



Contents

<i>Onwards and Upwards.....</i>	1
<i>Around the ARGs.....</i>	2
<i>Chytrid Update.....</i>	4
<i>Scientific Paper Review 2009</i>	5
<i>.....</i>	5
<i>Bats, Toads and Planning..</i>	7
<i>Help for Pond Management</i>	8
<i>.....</i>	8
<i>Request for Records of</i>	
<i>Melanism in Snakes.....</i>	9
<i>Lost Life</i>	9
<i>Amphibians and the OPAL</i>	
<i>Water Survey.....</i>	10
<i>Conservation Volunteers Unite</i>	
<i>as Firemen Save the Day .</i>	10
<i>100% Fund.....</i>	11
<i>Review: The New Naturalists</i>	12
<i>.....</i>	12

Onwards and Upwards

A word from David Orchard, Chair of ARG UK

The Herpetofauna Workers' Meeting earlier this year was another greatly enjoyable conference, held in the unusually sumptuous surroundings of Barceló Hinckley Island Hotel.

The HWM is the key networking event for anyone involved in amphibian and reptile conservation, providing opportunities to learn from presentations, participate in workshops and meet and exchange ideas with fellow herp workers. It's also supposed to be fun and something of a well-earned 'thank you' to ARG members for their ongoing efforts towards herps conservation.

The meeting was spread over the weekend, with presentations on Saturday and workshops on the Sunday. This year there were some particularly informative presentations and summaries are available from the ARG UK website www.arguk.org.

This year's meeting included the ARG UK Annual General Meeting, which gives an opportunity for any ARG member to stand for election onto the ARG UK committee. All members of this committee are volunteers and many chair their local ARGs.

The role of ARG UK is to support the ARGs by:

- Organising the annual HWM
- Producing a bi-annual newsletter, *ARG Today*
- Arranging public liability insurance cover for ARGs
- Helping to establish new groups and providing advice to ARGs when required
- Representing the ARG network at a national level.

Nobody has been more involved with the development of ARG UK than Jan Clemons, who became the first chair when the former Herpetofauna Groups of Britain and Ireland were 'rebranded' as ARG UK in 2005. Our

constitution now stipulates that committee members can remain in post for a maximum of three years, so this year Jan stood down and I was pleased to be elected as in her place.

Over the last five years, the ARG network has gone from strength to

strength, notably seeing greater interest and herping activity in South Wales, Yorkshire and the Northwest of England.

ARG UK secured funding for John Baker, widespread species officer with Amphibian and Reptile Conservation, to support the work of ARGs. More recently, ARG UK has secured a high profile as a major partner in the *Million Ponds Project*.

Despite all this work, there's always more that needs to be done. Over the next few years I'd like to see the ARGs becoming an even more important part of the national herp conservation scene. To do this, ARGs will need a higher profile and funding to support individual group projects. This is quite a challenge, but I'm often inspired by the enthusiasm, dedication and expertise of ARG volunteers and so it's a great honour to represent you as the chair of ARG UK.

Since its inception, ARG UK has received support from The Herpetological Conservation Trust (HCT). As the HCT has metamorphosed into Amphibian and Reptile Conservation, this close working relationship has continued to grow to the benefit of both organisations. This year ARG UK and Amphibian Conservation will be working together on the coming *Sliding Scales*

project, to promote snake conservation. Keep an eye on the ARG UK website for further details!

I'm looking forward to working with you all over the coming months and years. If you have any thoughts or ideas about how the ARG network could work more effectively for improved conservation of amphibians and reptiles, then I'd be pleased to hear from you.

Around the ARGs

South and West Wales ARG Picks Up Awards

Raising the profile of an ARG can be helpful in achieving herps conservation locally. Recently, South and West Wales ARG were also rewarded with new funding opportunities. Being prepared to do things we wouldn't normally do is a major element in profile and awareness raising, which in my case meant putting on a suit. Why the need for a suit? To attend an awards evening.

One way in which SWWARG has managed to raise its profile has been through the Local Authority Environment Awards. The idea for the Awards came from the Neath Port Talbot Environment Forum (www.nptef.org.uk). They were organized by the team from the Climate Change Unit in Neath Port Talbot County Borough Council (NPTCBC) and by members of the Forum.

Over 50 applications were received in 2009. Short-listing and judging took place during October-November and the Awards Evening was held in the Towers Hotel, Swansea on 20 November, all paid for with money gained through sponsorship from Corus (the steel producer) and The Countryside Council for Wales (CCW). The evening was hosted by Iolo Williams, the BBC wildlife presenter.

The night was a huge success with 180 people attending, including 140 shortlisted finalists. This was truly a community event with an excellent atmosphere. It also raised £600 for *Children in Need*, which took place on the same night. Images from the awards evening are available at www.nptef.org.uk

SWWARG was nominated for the 'Action for Wildlife' category, and the project that I work on as my day job, *Mentro Allan*, was nominated for the 'Green Public Sector' category. Nomination

videos gave a good opportunity to convey some useful conservation messages. During the *Mentro Allan* nomination video, I used the opportunity to talk a little about pond creation and the reason as to why we had created multiple ponds rather than just a single one. The SWWARG nomination video featured a gang of volunteers forking and wheel-barrowing manure to create grass snake egg-laying sites. Once again the video was an opportunity to raise awareness of conservation issues, in this case grass snakes and their habitat requirements.

Wearing the suit paid off as SWWARG and *Mentro Allan* managed to win their respective categories. Additional funding opportunities have been offered as a direct result of the awards. One prospective project that funding offered by Environment Wales may support is training volunteers to monitor the latest sand lizard introduction site, but materials for awareness raising, pond creation and all manner of projects are all areas funding is currently being applied for since the award ceremony. The purchase of survey equipment to monitor and research a recently discovered colony of wall lizards in Wales is another project that SWWARG hopes will get off the ground sooner than anticipated, also as a result of the awards.



Left to right: Iolo Williams, Jessica Lloyd (SWWARG treasurer), Peter Hill (SWARG Conservation Officer) and Mark Sabine, Environment Agency.

I highly recommend that ARGs contact the Environmental and Biodiversity units of their local Authority to find out if similar award schemes are in place locally. If not, then perhaps suggest such a scheme. The Neath

Port Talbot Environmental Awards began only last year, perhaps a similar scheme could be in place near you soon? If so, then take advantage of it, raise your ARG profile, and maybe even some additional funding.

Peter Hill

Action for Wildlife Award - South and West Wales Amphibian and Reptile Group

This group was chosen for its achievement in the conservation of an under-appreciated group of species. The group has helped to develop its volunteers' building skills and confidence, and has increased access to the natural environment. Visit <http://www.swwarg.co.uk/>.

Global Sustainable Development Cymru.

Sand Lizards and Slow-worms in the Northwest

North Merseyside ARG recorded over 300 sand lizards (including hatchlings) on the Merseyside coast in 2009. The most exciting finding was that about 20 seen at a site where they had not been recorded for at least 30 years! Due to the isolation of this particular site, the recent observations are unlikely to have stemmed from re-colonisations from nearby populations. It is more likely that these are lizards from a population that has persisted, but at low numbers and has hence gone undetected for many years. Two other population foci were located last year, one a former release site.

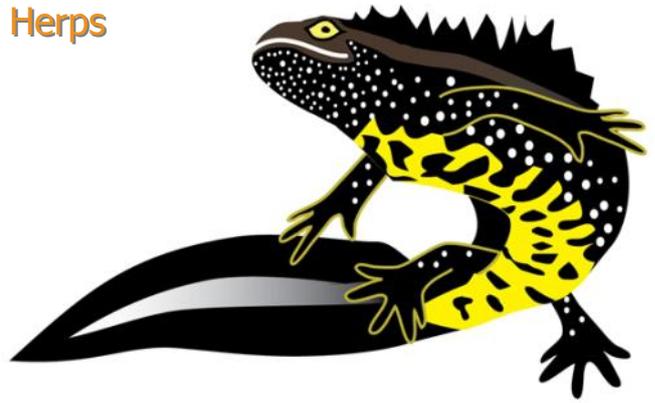
NMARG members have also been studying a slow-worm colony just outside the county boundary, which has proved more extensive than previously thought. We are still, however, trying to locate any colonies existing within the county boundary!

Mike Brown (North Merseyside Amphibian and Reptile Group recorder)

New Chair for Avon RAG

Dr Iain Adderton is the new Chair of Avon Reptile and Amphibian Group with immediate effect. Contact: iain.adderton@grontmij.co.uk. ARAG wishes to thank Anna Ferguson, the group's retiring chair.

Wildlife Gardening Competition...for Herps



Kent Reptile and Amphibian Group (Krag) is delighted to be joining with Kent Wildlife Trust (KWT) this year to give a *Dragons in Your Garden* award to the most herp friendly garden. This is a new award as part of KWT's wildlife gardening scheme and competition, open to private, school and business gardens among other categories. The winner will receive a special *Dragons in Your Garden* KWT blue plaque and a prize from Krag.

Jo Richards, Events, Publicity and Education Officer, Kent Reptile and Amphibian Group, www.kentarg.org

Pond Demonstration Site in Fife

Fife ARG has a full programme of activities and events for 2010. A key project for the group's second year of existence is the completion of a pond demonstration site in Cupar, now fully funded and under construction.

David Bell, Secretary Fife ARG

Hi Vis Jackets

Thanks to the British Herpetological Society, ARG UK was offered some high visibility jackets earlier this year.

Jackets were available to delegates at the Herp Workers' Meeting and a further 330 have been sent out to ARGs requesting them. In all, over 500 jackets have been distributed, destined to make life safer for toad patrollers.



ARG UK is grateful to Mark Hollowell and the BHS for supplying the jackets and to David Orchard and Jon Cranfield for distributing them.

Chytrid Update

In 2008 many ARG volunteers swabbed amphibians as part of a national screening survey coordinated by the Institute of Zoology. Where are we now, and what happens next?

In 2008, Natural England, Scottish Natural Heritage, the Countryside Council for Wales and the States of Jersey funded the Institute of Zoology (IoZ) to investigate the prevalence of chytrid fungus in the UK. Chytrid is the, now notorious, fungus that has been discovered in amphibians worldwide, with devastating effects in some populations. Andrew Cunningham and Eddie Brede, from the Institute of Zoology led workshops at the Herp Workers' Meeting in 2008 and recruited and trained volunteers to sample amphibians from sites around the country. This involved the capture of, ideally, at least 30 amphibians at each site, from which skin samples were taken using swabs.

Nearly 6,000 amphibians from 121 ponds were sampled.

The report (Cunningham and Minting, 2009) has been sent to all those involved in the survey and is available from the ARG UK website.

It is not yet known what impact, if any, chytrid is likely to have on UK wildlife. It is likely that additional sites, other than those found to be positive from sampling in 2008, also harbour the infection. It is, therefore, prudent to adhere to strict biosecurity precautions over the coming field season. Updated biosecurity guidelines are in the pipeline but for the time being, advice can be found in ARG UK Advice Note 4 on the ARG UK or IoZ websites <http://www.zsl.org/conservation/regions/uk-europe/ukchytridiomycosis,842,AR.html>.

Since the 2008 screening survey, Freya Smith has started a PhD studentship at the Institute of Zoology and Imperial College London, to further investigate the emergence of chytrid in the UK. Freya will be responsible for coordinating UK chytrid surveillance over the next few years. She has already been conducting a questionnaire survey of swabbers, which will contribute to a more in-depth analysis of the 2008 screen-



ing survey. These further results will be made available shortly.

This year's fieldwork will focus on a subset of the sites found to be positive for chytrid in 2008. These sites will be visited five times throughout the year, to help determine within-site prevalence and better understand the dynamics of chytrid at infected sites.

Key findings of the 2008 survey

- Amphibians tested positive for chytrid at 19 (16%) of sites across the UK.
- There appears to be an association between introduced non-native amphibians and chytrid .
- Chytrid was detected in all native amphibians except the great crested newt*

*Note that chytrid has since been found in great crested newts (Peter Minting, pers. comm.).

Freya is developing plans to carry out a second nationwide survey in 2011. Although the exact protocol has yet to be decided, the aim is likely to be to re-sample as many of the 2008 sites as possible, as well as increasing coverage in certain under-

represented areas, in particular Northern Ireland, Scotland and South West England. The results of the 2011 survey and those of the 2008 survey, combined, will be used to advise government policy (Defra is funding the 2011 survey for this purpose).

Freya is looking forward to working with volunteer surveyors in 2011. If you took part in the 2008 survey, it would be really helpful if you could re-sample your site(s) in 2011. If you have recommendations for additional sites to consider for inclusion in the 2011 survey, then please contact Freya Smith at the Institute of Zoology, freya.smith@ioz.ac.uk

Reference

Cunningham, A.A. and Minting, P. (2009). National survey of *Batrachochytrium dendrobatidis* infection in UK amphibians, 2008. Institute of Zoology, Zoological Society of London.

Scientific Paper Review 2009

Trevor Beebee, University of Sussex/Amphibian and Reptile Conservation, picks ten research papers from 2009 of particular relevance to UK herps conservation

Amphibian declines are not uniquely high amongst the vertebrates: trend determination and the British perspective.

Beebee, T.J.C., Wilkinson, J.W. & Buckley, J. (2009) *Diversity* 1, 67-88.

In this first paper to be published by the new organisation *Amphibian and Reptile Conservation*, evidence is presented that within Britain, Europe, and probably the world, reptile declines in recent decades have been at least as severe as the much-publicised amphibian ones. The reasons for declines are probably similar, and reflect the high sensitivity (compared with mammals and birds) of both amphibians and reptiles to habitat destruction. The difficulties in assessing population changes are discussed, showing how methods have improved over the past 150 years and continue to do so with the NARRS project.

The lunar cycle: a cue for amphibian reproductive phenology?

Grant, R.A., Chadwick, E.A. & Halliday, T. (2009) *Animal Behaviour* 78, 349-357.

Those attending the December 2009 BHS/ARC scientific meeting in Bournemouth will recognise this as the subject of one of the talks there. It seems remarkable that lunar effects on amphibian breeding cycles have been properly recognised only recently, and this paper provides fascinating evidence relating to anurans and urodeles. Frogs and toads migrate and spawn most frequently around the full moon, and newts also move mostly around this time, and minimally in the lunar cycle's third quarter. Of course these tendencies are moderated by weather, and the authors speculate on how and why amphibians respond to lunar periodicity. It is clear, though, that people monitoring amphibian populations could usefully take account of these new findings.

Population genetic patterns suggest a behavioural change in wild common frogs (*Rana temporaria*) following disease outbreaks (Ranavirus).

Teacher, A.G.F., Garner, T.W.J. & Nichols, R.A. (2009). *Molecular Ecology* 18, 3163-3172.

Ranavirus has been a scourge of British frog populations for several decades now, regularly causing substantive (but mostly temporary) population declines and the unpleasant appearance of dead and dying frogs in the

summer months. This paper describes a genetic analysis of frog populations that have undergone ranavirus attack, in comparison with ones that have not. Recovering populations showed evidence of extra assortative mating, presumably a behavioural response suggesting that surviving animals become choosier about whom they mate with. It's not clear, though, how this happens since pairing in frogs seems on the face of it to be a random, grab-who-you-can approach by males with little choice possible for females. Interestingly there was no evidence of significant reductions in genetic diversity in disease-recovering populations, and the authors speculate that this may be due to regular immigration from surrounding populations.

European phylogeography of the common frog (*Rana temporaria*): routes of postglacial colonisation into the British Isles, and evidence for an Irish glacial refugium.

Teacher, A.G.F., Garner, T.W.J. & Nichols, R.A. (2009). *Heredity* 102, 490-496.

How our native amphibians and reptiles colonised Britain after the end of the last ice age has been a cause for speculation for decades. Molecular genetic approaches are beginning to provide some new insights into this question, and in this paper, based on mitochondrial DNA studies, there is evidence that two separate invasions of common frogs occurred. A "western" genetic group, present in France and Spain, is found all over mainland Britain and in Ireland. However, in parts of southern Ireland there is another genetically distinct and quite different group. Although the origins of both groups in Ireland are uncertain, it is interesting to note a comparison with natterjack toads in southern Ireland, which are also genetically distinct from those in eastern England. One explanation is that pockets of both species, and maybe other members of the unique 'Lusitanian' fauna and flora of south-west Ireland, survived nearby during the last cold spell about 10,000 years ago and recolonised from there.

The influence of temperature on the spatial distribution of first spawning dates of the common frog (*Rana temporaria*) in the UK.

Carroll, E.A., Sparks, T.H., Collinson, N. & Beebee, T.J.C. (2009). *Global Change Biology* 15, 467-473.

The onset of breeding by amphibians in spring is a potential indicator of climate change effects, and several species have shown a trend towards earlier starts over the past 30-40 years. Preliminary studies, however, suggested that frogs were not among them and that frog spawning times had changed very little. In this paper, data on frog spawning times from all over Britain between 1998 and 2007 are compared. This confirmed what was previously known, i.e. that spawning onset is earliest in the south-west, and gets progressively later northwards and eastwards. However, comparison with data obtained by Maxwell Savage 60-70 years earlier also indicated that over this time period frog spawning has indeed become earlier, on average by a week or more. So frogs probably have responded to an increased frequency of mild winters, but rather slowly.

A method of obtaining dietary data for slow-worms (*Anguis fragilis*) by means of non-harmful cooling and results from a Danish population.

Pederson, I.L., Jensen, J.K. & Toft, S. (2009). *Journal of Natural History* **43**, 1011-1025.

Slow-worms are the most abundant reptile in many parts of Britain, but due to their secretive behaviour are notoriously difficult to study. Pederson *et al.* describe a wondrously simple method for finding out what slow-worms have been eating: just keep them cool (approximately 8°C) for up to five days, and about half the animals (adults and juveniles) maintained under such conditions will regurgitate their food. In the Danish population studied the main food items, in decreasing order of abundance, were small snails, slugs, millipedes, earthworms and Lepidoptera larvae. Dietary studies were also carried out in captivity, revealing (for example) that mealworms were nutritionally inferior to natural foods, and that molluscs were better than earthworms.

Optimal level of inbreeding in the common lizard.

Richard, M., Losdat, S., Lecomte, J., de Fraipont, M. & Clobert, J. (2009). *Proceedings of the Royal Society B*, **276**, 2779-2786.

Concerns about inbreeding effects on population viability are of increasing concern to conservationists, particularly for species such as amphibians and reptiles with small and sometimes isolated populations. This French study used captive common lizards in semi-natural conditions (outdoor enclosures), and investigated how mate choice worked. Intriguingly, females of intermediate age – essentially the fittest – were the most monogamous, but did not mate with

genetically similar partners. Younger (one-year-old) and older (four-year-old) females were less discriminating. Females rarely mated with close relatives (brothers), and when they did, offspring survival was low. Interestingly, though, breeding with animals more distantly related than cousins also increased clutch mortality. It seems that, at least for the study population, there was an optimum level of relatedness between pairs that minimised both inbreeding and outbreeding depression. A cautionary note, perhaps, for mitigation projects that might result in mixing unrelated populations.

Trend estimation in populations with imperfect detection.

Kery, M., Dorazio, R.M., Soldaat, L., van Strien, A., Zuiderwijk, A. & Royle, J.A. (2009). *Journal of Applied Ecology* **46**, 1163-1172.

In Britain, sand lizards have been a major focus of conservation activity for 40 years, but we still do not have a scientifically robust way of monitoring population changes. The present work developed the use of sophisticated statistical methods that have emerged over the last few years to investigate the fate of sand lizards in the Netherlands. It is of course based on systematic observations of wild lizards, and demonstrated particularly critical effects of observer experience (no surprise here...), survey date and temperature on data interpretation. However, the method accommodates all these issues and showed that, across multiple sites, sand lizards increased by over 85% between 1994 and 2005. The biggest changes were on coastal (dune) sites, and indeed only by taking account of varying detectability was it possible to show that inland (heath) populations also increased.

Male reproductive success and multiple paternity in wild, low-density populations of the adder (*Vipera berus*).

Ursenbacher, S., Emy, C. & Fumagalli, L. (2009). *Journal of Heredity* **100**, 365-370.

This Swiss study determined the degree of multiple paternity (using genetic analysis) in 15 clutches from wild adders. Even in the small populations investigated here, multiple paternity was detected in more than two thirds of the clutches. The biggest males sired the most offspring, and only the very largest fathered clutches with single paternity. There was no relationship between multiple paternity and offspring survival – clutches with a single father did just as well as those with several. However, multiple matings could be beneficial in populations with high levels of inbreeding.

Habitat selection and range size of grass snakes *Natrix natrix* in an agricultural landscape in southern England.

Reading, C.J. & Jofre, G.M. (2009). *Amphibia-Reptilia* 30, 379-388.

There is still rather little information about the movement of grass snakes, and the habitats they choose, in Britain. Reading and Jofre radio-tracked nine snakes in an area of south Dorset with (primarily) mixed woodland, pasture fields, gardens and claypits to try and improve this situation. It turns out that the snakes avoided the woodland, clay workings and fields, much

preferring habitat boundaries (hedges, banks etc). Home ranges could be up to nine hectares, but were usually smaller (often between one and four hectares). Banks, including some in woodland, were selected as hibernation sites. Individuals sometimes changed their home ranges between years, and the snakes generally used field boundaries as movement corridors (e.g. between manure heap breeding sites and pond hunting sites). The significance of this information for effective conservation strategies is clearly substantial.

Bats, Toads and Planning

John Baker, Amphibian and Reptile Conservation/ARG UK

Challenges to two planning application decisions may be of interest to those involved in the planning process. The first is a well known case (Simon Woolley v Cheshire East Borough Council) involving bats, European Protected Species; the second involves a common toad site (a complaint brought to the Local Government Ombudsman). In neither case were sites saved from development, but they both reinforce obligations for local planning authorities to consider wildlife during the planning process; in the first case as required for European Protected Species under the Habitats Regulations 1994, in the second to meet the 'biodiversity duty' of the NERC Act 2006.

In the first case, a judicial review, R. (on the application of Simon Woolley v Cheshire East Borough Council), in June 2009, the local authority granted planning permission for a site where bats were known to be present. The development involved demolition of a residential building, to make way for the construction of a larger property. Previous survey had found bats in the original residence. Planning permission was granted and the developer carried out work under the necessary licence obtained from Natural England.

A key aspect of the judicial review brought by Mr. Simon Woolley, was that the local planning authority had failed to meet obligations imposed by the Habitats Regulations 1994 (regulation 3 [4]).

Regulation 3(4) Without prejudice to the preceding provisions, every competent authority in the exercise of any of their functions, shall

have regard to the requirements of the Habitats Directive so far as they may be affected by the exercise of those functions.

The judgement ruled that the local authority, in meeting its obligations, should have considered whether derogation requirements were likely to be met and then granted, or refused, the planning application accordingly. The derogation requirements are given in Regulation 44 of the Habitats Regulations and are considered by national statutory bodies (Natural England in this case) when considering a licence application. However, this judgement should put pressure on planning authorities to recognise that they, too, should consider derogation requirements in order to meet their obligations to the Habitats Directive. Although guidance already documents that protected species are material considerations in the planning process (Government Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System, ODPM Circular 06/05) the 'Woolley case' reinforces the legal responsibilities.

In the second planning case, this time with herp (common toad) interest, outline planning permission for a site owned by Ipswich Borough Council was granted by Babergh District Council in 2007. The site includes an area called Kiln Meadow, which lies between a toad breeding site, in Bobbits Lane Local Nature Reserve, and woodland to the south, which appears to be a significant overwintering area for the toads. Certainly, large numbers of toads migrate across Bobbits Lane on the edge of the Nature Reserve. The Bobbits Lane toad crossing has

the highest toad count recorded by Froglife's *Toads on Roads* database. The high count of toads (5,475 in 2009) is doubtless, in part, due to the diligence of the toad patrol in moving (and counting) toads, but nevertheless, it is clearly a significant population.

Ray Sidaway and Jen Jousiffe, members of Save Kiln Meadow Campaign (SkiM) made a complaint to the Local Government Ombudsman that Babergh District Council had failed to adequately consider wildlife when granting outline planning permission. Processing the planning application had taken five years, from 2002 to 2007, during which time two new nature reserves were declared adjacent to Kiln Meadow and large numbers of toads were found to be either using or crossing the site. The Ombudsman decided that Babergh District Council had not considered law (presumably the biodiversity duty of the NERC Act) and policies, which had changed over the time that the

application was being processed. The council was considered to be at fault (www.greenlivingcentre.org.uk/iwg/skim/ombudsman-letter.htm).

The Ombudsman's decision does not secure the future of Kiln Meadow, but it is another fragment of support for the consideration of wildlife within the planning system.

Further information

Baker Shepherd Gillespie www.bsg-ecology.com/News/Images/Briefing%20Note_Aug09.pdf

Bat Conservation Trust www.bats.org.uk/publications_download.php/595/Judicial_Review_May_2009_BCT_summary.pdf

Save Kiln Meadow.
www.greenlivingcentre.org.uk/iwg/skim.htm

Help For Pond Management

If your ARG is thinking about a pond management project, help may be at hand from the *Million Ponds Project*

David Orchard, Amphibian and Reptile Conservation/Pond Conservation Trust

If your ARG is immersed in the survey season, thoughts of pond management may be well down your list of priorities. However, do please consider management opportunities during springtime survey visits to ponds.

Pond management is an issue that is approached with trepidation by some ARGs and it can be a controversial subject. The pond management workshops at this year's HWM demonstrated that ARG volunteers recognise that inappropriate work can damage valuable habitats and that although a pond may not be great for amphibians, it may, nevertheless, provide habitat for other species.

Ideally, a site or landscape should contain a number of ponds in different successional stages, providing a diversity of habitats for amphibians, plants and invertebrates. However, this may not always be possible and sometimes there may be good reasons why a pond should be managed, for example, to improve connectivity between neighbouring amphibian populations. But what management operations are appropriate and how should these decisions be reached? Help will be at hand later in the

year in the form of an advice note on pond management which is being produced as part of the *Million Ponds Project*, planned for publication in time for the autumn.

Feedback from ARGs about the *Million Ponds Project* over the last year has often included comments that creating new ponds is a low priority for a number of reasons; especially that finding sites for new ponds is difficult and that suitable sites usually already contain ponds. The view is often expressed that pond management is a much more urgent priority than pond creation and the need for more help with the former has been highlighted. The *Million Ponds Project* has responded to this feedback and so working with ARGs on pond management projects will become a priority over the next two years.

The coming months are an opportunity for ARGs to come forward with ideas for pond management and, if help is required, the *Million Ponds Project* will assist and search for funding where appropriate (unfortunately the *Million Ponds Project* funding is tied to pond creation work.

The ARG network is a significant partner in the Million Ponds Project, so let's work together and make 2010-2011 a time of action for pond management for amphibians!

If your ARG is thinking about developing a pond management project, please contact David Orchard, Amphibian and Reptile Conservation's Ponds Project Officer for the *Million Ponds Project*, david.orchard@arc-trust.org

Request for Records of Melanism in Snakes

Todd Lewis and Darryn Nash

Melanism is the phenomenon in which animals appear black or, at the very least, uniformly dark in coloration (although some normal patterning can usually be made out). Among British snakes, it was previously thought that melanism was restricted to the adder for which there is a considerable quantity of historical records. There are, however, also records of melanistic grass snakes and, more recently, of smooth snakes.



Normally coloured and a melanistic grass snakes (Todd Lewis)

The effects of melanism go beyond the darkening of the animal's appearance. It is thought that melanism may confer an increased thermoregulatory capability, with gravid females needing to spend less time basking. There may also be a disadvantage through an increased risk of predation.

Although melanism is known from all three British species of snake, how often it occurs and whether there is a pattern in distribution is unclear. Todd Lewis and I are investigating these two aspects using records generated from a combination of historical records and ongoing surveys. We would greatly appreciate your help in this; the more records we receive the higher

the level of accuracy we can ascribe to any conclusions.

We would like to know the species, where and when you saw it and, if possible, a photograph. Records should be forwarded to either Darryn Nash at darrynnash@hotmail.com or Todd Lewis at ecolewis@gmail.com. Where site confidentiality may be an issue, we would happily accept 1, 5 or 10 km-square grid references.

Thank you in advance.

Lost Life

New publication

Lost Life has been produced by Natural England as a contribution towards the International Year of Biodiversity. It highlights species losses, current threats and some conservation successes, with the

aim of stimulating greater conservation action.

The section on species losses deals with extinctions from England since the first century AD. Amphibians come out near the top of the table—with two extinctions (moor frogs and agile frogs) or 22% of species.

In terms of prioritisation under the UK Biodiversity Action Plan, herps do rather well (in terms of direction of conservation effort) or rather badly (considering that they were felt to be in need of BAP listing). All reptiles and 44% of amphibians are listed, rivalled only by whales and dolphins coming in at 92%. The figure for amphibians should, perhaps, be bit higher given that 44% is the proportion of all nine historical species, rather than the extant seven.

Natterjacks are featured as an example of a threatened species. Pool frogs and sand lizards are mentioned as species showing increasing population trends, and pool frogs are featured as a success story—apparently the only example of an extinct British vertebrate being returned through a planned reintroduction.

Congratulations to Natural England on setting out the scale of biodiversity loss and for stating that *species have their own intrinsic value* and that their loss at our hands is *simply wrong*. It is gratifying to hear a government body being definitive.



Amphibians and the OPAL Water Survey

'Water' is one of OPAL's national surveys

OPAL (Open Air Laboratories) is an exciting project that aims to get people back in touch with nature by exploring and discovering their local environment. OPAL is running a series of five national surveys that anyone can take part in. Each survey looks at a different aspect of our environment – soil, air, water, biodiversity and climate. The OPAL Water Survey launches in May 2010. It involves pond dipping for aquatic invertebrates as well as testing the physical properties of the water and identifying other life around the pond including amphibians, duckweeds and dragonflies.

Surveying these different groups allows participants to build up a picture of the biodiversity of their pond, and they can also calculate a 'pond health score'. The OPAL website will then point them towards resources where they can find out how to improve the quality of their pond. The data collected by the OPAL Water Survey will be analysed by scientists at University College London as part of their ongoing water quality research, and will be shared with groups such as Pond Conservation and Buglife who have helped to develop the survey resources (all data will be freely available).

OPAL has developed the amphibian section of the guide in partnership with Amphibian and Reptile Conservation. A key objective of OPAL is to enthuse people about nature and then signpost them towards sources of further information and activities, including local Amphibian and Reptile Groups.

The OPAL Water Survey aims to publicise local ARGs to help generate new members and amphibian recorders across the country.



OPAL needs your help! From May onwards, OPAL staff all over England will be running OPAL Water Survey public events. They would love to have local Amphibian and Reptile Group members to come along to their events, to share your enthusiasm for amphibians and to encourage more people to get involved in recording them. You don't need to be an expert to take part and OPAL will cover your food and travel expenses. Please contact Lucy Carter on lucy.carter@nhm.ac.uk or 020 7942 5188 for a Water Survey pack, or to find out more about how you could get involved at OPAL events. www.OPALexplorenature.org

Conservation Volunteers Unite as Fireman Save the Day

Jessica Lloyd and Hannah Whitby, South and West Wales ARG

Last year (26 June 2009), and in between saving lives, Cimla Fire Service extended its remit to saving our native amphibians. Volunteers from the South and West Wales Amphibian and Reptile Group (SWWARG), British Trust for Conservation Volunteers (BTCV), through *Mentro Allan* (venturing out), and the Conservation Ecology Research Team Swansea University (CERTS) completed three wildlife ponds at a local Comprehensive School in Neath with the help of Cimla Fire Service and officers from other local stations.

This site is one of a series of wildlife ponds and gardens in Neath and Ystalyfera, that have recently been created through SWWARG, with the help of the other volunteer groups, and thanks to funding from the *Tidy Town Scheme*, Neath Port Talbot Biodiversity Unit and ARG UK

100% Fund Award. BTCV, through *Mentro Allan*, have also created several ponds at Margam Country Park and the Gnoll in Neath, through funding from CCW and Neath Port Talbot Biodiversity Unit. Egg laying and hibernation sites have also been created for our native snakes at Margam Park. Plus funding from the Countryside Council for Wales (CCW) has enabled the construction of pond dipping platforms.

A major cause of amphibian decline is habitat loss. SWWARG, along with other organisations, aim to conserve native herpetofauna (amphibians and reptiles) through conservation, restoration and habitat creation and have therefore been working together to create suitable habitats to assist in population stability. Amphibians are unable to travel long distances

so loss of habitat can isolate populations making them unstable. The creation of suitable habitat to act as corridors between areas allows greater dispersal and stability. Not only does this benefit amphibians but also other species such as invertebrates (e.g. dragonflies) creating greater biodiversity, which is aided by developing ponds of various sizes and depths. This is also a great opportunity for



Cimla Fire Service filling ponds at Cwrt Sart School, Neath

raising awareness of ecology, biodiversity and conservation matters among young people, through their involvement at the school.

With the firemen on hand the job of filling the three ponds was completed in record time meaning we were

able to finish the planting all in time for the kids to see at the end of their school day.

100% Fund

ARG UK's own small grants scheme delivers extremely good value for money

The *100% Fund* provides small grants to ARGs involved in practical conservation work

Money for the Fund has been kindly donated to ARG UK. It's called *100%* because all money donated goes into funding conservation projects—not on administration or overheads.

The *100% Fund* is targeted specifically at ARG UK groups.

Funding ARGs guarantees a high standard of quality control for herps projects.

ARG UK welcomes donations to the fund. It's excellent value for money. £1441 has been awarded to wholly, or partially, fund six projects resulting in:

- Ten new ponds
- Support for a great crested newt introduction project
- One pond restoration and three new ponds under way

Funding has been raised by donations to ARG UK and from finance allocated by ARG UK itself. A raffle at this year's Herpetofauna Workers' Meeting in Hinckley raised £362.50 for the fund.

If your ARG has a project in mind, ARG UK would welcome your application (maximum £250). If you'd like to discuss your ideas prior to submitting an application please don't hesitate to contact either John Baker or David Orchard.

All *100% Fund* donations are directly converted into conservation projects thanks to administration costs being funded by the Esmée Fairbairn Foundation's Widespread Species Project.

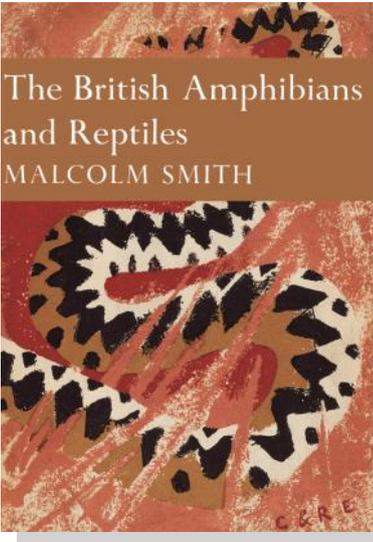
The most recent *100% Fund* award has been made to Herefordshire Amphibian and Reptile Team. HART was seeking part contribution towards a larger scheme to create three ponds at Brockhall Quarry, Stretton Sugwas. The site is a former quarry which has been re-landscaped and a ten-year management plan agreed between the owner, Herefordshire Council, Welsh Water and the Environment Agency.

The project plans to create three new ponds for great crested newts. £230 has been awarded, with the rest of the finances being obtained from other sources, including Amphibian and Reptile Conservation's great crested newt grant scheme (contact Dorothy Wright [doro-
thy.wright@arc-trust.org](mailto:dorothy.wright@arc-trust.org)).

Review: The New Naturalists

John Baker

The New Naturalists Library www.newnaturalists.com now provides a print on demand service. There are three herpetological titles within the series:

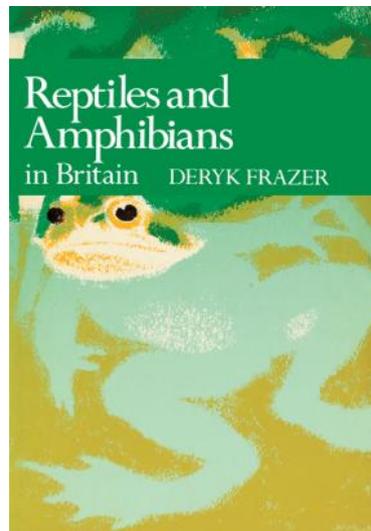
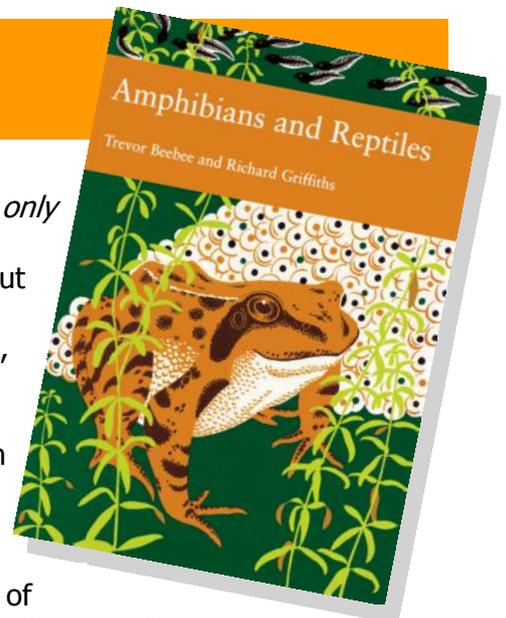


Malcolm Smith's *The British Amphibians and Reptiles* (first published 1951), Deryk Frazer's *Reptiles and Amphibians in Britain* (first published 1983) and Trevor Beebee and Richard Griffiths' *Amphibians and Reptiles* (2000).

The print on demand service has been advertised at £50 a copy (hardback). This may seem expensive in comparison with Howard Inns' *Britain's Reptiles and Amphibians* (published by WILDGuides), so why purchase a New Naturalist? Even within the narrow niche of herps literature, the publications are aimed at different markets. If you want a current, concise overview of the herps of the British Isles, with an emphasis on identification, then the WildGuides book is a good choice. If you want more detailed information on native and introduced herpetofauna, then The New Naturalists are excellent reference books. Even the most recent of these, Trevor Beebee and Richard Griffiths' publication, has been out of print for some years, so the print on demand service is most welcome. Although it is now ten years old, it is the most comprehensive published overview of herps and herpetology in the UK.

If you had to choose just one of the New Naturalists, Malcolm Smith's is hard to beat. If you talk to herpers of a certain age, for many, this is the 'bible' they grew up with. Not only

because it was pretty well the *only* publication on native herps, but it was comprehensive, accurate and well-written. Reading it even today, the information contained stands the test of time extraordinarily well. It's not only a historical document, encapsulating the state of herpetological knowledge of its time, but it's an enjoyable and informative read and a lovely thing to own.



If you're looking for just a field guide, you would be better off buying a copy of Howard Inns' WildGuides publication. But if you want to delve more deeply into herpetology...well, you'll probably already own at least one of the New Naturalists's publications. If

not, then they're all available, again.

Britain's Reptiles and Amphibians

Available from either Amphibian and Reptile Conservation 01202 391319, or from WILDGuides, www.wildguides.co.uk, 01628 529297.

As with all WILDGuides, a portion of sales goes to support conservation causes, in this case Amphibian and Reptile Conservation.

ARG Today is the e-newsletter of the Amphibian and Reptile Groups of the UK (ARG UK). It is edited by John Baker and funded by the Esmée Fairbairn Foundation as part of Amphibian and Reptile Conservation's Widespread Species Project.



amphibian and reptile
conservation

