



Warwickshire Amphibian & Reptile Team

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Affiliated to the Warwickshire Wildlife Trust (Registered Charity Number 209200)
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WART NEWSLETTER: ISSUE NO. 30 SUMMER 2002

Forthcoming events

Thursday July 18

10 am to 3 pm

WARTers are welcome to join a Kenilworth Common task day to improve the habitat for reptiles & glow worms. Contact Serena for more details.

Friday Oct 25

Jan will be giving a talk to the Trust's Central Group and WART members on her experiences in Costa Rica at 7.30pm at the Jephson Room at the Leamington Spa Centre. Free, but booking advisable. Further details in the next newsletter.

Contacts

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The WART Committee

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

The Great Pond Hunt

The Warwickshire Wildlife Trust is currently undertaking an exciting project that aims to survey nearly 200 non-garden ponds in the Nuneaton and Bedworth areas of Coventry.

Historical maps show that many ponds in Warwickshire have been lost. Many remaining ponds are declining in wildlife value due to urban developments, changes in farming practices and lack of appropriate management. The project hopes to highlight ponds that have been destroyed and those remaining in order to update information on their distribution and status.

A variety of information is being collected at each pond including physical characteristics (size, depth, % shading), water chemistry (pH, % oxygen, water temperature), vegetation (species, % cover) and the presence of water voles and amphibians. One of the main aims of the project is to highlight ponds that support Great-crested Newts, a Biodiversity Action Plan species and Britain's most strictly protected amphibian.

Great-crested Newts have quite specific habitat requirements; they require suitable ponds for breeding, surrounded by good quality terrestrial habitat. Agricultural intensification has resulted in the loss of large areas of this suitable habitat; therefore declines in newt populations have followed. Identifying sites supporting GCNs will enable appropriate management practices to be implemented in order to help prevent any further declines; advice is being given to pond owners to manage their ponds in a "newt-friendly" way.

Two pond surveyors have been employed by the Trust to undertake the work that started in April and will continue for four months. Many survey techniques are being used to search for newts, including egg-searching on vegetation, netting of ponds, bottle trapping and refugia searching. Newts are largely nocturnal so another successful method is searching the pond by torchlight between dusk and midnight, which means some of the survey work is being conducted at night.

If you would like further information about the project, contact Lyndsey Yates or Jonathan Easton at the Trust on 024 7630 8984.

Abnormal Frog Mortality

From "No Fur, No Feathers",

Modern technology can often drive you mad by failing just when you really need it. Just as annoying is the opposite situation: when it works, but you wish that it hadn't. Like the morning the Traffic Information setting on my car radio switched channels in order to warn me of lengthy tailbacks on the M6.

Apart from the fact that it might be simpler to report on that somewhat rarer occurrence, a *lack* of problems on that notorious road, the switch occurred just as an item on abnormal frog mortality in southern England began. The A55 not being the sort of road where it's safe to pay much attention to radio settings, I missed most of the feature, and was left wondering whether such deaths have increased, or if this was just a reporter dusting off an old story that (s)he felt had more mileage in it.

A quick trawl of the obvious web sites has left me none the wiser. According to the WWF web site, the prime suspect is still a microscopic type of fungus:

“Some of the most dramatic amphibian declines have occurred among the rainforest frogs in the higher altitudes of eastern Australia. At least four species may have disappeared entirely. Associated with the dead and dying frogs so far examined is a soil-dwelling chytrid fungus that had not previously been known to infect animals. One symptom of a fungus-infected frog is the thickening of its skin layers and, since water and gas exchange occurs across the skin, this effect could dehydrate and suffocate an amphibian.”

“This fungus has also been associated with mass mortalities in Costa Rica, the western highlands of Panama and elsewhere. Other diseases and fungi can also affect amphibians, but none of these have been associated with the same widespread mortality.”

But Froglife have other ideas; they blame it on a virus:

“The disease is now understood to be caused by a virus, probably an iridovirus belonging to the genus Ranavirus. Its symptoms, often referred to as “Red-leg”, were first noted to be increasing in suburban London gardens in the late 1980s. Initial reports concentrated around the southeast of Britain but more recently the condition has spread north and westward, with suspected cases in the Midlands, Cheshire, Yorkshire and the Southwest. Typically, adult frogs are seen to be dying over several weeks, resulting in dozens, or even hundreds, of deaths. Reports of the virus reach a peak in July and August.”

The true state of affairs may be that more than one factor is at work: the British mortalities may well be viral, whereas elsewhere chytrids are to blame. The role of increased levels of UV-B radiation caused by thinning of the ozone layer is also under investigation, says the WWF report.

“While research is conflicting, studies in the Pacific Northwest of the US indicates that eggs of some frogs and toads suffer increased mortality if they are not shielded from ambient levels of ultraviolet radiation. A recent report from the UN Environment Programme also highlights the amphibian decline phenomenon in relation to increased UV-B radiation on amphibian embryos.”

Pollution is also believed to be a factor. Whilst not directly responsible for some deaths, pesticides and other pollutants may be damaging amphibian immune systems, making them more vulnerable to disease. The continuing saga of habitat loss also shows no sign of

abating. Whatever the true causes, we need to be actively monitoring our frog populations. It's surprising that people are often unaware that the "experts" are *not* out every day looking at every pond. This is where local groups like WRAG [and WART] can make the difference. We can do at least some of the monitoring, and we can be a source of information.

And people are often glad of our interest. I was called to look at a local garden pond recently, because the owner believed that it had been invaded by alien frogs. Fortunately, the frogs were found to be our own native *Rana temporaria*, but in typical fashion they haven't looked at the pictures in the identification guides. Instead of being a shiny green colour they were a drab olive, and the gravid females did not look much like the slim and elegant illustrations. Good news for once, and at least it shows that there is some level of awareness out there.

Roger Robinson

More on diseased frogs...

An article in the Guardian (issue 29/1/02) by Paul Brown says that a Ranavirus found in north America is the main culprit for the British frog deaths, and that it may have been caused by infected goldfish imported from the US.

Tom Langton and Andrew Cunningham of Froglife, together with Peter Bennett of the Institute of Zoology at Regent's Park (the research arm of London Zoo) have been looking for a cause of the epidemic.

The virus also affects the north American bullfrog, brought to this country as tadpoles to be sold in petshops in the 1980s. Another theory is that Americans with shotguns shooting bullfrogs in fishfarms, blasted the pieces into the ponds, which were eaten by the fish, which were subsequently imported to Britain bringing the infection with them.

Since the virus also attacks reptiles, there are fears that other British species may also suffer population crashes.

Another complicating factor is the presence of large quantities of copper in the livers of frogs, which would damage their immune system and make them more susceptible to disease. The main culprit for this is slug pellets, which include copper to give them their characteristic blue colour designed to make them unattractive to birds.

Tom Langton said, "We have a fantastic amount of information on this disease and not the financial means to continue studying it. Foot and Mouth cost £3 billion and BSE even more, what we need is £1 million to study the common frog and find out what is wiping it out."

Contributions for the newsletter should be sent to Helen Newell.
Copy deadline for next issue: 30th September 2002.