www.arguk.org



2011 Herpetofauna Workers' Meeting

Colin Williams

Having only recently joined my local ARG, at the insistence of my reptile-obsessed daughter, Rhiannon, I approached the 2011 Herpetofauna Workers' Meeting (HWM) with some uncertainty. Not knowing what to expect, I was concerned that the science might be too advanced for my limited understanding. In Cardiff, however, it was on our doorstep and there was no chance that Rhiannon would let me get away with not going, so along we went.

The first day started with an opportunity to mingle and view the wares on the various stalls. It was not long before I was laden down with all sorts of interesting, and mostly free, literature. My wallet did not escape for long, however, and Rhiannon soon persuaded me to buy an admittedly stunning print by Tell Hicks. The artist himself was there to explain that the Perentie it depicted had been introduced to him by the late Steve Irwin.

The first talk, given by Tobias Uller, was a fascinating account of the increasing role played by genetics in herpetofauna conservation. This set the tone for what was a tremendously interesting series of talks that spanned the broad range of herpetological subjects. I was gripped particularly by Mike Toms' account of the herpetofauna reported from British gardens as part of the BTO's survey. Though familiar with the role of the garden pond, I had not fully realised the importance of gardens as a habitat for reptiles and amphibians and must confess great envy for the householders in Dorset who had all six native reptiles in their garden. Broken only by a very pleasant lunch, the talks came thick and fast but were always informative and engrossing, and before we knew it the main part of the day was over and it was time for the AGM.

The pleasures of the day were not over, however, and we soon

No 9 Spring 2011

Contents

| Herp Workers' Meeting 1 |
|--------------------------|
| Reptile relocation 2 |
| Save the Frogs Day 4 |
| Great Easter Newt Hunt 5 |
| Big Swab 6 |
| Salt & GCN mortality 6 |
| Adder Genetics7 |
| British Herp Symposium 7 |
| Scientific Papers8 |
| TV Star Praises ARG 10 |
| Around the ARG11 |

headed off to a superb dinner. As well as an excellent meal, this was a great opportunity to meet and chat to fellow delegates. On our table alone we had people from all over the country and from extremely different backgrounds, from schoolchild to biochemist. This diversity was remarked upon by the final speaker of the day, Trent Garner, who said that in his experience gatherings of people from such different backgrounds did not happen in other countries, and that we should not underestimate the power of such co-operation. Trent, together with Freya Smith, went on to provide a fitting ending to a terrific day. Their presentation on a very serious subject, amphibian disease, was both technically detailed and hugely entertaining.

The second day was very different but just as interesting. This was workshop day, where delegates chose three from a menu of workshops on offer. Unfortunately, it was not possible to participate in all of the workshops, and the greatest difficulty was in choosing which ones to miss out on. However, the organisers made every effort to meet the preferences of the delegates so that, having made the hard choice, we were able to attend the sessions that we wished.

Apart from the quality of the workshops themselves, this was a fantastic opportunity to meet still more people and have some lively group discussions. Again, the topics under discussion covered the full spectrum of herpetology. Rhiannon and I started with nonnative species, continued with herpetofauna recording and concluded with an introduction to this year's chytrid swabbing project (see page 6).

Although I began these two days with some uncertainty, I came away from them having been educated, entertained and encouraged to get out into the field and do some practical work. Rhiannon, too, although she was by far the youngest delegate, thoroughly enjoyed the whole experience. With her prior interest in snakes in particular, she was predictably fascinated by Nigel Hand's account of adder ecology in the Wyre Forest but was also enthused by the various talks about amphibians. She also greatly enjoyed her discussions with the many people who came to speak to her throughout the two days. I would encourage anyone out there, young or old, with an interest in herpetology to come along to future events, as I am sure they would enjoy them as much as Rhiannon and I did. As for us, I think we have a new annual event in our calendar!

From Shell Haven to Wiltshire – Notes on the UK's Biggest Mass Reptile Translocation (ARG UK)

The London Gateway is a unique development that will combine the UK's newest deep-sea container port in London with Europe's largest logistics park. It was also the home of literally tens of thousands of reptiles and amphibians, which had taken over this Thames-side brownfield site in Essex, appropriately named 'Shell Haven'. They found plenty of habitat on the site of the refinery and its associated infrastructure of railways, roadways and verges, fleets, ditches and ponds, and latterly, the flooded foundations of the buildings that were demolished when its old owners, Shell, left.



Adder copyright Jon Cranfield

However, finance speaks, and with a £1.5 billion development on the table, the new site owners DP Development (a merger of Dubai Ports Authority and Dubai Ports International), had to find a way of moving Shell Haven's herpetological residents that complied with EU Law. Ironically, the legally protected great crested newts had to be re-housed locally, and were found new homes on the Essex marshes to the north of the site including North Triangle and Garlands (it is unclear what happened to the unprotected smooth newts). Similarly, around 300 water voles, also protected under Section 5 of the Wildlife and Countryside Act, were moved to the north of the county to a 'mink free' area on the River Colne.

This just left the reptiles. Unfortunately, although all the widespread species of reptile (adder, grass snake, viviparous lizard and slow-worm) are priority species under the UK Biodiversity Action Plan – this does not confer full protection by law. As a result, and despite objections from Essex ARG (among others), the decision was taken to transfer them 140 miles west to two receptor sites in Wiltshire, both managed by the Wiltshire Wildlife Trust: Sandpool Farm and the former military base of Blakehill Farm near Cricklade. Interestingly, no consultation was held with the Wiltshire ARG at this time, although they have subsequently been invited by the Wiltshire Wildlife Trust to become involved with the long-term management and monitoring of the site.

This move was co-ordinated by Environment Bank Limited. DP World also purchased additional land to link four of the Trust's neighbouring reserves together (but remember this development is worth £1.5 billion).

To clarify the scale of the movement: 290 adders, 400 grass snakes, 17,000 common lizards and 6,000 slow worms were captured by hand and moved in vans – early in the morning so they did not dry out – all the way around the M25 and down the M4 to Wiltshire. Apparently, they are now settling well into their new homes!

However, now that the reserves in Wiltshire are 'full' the few remaining reptiles at the Essex site will be re-housed closer to home at the RSPB reserve at West Canvey Marshes.

According to Marcus Pearson, environmental manager for DP World, the move has been a success. Reptiles that had been moved and then recaptured to check their wellbeing seemed healthy, and doing well in their new home. However, this huge translocation raises a number of issues, both for this development, forthcoming developments on brownfield sites, and for the conservation status of our native reptiles in general.

First of all - why Wiltshire?

Marcus Pearson says that finding a new home was tricky because they could not be moved to places where there were already large populations. The MD of the Environment Bank Robert Gillespie went further "We would have preferred to have found a more local home for the reptiles, but in this instance these sites in Wiltshire were the only ones we could identify with an environment that is almost perfect from day one."





Grass Snake copyright Jon Cranfield

Secondly – how do we know it's all been such a brilliant success?

There is little information available about how the reptiles are actually being monitored. There was no mention of any form of data being collected (weights, lengths and photographs). The vast number of adult lizards may have made this unworkable, but the few hundred snakes could have been tagged, photographed, weighed and measured prior to release so that individual animals could be tracked through photo identification. In the water vole translocation, 10% of the animals relocated to Colchester have had radio collars fitted and will be monitored by the Essex Wildlife Trust and Thomson Ecology. In addition, it is reported that the reptiles will be monitored for only five years, a fraction of their natural lifespan. What are their long-term prospects?

Lessons to be learned – where do we go from here - what should we be asking for?

First, we should ask for greater protection for all our native reptiles. Adders especially, are a highly threatened species, and should enjoy the full protection of UK Law. This is something we should campaign for.

Second, we need to take a long, hard look at the logistics of Environmental Banking. It's a great idea, but it can only really be achieved if the schemes have a much more local aspect to them. The local conservation status of reptiles will continue to diminish as animals are moved away over such large distances outside of their natural home range.

Third, the current recommendations for mitigation practice, have to be reviewed and properly controlled by a fully audited standard methodology.

Press articles cited (in date order) include:

BBC News (online) Relocated water voles settle into new River Colne hom, 18 June, 2010

National Grid, October 2010, East Thurrock Connection - Substation Siting and Alignment Environmental Appraisal

Environment Bank Newsletter – Autumn-Winter 2010

BBC News (online) Thousands of reptiles released in Wiltshire, 14 March 2011

Essex reptiles settle into new Wiltshire home, Steven Morris, The Guardian, 21 March 2011

It's far too early to claim this relocation of reptiles was a success, Jon Cranfield, 29 March, 2011

SAVE THE FROGS DAY – April 29th 2011

By Dr. Kerry Kriger, SAVE THE FROGS! Founder, Executive Director and Ecologist

Was Prince William a frog in a past life? Quite possibly, since he chose his wedding to take place on the 3rd Annual Save The Frogs Day (April 29th, 2011), which will be the largest day of amphibian education and conservation action in the planet's history. Over 200 Save The Frogs Day events are expected to take place in 30 countries worldwide. The events are being coordinated by SAVE THE FROGS (www.savethefrogs.com), the California-based non-profit I founded in 2008. The goal of Save The Frogs Day is to raise awareness of the rapid disappearance of frog species worldwide.

This Save The Frogs Day, I will be leading a Save The Frogs Day Rally at the steps of the US **Environmental Protection Agency to raise** awareness of amphibian extinctions and demand a federal ban on the use and production of Atrazine, a pesticide that can turn male frogs into females at 2.5 parts per billion. In New York and Florida, frog legs protests will be held at two chain restaurant that sell frog legs. In San Francisco, SAVE THE FROGS! supporters will gather at the steps of City Hall to call on the city to save the Sharp Park Wetlands. The wetlands are home to endangered California Red-Legged Frogs, but San Francisco currently pumps the wetlands out to sea to accommodate a public golf course.



On the less serious side, Toronto's frog enthusiasts will be celebrating Save The Frogs Day with their 2nd Annual Frog Leap-a-Thon, a 250 meter race down the city's boardwalk. Students at Texas Tech University will attempt to make it into the Guinness Book of World Records by organizing the largest gathering of people wearing frog masks in planetary history. In Bangladesh, a 2km Frog Run is set to take place in the town of Chittagong. Students and teachers in several countries will be taking part in the SAVE THE FROGS! Art & Poetry Contests, which received entries from 27 countries last year.

What about the United Kingdom? The royal pair are not the only British couple with nuptials scheduled for Save The Frogs Day. Frog fanatics Sabrina Jayne Labrina and Simon Pittman of Bournemouth set their big day to coincide with Save The Frogs Day, and have even asked guests to donate to SAVE THE FROGS! in lieu of gifts. Congratulations and thanks to Sabrina and Simon!

I hope that you will hold Save The Frogs Day events in the United Kingdom each year, and I look forward to informing you of our other campaigns to protect the world's amphibian populations. Please email me at kerry@savethefrogs.com if you have comments or suggestions. You can learn more about Save The Frogs Day at: www.savethefrogs.com/day.



Female Palmate Newt © David Orchard

THE GREAT EASTER NEWT HUNT

Dr. John W. Wilkinson, ARC Research Officer

All biodiversity is not equal. Unfortunately. Even amongst our amphibians and reptiles there is a distinct hierarchy: some species have highly protected status at European level and others are Biodiversity Action Plan (BAP) priorities. Even the humble common frog has to be reported upon to the EU because of its potential for exploitation as a food source! So, with the common toad and all UK reptiles being BAP priorities now, which species are left at the bottom of the pile? In fact two of our smallest and most fascinating species, the smooth and palmate newts (*Lissotriton vulgaris* and *L. helveticus*) are protected only against being traded and there is no legal requirement to

report on their status. They are the smallest of the small and lowest of the low.

In an effort to redress the balance and give these unassuming newts the attention they deserve, Amphibian and Reptile Conservation (ARC) and ARG UK have teamed up for The Great Easter Newt Hunt! In the week that dear old Wills and Kate get spliced, our garden ponds will be seething with newts also trying to fulfil their romantic destiny! So we're asking anyone with a pond to get out to it and see what the newts are up to...

It's known that palmate and smooth newts often prefer different ponds. Despite being superficially similar, they have different preferences, with palmates preferring more acidic, woodland and often upland ponds. In more normal ponds they are sometimes out-competed by smooth newts but there are places they can be found together. We know that smooth newts are the most likely species to occur in garden ponds too, though results of the recent NARRS Report show palmate newts turn up in surveys more often than we might have expected. Is this a result of declining pond quality in

the UK? Has it affected whether or not palmates or smooth newts occur in garden ponds in different areas of the UK? These are just some of the questions that The Great Easter Newt Hunt will investigate - as well as highlighting the importance of garden ponds as newt breeding sites and getting people involved in the recording of some of our most neglected herps. We hope that the results of Britain's newt hunting will provide information useful in setting conservation priorities for these enigmatic amphibians.

So join ARC and ARG UK and spend a few minutes over Easter Newt Hunting! You know you want to! The newts will thank you for it one day... Plus you'll be fed up with photos of that dress by Bank Holiday Monday!

Great Crested Newt © David Orchard



ARG Today p. 5

The Big Swab/2011 Chytrid Survey

Freya Smith, Institute of Zoology

Thanks to a veritable army of ARG members, the Big Swab is now well underway.

Young and old, ARG members have been out catching amphibians (at all hours) and swabbing their skin for evidence of a nasty pathogen – the amphibian chytrid fungus.

Already, the first 29 sets of swabs are in, and, with another 150 surveys planned to take place between now and the end of June we are very close to reaching the target number of sites – 200.

As far as we are aware, this survey is the largest volunteer led chytrid survey in the world (and there are a lot of people working on chytrid!) and will produce a wealth of data with which to map the distribution of infection across the UK, as well as examine variation in susceptibility between different sites and species.

We are still recruiting new sites in some parts of the UK (see website for details) and may be able to take on more non-native sites. Please get in touch if you would like further information at reva.smith@ioz.ac.uk

As for the rest of you, congratulations and thank you, for a brilliantly successful start to the swabbing season!

The Big Swab, which is DEFRA-funded, is being coordinated by the Institute of Zoology at the Zoological Society of London.





Road salt implicated in mass mortality of great crested newts

Katie Colvile

In late March 2010, approximately 75 great crested newt carcasses were found in a railway station car park in Cumbria; the newts appeared to have died during their spring migration from nearby hibernation sites on their way to a large breeding pond behind the station.

Road salt had been laid in the car park two weeks previously, during an unusually late spell of freezing weather, and there was circumstantial evidence that residual road salt in the car park had caused these newt deaths. There are a few anecdotal reports of UK amphibian mortality associated with road salting, and salt treatment of ponds. As in this case, incidents tend to occur when a late period of freezing weather is swiftly followed by much milder temperatures. We would like to raise awareness of the apparent potential for road salt to negatively impact amphibians, and recommend that caution is exercised in the use of road salt near amphibian migration routes, particularly in March and April; road maintenance contractors should be aware of this risk. We would be interested to hear about any future incidents of suspected salt poisoning: please tell us at amphibian@zsl.org.

The 100% Fund contributes to the UK's first snake genetics study

Jon Cranfield

The ARG UK network voted at this year's Herpetofauna Workers' Meeting to give much needed funds to the UK's first genetic study into snakes.

£500 from the 100% Fund was awarded to the cutting edge study into the decline of the UK's only venomous snake the adder. The study is a collaboration between the Zoological Society of London, Oxford University and Natural England. The ARG UK was proud to help with the project by providing funds for laboratory equipment which enables the field workers to visit more sites to sample adders from small and large populations. The funds will help purchase the chemicals required to extract the DNA from swabs from the adders during the study this spring.

At the Herpetofauna Workers' Meeting a meeting between three separate adder studies came together to discuss the way forward for adder conservation in the UK. The study being carried out by The Zoological Society of London, Oxford University and Natural England forms part of a series of studies into the adder. Other studies are taking place at Manchester University and Bangor University. All the studies have ARG UK support and local volunteers are assisting.

The national media, including the BBC, The Guardian and The Daily Express have recently highlighted this valuable collaboration between ARG UK and these other bodies.





1st British Herpetological Symposium

Colin Williams

On 8 & 9 April, Bangor University Herpetological Society hosted the first British Herpetological Symposium.

The Society is run entirely by students at the University and many of the speakers were quick to congratulate them on both the concept and the organisation of such a successful event.

Speakers included many of the leading herpetologists from around the UK. To mention just a few, Wolfgang Wuster and Anita Malhotra spoke about the cutting-edge phylogeny and phylogeography work being undertaken at the host university; Robert Jehle highlighted the role of genetic data in amphibian population studies; and Tobias Uller detailed the evolution of sexdetermining systems. Other talks ranged from descriptions of studies into Leatherback and Loggerhead Turtles to overviews of the

herpetofauna of lands as diverse as Malta and Timor-Leste. The last was given by the celebrated herpetologist and TV presenter, Mark O'Shea.

With a combination of serious science, entertaining presentations and an enjoyable social evening, the Symposium was an unqualified success, not least for the chance to meet like minded people. It is intended that it will be repeated in two years time, which is certainly something to look forward to.

Scientific papers 2010

Trevor Beebee gives a round-up of some of the year's papers of interest

Amphibians

The impact of environmental temperature on larval development and metamorph body condition in the common toad, *Bufo bufo*. C.J. Reading, *Amphibia-Reptilia* **31**, 483-488 (2010).

This paper describes another set of results from a common toad population that has been studied for about 30 years in Dorset. Previous papers on this population have provided evidence of possible deleterious effects of mild winters on British common toads. Comparing features of larval development between 1980 and 2009 showed that spawning times varied by almost two calendar months, according to winter severity. Tadpole development took longer when spawning was early but metamorphosis still began more than a month earlier than when spawning was late. However, body condition was generally higher in metamorphs from late spawners and overall correlated with the temperatures experienced by tadpoles. So any benefits from early spawning may be countered by better condition, and maybe better survival prospects, of metamorphs from late spawnings.

Optimising biodiversity assessments by volunteers: the application of occupancy modelling to large-scale amphibian surveys. D. Sewell, T.J.C. Beebee & R. A. Griffiths *Biological Conservation* **143**, 2102-2110. (2010)

This paper describes an application of statistical methods to surveys of the five widespread species of British amphibians that are designed to establish presence or absence of a species in a pond. Fieldwork was carried out at two sets of breeding sites, one in Kent and the other in mid Wales. The results were analysed to establish best practice for establishing certainty of absence: when you don't find a species, how sure can you be that it really isn't there? The results suggested that for 90% confidence ponds need to be surveyed four times between March and May, using up to four methods (visual searching for eggs, netting, nightsearching with a torch and the setting of newt traps). Timing of surveys will of course vary with location (later in the north) and weather.

Assessing the long-term impact of *Ranavirus* infection in wild common frog populations. A.G.F. Teacher, A.A. Cunningham & T.W.J. Garner. *Animal Conservation* **13**, 514-522 (2010)

The unpleasant spectacle of diseased and dying frogs, especially in and around garden ponds in summer, has been widely reported in recent decades. This paper describes a follow-up study of Ranavirus-induced mass mortalities to determine long-term effects on populations. Initial impacts were often in the region of 80% declines but subsequent events varied from rapid recovery through persistent or recurrent mortality to extinction. Large populations tended to suffer bigger declines than small ones but there was no relationship with habitat age, which was considered an indicator of habitat quality. Because small populations sometimes go extinct in the absence of disease it is not clear whether this ultimate cost was enhanced by Ranavirus infection but the overall impact of this disease has nevertheless certainly been substantial. Fortunately there is no evidence that, at the larger scale, frogs across southern Britain, where most Ranavirus outbreaks have occurred, have declined significantly in recent times.

Dynamics of a declining amphibian metapopulation: survival, dispersal and the impact of climate. R.A. Griffiths, D. Sewell & R.S. McCrea. *Biological Conservation* **143**, 485-491 (2010)

A 12-year investigation of a great crested newt metapopulation, of four subpopulations (ponds), in Kent showed that recruitment to the metapopulation was mostly generated from just one of these ponds. At least one subpopulation went extinct over the study period. The four subpopulations were therefore distinct in their dynamics which were driven primarily by differential rates of breeding success and juvenile dispersal. An especially interesting observation was that across the metapopulation as a whole, annual survival was reduced as a correlate of mild and wet winters. This is not the first such inference, other studies have indicated negative effects of such winter conditions on both common and natteriack toads and possibly on common frogs. Climate change might be affecting the future prospects of our native amphibians in unexpected ways and it remains to be seen if they have enough adaptive genetic variation to cope with these new conditions.

Management history and climate as key factors driving natterjack toad population trends in Britain. A.L. McGrath & K. Lorenzen. *Animal Conservation* **13**, 483-494 (2010)

There are now a lot of data on British natteriack population dynamics extending over many years and this analysis pulls them together to evaluate, by statistical modelling, what are the major drivers of population change. Trends from 1985 to 2006 in multiple natteriack sites across Britain were used in conjunction with 25 climatic, site feature & conservation management variables. Surprisingly for a temporary-pond specialist, heavy rainfall was associated with negative effects (see also above paper) as was being at the range edge. Positive factors were management activities, notably pond creation/improvement and scrub clearance, and translocations to found new populations. Climate change scenarios include increased or decreased rainfall according to region and future events might therefore be damaging to natterjacks in some places but advantageous in others.

Reptiles

Distribution of the common lizard (*Zootoca vivipara*) and landscape favourability for the species in Northern Ireland.

A. Farren, P.A. Prodöhl, P. Laming & N. Reid. *Amphibia-Reptilia* **31**, 387-394 (2010)

This paper describes the use of common lizard records between 1905 and 2009 and habitat modelling to outline its existing distribution in northern Ireland and to identify favourable habitat features for the species, including a maximum potential range. Lizards occurred in about thirty-four per cent of the region's 10 km squares. Most records of the lizards were from heaths, bogs and coastal dunes.

The majority of surviving populations are small and isolated and many of the key habitats are under threat from building developments, agricultural intensification and afforestation. The development of an ecological network to restore and/or maintain population connectivity is recommended.

Changes in relative abundance of the western green lizard *Lacerta bilineata* and the common wall lizard *Podarcis muralis* introduced onto Boscombe Cliffs, Dorset, UK. S.R.C. Mole, *The Herpetological Bulletin* **114**, 24-29 (2010)

Green and wall lizards were discovered on the Boscombe cliffs in Bournemouth almost ten years ago. The origins of these populations of non-native species are unknown but both are evidently thriving. This paper describes results from surveys in 2007. Both species occupied a central area of cliffs with common lizards only found on the periphery. Comparisons with surveys in 2002 showed that the two non-native lizards had increased by 35-40% whereas common lizards had declined by 75%. Similar suitable lizard habitat extends further along the cliffs but is relatively inaccessible to humans, so there is potential for further spread of green and wall lizards and little prospect of eradicating either. This is of concern not just to local common lizards but also to sand lizards which also survive west of the region studied in this survey and which may also be outcompeted by the invaders.

Grass snakes exploit anthropogenic heat sources to overcome distributional limits imposed by oviparity. K. Lowenborg, R. Shine, S. Karvemo & M. Hagman. *Functional Ecology* **24**, 1095-1102 (2010).

It has long been conventional wisdom that viviparous reptiles can range to higher latitudes than oviparous species because the latter have less control over the incubation temperatures experienced by their embryos. This study investigated how grass snakes, an oviparous species, manage to range as far north as they do in Europe (much further, for example, than the viviparous smooth snake). As fieldworkers have long known, the grass snake's trick is to find sources of artificial warmth for egg incubation. This study, a combination of lab and field work, showed that manure heap (most favoured site) temperatures averaged 30.7 °C, compost heaps 20.6 °C and natural sites under logs and rocks a mere 15.5 °C. Manure heaps generated the fastest development and highest hatching success as well as the largest and quickest-moving offspring. From the conservation perspective this presumably means that manure heaps should receive high priority for maintenance and creation especially near the range edge.

Photographic identification in reptiles: a matter of scales. R. Sacchi *et al.* (11 authors). *Amphibia-Reptilia* **31**, 489-502 (2010).

The rapid development of digital cameras has made photo ID an attractive option in capture-mark-recapture studies whenever the study species has a diagnostic and easily recognised individual morphology. Another key requirement, especially for large populations, is an automated (computer-based) recognition system. The present study used scale patterns in wall and green lizards as individual fingerprints. An individual identification software system proved completely reliable with photos of pectoral scales from 21 animals of each species irrespective of potential errors from different photographers. With a much larger sample (> 1000) of wall lizard recapture photos reliability was always better than 95% and usually higher. Image digitisation and processing time was also manageably low (less than five minutes each). The method should be widely applicable to many reptile species and to all age groups because it relies on scale patterns rather than more superficial ornamentation. It is of course also cheaper and less traumatic to the individual than most alternative methods.

Slow worm, *Anguis fragilis* (Reptilia: Anguidae) as a species complex: genetic structure reveals deep divergences. V. Gvozdik, D. Jandzik, P. Lymberakis, D. Jabionski 7 J. Moravec. *Molecular Phylogenetics and Evolution* **55**, 460-472 (2010)

Slow-worms are one of the most widely distributed European reptiles, ranging over much of the north, centre and southeast of the continent and also into near Asia. Until quite recently most textbooks described them as one species, albeit with possible subspecies. Molecular analyses have clarified the true situation. Anguis fragilis occurs in western and central Europe including Britain, and in the north-west Balkans. It is probably also the variety found in western Scandinavia and Italy. Anguis colchica ranges from the Baltic south to the Czech Republic and eastwards to northern Iran, probably also including eastern Scandinavia and the north-east Balkans. Anguis graeca is found in the southern Balkans and A. cephallonica, partly sympatric with A. graeca, is in the Peloponnese region of southern Greece. There are probably subspecies of A. colchica in the Caucasus and near the Caspian sea.

TV Star Praises Work of ARG Volunteers

Colin Williams

Dr Rhys Jones, star of BBC Wales' 'Rhys to the Rescue' and visiting fellow at Cardiff University, attended an event organised by Gwent ARG on 17 April.

Rhys gave a lively presentation about our native reptiles to the sizeable audience, which included many children drawn in by the presence of a television celebrity. He told them how lucky we were to have such fascinating creatures living on our doorsteps, saying that our native snakes and lizards were every bit as beautiful and wonderful as the more famous reptiles of tropical climes.

Turning to the part played by volunteers, he said that this was the most important role in the conservation of these incredible creatures. ARG volunteers are on the ground, seeing reptiles on a daily basis. It is the records drawn from these sightings, Rhys told his audience, that form the basis of every conservation effort. Unless we know where the animals are, and what is happening to their populations, we cannot argue convincingly for their protection.

This, of course, is not news to ARG members, but it was good to hear such appreciation from a celebrity voice and there were many potential members present to whom it will have been a new message. Rhys told them that the participation of people like them was vital if groups like ARG UK are to play their vital part in halting the destruction of essential habitat and wildlife corridors.

His talk was enthusiastically received, as was one on amphibians by Gwent ARG chairman, Matt Harris. Children and adults alike were thrilled by the live animals that were available for them to see and handle.

The presentation was followed by a visit to nearby Llantrisant Common, where Gwent ARG are beginning a large-scale reptile survey on an SSSI for which there is very little existing information about the resident herpetofauna. Several people not previously involved with the ARG expressed an interest in participating in this survey and still more asked about joining the group.

Gwent ARG are extremely grateful to Dr Rhys Jones, both for the donation of his valuable time and skills, and for his kind words about ARG UK.

Around the ARGs

Brockhall Quarry Pond Creation

Richard King

HART has undertaken pond creation this year at Brockhall Quarry. The site at Stretton Sugwas is a former quarry which has been restored as a site for wild-life with a 10-year management plan agreed between the Duchy of Cornwall (the owner), the Herefordshire Council, Welsh Water and the Environment Agency. The plan included several new ponds but they were made too small and silted up.

When Welsh Water modified their flood management for the Wye and raised water levels in this area by several meters most of the other ponds were lost - some were well recorded great crested newt ponds. Only one pond in the old settling lagoon area located on higher ground remained.

The project created three new ponds in the rest of the old lagoon. The introduction of these new ponds gives the great crested newt more opportunity for dispersion and population expansion. The ponds have been left to colonise naturally.

The spoil was disposed of on site by banking up against the existing site bund, blending into the surroundings.

Will Watson, HART's project leader, said 'We've taken care to create ideal wildlife ponds. The ponds are different sizes, but all have gently sloping sides and irregular shapes, to maximise the number of aquatic microhabitats. We will monitor the ponds in future to check on the newts, but we fully expect them to colonise these new ponds.'

John Baker, formerly of Amphibian and Reptile Conservation (ARC), added, 'This is a great example of partnership working. HART has worked with the Duchy of Cornwall to produce a model amphibian conservation project. The Duchy of Cornwall has financially supported the project, but the pond creation funds have been topped up by ARC's Great Crested Newt Conservation fund and the Amphibian and Reptile Groups of the UK's 100% Fund.'

Duchy of Cornwall staff have been impressed by the work done, and are planning to arrange walks on the site to include these ponds.

Pond creation at Chudleigh Knighton Heath, Devon

Nicky Green

Devon Reptile and Amphibian Group was relaunched in 2010 with a full programme of activities.

Great crested newts have been a particular focus. The species is at the edge of its range in Devon, being confined primarily to a small number of sites in the southeast of the county. DRAG surveyed ponds at Chudleigh Knighton Heath during the newt breeding season to assess if there are any surviving populations of the great crested newt. The great news is that on each occasion GCNs were found!

Since April until the end of May, six surveys took place on three ponds that are situated on either side of the Chudleigh Knighton road heading towards Bovey Tracey. There is a pond which has previously been checked for the presence of great crested newts (pond one) and two ponds on the other side of the road situated close to a bridal path (ponds two and three). Surveys included searching for eggs, bottle trapping and torch surveying. Either two or all three methods were done on each occasion. We also tested the pH of the water which did vary slightly between the ponds.

Later, in October, volunteers cleared vegetation in the footprint of the new pond for great crested newts. This will be a small trial pond to test whether the site will hold water or need lining (on China clay so fingers crossed). The pond itself

was due to be dug over the Christmas period.

ZOOTOZA VIVIPARA. PHOTO BY ANDY RYDER

Common

Lizard

© Andy

Ryder

Fishponds Toad Patrol 2011

Andy Ryder, Chair Avon Reptile & Amphibian Group

In early 2010 I decided to check out a former toad patrol site in Fishponds. The site had previously been patrolled by Avon Wildlife Trust, but due to dwindling volunteer numbers the site had not been patrolled for a number of years, and from talking to local residents I learned that the number of toads seen each year was dramatically reduced. I patrolled largely on my own in 2010 and rescued 151 toads and 1 newt but also found several squashed toads.

Prior to this year's migration, I liaised with the council to erect some toad crossing signs, negotiated access to the fishing lake and organised some local publicity. I also managed to get Bristol Zoo to drum up some support and refer volunteers to me.

I checked the site nightly for a month or so; finding nothing more than the occasional pioneer amphibian, but finally on the 23rd Feb we found 16 toads. Things continued apace for the next few nights with good numbers found until the 27th when a cold snap kicked in. We didn't find much more until the 12th March and then for the next 2 weeks we remained pretty busy even finding more than 200 toads on one night. By the end of the migration we had moved over 900 toads and over 1000 amphibians. This is a fantastic set of results for a site that was not patrolled at all 2 years ago and with the continued support of the fishing club and a growing army of volunteers I am confident we can improve things still further in the coming years.



Northamptonshire Round-up

Brian Laney

Here in Northamptonshire I found and saved the first great crested newts of the season from trapped drains/gullypots from Long Buckby and Crick on the 18th January. As usual, now we are well into March, a good number of both smooth and great crested newts have been saved from the drains/gullypots, especially from Bury Dyke in a housing estate at Crick. Once saved the individual specimens are counted and sexed before being released into the nearby pond they are trying to reach. The polystyrene floats that were put into the drains/gullypots two years ago by me, where the drains contain deep water, have proved very successful with both smooth and great crested newts climbing out of the water and sitting on them until they can be rescued.

A pond where Terry Laney and Ken Blackwell saw great crested newts back in the 1960s near Great Brington has been deepened, overshading scrub cleared, and the nearby overgrown hedgerow lowered. Many thanks to Camille Newton, her partner Alex, and Bill, a local enthusiast, for their help on weekends during the winter. The good news is that I finally rediscovered great crested newts here after many years.

A new area where toads cross a minor road during the spring has come to light between Long Buckby and West Haddon. In recent years I have noticed the population growing, and many getting run down due to the higher volume of traffic using this road. On the 21st March I saved 58 males and 29 females, and the following evening, I saved 54 males and 38 females. Reports have come in of more slowworm populations spread further south throughout the county than first thought, with a confirmed record from 2007 from Badby Woods by Bob Bullock, while there is a record to be chased up and checked now at Silverstone.

Many thanks go to Camille Newton, Ian Tanner, the Ecology Department at Warwick, Louise Sherwell, Samuel Bacon and Laura Wood for their help and support.

Toads in the news

Erik Paterson from Clyde ARG managed to get much needed publicity for the plight of toads on our roads, with an article featuring his toad patrol efforts being published in the East Kilbride News. Erik took the opportunity, not only to call for more volunteers, but also to advertise the work done by Clyde ARG. Erik also breeds reptiles and has written a book on House Snakes.

Toads have also been in the news in Wales, where Carys Solman from Gwent ARG wrote a piece for the Merthyr Express, advising people to look out for toad spawn. Carys highlighted the decline in toad numbers in recent years and encouraged anyone spotting toads to send their sightings to the local records centre.

Charlcombe Toad Rescue Group – Migration 2011

Helen Hobbs

For the ninth year running, Charlcombe Lane, Bath was closed to through traffic for six weeks from 14 February-27th March so that migrating toads, frogs and newts could safely reach their breeding lake. However, due to the mild wet spell in early January the first migrating toads were seen on 10th January so volunteers from the Group were patrolling nightly from then on with buckets and torches to make sure there were as few casualties as possible. Thanks to the dedication of those volunteers who braved some very miserable weather this year, and to Bath & North East Somerset Council for their continued support of the road closure, a total of 2,889 migrating amphibians were recorded with only 188 casualties.





Although this didn't match the exceptional figures from 2010, this was still very encouraging and confirmed that the Charlcombe amphibian population is thriving.

We had a few interesting evenings at the lake when the margins were alive with mating toads, hopeful frogs with toads and even a frog sandwich (toads on top and below with a frog clasped in between)!

Volunteers also had a very enjoyable time filming a short feature about the toad patrol for the BBC nightly programme The One Show which should be screened soon, so watch out for that.

Elm Farm NARRS Survey training 2011

Holly Smith-Baedorf

Saturday 26th March saw ARAG run NARRS survey training at Elm Farm, a very apt location with strong commitments to local conservation.

Throughout the day volunteers were introduced to many aspects of collecting good survey data. The first section covered the importance of working with landowners, site selection and risk assessment. This was followed by a very visual guide to the challenges in recognising our native amphibians from spawn through to adults (including some non natives). Identifying reptiles was shown to be less challenging. However, recognising their range of habitats and spotting them within can be difficult for a first-time surveyor, but participants were reassured that this would improve with practice

in the field! Many surveying techniques were covered in detail including visual searches, torching, refugia, and effects of seasonal and daily timing of surveys. The importance of correctly recording herpetological observations and other sightings of interest, were also highlighted.

After training, everyone was invited on a walk around the farm to absorb the beautiful surroundings. Approximately 10% of the land belonging to the farm is preserved or deliberately planted for the benefit of native wildlife, some of which we were lucky to see! Two of the ponds on-site were also investigated, and found to be teeming with a diversity of invertebrates and toad spawn with a few newts swimming for cover from the ever-busy toads. A common lizard was also spotted nearby in addition to buzzards, hares and ammonites! There was also the opportunity to see refuges and nest boxes for owls, bats and dormice.

A huge thanks to ARAG for organising, Elm Farm for hosting and all those who attended for making it such an enjoyable as well as educational day. It's great to know there will be a number of squares surveyed in the Avon area this spring and summer!

Keep in Touch

Colin Williams

It is always great to hear what is happening in the many Amphibian and Reptile Groups around the country. If you have any events to report, stories to tell or results to record, please let us know.

Copies of any newsletters that you prepare locally are also gratefully received. Other ARG members around the country will be interested to hear what you are up to, and we will be delighted to tell them!

Stories or newsletters should be e-mailed to the editor at williams8qg@btinternet.com.

What is happening with ARG UK can be followed on the website. The ARG UK Panel also has a Facebook page and a Twitter presence, if you want more immediate contact.

We are aware that London and Gwent ARGs also have Facebook and Twitter pages and would encourage everyone to follow or like them as appropriate. If any other groups have similar social media pages, please let us know and we will tell the world.

If there is anything you would like to see more, or less, of in this newsletter, please let the editor

know at the e-mail address given above. This is your newsletter and we are keen that it reflects your wishes and interests as much as possible.

Above all, we really want to hear about all of your activities, triumphs, news and concerns.

Keep in touch!



ARG Today is the e-newsletter of the Amphibian and Reptile Groups of the UK (ARG UK). It is edited by Colin Williams. All submissions to williams8qg@btinternet.com.



