



Warwickshire Amphibian & Reptile Team

Brandon Marsh Nature Centre, Brandon Lane, Coventry CV3 3GW. Tel (01203) 302912 Fax (01203) 639556
Affiliated to the Warwickshire Wildlife Trust (Registered Charity Number 209200)
and the British Herpetological Society (Registered Charity Number 205666)

Patron: Ken Livingstone MP

WART NEWSLETTER: ISSUE NO. 23 SUMMER 2000

Forthcoming events

Canley Ford Open Day

Saturday 24 June

There will be a pond-dipping session at Canley Ford in Coventry. The WART session starts at noon. Access is off the Kenilworth Road opposite Coat of Arms, Bridge Road. Contact Jan for details if interested.

Previous events

Brandon Marsh Open Day

Our indoor display at the Warwickshire Wildlife Trust headquarters in Coventry on 16 April was a little neglected by visitors, probably due to the sunshine outside. In spite of this, the live exhibits proved a useful way to interest “non-herpy” people in our subject.



Having put Jan to a lot of trouble to obtain a licence for catching and displaying Great-crested Newts for the day, the newts failed to oblige. Helen Newell had cheerfully assured the WART committee that she knew of a pond where catches were guaranteed, but the ten traps laid yielded nothing, not even a water snail.

Fortunately another pond supplied some Smooth Newts, Jan brought some frog tadpoles and a lizard, while Serena brought her Slow-worms.

Visitors to the stand provided different reactions to our display, including “haven’t seen those for years” about the newts, eagerness to stroke a slow-worm and “ugh, how disgusting!” exclaimed in our general direction (I hope she meant the herps and not us!).

Tocil Wood

Seven people attended the WART visit to Tocil Wood on Sunday 26 March, including our guides, Andi Clevely and Tony Ware.

The area we concentrated on was a marshy patch containing some ponds, where we found 2 frogs and some frogspawn. Mossy logs crossed the patches of plentiful Marsh Marigold, with Primroses nearby, and chiffchaffs called overhead while a green woodpecker laughed in the background.

A later visit to Tocil wood discovered a new massive toad population at a lake over the road from the reserve, with plenty of Daubentons bats skimming over the water.

There are plans for pond enhancement; the surrounding trees mean that a considerable depth of leaf litter has accumulated. One pond has already been excavated and is full of water from all the rain we have had. Further work to grub out badly silted ponds is planned and there is good potential for amphibian conservation.

This nature reserve, near Warwick University, on the southern edge of Coventry, is certainly worth a visit.

The WART Committee

Chair	Jan Clemons
Vice-Chair	Andrew Thompson
Secretary	Andi Wolf
Membership Secretary /Treasurer	Howard Eccles
Newsletter Editor	Helen Newell
Ordinary members	Jane O'Dell, Serena Eccles

Herpetofauna Recorders Meeting

The meeting this year was held in the new British Library, London and for the first time in four years I could just go as a delegate without worrying about running a workshop or doing a talk. WART was also represented by Chris Gleed-Owen who spoke about identifying changes in East Anglia's herpetofauna using archaeozoological survey. The impressive word means 'subfossil' bones excavated at an archaeological site. The survey was part of English Nature's Pool Frog Species Recovery Programme and aimed to find out where the species once lived and how common they once were. Finds to date add weight to the theory that the Norfolk Pool Frog population was native.

There were a variety of other talks on subjects ranging from slow worms in Kent, pond protection, species action plans for marine turtles and Will Watson's (of WRAG) pond project in Worcestershire. There were also workshops on publicity, Great-crested Newts and legal aspects concerning herpetofauna.

One of the great pleasures of attending this annual conference is the social side, meeting old friends and having a good time. I did miss the guest lecture on Diseases in Amphibians and ended up going for a classy Italian meal with Tony and Keith of the HCT plus a herpetologist from lower Saxony called Richard Podlouchy. Herp conservation in Germany is food (sorry) for thought. Evidently Richard and volunteers have been involved with a monitoring programme for the past 25 years which is part funded by the government and has led to special areas of conservation being set aside. All we do here is write plans for species and habitats instead of getting out there and doing the all important survey work. Herp conservation in Lower Saxony is definitely not a paper exercise.



Returning to the social evening we found out that the slides of infectious amphibians were very gruesome so became a team for the quiz. The HRM quiz is not easy and borders on the bizarre.

At one point I had to down a pint of beer, turn round ten times and throw plastic frogs in a bucket from 2 metres away! Fans of Metallica also do well in this quiz or is it Whitesnake?

The HRM is the right place to be to combine a love of herpetology and the good life. However what's all this about Betty and the Rugby Team, Alan (Shepherd of WRAG)?

Jan Clemons

Changes in a Common Toad Population Over 10 Years

From Froglog Number 35, October 1999

In view of the declining amphibian populations debate it is vital that long-term studies of amphibian populations are carried out. This article outlines how a simple study of a common toad population, using volunteers over a ten year period can generate some interesting data. The study can also be viewed as an educational tool in terms of getting people interested in amphibians and enabling them to extend their newly acquired expertise to further survey ponds in the county.

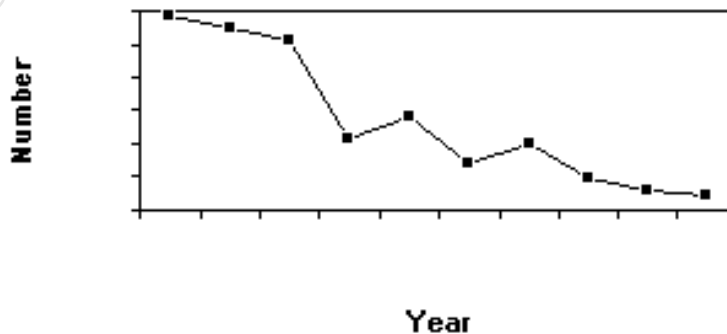
The study site, Dunchurch College, is situated in extensive landscaped gardens on the outskirts of the town of Rugby, Warwickshire, UK. In 1990, a large toad population was found in and around a large fish pond in the college grounds. A second heavily shaded pond within 50m was found to contain no vertebrate life. No amphibian data for this site had been recorded previously and a decision was made to survey the toad population every year as part of a long-term study.

The college gardens were designed and laid out in 1908 by the famous landscape gardener, Thomas Mawson for a new house formally called Dunchurch Lodge. The large pond was created as an ornamental feature to aid drainage on a wet slope down to the pond and was stocked with fish. The second pond appears to be a natural feature and is shown on Ordnance Survey maps dating back to 1882.

Over the past ten years the Dunchurch toad survey has involved over two hundred volunteers from the local community using the same simple methodology to ensure consistency from year to year. In England, common toads undertake spring migrations to return to their breeding ponds and, each year, as soon as the toads arrived at the pond, nightly 2 hour visits were made until toad numbers peaked and started to fall. Using torches, all the toads present in and approaching the pond were counted and their sex determined. Simple abiotic data was also collected.

Figure 1 shows how this toad population has declined over the ten year study period. Since 1997 the population has remained very small and only further study will reveal whether or not the population will recover.

Figure 1. Total number of toads counted during peak count



The ratio of male to female toads over the study period has remained fairly stable (at between 1.3:1 & 4:1), but there was a sudden decrease in females in 1995 (only 14 females were found) altering the ratio for that year to 12.5:1. The reasons for this phenomenon remain unknown as the ratio recovered the following year.

Over the last decade, the start of the migration period has ranged over 26 days, the earliest time being 17 March and the latest 11 April. However, the days needed to reach the peak count varied. In 1990, the peak count was reached in only three days whereas in 1997 it took 8 days. This year air temperature was only 8 degrees Celcius and such an unseasonal cold spell may have extended the migration period.

What factors could be responsible for this decline? There is certainly no lack of recruitment as different age cohorts make up the population. The groundsmen have reported masses of toad metamorphs on the lawns around the pond in summer and young toadlets shelter in the estate's various greenhouses and potting sheds. The college grounds are meticulously managed under a conservation policy. Use of agrochemicals is minimal and the pond water pH has remained closely around neutral.

Last year, whilst trying to come up with reasons for the decline, a conversation with the new estate manager shed light on the possible cause. A sewage outflow pipe from a local farm running parallel to the pond had got blocked and it was thought that effluent had leaked into the pond. This also correlated with the larger presence of algal growth over the past three years. The drain was subsequently unblocked and repaired, but may have been leaking for some years. An electronic oxygen probe registered an oxygen concentration of only 40% which is low compared to a nearby, similar sized pond which registered 110%.

Sewage leakage may well account for the decline over the past three years but it may be that the decline seen since the beginning of the study is a natural population fluctuation, exacerbated by organic pollution. We have now delegated future monitoring to the estate staff but will continue to monitor pond water oxygen concentration and look for any correlations. Ten years may be too short a time to reach any firm conclusions but it is vital that the study continues.

Acknowledgements:

Staff at Dunchurch Management College for permission to study the site and for their support in positively managing the pond and surrounding environment for amphibians.

Members of Warwickshire Amphibian and Reptile Team (WART).

Past and present pupils of Rugby High School.

Jan Clemons

Warwickshire Biological Record Centre

In 1974 the Warwickshire Museum formally established the Warwickshire Biological Record Centre (WBRC). This was one of the first centres of what has now developed into a nationwide network of Biological Record Centres.

The WBRC has two main functions. It collates and holds information on:

- the distribution of species in the county, approximately 10,200 individual species, from which provisional distribution atlases are published
- the known location of sites of ecological interest throughout the county - some 2,500 in all. These include woods, meadows, marshes, rivers, disused railway lines, hedges, road verges, ponds and canals.

Information held in the WBRC plays a vital part in protecting the ecology of the county from development through the planning process, and is used for that purpose on a daily basis. Lists of planning applications are scanned by the county ecologists at the Museum every week and they need all the information they can to help them protect the ecology of Warwickshire.

For information we rely heavily on local naturalists, students and other members of the public, and we work closely with conservation groups such as the Warwickshire Wildlife Trust and English Nature to ensure that the Warwickshire Biological Record Centre contains the most comprehensive data-bank of species and habitat records in the county.

The exchange of data between WART and the WBRC is one of the best examples of data swapping with a recording scheme, and a good example for others to follow. Nigel Clemons, WART's records manager, enters all herpetile records onto his own database, and sends updated information to the WBRC on an EXCEL spreadsheet via e-mail. This is put onto an ACCESS database by our Senior Ecologist, Caroline Lidgett. Nigel regularly updates Caroline so that she always has access to the most up-to-date information possible on the location of herpetiles.

If you know of any areas of ecological interest or have records of interesting species, especially protected ones, don't always assume that we know about them. We might not! Please send us any information which will help to build up this data bank or, better still, come and see what we do here and find out how you can help. The WBRC is open to public use Monday to Friday by appointment. If you would like to visit us our telephone number is below.

Warwickshire Biological Record Centre
Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS
Tel.No 01926 418060

WART-er in the Rainforest

Jan will be going as a female leader & herpetologist on a 4 week conservation research expedition to the rainforest of Belize this July/August with the Brathay Exploration Group.

This is in collaboration with the Natural History Museum and twenty young people plus five volunteer leaders will be carrying out conservation-related fieldwork.



Jan insists this is not a holiday but a very big challenge as life in the rainforest is tough. The weather is hot and humid and facilities are basic. The nearest market is a four hour round trip away and the group will be camping outdoors in jungle bashas and cooking on open fires. Team-work is an essential part of the expedition and is on a totally different level from Taransay castaways. The use of earplugs during the night is essential.

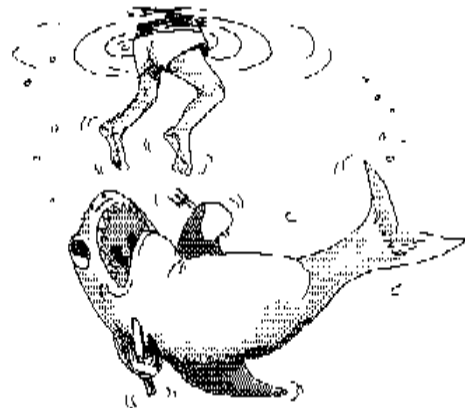
Jan will be carrying out reptile and amphibian survey work with small groups. She has already had a lot of help from Paul Edgar and Peter Stafford, herpetologists already working in Belize. The aim is to carry out timed transect walks, debris and leaf litter searches and pitfall trapping to compile a species list. Evidently many species are nocturnal so survey work will be carried out night and day. All survey work will include a description of the habitat, time of day, activity and position as well as other relevant data.

Jan has known Paul Edgar for years. He was heathland officer for Hampshire before packing it all in and going to the Fireburn Reserve in North Belize. The Wildtracks appeal (see flier) invites people to adopt an acre of rainforest for £18 to protect it for future generations. Jan's school (Rugby High) have adopted nearly 35 acres and she will be doing some independent travelling with four students from the school to visit Fireburn & see the acres using a GPS so the sponsors back home can actually see what they have adopted. When Jan told the WART committee about the adoption scheme, we thought it was a great idea and that WART members should hear about it.

Jane O'Dell has already got her checkbook out and Jan has offered to take Jane's and any other donations with her and pick up the certificates in person. All you need to do is fill in the last page of the flier, attach your cheque and post it to the Trust HQ labelled 'Belize'.

Jan has also promised to do a talk for WART on her return. The last week of the expedition will be spent on a coral reef where they can swim with sharks and rays and see the endangered manatee.

We can only hope she will return - after all Warwickshire may not seem appealing after being in such a herpetologist's paradise!



Illustrations by Nicola Angell.
Contributions for the newsletter should be sent to Helen Newell.
Copy deadline for next issue: 31st August 2000.