

WHITE-CLAWED CRAYFISH Species Action Plan

1. Introduction

Austropotamobius pallipes, the White-clawed crayfish, is in decline in Europe, Britain and in the north-east and is included on the **Priority** list in the UK BAP. It is the only crayfish native to the British Isles. It is likely that crayfish have never been widespread in the National Park as their preferred habitat of calcareous burns, rivers and lakes is very limited.

This SAP is complementary to the **Rivers and Burns** HAP.

2. Current Status

2.1 National

A SAP has been prepared as part of the 1994 tranche of the UK BAP. Many populations have been lost from the UK, and also in France, Spain and Italy. It is listed in Appendix III of the Bern Convention and Annexes II and V of the Habitats Directive. The IUCN/WCMC have classed it as globally threatened and it is protected under Schedule 5 of the WCA.

2.2 Local

The best populations in Northumberland are on the Wansbeck and the Aln but these are some way from the NNP. Populations have been found in the NNP in the Crook Burn, Jenkins Burn, Halleypike Lough, Broomlee Lough and Greenlee Lough. There are no known extinctions of the species within the NNP. It is unlikely that there are any former sites due to the lack of calcareous watercourses.

Survey work undertaken by the Environment Agency in 1996&7 found the population on the Jenkins Burn to be sparse and several crayfish were suffering from bacterial diseases, whereas the Crook Burn population was healthy, abundant and thriving with large adults, recent hatchlings and a range of intermediate sizes.

3. Factors causing decline or loss

- 3.1 Nationally the most recent concern has centred upon the fungal disease - crayfish plague, imported with farmed non-native crayfish, plus the release of non-native crayfish (signal and Turkish) that can out compete the native species.
- 3.2 Pollution will have occurred on watercourses resulting in the direct losses, reduction in and isolation of populations. The use of agricultural products based on synthetic pyrethroid chemicals is of particular concern due to the susceptibility of crustacea to these substances. They are widely used in sheep-dip, arable pesticides and in timber and tree seedling treatments. Recently dipped sheep crossing streams pose a severe threat.
- 3.3 Cattle using streams for watering damage crayfish populations by the direct deposition of waste, trampling and the associated loss of habitat due to siltation.
- 3.4 The populations in the Park are isolated and are thus vulnerable to habitat change, disease or pollution.

4. Current and Recent Action in the National Park

- 4.1 The NPA has worked with the Environment Agency to identify populations within the NNP. EA has undertaken some survey work over recent years of the main populations but has not focused on the National Park. Other parties working in the area, for example the Otters and Rivers Project have recorded crayfish in the same locations. Specific surveys that have noted the species are as follows:

<u>Crook Burn</u>	<u>Halleypike Lough</u>	<u>Jenkins Burn</u>	<u>Broomlee Lough</u>	<u>Greenlee Lough</u>
1992 - Phase 1 Survey	1999- NPA Survey	1991 - NPA Survey	2001 - NPA Survey	2001 - NPA Survey
1994 - Simms		1996 - EA Survey		
1996/7 - EA		2001 - NPA Survey		
1999 - NPA Survey				

4.2 There has been no monitoring of existing populations to gauge whether the population is declining. The counting of crayfish carcasses on the burns may provide an index of population but it may also reflect the presence of predatory otter and mink, which may have been variable over past years.

4.3 There have been no moves to introduce crayfish farming locally or any other known changes in watercourse or fishery management. A small pond was created on the Jenkins Burn in 1991. It is not known what effect, if any, this might have had.

4.4 There have been very few changes in land management in and around Crook Burn and Halleypike Lough and it retains its heather moorland cover. Halleypike and Folly Lake are both lakes of Victorian origin and are fished (Halleypike is part of Town Shields, Folly Lake is part of Sewingshields).

5. Broad Objectives and Targets

5.1 Maintain the present distribution of crayfish.

5.2 Continue to monitor populations.

5.3 Increase awareness of this internationally important species amongst local landowners and managers as well as fishery interests and visitors.

6. Proposed Action

6.1 Policy and Legislation

None proposed

6.2 Site safeguard and management -

Action	Target	Partners	Achieving Objective
6.2.1 Ensure suitable habitat management of land surrounding watercourses containing crayfish, especially moorland or wetland. Ensure that the species is taken account when drawing up CSS.	All in place by 2005	EA, EN, DEFRA, NT farmers, NWT	1
6.2.2 Undertake fencing to exclude stock from watercourses where poaching or grazing pressure is damaging habitat. Provide watering bays or troughs.	Identify by 2004, fence by 2006.	EA, DEFRA, EN, NT, farmers, NWT	1
6.2.3 Ensure that the NNPA holding at Greenlee/Stonefolds is managed in a way to promote crayfish conservation.	Suitable m/ment by 2003	EA, tenants, EN, DEFRA	1

6.3 Species Management and Protection

Action	Target	Partners	Achieving Objective
6.3.1 Any stocking of fish to the Roman Wall (or other) Loughs that is deemed acceptable under Habitats Regulations must be sourced from farms or catchments with no non-native crayfish or plague.	Approach relevant parties by 2003	EA, EN, DEFRA, NT NWT farmers.	1,3

6.4 Advisory

Action	Target	Partners	Achieving Objective
6.4.1 Advise landowners and managers of the importance of the species and the critical isolated nature of the remaining populations and seek their help in reporting problems and carrying out conservation works.	Contact relevant parties by 2002	EA, EN, farmers, NT, NWT	1,2,3
6.4.2 Give advice regarding the use of potentially damaging substances such as sheep dip.	To all relevant parties by 2003	EA, EN, farmers, NT, NWT, DEFRA	1,3
6.4.3 Ensure that anglers understand the possibility of disease transfer by damp footwear and fishing equipment and advise of necessity to use only thoroughly dry equipment.	Advice to relevant fishing interests by 2003	EA, EN, farmers, NT, NWT, DEFRA	1,3

6.5 Future Research and Monitoring

Action	Target	Partners	Achieving Objective
6.5.1 Monitoring of populations to be carried out on a regular basis by licensed agents. This should be undertaken with care to minimise disturbance and the risk of disease transfer. Include standing waters.	Initiate in 2002. Repeat every 3 years.	EA, NWT, NT.	2
6.5.2 Ensure that the NNPA holding at Greenlee Lough is surveyed thoroughly.	2002	EA, NWT	2

6.6 Communications and Publicity

Action	Target	Partners	Achieving Objective
6.6.1 Use the crayfish when promoting the importance of rivers and burns in the NNP during the Celebrating Biodiversity dedicated year.	2004	Schools, NWT, EA, EN, local media.	3
6.6.2 Use local media, magazines etc. to highlight the presence and importance of crayfish in the region.	At least 2 by 2010	EA, NWT, EN, media	3
6.6.3 Hold talks and guided walks, targeting relevant parties such as fishery interests.	At least 2 by 2010.	EA, NWT	3

References

Environment Agency Surveys and Monitoring 1996/7
Phase 1 Records (1992) - NNPA database.