

**European Community Directive
on the Conservation of Natural Habitats
and of Wild Fauna and Flora
(92/43/EEC)**

**Second Report by the United Kingdom under
Article 17
on the implementation of the Directive
from January 2001 to December 2006**


**Conservation status assessment for
Species:**

**S1092 - *Austropotamobius pallipes* - White-
clawed crayfish**

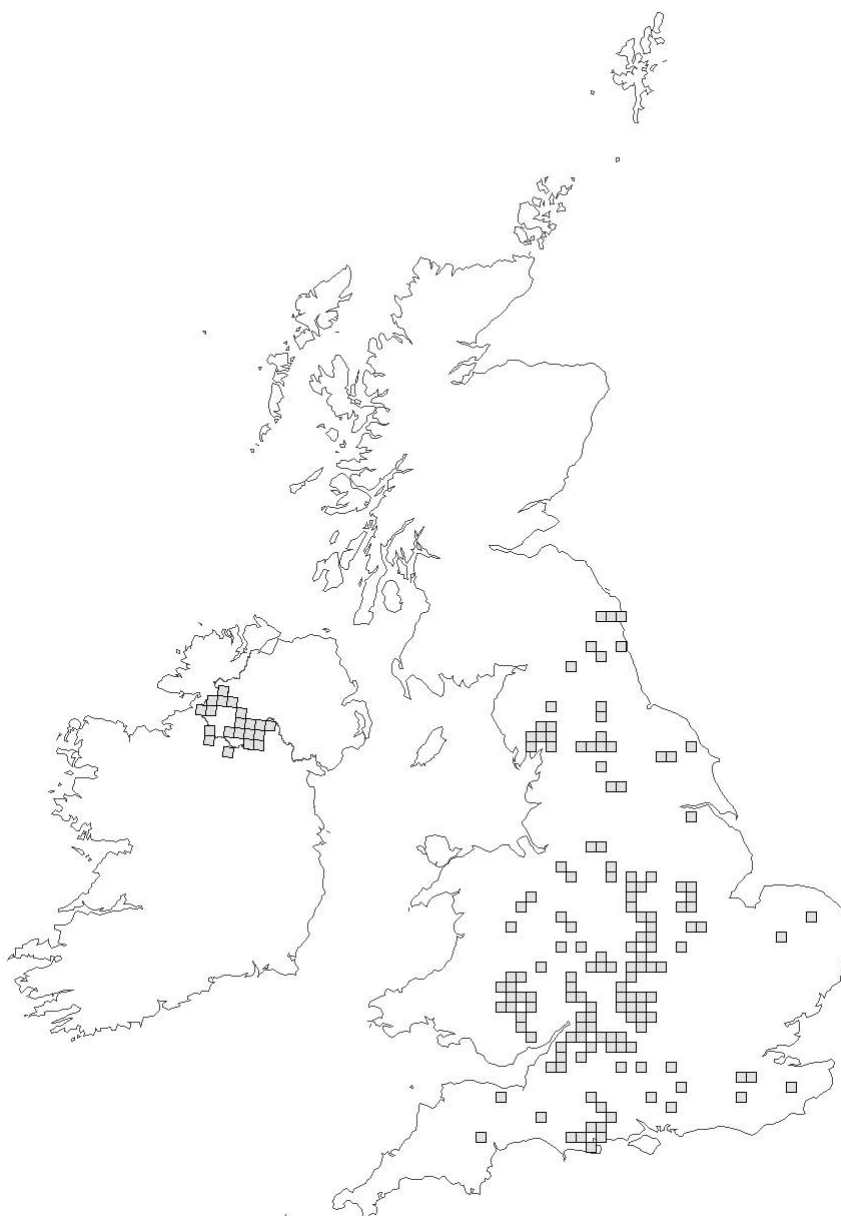
The information in this assessment corresponds to the "species fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

Please cite as: Joint Nature Conservation Committee. 2007. *Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006*. Peterborough: JNCC. Available from: www.jncc.gov.uk/article17

Species Name: *Austropotamobius pallipes*

| 1. National level | |
|---|---|
| Species Code | S1092 |
| Member State | United Kingdom |
| Biogeographic regions concerned within the Member state | ATL |
| 1.1 Range map |  A map of the United Kingdom showing the distribution of <i>Austropotamobius pallipes</i> . The distribution is indicated by shaded grey areas. The largest shaded area covers the southern and central parts of England, including the Thames valley and the area around London. There are also smaller shaded areas in the north of England, the Midlands, and the south of Scotland. The map shows the outline of the United Kingdom, including the main islands and the Channel Islands. |

1.2 Distribution map



2. Biogeographic level

2.1 Biogeographic region

ATL

2.2 Published sources and/or websites

HOLDICH, D. 2003. Ecology of *A. pallipes*. Conserving Natura 2000 Rivers Ecology Series No. 1. Available at: www.english-nature.org.uk/lifeinukrivers/publications/crayfish.pdf (accessed January 2007)

HOLDICH D.M. HARLIOGLU M.M & FIRKINS I. 1997. Salinity adaptations of crayfish in British waters with particular reference to *Austropotamobius pallipes*, *Astacus leptodactylus* and *Pacifastacus leniusculus*. Estuarine, Coastal and Shelf Science 44, 147–154.

HOLDICH D.M & REEVE I.D. 1991. The distribution of freshwater crayfish in the British Isles with particular reference to crayfish plague, alien introductions and water quality. Aquatic Conservation 1, 2, 139–158.

HOLDICH D.M & ROGERS W.D. 1997. *A. Austropotamobius pallipes* in

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|--|---|
| | <p>the British Isles – distribution, threats and legislation. Bulletin Français de la Pêche et de la Pisciculture 347, 597–616.</p> <p>HOLDICH D.M & ROGERS W.D. 1997B. Strategy for the management of <i>A. pallipes</i> (<i>Austropotamobius pallipes</i>) populations in England and Wales. R&D Project 640. Environment Agency, Bristol.</p> <p>HOLDICH D.M, ROGERS W.D & READER J.P. 1995A. Crayfish conservation. Project Record 378/10/N&Y. National Rivers Authority, Bristol.</p> <p>HOLDICH D.M, ROGERS W.D, READER J.P & HARLIOGLU M.M. 1995B. Interactions between three species of freshwater crayfish (<i>Austropotamobius pallipes</i>, <i>Astacus leptodactylus</i> and <i>Pacifastacus leniusculus</i>). Freshwater Crayfish 10, 46–56.</p> <p>HOLDICH D.M, ROGERS, W.D & REYNOLDS J.D. 1999B. Crayfish in the British Isles. In: Gherardi F and Holdich DM (eds). Alien crayfish in Europe. How to make the best of a bad situation? Balkema, Rotterdam, 221–232.</p> <p>HOLDICH D.M. 2000. The Development of Ecological Requirements to inform the Production of Conservation Objectives for <i>A. pallipes</i>. Peterborough: English Nature</p> <p>ROGERS D & WATSON, E. 2004. Assessment of the condition of the white-clawed crayfish, <i>A. pallipes</i>, in the River Wye SAC. Bangor: CCW Environmental Monitoring Report 2.</p> <p>Map Data Sources</p> <p>Biological Records Centre - Crayfish dataset; Natural England - Invertebrate Site Register for England; Environmental Heritage Service species datasets; Dorset Environmental Records Centre - Dorset SW Pilot species dataset; Bristol Regional Environmental Records Centre - SW Pilot Project BAP Species Inventory 2002; Wiltshire and Swindon Biological Records Centre - Wiltshire BAP Priority Species Distribution Records; Devon Biodiversity Records Centre - Devon incidental species records 1950-2002 (via the NBN Gateway)</p> |
| 2.3 Range of species in the biogeographic region or marine region | |
| 2.3.1 Surface range of the species (sq km) | 59049 |
| 2.3.2 Date of range determination | 2000-2003 |
| 2.3.3 Quality of data concerning range | Good |
| 2.3.4 Range trend | Decreasing (-) |
| 2.3.5 Range trend magnitude (%) | Unknown |
| 2.3.6 Range trend period | 1994-2006 |
| 2.3.7 Reasons for reported trend | 3 - Direct human influence; 4 - Indirect anthropo or zoonogenic influence; 5 - Natural processes; 6 - Other - ; Competition and predation from introduced non-native species |

| 2.4 Population | | | | |
|--|--|------------------------------|---------|-----|
| 2.4.1 Population size estimation | Minimum | 166 | Maximum | 166 |
| | Units | Other Occupied 10-km squares | | |
| 2.4.2 Date of population estimation | 2000-2003 | | | |
| 2.4.3 Method used for population estimation | 2 - Extrapolation from surveys of part of the population | | | |
| 2.4.4 Quality of population data | Poor | | | |
| 2.4.5 Population trend | Decreasing (-) | | | |
| 2.4.6 Population trend magnitude (%) | Unknown | | | |
| 2.4.7 Population trend period | 1994-2006 | | | |
| 2.4.8 Reasons for reported trend | 3 - Direct human influence; 4 - Indirect anthropo or zoonogenic influence; 5 - Natural processes; 6 - Other - ; Competition and predation from introduced non-native species | | | |
| 2.4.9 Justification of % thresholds for trends (optional) | Not applicable | | | |
| 2.4.10 Main pressures | 701 - water pollution; 852 - modifying structures of inland water courses; 963 - introduction of disease; 971 - competition; | | | |
| 2.4.11 Threats | 701 - water pollution; 852 - modifying structures of inland water courses; 963 - introduction of disease; 971 - competition; | | | |
| 2.5 Habitat for the species in the biogeographic region or marine region | | | | |
| 2.5 Habitats for the species | <p>geology and water quality. <i>A. pallipes</i> occurs in areas with relatively hard, mineral-rich waters on calcareous and rapidly weathering rocks. It is found in a wide variety of environments, including canals, streams, rivers, lakes, reservoirs and water-filled quarries.</p> <p><i>A. pallipes</i> is typically found in watercourses of 0.75 m to 1.25 m deep, but the species may occur in very shallow streams (about 5 cm of water) and in deeper, slow-flowing rivers (2.5 m). It may be more abundant in watercourses flowing north-south due to the increased shading this aspect provides (Holdich D, pers. obs.). It is not known to inhabit saline waters, although it has the capacity to survive in the short term in levels equivalent to 75% seawater.</p> <p><i>A. pallipes</i> typically occupies cryptic habitats under rocks and submerged logs, among tree roots, algae and macrophytes, although it usually emerges to forage for food. Juveniles in particular may also be found among cobbles and detritus such as leaf litter. Adults may burrow into suitable substrates, particularly in the winter months. In habitats with flowing water <i>A. pallipes</i> may be found associated with:</p> <ul style="list-style-type: none"> • Undermined, overhanging banks. • Sections exhibiting heterogeneous flow patterns with refuges. • Under cobbles (juveniles) and rocks in riffles, and under larger rocks in pools. • Among roots of woody vegetation, accumulations of fallen leaves and boulder weirs. • Under water-saturated logs. | | | |
| 2.5.2 Area estimation (sq km) | Unknown | | | |

| | |
|---|--|
| 2.5.3 Date of estimation | 05/2007 |
| 2.5.4 Quality of data | Poor |
| 2.5.5 Trend of the habitat | Decreasing (-) |
| 2.5.6 Trend period | 2002-2005 |
| 2.5.7 Reasons for reported trend | 3 - Direct human influence; |
| 2.6 Future prospects | |
| 2.6 Future prospects for the species | Poor prospects_Species likely to struggle unless conditions change |
| 2.7 Complementary information | |
| 2.7.1 Favourable reference range (sq km) | |
| 2.7.2 Favourable reference population | |
| 2.7.3 Suitable Habitat for the species | Unknown |
| 2.7.4 Other relevant information | |
| 2.8 Conclusions <i>(assessment of conservation status at end of reporting period)</i> | |
| (2.3) Range | (U2-) - Bad and deteriorating |
| (2.4) Population | (U2-) - Bad and deteriorating |
| (2.5) Habitat for the species | (U1-) - Inadequate and deteriorating |
| (2.6) Future prospects | (U2-) - Bad and deteriorating |
| Overall assessment | (U2-) - Bad and deteriorating |