

# **WHITE-CLAWED CRAYFISH**

## **SUMMARY**

- White-clawed crayfish are found in fresh water throughout Europe, from Spain in the west and south to Montenegro in the east and Scotland in the north.
- The species is thought to have declined by 50 – 80% across this range in the last ten years and is classified as 'endangered' on the IUCN red list of threatened species.
- It is against UK and European law to disturb, take or sell white-clawed crayfish from the wild.
- If you are carrying out any work that may disturb or harm white-clawed crayfish and their habitat you must contact Natural England (NE), Dorset County Council (DCC) or the Environment Agency (EA) before the work commences. A survey and a licence may be required.

## **LEGAL PROTECTION**

The white-clawed crayfish is protected under both European and UK law. It has full protection under Annex II and V of the European Habitats Directive (1992), requiring the designation of Special Areas of Conservation for its protection and prohibiting the taking or disturbance of the species in the wild. The European Bern Convention lists white-clawed crayfish in Appendix III as a protected species.

Under UK legislation the white-clawed crayfish is protected from intentional taking from the wild, as well as selling, under Schedule 5 (section 9 (in part)) of the Wildlife and Countryside Act 1981 (as amended). Contravention of this law carries a maximum penalty of £5000. In addition, five other (non-native) species of crayfish are listed under Schedule 9 (section 14) of the Wildlife and Countryside Act, prohibiting their release (back) into the wild where they are a threat to our native crayfish.

The white-clawed crayfish is also a priority species in the UK Biodiversity Action Plan and is one of the 'short list' species where number or range in the UK has declined by more than 25% in the last 25 years. A national action plan, as well as a South-West regional biodiversity action plan, has been written for the species, focussing on conserving and increasing existing populations and limiting the threat from non-native species and disease.

## **LICENSING**

Adhering strictly to European and UK law, it is only necessary to obtain a licence for *survey* of white-clawed crayfish, rather than any other work which may disturb or harm the animals or their habitat. However DCC, NE, the EA and the Dorset Wildlife Trust (DWT) promote a best practice approach whereby licenses are recommended for any work involving the species and its habitat.

Therefore, if you are undertaking survey, management or repair work to bridges or other structures on the bank or bed of a river where white-clawed crayfish are known to be present, you must first obtain a licence from NE. If, while carrying out work or survey work, you discover white-clawed crayfish in a body of water you must stop work and consult NE before continuing.

If, during the course of survey or work, you discover a different species of crayfish present in a river or other body of water then it is against the law (Wildlife and Countryside Act, 1981, Schedule 9, Sect 14) to release that species of crayfish back into the water. Instead, keep the crayfish somewhere isolated (eg a bucket filled with water from the capture site, with weed/pebbles to provide refugia) and contact one of the above agencies for advice.

If you would like to take, keep or trap non-native crayfish (eg signal crayfish) for sale or to eat then you must first obtain a licence from the EA. This will not be allowed in areas where there may be white-clawed crayfish as the trapping may accidentally disturb or harm this species.

Please also remember to send records of any crayfish found to the Dorset Environmental Record Centre (DERC) and EA

### **SURVEY AND OTHER WORK WITHIN CRAYFISH HABITAT**

In common with many other protected species the survey of white-clawed crayfish is prohibited within the breeding season and this includes the period when the female is carrying young under her tail. This means that hand searching and trapping of white-clawed crayfish is only allowed from mid-July to mid-September and that torch surveys (causing less disturbance) are allowed until mid-October. All surveyors need to be licenced by NE and trapping white-clawed crayfish requires additional consent from the EA.

In addition, if you are carrying out any other kind of work within white-clawed crayfish habitat you will need a licence from NE. You are also advised to consult the DCC method statement which provides a code of good practice when working in crayfish areas and covers such things as disinfection of equipment to prevent the spread of crayfish plague (see below).

### **ECOLOGY**

The white-clawed crayfish (*Austropotamobius pallipes*) is the only native crayfish species in the UK. It can live for ten to fifteen years and reach up to 15cm in body length.

White-clawed crayfish are a freshwater species and can't survive for more than a few hours out of water. They live in all sorts of freshwater habitats, from upland streams to lowland rivers, lakes and old flooded gravel pits, particularly where the bedrock is alkali in character. They are omnivores, eating a diet which varies with age but which includes water plants, rotting vegetation, aquatic invertebrates, fish eggs, dead fish and even one another. They have an important role as detritivores in our river systems and their presence is a sign of a healthy water body.

White-clawed crayfish are most active during the summer months and are mainly nocturnal to avoid predation. During the day they can be found under submerged rocks and logs, or amongst piles of fallen leaves in still water. They mate in the autumn and the 'berried' female then carries the eggs throughout the winter. In spring the eggs hatch and the juvenile crayfish continue to be carried (under the tail) of the female until they are released in June, sometimes July/August in the cooler north of England. Juveniles take three years to reach sexual maturity.

## **THREATS**

White-clawed crayfish have always been a source of food for otters, water birds and large fish such as carp and eel. However, since the late 20<sup>th</sup> Century the species has had to contend with increased water pollution, loss of habitat and the introduction to our waterways of at least five other larger, more aggressive species of crayfish (an identification guide is available from the EA).

By far the biggest threat to white-clawed crayfish was the introduction of signal crayfish in the 1970's. Where this species is present it will out compete white-clawed crayfish and gradually take over their habitat – it is more aggressive, breeds faster, produces more young and even eats the native crayfish. It also carries a fungal like organism ('crayfish plague') which is lethal to white-clawed crayfish. Once this plague has been introduced to a body of water there is no way to eradicate it and it is certain that over time the entire population of native crayfish will be wiped out. The spores of the plague can survive in damp conditions for up to two weeks which means that the plague can be transferred from one place to another by anyone travelling between water bodies.

There have been 25 outbreaks of crayfish plague within the UK and it is the main reason for the decline of the white-clawed crayfish. For this reason the control of signal crayfish and the transfer of the plague are of great concern and there are strict protocols on survey and disinfection of equipment which must be observed when surveying or working in known white-clawed crayfish habitat. For advice on these please contact NE, EA or DCC or see the EA Guidance on Prevention of Crayfish Plague or the DCC method statement

## **UK DISTRIBUTION**

Prior to the 1970's white-clawed crayfish were widely distributed throughout the UK, but they are now found in far fewer locations.

The species still has strongholds in the north of England, especially Cumbria, and in the Midlands but has greatly reduced in range throughout the rest of the country including the South West. In Dorset white-clawed crayfish are now only found in the River Piddle, Tadnoll Brook, River Allen and River Wriggle. If you think you have found white-clawed crayfish while fishing, surveying or working in an area of potential crayfish habitat you must stop work and contact NE, the EA or DCC before proceeding any further. Please send any species records to the EA and to DERC.

## **ARK SITES**

Another approach to conserving the white-clawed crayfish is to introduce it to new habitats where there are no crayfish at all, but where the habitat conditions are suitable. These are known as 'Ark' sites and in Dorset are part of the South West Crayfish Project. If you would like more information on these please contact Lydia Robbins; [lydiarobbins@avonwildlifetrust.org.uk](mailto:lydiarobbins@avonwildlifetrust.org.uk), tel: 01179 177 270 or see <http://www.crayfish.org.uk/>

## **OTHER SPECIES**

Please bear in mind that white-clawed crayfish habitat may also be habitat for other species of conservation concern such as otters and water voles:

Otters are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and under the Conservation of Habitats & Species Regulations 2010. It is illegal to kill, injure, capture or disturb them, and the places they use for breeding and resting (ie an otter holt) are protected from being damaged or destroyed. Please see DCC Advice Note 5 for further information.

Water voles are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. Please see DCC Advice Note 9 for further information.

### **OTHER CONSIDERATIONS**

Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005) states that 'in taking decisions, local planning authorities should ensure that appropriate weight is attached to .... protected species.....' and the accompanying Circular 06/05 states that 'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

### **CONTACT DETAILS**

Dorset County Council - Natural Environment Team (Danny Alder) – [DannyAlder@dorsetcc.gov.uk](mailto:DannyAlder@dorsetcc.gov.uk), tel: 07803 238447

Natural England (Doug Kite) – [Douglas.kite@naturalengland.org.uk](mailto:Douglas.kite@naturalengland.org.uk), tel: 07786 312 375

Environment Agency (Sarah Guest) – [sarah.guest@environment-agency.gov.uk](mailto:sarah.guest@environment-agency.gov.uk), tel: 01258 483 441

Dorset Wildlife Trust (Sarah Williams) – [s.williams@dorsetwildlifetrust.org.uk](mailto:s.williams@dorsetwildlifetrust.org.uk), tel: 01305 264 620

Dorset Environmental Records Centre – [enquiries@derc.org.uk](mailto:enquiries@derc.org.uk), tel: 01305 225 081