alter their form to adapt to a particular situation and then produce offspring which also possess the new form. Kammerer was an excellent



Midwife toad with eggs, photo by Hannah Powell

terrarium keeper and, apparently, used captive animals, especially European amphibians and reptiles, to demonstrate Lamarckian inheritance. Kammerer had raised generations of midwife toads under conditions such that they were forced to mate in water, rather than on land as they do in the wild. Kammerer claimed that under these conditions, male midwives developed nuptial pads, to better grip their mates (under normal mating conditions on land, midwife toads rarely develop nuptial pads).

Much of Kammerer's collection of living and preserved specimens, supposedly demonstrating Lamarckian inherited traits, was lost during the 1914-18 war. A single, preserved male was all that remained of his midwife toads. It was this specimen that Kammerer brought to Cambridge for inspection by the University's zoologists. It was also this specimen that was later shown to have been injected with black ink, a revelation followed shortly by Kammerer taking his own life.

Hopefully, there will be no harmful repercussions relating to the reappearance of the midwife toad in Cambridge. Non-native species can cause harm to native fauna (although not in every case) and legislation (Wildlife and Countryside Act 1981) prohibits their release into the wild. Measures to deal with non-native species already established should be determined by a consideration of the risks posed by the species in question and the likely effectiveness of any control measures. For species such as the North American bullfrog, which, outside its natural environment, is recognised as a global pest, the risks posed are great. Hence prevention of establishment through vigilance and removal of frogs found is desirable and feasible. In contrast, midwife toads seem to pose minimal risk and eradication of populations

**[www.arguk.org](http://www.arguk.org) - the new website address**

**ARG UK has recently changed its website address from [www.arg-uk.org.uk](http://www.arg-uk.org.uk) to [www.arguk.org](http://www.arguk.org). Please ensure that you're looking at our most up to date site!**

may be problematic. So, for midwife toads, recording population locations and spread is probably the most useful measure – so that the species' status can be monitored.

To assist with locating populations of non-native amphibians and reptiles, The HCT has established the *Alien Encounters* web page [www.alienencounters.org.uk](http://www.alienencounters.org.uk) to provide information about non-native species issues and to encourage the reporting of non-native herps. *Alien Encounters* is a collaborative venture, to allow sharing of data with those concerned with non-native species. It does not aim to replace any existing recording schemes, but rather it hopes to gather information from the public who may not otherwise take part in biological recording. This is an important source of information regarding non-native species – as individuals and populations often 'pop up' unexpectedly, due to human intervention, making systematic surveys an ineffective means of tracking the aliens.

*Alien Encounters* is part of the National Amphibian and Reptile Recording Scheme.

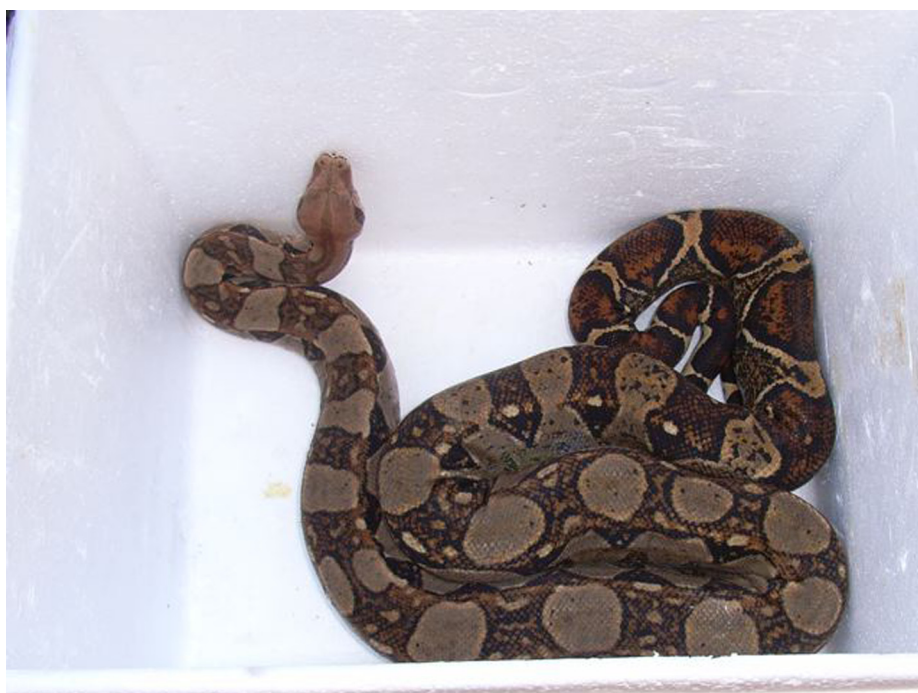
## Exotic Snakes from Palm-fringed Doncaster

Colin Howes  
Keeper of Environmental Records at Doncaster Museum

Doncaster Museum regularly deals with enquiries about amphibians and reptiles, either directly from members of the public (by phone, or in person), or occasionally as referrals from colleagues in other Doncaster Council departments.

A steady flow of tree-frogs imported with bananas from the Caribbean and Central America and a tokay gecko (*Gekko gecko*) in a consignment of soft toy gorillas from Indonesia were exotic distractions to our usual run of enquiries.

Enquiries about snakes generally turn out to be the commonly occurring native grass snake and the perceived problems can be resolved by advice, discussion and in rare instances by capture and translocation. But for some reason, in recent years some snakes have turned out to be exotic species.



The West African royal python (*Python regius*) from Armthorpe, West Yorkshire. Photo by Colin Howes

This raises the possibility that the snake in question may be venomous, requiring expert handling or, if the worst happens, the need for correct identification in the interests of medical agencies obtaining and administering the appropriate anti-venom.

In these cases we have always had reliable support from local members of the South Yorkshire Branch of the International Herpetological Society. In addition, colleagues at Austerfield Study Centre keep a range of exotic creatures, including snakes, and are competent in looking after and demonstrating them. In the past, some live exotic specimens retrieved as a result of Museum enquiries have been passed on to the Austerfield collection.

On various occasions between 2005 and 2007 snakes have turned out to be exotic species. These were a North American western hog-nose (*Heterodon nasicus*) from an address in Cantley, North American corn snakes (*Elaphe guttata*) from an address in the Town Moor area and one other un-named address, a boa constrictor from derelict industrial premises by the canal in Mexborough and a West African royal python (*Python regius*) from Armthorpe. The latter was a leather gauntlets and extension ladder job!

In most cases the enquirers had been ringing the 'authorities' (local council, police and RSPCA) for days and were enraged at what they considered to be

corporate indifference. Two terrified families had to evacuate their homes until the matters were resolved, one leading to the following banner headline in the local press:

***'SNAKE SCARE: Family forced to spend a terrifying night after Police, Council and RSPCA refuse urgent help'.  
Doncaster Star (22 July 2005)***

Although it is possible for the temperate-adapted North American species, the western hog-nose and the corn snake to survive in our climate and to feed on rodents, the South American boa constrictor and West African royal python would need artificial heating for most of the year and are not likely to be able to breed or survive in the wild.

The 5ft boa constrictor, which had become quite chilled, was enjoying human body warmth being wound round the arm and chest of its captor, who was also enabling it to bask in the warm late afternoon sun of 4<sup>th</sup> October 2007 ... such selfless attention to animal welfare. This incident became quite festive by the time I arrived, with the wives, children and grandchildren of site security guards gathering to marvel at the exotic creature.

It was interesting to note that the Armthorpe python had made its way to the roof/attic level of the long terrace



it was occupying. Here, heat-lagging in the upper structure was providing the best available thermal conditions. It was clearly well fed and when caught (on 7<sup>th</sup> October 2005) was prospecting a house sparrow nesting/roosting area under the eaves for prey.

Human reaction was particularly interesting in this case. The terrified householders were literally barricaded indoors with doors and steamed-up windows shut tight. They watched, noses-pressed-to-glass, as first a massively extended fishing net pole and then an aluminium ladder were used to reach the snake (which had coiled itself around the TV aerial cable beneath the eaves). Then as soon as it was captured and in safe custody, everyone streamed out to admire the magnificent beast. The tenor of the conversation converting to "Hey dad, can we 'ave one?"

## ARG UK South-east Regional Meeting

Iris Simpson  
Sussex ARG

This conference was hosted jointly by Sussex and Surrey ARGs and, thanks to generous sponsorship from several organisations, was held in the luxurious setting of the Longley Suite at the Arora International Hotel, Crawley. The conference room was set out in the modern café style, complete with water and stationary on each table with plenty of space to circulate and view the excellent displays.

The morning session, chaired by Jenny Bacon, started with a presentation from Julia Wycherley, outlining the history of Surrey ARG from its work in overcoming Victorian attitudes towards amphibians and reptiles (the group even managed to get Ken Livingstone on the television), to current day use of computers. Surrey ARG is now planning to concentrate on pond management in the immediate future.

As both Surrey and Sussex are celebrating their twentieth years, it was appropriate that Sussex founder member Alf Simpson followed as from the beginning Julia and Alf have always been in regular contact. Indeed, Alf was born in Surrey and spent many hours newt hunting on Epsom Common in the ponds created by bomb craters. His

main efforts in Sussex have been aimed at toad crossings, running the national nature reserve at Ebernoe for Sussex Wildlife Trust and taking an active role in other conservation issues for which SARG nominated him an award, resulting in his MBE.

Trevor Beebee needed no introduction and his talk on using genetics to define natterjack toad populations was fascinating. Computer analysis of genetic information shows that populations are not always as might appear from current distribution. Some now geographically separated sites support toads that are essentially from the same genetic populations, while some closely spaced natterjack sites are in fact distinct genetic populations, separated by physical barriers. Trevor felt that this genetic approach to defining populations could be applied more widely to other rare species, such as sand lizard and smooth snake.

After a coffee break, Mark Amey, a professional herpetologist gave a technical presentation on the evolution of snake venom, which is still proceeding very rapidly. This means that the amounts of anti-serum required in the event of bites will need to be closely monitored at all times. To add emphasis to his talk, Mark had brought along a rat snake kept in a secure bag.

"Reflections on a misspent life" was the title of veteran wildlife illustrator Denys Ovenden's talk. His days at Hornsey Art College and war service in North Africa had triggered his life long interest, but he indicated his concern at modern day teaching which must be improved for young illustrators.

Lunch gave plenty of time to network with other delegates, catch up with

friends and take advantage of the various sales opportunities. Surrey's Ralph Wycherley took the chair for the afternoon which opened with another Sussex founder member, Brian Banks. His fascination and enthusiasm for amphibians in Poland was quickly apparent, the situation there being completely different from the UK. Farming is still based on small strips and includes woodland and shallow ponds; Poland has at least 45 habitat types that support 15 species of amphibians. Much of the existing survey work is part of a European funded project related to Poland entering the E.U. His major worry is that there is no pre-assessment prior to developments as the attitude is "they are everywhere". Poland is therefore a long way behind the U.K. in this respect.

ARG UK is only two years old but Jan Clemons was able to report membership of 54 groups. A successful spring conference had been held in Coventry but the need to recruit more and younger people as volunteers was emphasised.

To conclude an excellent day you need an inspiring final speaker and Tony Gent was brilliant. Why do we do herp. conservation? It is the law under the European Habitats Directive but this is only part of the story – we enjoy it. The Sussex and Surrey ARGs are a success story and long may this last.

To sum up, a wonderful day. Congratulations to the main organisers Barry Kemp and Alan Drummond. Next year the conference will be in Hampshire, probably in Winchester. So not miss it!

## ARG UK Advice Sheets

**Take a look under the "Publications" section of the ARG UK website for our latest Advice Sheets. Two are currently available to download free of charge, "Working with the Planning System" and "Establishing and Maintaining an Amphibian and Reptile Group". A third advice sheet will be added soon, "Insurance Arrangements for Amphibian and Reptile Groups"**

**Watch our website for further details!**  
**[www.arguk.org](http://www.arguk.org)**

# National Amphibian and Reptile Recording Scheme (NARRS) 2007 Update

Chris Gleed-Owen and John Baker  
The Herpetological Conservation Trust

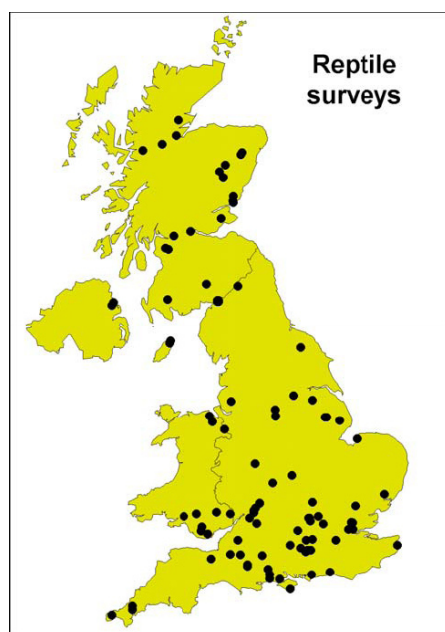
## Widespread species surveys

2007 saw the launch of the widespread amphibian and reptile elements of the National Amphibian and Reptile Recording Scheme (NARRS). These are aimed at measuring trends in the conservation status of all widespread species – perhaps the most challenging aspect of NARRS. The HCT, assisted by many voluntary trainers, organised 52 training days across the UK for approximately 1,000 people. About 500 people requested 1 km survey squares, randomly selected and evenly distributed across all Vice Counties.

## Preliminary Results

We have begun analysing data and will continue over the winter, but we present a brief summary of results here. Results have been returned from about 150 amphibian and 110 reptile surveys (13% of people surveyed non-NARRS squares, which may make them ineligible for some of the analysis, although we will attempt to use these data if at all possible). Most people surveyed one square, but some took on the admirable task of surveying multiple squares. Fourteen people did two squares, one person did six, one person seven, and one person an incredible thirteen squares. Andy Riches (Dumfriesshire),

Seonag Robertson (Aberdeenshire) and Peter West (Essex) deserve special thanks for their impressive achievements.



Distribution of NARRS reptile squares

## Reptiles

Reptiles were found in 55 of 103 NARRS squares. This extremely high detection rate (53%) probably hides some bias in the squares surveyed, which will require further investigation. For example, we will need to examine whether there was a higher 'drop-out' rate (failure to survey allocated square) for poorer squares.

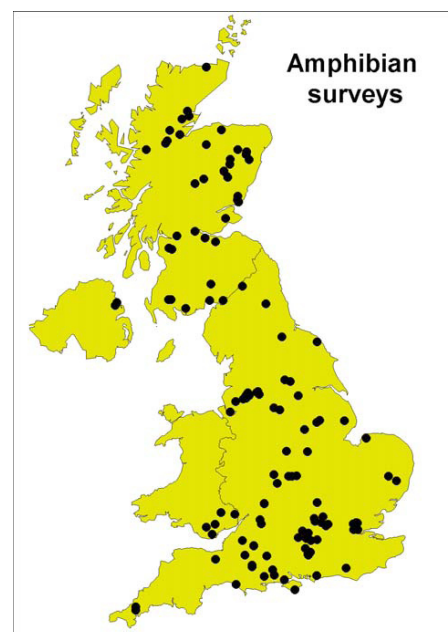
## Amphibians

142 ponds were surveyed in NARRS squares and amphibians were detected in 107 of these (75%).

In summary, the volume of data returned from the 2007 season is heartening, but

we must apply various caveats before interpreting it. The data almost certainly hide biases that we need to account for.

We would like to thank all of the volunteers who took part in 2007. The widespread amphibian and reptile surveys will continue in 2008 and we look forward to future working with ARGs in 2008. We are also grateful to funding from the Esmée Fairbairn foundation, Natural England and the Countryside Council for Wales.



Distribution of NARRS amphibian squares

For more information about NARRS in 2008, contact Chris Gleed-Owen [chris.go@herpconstrust.org.uk](mailto:chris.go@herpconstrust.org.uk) or visit the NARRS website, [www.narrs.org.uk](http://www.narrs.org.uk).

	Common lizard	Slow-worm	Grass snake	Adder
Number of squares	28	22	21	8
Occupancy rate (%)	27	21	20	8

Table 1. Number of squares in which each species was detected and percentage occupancy rate.

	Common frog	Common toad	Marsh frog	Great crested newt	Smooth newt	Palmate newt	Smooth or palmate newt
Number of ponds	80	30	1	12	30	43	11
Pond occupancy rate (%)	56	21	1	8	21	30	8

Table 2. Number of ponds in which each species was detected and percentage occupancy rate.



## Between £100 and £200 Millions Worth of Data is Inaccessible to Conservationists

David Orchard  
Vice chair of ARG UK

The thorny issue of what should be done with millions of pounds worth of biological records collected each year by professional consultants was raised at this year's Institute of Ecology and Environmental Management (IEEM) Conference in Nottingham.

The wider benefits of collecting this information are often lost because consultants frequently don't pass on their records.

*"How much more could be achieved for nature conservation in Britain if records were shared more readily?"*

This question was posed in a short talk by Andy Tasker, IEEM president, who encouraged consultants to be more forthcoming with the findings of their survey work. "By passing on records to the NBN, consultant ecologists could be making a far bigger contribution to our understanding of the distribution of species in the UK" said Andy. "This would enable us plan our conservation strategies at a national scale with more certainty than we can now, and also help directly monitor climate change."

IEEM has a code of professional conduct which states under item 5.7 that members should "Wherever possible, make scientific data collected during the course of their professional duties available to others such as records centres".

Following the talk, Jim Fairclough (senior ecologist with Golder Associates), said,

*"Consultant ecologists not only have a professional but also a moral obligation to share their data with local records centres and the NBN. This enables us to make a major difference to nature conservation in the UK at little or no cost to ourselves."*

Jim went on to say, "Golder Associates does this as a matter of course on every job and we'd like to see other consultants following our good practice".

Although special circumstances may sometimes make it difficult to share records with local records centres,

these are the exception and not the rule. Consultants and clients are often under the misapprehension that their data will remain confidential unless they pass on the records. In reality it's probably already accessible to the public via the planning process or Freedom of Information Act.

At last year's Herpetofauna Workers' Meeting in Coventry Lee Brady, principal ecologist with Calumma Ecological Services, commented

"I make it clear in my terms and conditions that I will be passing on my biological records to the local records centre. This avoids the potential for any misunderstandings."

Let's hope this is a growing trend!

## Farmers to be Paid to Dig Ponds for Natterjacks in Ireland

Ferdia Marnell  
Dúchas, The Heritage Service, Ireland

The natural range of the natterjack toad in Ireland is confined to a small number of coastal sites on the Dingle and Iveragh peninsulas in County Kerry in the south-west of the country. It was once more widespread in Kerry, but there is evidence that the range of the natterjack in Ireland has decreased substantially

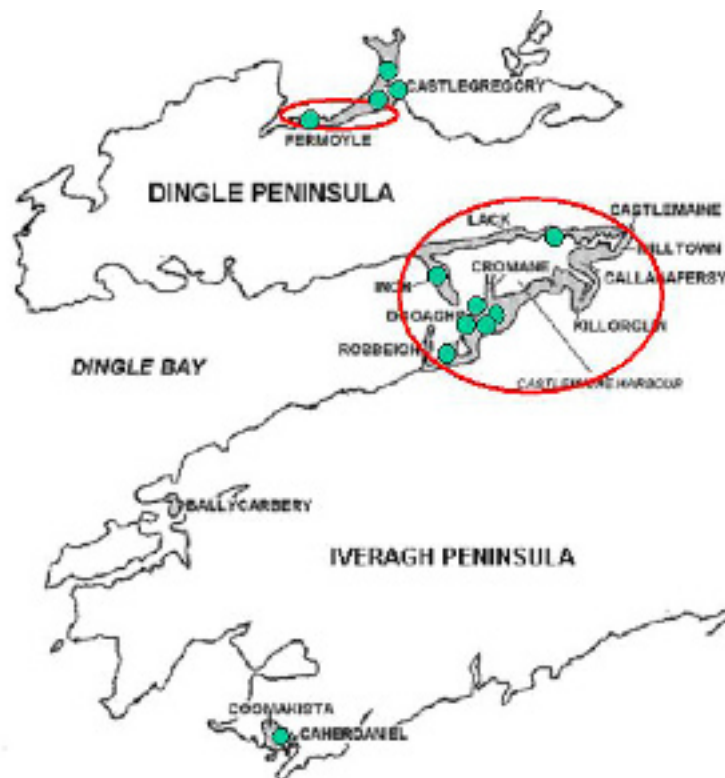


Pond work in Fermoyle, photo by Ferdia Marnell

(perhaps by half) since it was first discovered in the early 1800s. Land use change, recreational pressures, pond succession and coastal protection works are probably the main culprits. The most significant loss in range occurred around Castlemaine Harbour.

It seems clear from historic records that the species has previously been found right around this coastal strip. The toad's range has not changed much since the 1970s, but despite the present stability, some populations are now isolated. Such isolation can lead to reduced genetic diversity, local inbreeding and, eventually, population extinctions. It is now hoped that this can be avoided in Kerry by establishing new networks of ponds in strategic areas to allow for migration between breeding sites.

Some of this work has already begun and both the National Parks and Wildlife Service (NPWS) of the Department



of the Environment, Heritage and Local Government and the Heritage Council have funded pond creation for natterjacks in recent years. However, *ad hoc* conservation work can only achieve so much and the continued survival of the natterjack toad in Kerry is ultimately dependent on the local farming community.

To this end, in November 2007, a major new scheme, aimed at getting farmers involved in natterjack conservation, was launched jointly by NPWS and the Department of Agriculture and Food. The programme has an ambitious target of reinstating the natterjack toad around Castlemaine Harbour and along the coastal strip west of Castlegregory on the Dingle peninsula. Farmers will enter a five-year agreement with NPWS and receive annual payments related to the number of ponds they dig. Ponds will have to be dug in the first year of the agreement, thereafter payments will be for maintaining them (e.g. through hand clearance of vegetation) and the surrounding sward (through grazing) in a suitable condition for natterjacks.

The rate of payments are being viewed favourably by the local community – 500 euros will be paid for the first two ponds in each hectare with a reduced payment available thereafter - and it is hoped that there will be considerable take up of the

scheme and consequent benefits for the toads over the coming years.

## Boost for Berkshire Great Crested Newts

Andy Glencross  
Chair of Buckinghamshire ARG

The Berkshire Biodiversity Co-ordinator has secured over £24,000 from Natural England towards biodiversity implementation projects over the next six months. These include a county biodiversity website (£1,950), projects to map both biodiversity and geodiversity opportunities (£7,700) and a project to provide more ponds for the county's great crested newt population (£14,400).

Much of the practical side of the great crested newt project will take place in Wokingham Borough towards the end of 2007. We plan to excavate three new ponds at The Moors in Finchampstead, two new ponds at The Millennium Arboretum in Emmbrook and a new lined pond at Bluebell Meadows in Winnersh. In addition we hope to restore two existing ponds at Dinton Pastures Country Park.

Great crested newts require a number of alternative breeding ponds in order to ensure their long-term survival. This project will make a significant contribution to securing the future of Wokingham's great crested newt population.

## Newt Protein may offer Key to Regeneration

Ben Hirschler  
Reuters, November 1st, 2007

Scientists have found a key protein that helps newts regrow severed limbs and which may guide future research into human regenerative medicine.

Biologists have long been intrigued by the ability of newts and salamanders to renew damaged body parts, but how they do it has been unclear. Now new research by a British team shows that a protein called nAG, secreted by nerve and skin cells, plays a central role in producing a clump of immature cells, known as a blastema, which regrows the missing part.

The importance of nAG was demonstrated by the fact that even when a nerve was severed below the stump tip, which would normally prevent regrowth, the scientists were able to coax regeneration by artificially making cells produce the protein.

Anoop Kumar and colleagues from University College London (UCL), writing in the journal *Science*, said the finding "may hold promise for future efforts to promote limb regeneration in mammals".

David Stocum of Indiana University, Indianapolis, said it could help explain why mammals have limited regrowth abilities.

A clear understanding of the molecular signals involved in blastema formation and limb regeneration could eventually allow medics to programme similar patterns into cells of non-regenerating body parts.

In effect, newts are able to manipulate their bodies by turning cells into undifferentiated stem cells and then back into mature tissue again. It is a clever trick - but understanding how they do it does not mean humans will necessarily be able to copy them and regrow lost arms or legs, according to Jeremy Brockes of UCL.

"It would be very desirable for regenerative medicine to understand the specification of the blastema and to try to recreate that in a mammalian context. But we are a long way away from being able to do that," he said in an interview.

## Order your ARG UK t-shirts before Christmas!

*If you order your ARG UK t-shirt before Christmas we can have them printed up and ready for collection at this year's Herpetofauna Workers' Meeting in February.*

*ARG UK will be printing these "must have" fashion accessories for the 2008 conference and if you'd like to order some for yourself or on behalf of your ARG, now is the time to act. The black t-shirts will include the ARG UK logo and the wording "Amphibian and Reptile Groups of the United Kingdom" on the front (tastefully small) and will cost £10 each. These t-shirts could be worn by members of any ARG and will be of particular interest to members of small groups, where finding enough people to place an order for a group t-shirt is difficult.*

*Profits will be used to help fund the work of ARG UK*

*To place your order, please e-mail [Dorchard@arg-uk.org.uk](mailto:Dorchard@arg-uk.org.uk) and confirm the number of t-shirts and sizes required. Payment will be required in full before the t-shirts can be printed.*



## The ARG Today Interview

Tony Gent  
Chief Executive Officer,  
The Herpetological Conservation Trust



Tony Gent showing a group of children a smooth snake  
photo from HCT

Tony Gent is the CEO of The Herpetological Conservation Trust. He is well-known to herp conservationists, and among other wildlife conservation organisations, for herpetofaunal advocacy and, in particular, his work on policy development. ARG Today finds out more about this work and the career path that brought Tony to The HCT.

Where did you start your career in herpetology and where have you worked since then?

My first job in herpetology started in August 1990 as Assistant Species Adviser in the Nature Conservancy Council, just before it metamorphosed into English Nature and the other 'Country Agencies'. Thereafter I was the Amphibian and Reptile Specialist with English Nature until May 1999. However prior to that my PhD work was on the ecology of smooth snakes in the New Forest and I worked in various capacities, including 'commercial', sales and marketing and 'environmental' with a large public limited company between my PhD and working for NCC. This work did touch on herpetological, planning and European environmental matters, but most of my 'herp involvement' at that time was through Surrey ARG and the British Herpetological Society (BHS).

I left English Nature to become Chief Executive at The Herpetological Conservation Trust and have been here ever since.

*Do you think that the conservation of amphibians and reptiles will ever be seen with the same affection by the public as the conservation of birds, mammals and butterflies?*

I think it will always be difficult to get the same amount of affection – for a whole range of reasons, even if it simply that there isn't quite the diversity of species to look for or that they can be difficult to see. However there is huge amount of interest and affection for at least some elements of our herpetofauna that should not be under-estimated and is there to be harnessed. However we have learnt not to rely on the "popular vote" and conservation of amphibians and reptiles relies on a range of different approaches, including legislative and policy based ones.

*What have been some of the successes of The HCT while you've been CEO? What role has HCT played in the conservation of sand lizards and natterjack toads?*

The HCT has been around since 1989; its initial focus was very much on the rarer species – and especially the rarer reptiles, following on from the work of the BHS's Conservation Committee at the time and involving many of their members! Since then the Trust has grown, acquiring nature reserves and developing a key role in all of the Species Action Plans/Species Recovery Plans for the rare herps. Since I've been CEO, I've seen the Trust consolidate its position as the lead herpetological NGO in the UK Biodiversity Action Plan and develop its monitoring programmes, significantly including the development of NARRS.

These projects have provided The HCT with a strong platform for taking forward herpetofauna conservation through effective links with governmental agencies on the one hand and professional, amateur (in the nicest sense of the word) and volunteer herpetologists and other non-governmental conservation organisations on the other. The addition of most other herpetofauna species on the UK priority lists, and securing funds (mostly from the Esmée Fairbairn Foundation) jointly with ARG UK for a project to

help take forward the conservation of the Widespread Species has been one recent success. Establishing a project to engage actively with volunteers and the local community around our sites in Dorset (with funding from the Heritage Lottery Fund) is another.

I have considered successes here very much as "organisational successes" but the proof of the pudding lies very much in what is happening on the ground for the animals, their habitats and the positive support/involvement of people

### Invasive species ban proposed

Defra is proposing to add a range on invasive non-native species to schedule 9 of the Wildlife and Countryside Act, and to ban their sale. This would make it illegal to release the species, or allow them to escape, into the wild, or to trade in them. This includes water fern, New Zealand pigmyweed, water hyacinth, Canadian waterweed, Nuttall's waterweed, curly waterweed, floating pennywort, parrot's feather, water primrose, American bullfrog, edible frog, marsh frog, Italian crested newt, red-eared terrapin, and African clawed toad.



Parrot's feather (*Myriophyllum aquaticum*)  
photo from Pond Conservation

Defra is seeking comments on the proposal. The consultation documents and a response form are available from [www.defra.gov.uk](http://www.defra.gov.uk). The consultation ends on 31<sup>st</sup> January 2008.

in their conservation. Monitoring these changes is difficult, and at the core of the aims of the NARRS project, but we have seen significant successes in seeing more habitat protection and management for the rarer species and a translocation programme for sand lizards, smooth snakes and natterjacks that has helped restore the animals' former ranges. Sand lizards and natterjacks have been successfully returned to parts of their former range as far apart as North Wales and the east coast of Kent through conservation projects run by The HCT.

*How would you like to see HCT develop in the future?*

Undoubtedly threats will continue for our herpetofauna into the foreseeable future; the nature of these, and the opportunities to address them, will change. It is important that these species have a champion both to tackle the problems head on, and to encourage a greater support from others to help conserve amphibians and reptiles. I intend The HCT to stay at the forefront of this work. Although much of what we do now will always be relevant, we may need to review some of our approaches to make sure we remain effective.

*Over time The HCT has evolved from an organisation that had to focus limited resources on only the rarest species and on managing small sites, to one with a much more 'holistic' view covering all our native species. We are now better able to involve people in the work that we do. The importance of herpetofauna conservation is now widely accepted so having a much wider appeal to the public is a key objective of the Trust.*

Of course we need to be able to work in a changing world – both regarding the physical and 'political' environment. Climate change will require a different approach to conservation (who knows – we might even be planting trees, rather than cutting them down, in twenty years time!) and the shifting emphasis of the Biodiversity Action Plans to 'landscape level' and 'ecosystems approaches' and working in a devolved UK all present challenges to the way we work. Of course our focus also needs to look beyond the UK, with Europe and the UK's Overseas Territories and Crown Dependencies being the most obvious

areas for us to further develop our work.

*Do you feel there's a risk of specialist conservation organisations like HCT being "squeezed out" by the much bigger organisations like the RSPB when it comes to funding?*

It is important that specialist organisations remain relevant. Perhaps the biggest risk from larger organisations is that their work will expand to absorb what the smaller organisations do, and they can use their large size and membership to provide them with a greater opportunity for influencing the conservation agenda. Provided we remain able to offer a 'unique service' conserving reptiles and amphibians (that is relevant to a modern agenda) I am sure we will always be able to gain funding.

*Would you like to see stricter protection for any of the UK herps? Do you think that any of them are too well protected?*

There is a difference between 'protection' and 'conservation', but one that is quite difficult to build into legislation. As such we are in a strange position of having 'protection' that can be quite onerous while not necessarily

achieving the desired 'conservation' outcomes. I would like to see much stronger legislative mechanisms for achieving **conservation** of our herpetofauna and believe there are various different ways of constructing this (for example statutory action plans underpinned by legislation and well integrated policy measures). However these could involve quite complicated legal mechanisms and an underlying commitment by Government to achieving an improvement in status.

*We don't see a huge amount of lateral thinking in the implementation of biodiversity legislation, and all the while that a new approach remains unlikely (or possibly too risky) then we need to retain the rather blunt instruments of strict species protection simply to slow down the rates of decline... so in answer to the questions you asked, it's 'yes and no' in both cases!*

*How well do you think the current licensing system protects the great crested newt in the UK? Is there a case for further changes?*

I believe there is scope for a new look at the application of species licensing; shifting the focus from protection of individuals to the conservation of populations.

## ARG UK North West Conference and Networking Event

**Saturday February 23rd at  
Manchester Museum**

**9.30am - 4.00pm. Registration: £15 (£10  
concessionary) including lunch. For a full  
programme and booking form please check the  
ARG UK website at [www.arguk.org](http://www.arguk.org)**

MANCHESTER  
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The University of Manchester  
The Manchester Museum



The HCT

Working for amphibians and reptiles since 1989

Organised with support from the Herpetological Conservation Trust (HCT), The Manchester Museum, North West Conservation Projects Ltd. and Pond Conservation



*Undoubtedly the legislation has given vital protection to the species and it is hard to imagine the extent of losses that would have occurred without it (not only for great crested newts, but also for many other species that benefit from sharing their habitats). However it is doubtful whether this protection has halted, and almost certainly has not reversed, the decline of the species.*

Though the legislation currently seems to offer very limited scope for this, a focus on 'ensuring a favourable status' may allow greater flexibility for implementation and more importantly better conservation for the species. The licensing mechanism does allow opportunities to direct work that benefits conservation, but usually only in response to a threat or otherwise damaging activity.

*There is often debate about the efficacy of different mitigation exercises, perhaps due to the size, location of the work or to long-term commitments for funding management. Such projects also have the problem of being self-contained exercises outside of any bigger vision or plan; it is hard to expect great results from such piecemeal and reactive projects. A more 'holistic' look at options for using the legislation to enhance the status of the species is needed.*

*HCT has given significant support to the ARG network. Why does HCT give so much support to volunteers when the ARG network remains independent from HCT?*

The ARG network is an essential element to the conservation of herpetofauna in the UK; for that reason we are keen to see that it is supported and successful. The network has grown independently of The HCT and has created a number of diverse bodies, each with their own dynamics and outlook. It is unrealistic and unnecessary to expect these groups to become part of The HCT. It is possible that The HCT will develop a more formal supporter base, possibly a membership, and in that case individuals and possibly even groups may wish to join what we have to offer. However that would not detract from our overall wish for strong and well-motivated groups using the constitution that best suits them.

*"Rumour has it that you're one of the few people who understands how European legislation works and how to influence it.*

It's a lie – no one understands European legislation! I have tried to maintain a reasonable working grasp of the species provisions of the Habitats Directive since these form one of the cornerstones of herp conservation. However, keeping track on this, and especially the way it has been implemented separately in the different countries of the UK (let alone elsewhere in Europe) is manifestly unachievable. As you look more deeply into this and follow the workings of the European Commission and outcomes of judgements from the European Court of Justice, and then add to that links with other Directives (e.g. Birds Directive, Environmental Liability Directive, Water Framework Directive) it becomes plain that this can't be covered as a part-time occupation and it pays dividends to get pally with an environmental lawyer.

*What is your favourite amphibian or reptile?*

I try to avoid selecting favourites – every time you select one for one reason, one of the others upstages it for something else! In the UK context I have a soft spot for the pool frog – despite the cheeky fellow going extinct on 'my watch' (but at least we had a damn good go at saving it at the 11<sup>th</sup> hour and 59<sup>th</sup> minute). Having studied it for a PhD, I must admit to rather liking the smooth snake – it is also a pretty good ambassador for convincing inherent ophidiophobes that snakes are actually OK. Yet I think that "the high score" for overall jaw-dropping brilliance must go to the leatherback: a couple of metric ton submarine that cruises several thousand miles a year and can swim to a depth of 1 km and all powered by jelly-fish. I've never seen one – perhaps I should get out the office a bit more and do some real herpetology!

## Green Frogs in the U.K.

Martin Noble  
Hampshire ARG

The green frog group is widely distributed throughout Europe. The alternative name of water frogs indicates their habitat as they are seldom found more than a few feet from water. Although predominantly green in colour, they can range from greenish-grey to brown with various markings. The photographs in the Collins Field Guide to the Reptiles and Amphibians of Britain and Europe (Arnold, E.N. and Ovenden,

D. [2002] HarperCollins, London) show typical specimens of the main species. Only one of these – the pool frog – is truly native to the U.K and official attempts are now being made to re-establish the northern form of the species at a site in Norfolk. However there have been a number of unofficial releases of pool frogs and some allied species and hybrids into various other parts of England over the years.

The pool frog is one of three similar species/hybrids, which occur throughout Europe. These are the marsh frog (*Rana ridibunda*), the edible frog (*Rana kl. esculenta*) and the pool frog (*Rana lessonae*). Generally the marsh frog is an eastern European species, occurring from Russia through to Germany while the pool frog is found more to the west in Europe. There is a broad area where the two species overlap and here they hybridise to produce the edible frog. Further west in Spain there is a similar species, the Spanish marsh frog (*Rana perezi*) and to the south-east the Italian pool frog (*Rana bergeri*). These two have their own hybrid populations where the main species interbreed with allied species. The hybrid individuals do not generally produce fertile spawn when they mate with each other so they tend to live in mixed populations with original species. For example, most of the populations in France are of mixed edible/pool composition.

This is a considerable over-simplification of the situation but it gives a general idea of what is happening. In the UK the only species known to have occurred here as a true native is the pool frog. This we know from fossil and historical records relating to eastern England, although it is hard to imagine that its distribution would always have been so limited. Perhaps there are still fossil remains yet to be discovered which might show a wider historical range.

## Introductions

By far the largest part of the UK population of green frogs has resulted from introductions. Over many years individuals of all these species have escaped or been released here. The most famous documented release was in Romney Marsh in 1935 of just twelve marsh frogs. They bred extremely well and since then have spread throughout most of Kent and adjoining parts of



*Pool frog in the New Forest, photo by Martin Noble*

Sussex. However this was only one of many releases although most of the others appear to have been of edible/pool frogs. For example between 1837 and 1842, several thousand were imported from France and Belgium to locations near Downham Market in Norfolk.

In spite of the Wildlife and Countryside Act of 1981 making the practice of releasing non-natives into the countryside illegal, further releases seem to have continued to the present day. The three species/hybrids are now well distributed throughout the southern English Counties. Populations also occur in East Anglia and parts of the Midlands and North.

### Distribution in Hampshire

Green frogs occur at a number of places in Hampshire. Edible/pool frogs have been reported from Bramshill Plantation in the northeast of the county and at other undisclosed places on the Hampshire/Surrey border. In the southwest of the county they have been reported from ponds at Everton, Pennington and Lymington and from a number of ponds and streams in the New Forest. An alleged two hundred individuals were released in a garden in Shirley, Southampton although it is thought that they may have died out due to an inability to produce viable spawn. However the main New Forest populations appear to be breeding at a low level and maintaining their range so it is likely that we may have to accept

their presence as an integral part of the Hampshire fauna.

I am sure that there are other populations of green frogs living in Hampshire. Hampshire Amphibian and Reptile Group would be very pleased to hear of any other records that members may have. Please contact Natalie Rogers (Hampshire Wildlife Trust, [natalier@hwt.org.uk](mailto:natalier@hwt.org.uk), 01489 774400) or Nick Smith, Hampshire Herps Recorder, [nickanguis@yahoo.co.uk](mailto:nickanguis@yahoo.co.uk), 02380 578944).

## Great Crested Newt Occurrence in Herefordshire

Will Watson  
Herefordshire Ponds and Newts Project  
Consultant

There has recently been some debate regarding the numbers of great crested newt ponds in Great Britain. Recent studies, including the Herefordshire Ponds and Newts Project, indicate that there may be many more than originally estimated by the National Amphibian Survey (Swan and Oldham, 1993).

Between 2003 and 2004 the Herefordshire Ponds and Newts Project undertook survey work within the Herefordshire Rivers LEADER+ area. This area covers 880 square kilometres, 41% of the county and includes 97 parishes, which adjoin the Rivers Wye, Lugg, Arrow and Frome including part of their catchments.

To put this in comparison with the country as a whole, the area of Herefordshire is 2156 square kilometres, which is 0.97% of the land area of Great Britain. The Herefordshire landscape is predominantly lowland punctuated by plateaus and groups of isolated flat-topped hills. It is fairly intensively managed for agriculture with about one third arable to two-thirds pasture and

### Early frogs?

Watch out for early frog spawning! A phone call to the HCT office on October 23rd reported 'frogs spawning' near Oban (W. Highlands of Scotland). Other reports from the area included frogs calling in gardens.

However, before drawing conclusions about unusually early breeding, further confirmation is required i.e. were the frogs in amplexus and was spawning observed, or was the observation based only on finding spawn? Spawn often remains after female frogs are killed and eaten by predators. Spawn, from a frog kill, which is left in a pond can give the appearance of a naturally deposited spawn clump. However, such spawn, being unfertilised will not develop.

Frog and toad calling and even amplexus in the autumn can be fairly common 'unusual occurrences'. It happens probably because these amphibians prepare for reproduction prior to hibernation. Weather and day length conditions shortly prior to hibernation are probably similar enough to spring time to prompt some elements of reproductive activity. However, this rarely results in the production of viable spawn.

If anyone would like to report observations of unusual amphibian or reptile behaviour, note that HCT's National Amphibian and Reptile Recording Scheme (NARRS) website has a recording page [www.narrs.org.uk/gasrecordingform.html](http://www.narrs.org.uk/gasrecordingform.html)



other land uses. The landscape of the Herefordshire Rivers area is typical of Herefordshire as a whole but includes areas of floodplain which have been shaped by the four rivers.

To assess great crested newt pond occupancy rates we had to estimate the total numbers of ponds. There are currently 1630 ponds marked on OS 1:25 000 scale Explorer maps within the Herefordshire LEADER+ area. More ponds appear on 1:10 000 scale maps but some are not shown on any OS maps. The percentage of additional ponds present but not counted from maps in Herefordshire is probably in the region of 15%; this figure is based upon my own observations in the field and discussions with Dr. Jeremy Biggs (Pond Conservation). It would therefore be more realistic to say that there are 1875 ponds within the area. This is equivalent to 2.13 ponds per square kilometre; slightly higher than the average density for lowland England (1.7 ponds per square kilometre [Williams, *et al.*, 1998]). Herefordshire, like most other counties in Britain, had substantially more ponds in the past. Between the 1920s and 1980s there was an overall loss of 30% of ponds in the county (Brian and Harding, 1996), largely due to changes in agricultural practices.

Over the three-year period of the survey we surveyed 286 ponds within the LEADER+ area (15% of ponds within the area). We obtained access and permission to survey ponds through an advertising campaign, which also involved directly contacting conservation organisations. However, in most cases we were approached by private landowners who had chosen to take part in the survey. Every pond on each land holding was surveyed, so the ponds are likely to be a good representative sample. As it was a community-based project with limited funding we opted to survey ponds just once (in contrast to generic guidance relating to presence/absence surveys for great crested newts which recommend a minimum of three or four survey visits). The majority of ponds were surveyed between March and the beginning of June.

The survey found that 46% of ponds supported the great crested newt. Extrapolating from this observed pond occupancy, there may be 865 ponds

supporting great crested newts in the LEADER+ area. This rate of occupancy is likely to be an underestimate, because most surveyed ponds were visited only once which may have overlooked some newts. If compared with the National Amphibian Survey (Swan and Oldham, 1993), where the national average pond occupancy was determined as 10%, our recorded occupancy rates are relatively high. It should be stressed that occupancy indicates presence only rather than successful breeding, the suitability of a pond or population size.

Extrapolating from the total number of ponds counted within the LEADER+ area (1875), gives an estimate of 4600 ponds for the whole county. This is similar to an estimate based on Brian and Harding's (1996) data. They counted 3681 ponds on the 1:25 000 scale 1980 OS maps covering the county. Assuming that 15% more ponds are actually present than shown on maps, then a figure of 4233 ponds would be more accurate. If the pond occupancy rate within the LEADER+ area (46%) is representative of all ponds in Herefordshire, then there are approximately 2000 great crested newt ponds within the county.

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## Regenerative Medicine Advance: Frog Tadpole Artificially Induced To Re-grow Its Tail

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([www.herpdigest.org](http://www.herpdigest.org))

Scientists at the Forsyth Institute, Boston USA, may have moved one step closer to regenerating human spinal cord tissue by artificially inducing a frog tadpole to re-grow its tail at a stage in its development when it is normally impossible.

Using a variety of methods including variation on gene therapy, the scientists altered the electrical properties of cells thus inducing regeneration. This discovery may provide clues about how bioelectricity can be used to help humans regenerate.

This study, for the first time, gave scientists a direct glimpse of the source of natural electric fields that are crucial for regeneration, as well as revealing how these are produced. Although the *Xenopus* tadpole sometimes has the ability to re-grow its tail, there are specific times during its development that regeneration does not take place (much as human children lose the ability to regenerate finger-tips after 7 years of age). During the Forsyth study, the activity of a yeast proton pump (which produces H<sup>+</sup> ion flow and thus sets up regions of higher and lower pH) triggered the regeneration of the frog's tail during the normally quiescent time.

According to the publication's first author, Dany Adams, Ph.D., Assistant Research Investigator at the Forsyth Institute, applied electric fields have long been known to enhance regeneration in amphibia, and in fact have led to clinical trials in human patients. "However, the molecular sources of relevant currents and the mechanisms underlying their control have remained poorly understood," said Adams. "To truly make strides in regenerative medicine, we need to understand the innate components that underlie bioelectrical events during normal development and regeneration. Our ability to stop regeneration by blocking a particular H<sup>+</sup> pump and to induce regeneration when it is normally absent, means we have found at least one critical component."



*Red-eared terrapins, photo by Chris Davis*

## The Terrapins of Hampstead Heath

Patrick Barkham

*The Guardian, May 4, 2007*

Bobbing about in their flat-bottomed boat, Ian Shepherd and Bob Gillam have been given the slip. A moment before, the conservation rangers lured a large terrapin into a floating trap on the murky waters of Hampstead Heath's bird-sanctuary pond. Dipping and swishing a large salmon net around the square trap, they can't find the elusive reptile anywhere. Then Shepherd sees why: with its formidable front claws, the red-eared terrapin has ripped off a plastic cable tie and torn away the chicken wire at the corner of the trap before paddling off at high speed.

"It's the Steve McQueen of terrapins," sighs Rob Renwick, one of the heath's conservation team leaders. Hampstead has a problem. These American reptiles began life as cute little critters when they were kept as pets during the first Teenage Mutant Ninja Turtle-inspired craze of the early 90s. But when they outgrew their owners, scores were dumped into Hampstead's waters. Life in the heath's lush ponds agreed with them and they grew some more. Now up to 150 cruise up and down almost all the 25 main ponds on the 792-acre heath, including the men's and women's bathing pools.

Many have swelled to the size of dinner plates, chomping their way through our native species: fish, newts, toads,

frogspawn, dragonfly larvae and, possibly, the occasional great crested grebe, coot, moorhen or mallard.

There are a growing number of tales of aggressive, illegally released terrapins - "terrorpins" as the tabloids call them - bringing death and destruction to ponds and waterways across the country. Native to the warm swamps of Louisiana and other southern US states, they have been spotted in ponds in north-east England, canals and the Thames. Two years ago, schoolchildren were reduced to tears at a pond in Mill Hill, London, when they apparently saw ducklings being consumed by a group of ravenous terrapins. A mallard was later found with its legs bitten off. Last year a ranger at Hampstead saw a duckling being dragged under water.

Terrapin experts at the British Chelonia Group, a tortoise, terrapin and turtle charity, are sceptical of such attacks. Red-eared terrapins, they say, are not known to take birds, although snapping turtles - another rogue species sometimes released into the wild - will kill baby birds.

The terrapins have not attacked any swimmers at Hampstead, but they are known for their nip. The males also boast long front claws, which they use in mating. "They have been in the bathing ponds for a while and no one has been bitten but there's a chance it could happen," says Julie Brownbridge, one of the heath's ecologists. "And some carry salmonella, which is another sound reason to get them out."

While one park ranger is rather fond of the reptiles and hums the Syd Barrett song Terrapin as he works, Brownbridge fears they are wreaking havoc with the heath's fragile flora and fauna. Last year, they were seen scuttling between ponds and, apparently, scaling a steep hill to reach a pool on the other side of the heath. One was found killed, its shell smashed by an angry angler (terrapians are very unpopular with fishermen).

The return of the heroes in a half shell, Leonardo, Raphael, Michelangelo and Donatello, in the latest Mutant Turtle film, TMNT, has got terrapin aficionados worrying that more people will buy them as pets before chucking them out when they discover just how hungry, messy and disease-ridden they can be. Don Freeman, chairman of the British Chelonia Group, says the "mad craze" when the 1990 film was released caused thousands to be released into the wild. While it is now illegal to import them from America, they can still be bred in captivity and sold as pets. "Dear little things about the size of a 50p piece grow to be as big as the bottom of a bucket," says Freeman. "When they are that size they are a bit of a problem unless you are a devotee - they make a terrible smell, they bite, and they are not terribly friendly animals. If they are put into a small environment like a village pond they will soon decimate all the wildlife in it."

As these pond-life terrorists pop out of the water to bask in the spring sunshine, Hampstead's conservationists are taking action. Renwick has little affection for them - "horrible little things," he says - but culling operations tend to attract unwelcome attention from animal rights activists. When the park's rangers looked at the culling option they found it cost the same (£25 per animal) to have them humanely put down by a vet as it would to catch them and send them on a permanent holiday to a terrapin sanctuary in Tuscany.

The sanctuary scheme is run by the British Chelonia Group, which has dispatched 700 terrapins in the past three years to a secure reserve blessed with pools warmed by volcanic rock and Italian sunshine. Freeman says that while the terrapins are surviving in British ponds, many are suffering from a climate and diet that does not really suit them.



The City of London Authority, which manages the heath, has also accepted an offer from a sanctuary in Norfolk.

Hampstead's conservationists hope to catch most of the terrapins by the end of the summer. If not, they fear there is a chance they could breed. One really hot summer, and terrapin numbers could spiral out of control.

Four home-made traps are now floating on Hampstead's ponds made of plastic piping fitted together in a square, offering a tempting basking spot for the creatures. Extra plastic mesh on the outside helps the terrapins clamber up, but once they haul themselves out of the water they slip into the centre of the trap, where tough chicken wire should, in theory, prevent them swimming off. Fish is dropped in the central area as an added incentive for the terrapins to turn themselves in. Five have been caught so far, including the troublesome specimen that chose to escape the moment the Guardian arrived. The remaining four are being kept in a child's paddling pool fenced in with chipboard in one of the staff yards.

The trap is being repaired, and at the secure paddling pool Renwick is making sure there are no more escapees. The terrapins devour cat biscuits and lounge across some rocks added to the pool to make them comfortable. Has Renwick got names for them? "Leonardo, Raphael, Michelangelo and Donatello, of course," he grimaces.

## Northern Australia - Cane Toads Dying From Unknown Disease

Daniel Bateman  
*Townsville Bulletin, (North Queensland, Australia)*  
12.2.07

A mystery disease is killing the northern Australia's cane toads before scientists have a chance to unleash their man-made virus upon them.

Scientists have been developing the Bohle iridovirus (BIV), targeting the cane toads' genes and halting tadpoles from metamorphosing into toads. Before the water-borne disease is released, the scientists will be testing the virus to be sure it does not kill native species. Results are expected by the end of 2007.

However, toad numbers are already falling throughout North Queensland and a microbe may be responsible. Jensen resident John 'Nipper' Ryan believed he had already seen a toad virus in action in his backyard. "We used to have heaps of the bastards here," Mr. Ryan said. "There'd be 20-30 when you turned on the porch light at the front of the house. "In the wet season, you look out and just think "Holy hell!". Then about 18 months ago they started disappearing"

The remaining toads Mr. Ryan found had a dark grey to black discoloration along their backs and were also extremely lethargic. "They just sit there, doing

nothing," Mr Ryan said. "Usually you lift something up and the toad hops away."

James Cook University toad expert Professor Ross Alford said there was no chance of the toads becoming extinct in North Queensland. "We still don't have much trouble collecting fair numbers of them when we need to," he said.

Mr. Ryan hoped authorities could soon fix the cane toad problem. "They've stuffed up the environment," he said. "The only thing that knows how to kill them are crows. They will flip them over and eat their insides out."

## Widespread Species Project

John Baker  
*ARG UK and The HCT*

Earlier this year ARG UK and The HCT were jointly awarded funds by the Esmée Fairbairn Foundation to support a Widespread Amphibian and Reptile Project. There are two main elements to this project, both of which will benefit ARGs:

- ARG Support
- Biodiversity Action Planning

Over the past few years the ARG network has become increasingly more cohesive and has benefited from several developments, such as a newsletter, website and insurance. ARG UK has also taken on the organisation of the Herp Workers' Meeting. These developments have been dependent on voluntary input (time and money) from individuals within ARG UK and financial support from The HCT and the statutory agencies.

Support provided through the Widespread Species Project will assist with the administration of ARG UK and capitalise on the potential of the network. There should also be scope to support individual groups – depending on the level of demand. Support could be in the form of training, developing a group project, assisting with a regional meeting, or simply advice or another pair of eyes to look over paperwork.

The Widespread Species Conservation Officer can be contacted by phone (01986 872016, 07884 441521), or by leaving a message at The HCT Office in Bournemouth (01202 391319).

## ARG UK East Anglia Regional Meeting 1st March 2008

**The East Anglia Regional Meeting will be held at the Rural Business Centre, Writtle College, Chelmsford, Essex and will be hosted by the Essex Amphibian & Reptile Group. The provisional programme includes presentations and field workshops on the habitat suitability index for great crested newts, adder conservation, slow-worm translocation and farmland assessments for amphibians & reptiles.**

**Costs for the day will be £10 for ARG UK members and £20 for non members**

**For further details and booking forms please contact Essex ARG 01702 540600 or email [essex\\_arg@hotmail.com](mailto:essex_arg@hotmail.com)**

# Herpetofauna Workers' Meeting 2008

**Saturday 9 to Sunday 10 February 2008 at Butts Park Arena, Butts Road, Coventry CV1 3GE**

## Friday 8 February

20.00 Meal at Marhaba Restaurant, 116 Far Gosford Street, Coventry.

## Saturday 9 February

- 10.30-10.35 Welcome address. Jan Clemons, ARG UK.
- 10.35-11.00 NARRS Update. Chris Gleed-Owen, The HCT.
- 11.00-11.25 Making the Adder Count – developing a local project in Derbyshire. Chris Monk, Derbyshire ARG.
- 11.25-11.50 Monitoring and distribution surveys in the Netherlands. Raymond Creemers, RAVON.
- 11.50-12.15 Essex seawalls – an important but threatened refuge for reptiles. Jon Cranfield, Essex ARG.
- 12.15-12.35 The consequences of being SAC'd – Conservation Action on SACs and delivering FCS. Matthew Ellis, Countryside Council for Wales.
- 13.45-14.10 Emergence of amphibian chytridiomycosis in the UK. Institute of Zoology.
- 14.10-14.35 Crassula control. Kylie Jones, NE Wales Wildlife.
- 14.35-15.00 Conservation of Jersey Herps. Nina Cornish, Jersey ARG.
- 15.00-15.25 Changes in European protected species legislation: implications for amphibian and reptile conservation. Jim Foster, Natural England.
- 15.55-16.20 The Pond HAP. Becca Cleaver, Pond Conservation.
- 16.20-16.45 Colonisation of newly created small ponds by great crested newts. Amy Wright, DICE.
- 16.45-17.05 Do translocations work? A ten-year study of a translocated slow-worm population in Kent. James Webster/ Richard Griffiths, DICE.

Social evening

19.00-24.00 Evening meal, guest speaker and quiz.

## Sunday 10 February

- 09.30-16.00 Workshops::
1. Reptile habitat suitability index (leader: Lee Brady)
  2. Widespread Species Action Planning (leader: John Baker, ARG UK/The HCT).
  3. Amphibian chytridiomycosis: what you should know, and how you can help (leader: Institute of Zoology).
  4. Habitat suitability index for great crested newts (leader: Dot Wright, The HCT)
  5. High quality ponds (leader: Becca Cleaver, Pond Conservation)
  6. Key sites (leaders: John Poland and Rachel Urwin, Hampshire ARG)

ARG members and concessions: £30 for the conference (including lunches and refreshments), others: £80.

Dinner (Friday): £15, dinner and speaker (Saturday): £15

**For registration form contact Angie Stribling, The Herpetological Conservation Trust, 01202 391319, [angela.stribling@herpconstrust.org.uk](mailto:angela.stribling@herpconstrust.org.uk)**

This conference has been generously sponsored by:

