



CANALS

1. INTRODUCTION

At the turn of the eighteenth century with the increasing industrialisation of Britain an extensive canal system linking towns, cities, quarries and other industrial areas was created. With the decline of industrial usage the narrow canal corridors have widely transformed into lush, diverse wildlife corridors which contain a myriad of species. Canals now form vital wildlife corridors in our sub-region, often passing through intensive farmland or heavily urbanised settings with little open space. In the wider countryside they can significantly contribute to the wildlife habitats through which they pass.



Canal corridors can support rich and varied plant communities including some extremely rare species. Canals host several distinct plant communities: the submerged pondweeds such as hornworts, milfoils and the BAP species grass-wrack pond-weed; emergent plants such as floating water lilies and reed species including reed sweet grass, canary grass, bulrush and branched bur reed which form the emergent fringe. The greatest variety of plant species is found in canals with relatively clear undisturbed water - usually where there is little or no boat traffic.

Kingsbury Water Park © Steve Falk

This canal action plan encompasses a number of habitats which fall within and either side of the slow-flowing open-water canal channel. These include the open freshwater habitats of the canal channel itself, marginal waterside habitats of the lower banks and shallows, trees, hedgerows and grasslands of the tow-path verges and built features such as bridges. Where canals are set within cuttings or upon raised embankments, they can become even more substantial features, with much subsidiary grassland and scrub (e.g. Nettle Hill near Ansty and the Tunnel, near Fenny Compton). Canals can support highly diverse and unusual plant and animal assemblages along the better stretches including creatures such as water voles, white claw-crayfish, otters and kingfishers. Canalside buildings, bridges and tunnels provide roosting sites for bats. Amphibians and reptiles can include grass-snakes, frogs, toads and newts. Many scarce and declining flowers and insects still occur along canal corridors.

The aesthetic appeal of canals, their wildlife and heritage make them popular with walkers, fishermen and boat users. They are increasingly the focus of the leisure industry and much new waterside development. These many competing demands and the repair needs of the historic waterway structures need to be managed sensitively to accommodate the needs of local wildlife as well as canal users.

2. OUR OBJECTIVES & TARGETS	Target
A. To carry out surveys to identify and monitor key habitats and species on all the canal systems, identifying the most important stretches	by 2010
B. To improve the management of invasive species and the condition of canal hedgerows and grass verges	by 2005
C. To promote good management practice and to share knowledge	2003-2015
D. To maintain and improve the canal water quality by one grade from the current status	by 2005
E. To enhance public appreciation of waterways	2003-2015
F. To develop new partnerships to enhance the habitats of land adjacent to 1km of canal corridors	by 2010
G. To ensure the survival of protected or important species populations on the canals and increase their range by improving habitat conditions	by 2010

ASSOCIATED HABITAT PLANS

- Ponds, Lakes & Reservoirs
- Rivers & Streams
- Hedgerows
- Reedbeds

ASSOCIATED SPECIES PLANS

- Water Vole
- Otter
- Bats
- Great Crested Newt
- White-clawed Crayfish

3. NATIONAL BAP OBJECTIVES AND TARGETS

There are no national BAP objectives for canals, however British Waterway have produced their own national Biodiversity Action Plan.

4. CURRENT STATUS

There are seven navigable canals within the county of Warwickshire: The Grand Union, Oxford and Coventry Canals, which link together to form the 'Warwickshire Ring' a popular cruising route, and the Ashby, Birmingham, Fazeley and Stratford Upon Avon Canals.

None of the canals in the county are Sites of Special Scientific Interest (SSSI) although they are considered to enhance those adjacent to the canals such as Stockton Railway Cutting and Quarry SSSI, Calcutt Locks Meadow SSSI, River Blythe SSSI, Clowes Wood and New Fallings Coppice SSSI and Alvecote Pools SSSI. All canals are designated as Ecosites and many are of substantive value and have been selected as potential SINCS.

The water quality of the canals is generally fair with problems such as blanket weed, but good enough to support a reasonable strong coarse fishery. A few stretches of the canals are classified by British Waterways as 'unsatisfactory' for a combination of physical and chemical reasons. However, the water quality of these stretches has already improved dramatically over the last decade to reach the current grades, allowing otters to return to the canals to breed, rest and predominantly fish.

4.1 Legal and Policy Status

British Waterways has statutory environmental duties under the British Waterways Act 1995. Section 22 of the Act dictates that British Waterways have 'to take into account any effect, which their proposals would have on the beauty or amenity of any rural or urban area or on any such flora, fauna, features, buildings, sites or objects'.

The protection of species under the Habitats Directive, the Wildlife and Countryside Act 1981 and Conservation Regulations 1994 are adhered to. Other Acts relating to various regulations are also upheld by British Waterways.

4.2 Current Factors Affecting The Habitat

- **Recreational and development pressures.** In recent years the aesthetic value of waterside locations has been exploited with the redevelopment of a number of river frontages. Recreational pressures on canals are likely to continue to increase as more funding is put into canal restoration projects.
- **Deterioration of habitats** along the canal corridor as a result of unsympathetic management e.g. over regular mowing or over-formalisation of canal-side landscaping.
- **Hard engineered bank protection** has been over utilised in the past. On many stretches the old brick retaining walls which often have their own associated flora have been replaced with sheet-piling, but this restricts the growth of marginal vegetation and is unsuitable habitat for burrowing species such as Water Vole. In some areas 'soft-bank protection' using vegetative fibre such as coconut matting is being trialed, to create a more natural bank side habitats.
- **Increased boat traffic** has many adverse effects on the quality of the immediate environment e.g. increased turbidity of the water, erosion of the soft banks, through wave action, physical disturbance to aquatic and marginal

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communities, installation of hard engineered profiles leading to loss of habitat, noise and pollution.

- **Invasive plant and animals species** e.g. Japanese knotweed, Himalayan balsam and non-native crayfish have which have affected the natural communities of some stretches (although the extent is currently unknown).
- **Pollution** from litter, discharge of inappropriate chemicals from boats and occasional overflow of sewage from storm water drains can all lead to poor water quality. Diffuse run-off from surrounding land is harder to control e.g. runoff from built up areas without Sustainable Urban Drainage Schemes or fertilizers and pesticides from agricultural land in rural areas. In some more industrial areas there has been historic contamination of the sediments with heavy metals and hydrocarbons which can reduce water quality if disturbed. Poor quality water is low in biodiversity.
- **Deliberate vandalism** of heritage features and damage to emergent fringe and bird nests.
- **Dredging operations** can potentially cause disturbance of benthic organisms (e.g. Crayfish and swan mussels) but also play their part in arresting habitat succession in favour of open water.

5. CURRENT LOCAL ACTION

- Environmental Code of Practice Appraisals are completed by British Waterways for all programmed work. These identify habitat and species in the area of work that may be affected by the proposal and any remedial action required to prevent damage to the habitat or species and actually enhance the area.
- The British Waterways National Biodiversity Action Plan highlights the various species and habitats that may be located along the canal corridor and issues guidelines to protect and enhance these environments. The proposal to produce a local canal Biodiversity Action Plan related to the existing habitats and species is currently being considered.
- There is increased knowledge and use of a variety of soft bank protection methods and these ideas need to be shared amongst British Waterways and the Environment Agency. Methods of installation and design still need to be improved upon.
- Corridor studies have been completed for a few sections of canal in North Warwickshire which have identified potential areas for habitat schemes. More generally, wildlife surveys have been carried out for many more sections (usually of the banks rather than the water channel). These can be obtained from the BRC or local recorders.
- Environmental awareness is being promoted through a variety of partnerships and locations in Warwickshire including the mobile library service and canal side events, offering activities for children to participate in.

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- A couple of scoping surveys have been conducted over the last few years which have highlighted environmental projects in residential areas for the benefit of all the users.
- An environmental awareness leaflet has been developed by British Waterways aimed at boaters and other canal users to offer them advice on how to reduce the possible detrimental impact upon the environment by their actions.
- British Waterways has been doing a management trial on Stratford Canal.
- Coventry City Council are employing a Canal Ranger post.

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 habitat policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9).	LBAPSG	LAs	2003-2015	G
PL2. Actively encourage the continuous updating and development of corporate policies, environmental code of practices and local Biodiversity Action Plans.	BW	LAs NE EA WM	2003-2015	B, C, G
PL3. Actively encourage the passing on of survey information to the Local Record Centre, government bodies, Wildlife Trusts and universities so that it may be included in future policy making.	BW	NE LAs WM EA WWT Universities	2003-2015	B, C
PL4. Assemble the relevant policies and legislation so that they are readily available in waterway offices for staff conducting Environmental Appraisals.	BW	NE WM EA LAs WWT	2005	B, C
PL5. Ensure that any site meeting the relevant criteria is considered for designation as a SINC.	WSP		2003-2015	G

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Site/ Species Safeguard & Management					
SM1. Actively work with all agencies and bodies to ensure that development proposals do not affect the integrity of the canal biodiversity.	BW	LAs WM EA	NE WWT	2010	B, G
SM2. Actively promote the consideration of biodiversity during all canal restoration and maintenance.	BW	LAs WWT	NE WM	2005	B, C, G
SM3. Promote partnerships to help manage sites both within and adjacent to the canal corridor.	BW	LAs Canal Trusts Volunteers	WWT	2005	B, C, F
SM4. Produce and implement Environmental Appraisals and Environmental Impact Assessments for all maintenance work and proposed developments.	BW	LAs NE EA		2003- 2015	A, B, C, G
SM5. Improve and monitor the water quality.	BW	EA	LAs	2005	D
SM6. Develop and implement programmes to control invasive species and manage hedgerows.	BW	EA FWAG	EN LAs NE	2005	B, C
Advisory					
A1. Distribute information on habitats and species to those involved in canal work.	BW	LAs WM	WWT BTCV	2003- 2015	B, C
A2. Provide suitable training for operatives to ensure the maintenance and enhancement of biodiversity.	BW	WWT Canal Trusts	BTCV	2005	A,B,C,D,E
A3. Advise on legislation and policy affecting species and habitats.	NE	BW EA	WM WWT	2003	C
Research & Monitoring					
RM1. Conduct habitat and species surveys to determine their extent and status including key species.	WBRC	BW	WWT Volunteers	2010	A, B, C
RM2. Establish GIS record databases to be accessed at waterway offices.	BW	WM WWT	LAs NE	2010	A
RM3. Continue trials and research into soft bank protection and 'dressing up piling'.	BW	WWT STW	EA LAs	2005	C

RM4. Encourage volunteers to help monitor species populations.	WM	BW LAs Universities	WWT	2010	A, E
Communication, Education & Publicity					
CP1. Develop interpretative material on canal wildlife including leaflets, activity sheets and signage.	BW	NE LAs Volunteers	WWT	2003	B, E
CP2. Raise the profile of the canal environment through press releases of events.	BW	LAs EA	NE BTCV	2003	E
CP3. Organise and deliver environmental projects and training.	BW	BTCV WWT	LAs	2005	A, B, C, E
CP4. Develop activities and initiatives to include school and youth groups.	BW	LAs	WWT	2005	E
CP5. Develop a programme of guided walks, talks and activities within British Waterways and in partnership.	BW	LAs BTCV	WWT	2005	E

Abbreviations: BTCV – formerly the British Trust for Conservation Volunteers, BW – British Waterways, EA - Environment Agency, NE – Natural England, STW - Severn Trent Water, WBRC – Warwickshire Biological Record Centre, WCC – Warwickshire County Council, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust

7. REFERENCES (see LBAP Bibliography web page)

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

British Waterways

Buglife (2004) Information on the habitat-management requirements of key invertebrates. CD-Rom £34.99 from Beverley Doyle by email at:
beverley.doyle@buglife.org.uk

National Waterway Wildlife Survey 2005 : www.waterscape.com/wildlife

9. CONTACT

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