Three species of crayfish occur in Nottinghamshire

White-clawed crayfish

The native white-clawed crayfish, *Austropotamobius pallipes* (Astacidae) occurs in the west in the River Leen and some of its tributaries and associated lakes from Newstead Abbey down to Hucknall. It also occurs in the Upper R. Erewash, R. Maun and R. Idle catchments. This species is not present south of the River Trent.

White-clawed crayfish can live at least twelve years and reach a maximum length of approximately 12 cm. They become mature after three or four years and mate and lay their eggs in the autumn. Throughout the winter the eggs remain attached to the female's abdomen, (under the tail). In late spring they hatch into tail-less miniature crayfish, which continue to cling to their mother.



Adults with rough top sides, white-pink undersides to claws, and sharp spines in grooves on both sides of the body. **C Jackson.**

Spiny-cheek crayfish

The North American spiny-cheek crayfish, *Orconectes limosus* (Cambaridae), has been recorded as a large population in Clifton Pond at Attenborough Nature Reserve. It was originally introduced by a carp fisherman, probably in 2000.

The life-history of the spiny-cheek crayfish is very similar, however they may mate in spring rather than autumn and they reach an average length of 12cm.



Spines on sides of the body in front of the groove; smooth pitted claws; and maroon stripes across the tail. **DM Holdich.**

Signal crayfish

The North American signal crayfish, *Pacifastacus leniusculus* (Astacidae), is present in the east of the county, where it has been known since the mid-1980s. Populations of signal crayfish mainly occur in the River Greet (Southwell), but are also found around Lowdham, Halam, Syerston, Kelham, and Newark. Dead individuals have been found in the R. Trent at Farndon. One of unknown origin was found near Papplewick in 2009 (see below).

The life-history of the signal crayfish is very similar but it can live longer and will reach an average length of 15 cm, although individuals of 30 cm have been recorded.



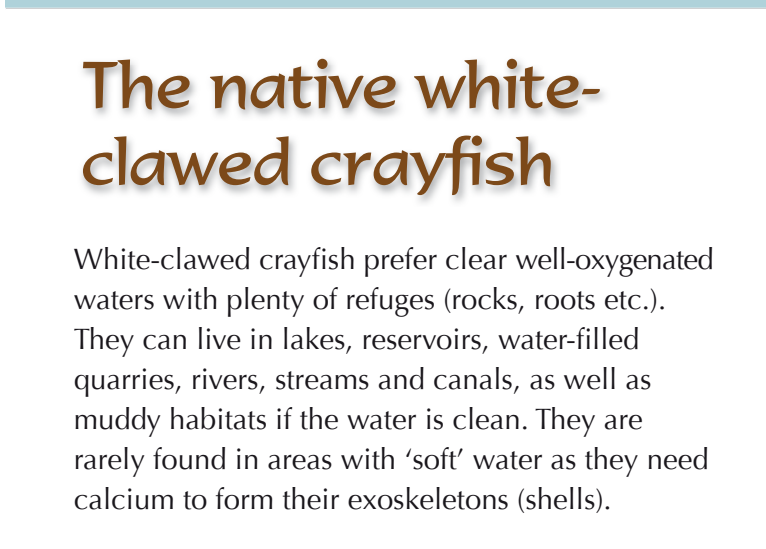
Smooth top sides and red undersides to claws, white-turquoise patch on top of claws, lack of sharp spines in groove. **L Scudder.**

The native white-clawed crayfish

White-clawed crayfish prefer clear well-oxygenated waters with plenty of refuges (rocks, roots etc.). They can live in lakes, reservoirs, water-filled quarries, rivers, streams and canals, as well as muddy habitats if the water is clean. They are rarely found in areas with 'soft' water as they need calcium to form their exoskeletons (shells).

White-clawed crayfish are mainly nocturnal, hiding during the day under rocks or vegetation. They are omnivorous, feeding on a wide variety of animals and plants. When present they play a key role in the aquatic environment.

Adult white-clawed crayfish are prey for many animals, e.g. other crayfish, carnivorous fish, rats, mink, otters, coots and herons, Young crayfish may be eaten by fish, and the larvae of dragonflies and beetles, and also by other crayfish. Crayfish are especially prone to predation after moulting when their bodies are soft.



The purpose of this leaflet is to provide information to anglers, landowners and the general public about crayfish in Nottinghamshire. This includes information on the three crayfish species present in Nottinghamshire, the threats faced by the native white-clawed crayfish and the actions that can be undertaken to help our only native crayfish species.

The information in this leaflet has been provided by members of the Nottinghamshire Biodiversity Action Group. The Nottinghamshire Biodiversity Action Group is a partnership of voluntary, statutory and community groups working together to conserve and enhance the wildlife of Nottinghamshire to the benefit of people.

www.nottsbag.org.uk

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Nottinghamshire County Council

Crayfish in Nottinghamshire

Help us to protect our

Native white-clawed crayfish



Please never use crayfish as fishing bait

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Threats to the white-clawed crayfish

White-clawed crayfish are very sensitive to pollution, particularly from pesticides and sewage, low water levels and changes to their habitat. However, the major threats to their future survival are the signal crayfish and the disease known as crayfish plague caused by the fungus-like organism, **Aphanomyces astaci**, which signal and spiny-cheek crayfish can carry. So far, the white-clawed crayfish populations in the west of Nottinghamshire have not been impacted by non-native crayfish or crayfish plague, but they are under constant threat from the east and surrounding counties.

Nationally, however, in the last 30 years the white-clawed crayfish has become so endangered that it could become extinct by the 2030s. It has been given legal protection from 'taking' and 'sale' by the Wildlife & Countryside Act., and its habitat is protected from pollution under the Salmon & Freshwater Fisheries Act 1975 (crayfish are classified as 'fish' for legislative purposes).

Signal crayfish

North American signal crayfish are a culinary delicacy and since the mid-1970s they have been 'farmed' in this country, although few such farms exist today. Many crayfish have escaped from these 'farms' and others have been released and introduced deliberately and they are now widespread in England, Scotland and Wales.

The signal crayfish competes with the white-clawed crayfish for food and shelter. It grows to a much larger size, is more aggressive, and produces a greater number of young.



This information was recorded between 2000 and 2010

Crayfish plague

Crayfish plague is a virulent disease for which North American crayfish can act as vectors. The infective spores are transmitted via water, but can be carried on fish and damp equipment (e.g. waders, nets). White-clawed crayfish are very susceptible to the disease, which usually wipes out whole populations.

If North American crayfish, or crayfish plague, spread into western Nottinghamshire, it is very likely that the white-clawed crayfish will become extinct in the county. We would then lose an important part of our biodiversity.

To help prevent the spread of crayfish plague you should completely dry out (in the sun for example), or disinfect equipment and footwear with bleach, if you have been fishing or paddling in places where non-native crayfish may occur. The spores of the disease-causing organism cannot survive in dry conditions and are killed by disinfectant. Even a dog that has been paddling in a river/lake could transfer the spores to another river/lake!

How you can help

NEVER USE CRAYFISH AS FISHING BAIT
This activity is illegal as the crayfish could be carrying crayfish plague.

Watch out for crayfish

You can help the white-clawed crayfish survive in the county by reporting any sightings of non-native crayfish and any mortalities of white-clawed crayfish to the Environment Agency **(Hotline 0870 8506506)**. Ask for the Fisheries, Recreation & Biodiversity Team. If you are not sure whether they are native or non-native then take a photograph whilst they are in the water and ask for advice from the Environment Agency.

Any sightings of white-clawed crayfish in the county should also be reported to the Environment Agency as these could be new records.

White-clawed crayfish can only be taken (by hand, net or trap) for scientific purposes (including photography) under a licence from Natural England. If they need to be trapped for scientific purposes then a licence from the Environment Agency is also required. If water voles occur in the area then water vole friendly traps must be used.

Taking non-native crayfish from the wild is not illegal, except with an unlicensed trap, but it is illegal to put them back, so they must be humanely destroyed. The Environment Agency advises that no licences to trap them will be given for Nottinghamshire except for scientific purposes.

Crayfish can escape from almost anywhere. It is illegal to keep crayfish as pets except the redclaw crayfish from tropical Australia, known as 'blue lobsters' in the trade. If you have some already and no longer want them, contact the Environment Agency. Non-native crayfish can be kept for human consumption by restaurants, but uneaten stock must be disposed of humanely.



Hotline
0870 8506506

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