

SPECIES ACTION PLAN FOR WHITE CLAWED CRAYFISH

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Current Status

The white clawed crayfish (*Austropotamobius pallipes*) is the only species of freshwater crayfish native to the UK. The geographical distribution of the species is governed mainly by geology; it prefers moderately hard, neutral to alkaline water containing reasonable levels of calcium. Native crayfish can be found in a range of habitats in both flowing and standing water, but are most commonly found in rivers and streams with good cover and little sediment. Factors affecting local distribution include the availability of habitats and water quality.

The white clawed crayfish was formerly widespread in Europe, but populations are now confined to a diminishing number of areas. It is relatively widespread in the UK, but many populations have been lost since the 1970s, and the species is in rapid decline. In Nottinghamshire the white clawed crayfish is found in the upper reaches of the River Leen, and isolated populations also exist in still waters at Woodhall Farm and Bulwell Hall.

Three species of non-native crayfish released into the wild by man are a major threat to the native species. An unconfirmed angler's record exists for the non-native signal crayfish (*Pacifastacus leniusculus*) caught in the River Greet.

The white clawed crayfish is protected under both UK and European law, and is classed as globally threatened.

Threats

The main factors currently affecting the white clawed crayfish in Nottinghamshire are:

- Crayfish plague, a disease caused by a fungus carried by some North American species including the signal crayfish. Spores can also be carried by water, fish and damp angling and water sampling equipment. There are as yet no records of outbreaks in Nottinghamshire.

- Direct competition for food and habitat from non-native crayfish. The signal crayfish in particular is very aggressive and will readily displace native crayfish from favoured habitat.
- Habitat modification and management leading to a reduction in abundance of invertebrate prey species and the loss of suitable living conditions.
- Pollution, particularly pesticides, agricultural effluents and sewage.

Current Initiatives - Examples

- A national Species Action Plan for white clawed crayfish has been prepared.
- Many private landowners manage areas of actual or potential value for white clawed crayfish. They have an important role to play in the implementation of this plan.
- The Ministry of Agriculture, Fisheries and Food (MAFF) has announced plans to use fisheries legislation to regulate the keeping of non-native crayfish species in order to protect native crayfish and their habitats in England.
- The Environment Agency has produced an identification leaflet for crayfish and has initiated research projects looking at the control of signal crayfish and the treatment of water to prevent the transfer of crayfish plague.
- The University of Nottingham and the national Biological Records Centre hold and update a database on crayfish in the UK.
- The three species of non-native crayfish established in the wild are listed on Schedule 9 of the Wildlife and Countryside Act, which makes it an offence to release or allow them to escape into the wild.

Targets

To contribute to the UK species action plan by:

- *Establishing the status and distribution of white clawed crayfish by 2005, and using this to establish a target for increasing its distribution in the County.*
- *Maintaining the known distribution of white clawed crayfish.*

Proposed Action

Policy and Legislation

1) Review local fisheries byelaws to control the use by anglers of crayfish as bait.

Action: Environment Agency (EA).

2) Control the keeping of non-native crayfish in areas where they are not yet established in the wild and control the trade in these species for ornamental purposes throughout the UK.

Action: Ministry of Agriculture Fisheries and Food (MAFF).

Site Safeguard and Management

3) Include action for white clawed crayfish in Local Environment Agency Plans (LEAPs) for all rivers containing crayfish by 2000.

Action: EA.

4) Ensure that appropriate habitat management is undertaken in areas where there are native crayfish populations.

Action: EA, English Nature (EN), Farming and Wildlife Advisory Group (FWAG), Nottinghamshire Wildlife Trust (NWT), British Trust for Conservation Volunteers (BTCV), Sherwood Forest Trust (SFT).

5) Continue to examine the feasibility of eradicating non-native crayfish populations from the wild where they threaten populations of native crayfish.

Action: EA, EN.

6) Examine the feasibility of re-introducing white clawed crayfish to selected sites and instigate introduction programmes where appropriate.

Action: NWT, EN, EA.

Species Management and Protection

7) Do not issue licences which permit the keeping of non-native crayfish at sites where there are inadequate precautions to prevent escape.

Action: MAFF.

Advisory

8) Provide advice to those involved in the conservation of native crayfish populations and the management of non-native crayfish populations to ensure the protection of the former.

Action: EA, EN, NWT, FWAG, BTCV, SFT.

9) Provide advice on disinfection procedures to prevent the transmission of crayfish plague.

Action: EA.

Future Research and Monitoring

10) Complete a baseline survey to establish the range and population size of white clawed crayfish by 2000. Develop a monitoring programme to assess changes to this by 2005.

Action: EA, EN, NWT, Notts Biological and Geological Records Centre (NBGRC).

11) Research water treatment methods that prevent the transfer of crayfish plague.

Action: EA.

12) Research options for the effective control and eradication of crayfish plague.

Action: EA.

Communications and Publicity

13) Use the native crayfish to publicise the importance of water quality and riparian habitats to biodiversity.

Action: EA, Biodiversity Action Group.

What You Can Do

- Use water wisely. Low stream flows due to water abstraction are a major threat to white clawed crayfish.
- Never buy crayfish to put in a garden pond. Crayfish for sale are not native species, and are likely to find their way into the wild, where they are a major threat to white clawed crayfish.