



Chalk rivers support a wide range of aquatic plants, along with a host of insects, snails & fish species that thrive in the cool, clear water and predominantly gravelly riverbed.

# Chalk Rivers

Kent Habitat Action Plan

## KENT BIODIVERSITY ACTION PLAN



The Kent Biodiversity Partnership has worked together to establish conservation objectives for biodiversity in Kent, ensuring the County's broad and eclectic mix of natural habitats are safeguarded for future generations.

In 1997, the Kent Biodiversity Partnership first published the Kent Biodiversity Action Plan (BAP), an award-winning document that set out actions required to protect habitats and species of particular wildlife value in Kent. In doing so, partners from across Kent sharing an interest in nature conservation, demonstrated their joint commitment to the 1994 UK BAP - the nation's first strategy dedicated to the conservation of the country's biodiversity.

In 2003, Kent completed an audit of the County's UK BAP broad and priority habitats. Equipped with information on the state of Kent's UK BAP habitats, the Kent Biodiversity Partnership Steering Group members began the first review of the 1997 Kent BAP. A revitalised Kent BAP now takes the form of 28 Habitat Action Plans (HAPs). Each HAP has been developed by an individual lead partner who has worked closely with and consulted a working group of partners all aiming to invest their organisation's time and resources to the setting up and running of initiatives that will conserve the County's priority habitats as well as the wildlife that depend on these to survive. An alphabetical index for the 28 Kent HAPs is provided below.

The work of the Kent Biodiversity Partnership and the update of the Kent BAP is co-ordinated by Kent County Council (KCC) and chaired by English Nature.

To find out how to get involved in the work of the Kent Biodiversity Partnership, go to [www.kentbap.org.uk](http://www.kentbap.org.uk), email [info@kentbap.org.uk](mailto:info@kentbap.org.uk) or telephone the Kent BAP Co-ordinator on 01622 221537.

## KENT HABITAT ACTION PLANS

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## 1.0 CURRENT STATUS

England has the principal resource of chalk rivers in Europe. They are all located in south and east England - from Dorset to East Yorkshire. Kent's chalk rivers arise from the North Downs chalk and include the Darent, Cray, Shuttle, Dour, Nailbourne and stretches of the Great Stour, Little Stour and North Stream. However, unlike some chalk rivers in other counties, none of Kent's currently qualify for statutory conservation designation. However, some key stretches in Kent such as the Great Stour between Wye and Canterbury have been designated as non-statutory county 'Wildlife Sites' (or SNCIs) by the Kent Wildlife Trust.

Chalk rivers have a characteristic plant community, often dominated in mid-channel by river water crowfoot and starworts, and along the edges by watercress and lesser water-parsnip. They have low banks that support a range of water-loving plants.

All chalk rivers are fed from groundwater aquifers, producing clear waters and a generally stable flow and temperature regime. These are conditions which support a rich diversity of invertebrate life and important game fisheries, notably for brown trout and salmon. Brook lamprey, white-clawed crayfish and otter are among the internationally important species which chalk rivers support. Other, nationally threatened species such as the rapidly-declining water vole are also characteristic of chalk rivers.

Most chalk rivers have 'winterbourne' stretches in their headwaters. These often run dry, or partially dry, in late summer because of lack of rainfall recharging the aquifer. A characteristic range of invertebrates are adapted to these conditions, as is the brook water crowfoot.



Water vole © T. Longley

## 2.0 FACTORS AFFECTING THE HABITAT

- Excessive abstraction mainly for public water supply from the chalk aquifer has contributed to low flows on a number of chalk rivers. This has led not only to drying out of upper sections and riparian zones, but also to reduced flow velocities, accumulation of silt and changes in the aquatic vegetation structure.
- Physical modification: usually for flood defence, drainage, navigation, historic water-mills, ornamental or fishery purposes. These changes often lead to a marked reduction in river habitat diversity, and reduced ecological connectivity along the river's course.
- Pollution: In common with most lowland rivers, chalk rivers are significantly affected by sewage discharges, and in times of low flow de-oxygenation may occur. Effluent from fish farms, water-cress beds and light industry can have similar effects. Agricultural practices can lead to diffuse pollution and increased silt inputs.
- Fisheries management can be beneficial, neutral or detrimental in its effects.

### 3.0 CURRENT ACTION

- In carrying out their functions the Environment Agency, Water Companies, Internal Drainage Bodies, Local Authorities, in England and Wales have a statutory duty to further conservation where consistent with purposes of enactment relating to their water management functions. On-going work includes addressing the causes and impacts of low flows and ensuring that flood defence activity and development are sympathetic to the needs of chalk river habitats.
- Multi-organisation countryside and river management partnerships exist in most of Kent's chalk river catchments, with remits to enhance chalk river habitat where appropriate. Examples include the Kentish Stour Countryside Project, the River Dour Steering Group and the North-West Kent Countryside Project.
- The Environment Agency's Integrated Water Management Strategy project is addressing the potential impact on the Great Stour of the development of Ashford.

#### 4.0 ACTION PLAN OBJECTIVES

1. Conserve the characteristic flora, fauna and physical habitat features of chalk rivers including their winterbourne stretches.
2. Review the need and potential for restoration of flows, water quality and habitat diversity of Kent's chalk rivers in consultation with local communities and organisations, and implement restoration where appropriate.
3. Raise awareness of the importance of Chalk Rivers as a UK priority habitat in Kent.

#### 5.0 RELEVANT ACTION PLANS

The relevant UK Habitat Action Plans:

Chalk rivers

<http://www.ukbap.org.uk/UKPlans.aspx?ID=25>

Cereal field margins

<http://www.ukbap.org.uk/UKPlans.aspx?ID=8>

The relevant UK Species Action Plans:

Freshwater white-clawed crayfish, *Austropotamobius pallipes*

<http://www.ukbap.org.uk/UKPlans.aspx?ID=124>

Otter, *Lutra lutra*

<http://www.ukbap.org.uk/UKPlans.aspx?ID=428>

Water vole, *Arvicola terrestris*

<http://www.ukbap.org.uk/UKPlans.aspx?ID=115>

The relevant Kent Habitat Action Plans:

Cereal Field Margins

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The Working Group members have participated in the development of this Plan and are now instrumental in its delivery:

British Trust for Conservation Volunteers, Defra (Department for Environment, Food & Rural Affairs), Environment Agency, Kent & Medway Biological Records Centre, Kent Bat Group, Kent County Council, Kent Downs AONB Unit, Kent Wildlife Trust, Royal Society for the Protection of Birds and White Cliffs Countryside Project.

This document has been produced with the financial support of the European Regional Development Fund and KCC.

