



# Crayfish Tales

by Andrew Evans

**Have you ever wondered what Britain's most threatened native species is? The red squirrel maybe or perhaps the water vole? In fact, it's currently thought to be the white-clawed crayfish. Of the 500 or so crayfish species worldwide, only one, the white-clawed crayfish, is native to Britain. 24% of the world population lives in Britain and so the decline here is of international concern. The good news is that there are still some white-clawed strongholds left in the UK. One of them is the River Leen, which flows through Papplewick and Nottingham, and it is here that the work of the Wildlife Trust is helping to save this little known species.**

In the early twentieth century native crayfish were wiped out in many parts of Europe by crayfish plague, a waterborne disease that left seafood enthusiasts deprived of their traditional delicacy. In the 1960s, Sweden responded by beginning to import an American species – signal crayfish – to replace the native crayfish they had lost. By the 1970s, signal crayfish were in turn being introduced across Britain for farming. However, there was a flaw with this plan. Since they have the ability to walk for miles across land, it was not long before signal crayfish began to escape into the wild where they wreaked havoc with the ecosystem.

The secret of their success has been their aggression and lack of fussiness about food. The signals have a voracious appetite and are happy to consume just about anything. Unfortunately for the white-clawed crayfish, the signals

are immune to crayfish plague, but act as carriers of the disease, introducing it to new waterways where it kills off the native species.

Unfortunately, a signal crayfish was found in the autumn at Moor Pond Wood near Papplewick. Needless to say, this discovery rang alarm bells, but work over the winter has so far revealed no cause for panic as no further signals have been discovered. The incident in the autumn has prompted the county's Biodiversity Action Group (BAG) partnership to set up a working group to try to help the white-clawed crayfish survive in Nottinghamshire. This will involve gathering and collating more information on crayfish distribution around the county, and training more volunteers to help us undertake survey work. If the situation worsens, we hope to establish so-called 'ark sites'

around Nottinghamshire where the native crayfish can be conserved. The ark sites essentially work like a Noah's Ark dedicated to crayfish. This tactic has already been employed in south west England where the crayfish situation is much more serious than it is here. Because crayfish plague can be carried on shoes and equipment, the locations of the ark sites are kept secret so as to avoid visitors arriving and introducing the disease from elsewhere in the area.

It is vital that we continue to protect the white-clawed crayfish, as some estimates suggest that the species could be extinct within 30 years. At the moment, their numbers are healthiest across the north of England, especially in areas like the Yorkshire Dales where there are plenty of fast flowing streams with calcium-rich water. They also favour areas with plenty of gravel, boulders

## Case Study – Hucknall Town Centre Crayfish

- In 2008 Nottinghamshire County Council contacted EMEC, Nottinghamshire Wildlife Trust's environmental consultancy, about proposed works to improve Hucknall town centre.
- Part of EMEC's work was to survey the Baker Lane Brook for white-clawed crayfish, where they found a healthy population.
- As the building works might involve creating a culvert along stretches of Baker Lane Brook, EMEC subsequently made recommendations to help protect the crayfish during construction work,

and underwater tree roots for them to shelter in. This is the sort of habitat that the BAG working group hopes to create across Nottinghamshire.

As well as working on ark sites, Nottinghamshire Wildlife Trust is an active member of the River Leen Working Group and has recently been vocal in calls to limit the impact of development on another of the species' key strongholds along the River Maun and the Caudwell Brook.

If we can secure this sort of habitat in Nottinghamshire and limit the spread of crayfish plague, then we can help secure the future of this most threatened species.



▲ Signal crayfish



▲ White-clawed crayfish

## Spot the Difference!

Looking like mini lobsters, the first thing you will notice about the white-clawed crayfish is the large front claws which are used for displays during the breeding season. These are also useful tools for collecting food, and give this crayfish species its name. Their bodies are an olive brown colour, but the underside of the claws is a pale pink-white. They are the largest native freshwater invertebrates in the UK and play an important role in rivers and lakes, helping to keep water ecology stable, as well as being a food source for creatures such as otter and heron. Generally, adults grow to a maximum of 15cm and they can live over 10 years.

Signal crayfish are usually distinguished from white-clawed crayfish by their larger size and red claws. Unusually for a crustacean, signal crayfish are thought to take their name from the railway industry. The signals have a white patch on their claw and as the crayfish wave their claws, the scene is vaguely reminiscent of a train's guard signalling to the train driver. The signals can do considerable damage to river banks by burrowing up to three feet into them in order to build their homes. They also compete aggressively with each other, sometimes leading to cannibalism. They grow to about six inches and can live for up to 12 years.

Andrew Evans  
Volunteer Communications Officer

## Green Guardians in the Money!

**Over the past few months, many of the winners of last year's Green Guardians Environmental Awards have been presented with their £1000 prize cheques.**

Now that the prizes have been awarded, Nottinghamshire Wildlife Trust and its partners in the Green Guardians Awards programme are focusing their attention on the search for 2010's winners.

The Award scheme will be open for applications again in May - so if you are involved in an environmental initiative anywhere in Nottinghamshire don't forget to apply - you could win £1000 in cash.

For further details visit [www.nottinghamshirewildlife.org](http://www.nottinghamshirewildlife.org)



▲ Members of the Randall and Martin families receiving their cheque from Xander Leijnse of Siemens Metering Services



▲ Jabran Ahmed, Joanna Beck & Susan Barker of the Partnership Council receiving their Green Guardians' Certificate from Nigel Beresford of EDF Energy (left) and Nottinghamshire Wildlife Trust's Erin McDavid