



WHITE-CLAWED CRAYFISH

Austropotamobius pallipes

1. INTRODUCTION

The white-clawed crayfish is the only native species of freshwater crayfish in the UK. It lives in a variety of aquatic habitats, including streams, rivers, lakes, canals, reservoirs and water-filled quarries, preferring those without too much sediment and with minimal pollution. Shelter e.g. rocks, stones, aquatic vegetation, tree roots and cavities in riverbanks are important for its survival.



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It is generally nocturnal, feeding on a range of vegetation, animal matter and detritus. It is eaten by certain fish as well as birds like herons and mammals such as rat, mink and otter. The young can also fall prey to predatory insects

such as dragonfly nymphs and diving beetle larvae. Maturation takes 3-4 years, with adults rarely exceeding 10cm in body length.

For identification purposes it is worth noting that at least five further species of crayfish have been introduced into Britain, and the American signal crayfish *Pacifastacus leniusculus* now accounts for an increasingly high proportion of crayfish records in our region. For more information on the identification of British crayfish, readers are referred to the Environment Agency's booklet '*Freshwater Crayfish in Britain & Ireland*' which also describes the threats posed to our native species (see section 7).

2. OUR OBJECTIVES & TARGETS

	Target
A. Determine the distribution and status of the white-clawed crayfish within the county and designate known sites	by 2006
B. Maintain the present range of white-clawed crayfish in the sub-region and the provision of suitable sites	2004-2015
C. Increase population size and range by attempting to establish 10 new colonies at appropriate sites.	2010
D. Control populations of non-native crayfish	2004-2015
E. Raise awareness of the white-clawed crayfish, its life cycle and habitat requirements	2004-2015

ASSOCIATED HABITAT PLANS

- Rivers & Streams
- Canals
- Ponds, Lakes & Reservoirs
- Quarries & Gravel Pits

ASSOCIATED SPECIES PLANS

- Otter
- Water Vole
- Great Crested Newt

3. NATIONAL BAP OBJECTIVES & TARGETS

- *Attempt to maintain the present distribution of this species by limiting the spread of crayfish plague, limiting the spread of non-native species, and by maintaining appropriate habitat conditions.*

4. CURRENT STATUS

White-clawed crayfish was formerly widespread in the UK, especially in areas where the water is alkaline. Recent decades have seen major losses of the species (30% of its range since the 1970s), although it remains widespread but localised in central England. About a quarter of the world population of this species is estimated to occur in the UK.

In Warwickshire, the most notable site for white-clawed crayfish is Ensor's Pool on the outskirts of Nuneaton (which has been put forward for designation as a SAC under European legislation). Other watercourses known to be supporting the species include the R.Alne (and its tributaries - the Ullenhall and Tapster Brooks), R.Stour, R.Swift, R.Anker, Cuttle Brook, Shenton Hall Brook, Horn Brook, plus Newbold Quarry. Other populations exist on the Leam, Avon and Itchen and at Middleton Hall (alongside the American signal crayfish). The population of native crayfish previously present on the R.Blythe is thought to be extinct and a large population of signal crayfish is now believed to exist there, having spread from a nearby fishing pool. There may also be populations on parts of the canal network though many of these records are not recent. An important population exists on the Plants Brook catchment in north Birmingham, on the borders of Warwickshire.

4.1 Legal and Policy Status

The white-clawed crayfish is listed on Annexes II and V of the EC Habitats Directive and Appendix III of the Bern Convention, plus is classed as globally threatened on the IUCN Red Data List. In the UK, the species is protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) in respect of taking from the wild and sale.

It should also be noted that it is an offence to release non-native crayfish into the wild (under the Wildlife & Countryside Act 1981). Further, under the Import of Live Fish Act 1980, the Prohibition of Keeping Live Fish (Crayfish) Order 1996, it is an offence to keep signal crayfish in certain 'no-go' areas and all other non-native crayfish species anywhere

in England and Wales without a licence. The area of Warwickshire in the R.Avon catchment area lies outside the 'no-go' areas. However, areas of Solihull, North Warwickshire, Nuneaton and Bedworth and Rugby within the Anker and Blythe catchments are inside these 'no-go' areas.

The Environment Agency has introduced byelaws that make it an offence to use any crayfish as angling bait. This should help protect the native species and help prevent the spread of crayfish plague. In addition, the Agency intend to introduce a national byelaw to make it an offence to fish for native crayfish without a licence.

4.2 Current Factors Affecting The Species

- **Crayfish plague**, a disease caused by a fungus (*Aphanomyces astaci*). It is carried by signal crayfish (*Pacifastacus leniusculus*) introduced from North America, while the fungal spores can be transmitted by a variety of means including water, fish and damp equipment.
- **Direct competition** for food and habitat from non-native crayfish. Signal crayfish are thought to be relatively widespread in the county, while spiny-cheek crayfish (*Orconectes limosus*) have also recently been recorded.
- **Loss of habitat** through development and intensive/inappropriate land management (e.g. loss of ponds and other water bodies) and river maintenance practices.
- **Pollution**, particularly sheep dip chemicals, pesticides, sewage and sedimentation.
- **Predation** by various fish, mammals, birds etc

5. CURRENT LOCAL ACTION

- The Environment Agency is leading much of the work for white-clawed crayfish in Warwickshire. In particular it is co-ordinating white-clawed crayfish surveys and monitoring in the county, and is liaising with landowners and managers to promote its continued survival.
- Other activities potentially benefiting white-clawed crayfish include:
 - Appropriate habitat management at key sites
 - Implementation of policies (by Environment Agency, DEFRA etc) relating to habitats, water quality, fisheries etc.
 - Administration of agri-environment schemes (particularly Countryside Stewardship) which has improved the management of riparian / wetland habitats
 - Implementation of appropriate working practices and mitigation for works by organisations such as British Waterways
 - Publication and implementation of corporate BAPs (e.g. Severn Trent Water, British Waterways etc.)

6. PROPOSED LOCAL ACTIONS (some dates amended - Core Steering Group - Feb 2008)

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9)to safeguard and promote white-clawed crayfish and their habitat.	LBAPSG	NE WM DEFRA EA	2004- 2015	B, C
PL2. Seek to extend the 'no-go' area for keeping signal crayfish to include the Avon catchment in Warwickshire.	EA	BW WWT NE FWAG WM WSP	2004- 2015	B
PL3. Actively encourage the appropriate enforcement of laws in regard to preventing use of crayfish as bait.	EA		2004	B
PL4. Actively encourage the enforcement of policies relating to keeping non-native crayfish (including reviewing existing licences and ensuring licences are only issued in respect of secure sites).	EA		2004- 2015	B
PL5. Ensure all known white-clawed crayfish sites are considered for designation as SINCs or SSSIs.	WBRC	WM EA NE WWT BW WSP	2010	A
PL6. Actively promote management agreements under agri-environment schemes that are sympathetic to, and promote the requirements of, white-clawed crayfish where appropriate.	NE	FWAG	2004- 2015	B, C
Site / Species Safeguard & Management				
SM1. Designate all watercourses supporting white-clawed crayfish as SINCs and consider designating key sites as SSSIs.	WSP	NE WWT EA WM	2005	B
SM2. Maintain water quality at known white-clawed crayfish sites – promote the minimisation of sedimentation and pollution of these watercourses.	EA	BW NE FWAG WM WSP WWT	2004- 2015	B, C
SM3. Undertake positive habitat management works to link white-clawed crayfish populations on particular watercourses/sites.	EA	BW WWT NE FWAG WM WSP	2004- 2015	C
SM4. Ensure a response to proposals regarding works to watercourses at or close to white-clawed crayfish populations, strongly stating the need to minimise the impact on and, where appropriate, enhance habitats for the species.	EA	BW NE FWAG WM WSP WWT	2004- 2015	B, C

SM5. Implement appropriate and feasible measures to control the spread of crayfish plague and eradicate non-native crayfish where they pose a threat to populations of white-clawed crayfish.	EA	NE	2004-2015	B, C, D
Advisory				
A1. Provide advice to key landowners / managers with regard to best practice management for the benefit of white-clawed crayfish.	EA	WWT NE FWAG	2004-2015	B, C
A2. Provide advice to the fishing community on prohibiting use of crayfish as bait which is now an offence, and appropriate disinfection procedures to prevent the further spread of crayfish plague.	EA	Fishing Clubs Fisheries	2004-2015	B
Research & Monitoring				
RM1. Monitor known white-clawed crayfish populations.	EA	WWT BW	2004-2015	A, B
RM2. Extend surveys on appropriate watercourses to determine the extent of both native and non-native crayfish populations (with reference to historic records where appropriate).	EA	WWT BW	2010	A
Communication & Publicity				
CP1. Increase public awareness of the presence of white-clawed crayfish in local rivers, and threats to their survival. Publicise the need for conservation action and encourage the public to report the presence of the species.	EA	BW NE FWAG WM WSP WWT	2004-2015	A, B, C, E
CP2. Ensure that the users of sites supporting crayfish, and in particular anglers, are made aware of the risks of spreading crayfish plague on equipment, and the legal controls on the release of non-native crayfish.	EA	BW EN FWAG WM WSP WWT	2004-2015	B, D, E

Abbreviations: BW – British Waterways, EA – Environment Agency, **NE – Natural England**, FWAG – Farming & Wildlife Advisory Group, LBAPSG – Local Biodiversity Action Plan Steering Group, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust.

7. REFERENCES (see **LBAP Bibliography** web page)

Environment Agency. *Freshwater Crayfish in Britain & Ireland*. Obtainable from the Environment Agency (Tel. 0845 933 3111).

8. FURTHER INFORMATION (see separate **Links** web page for links to web sites)

UK Biodiversity Action Plan no.124
European thematic network
Crayfish Home page
Environment Agency

9. CONTACT

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