Chalk Streams of Lincolnshire

Chalk stream management

The wildlife value of chalk streams can be improved through appropriate management to create a greater diversity of habitats, minimise the impact of adjacent land use and allow colonisation by mobile aquatic species.

MANAGEMENT OF STREAM-SIDE TREES

Some streamside trees and shrubs are beneficial as they create areas of shade and are particularly valuable around chalk springs. However, where streams run through wooded areas some sections should be opened up to the light to encourage the growth of aquatic and marginal vegetation and to increase the diversity of the associated fauna. Trees can be felled to create permanent open areas or managed on a short rotation by coppicing (cutting back the tree at the base and allowing it to regrow) or pollarding (cutting back to head-height and allowing subsequent regrowth). In very open areas occasional native trees, such as willows or alder, should be planted to provide shade.

REMOVAL OF IN-STREAM OBSTRUCTIONS

It is important to allow the movement of mobile species, particularly fish, up and down a stream. Engineered structures are occasionally used to raise water levels and, unless specially designed, these prevent fish passage. If possible these structures should be removed and replaced with a more fish-friendly solution, such as a series of riffles and pools which gradually raise the water level, but still allows fish to pass.

CONTROL OF INVASIVE NON-NATIVE SPECIES

Several invasive non-native plants, such as Himalayan balsam and Japanese knotweed, can occur near water. These species grow very vigorously and left unchecked will swamp native plants and their associated fauna. Small and localised infestations can be dealt with by hand, but the advice of the Environment Agency, which has produced Guidance for the control of invasive weeds in or near fresh water, should be sought for the control of larger infestations.

CREATION OF BUFFER STRIPS

The establishment of a long grass buffer strip adjacent to a stream can help to reduce the effects of soil erosion, nutrient enrichment caused by fertiliser run-off and the impact of other agrochemicals. In intensively grazed fields a reduction in the stocking density will reduce the risk of soil erosion. Alternatively a strip of grassland along the stream can be fenced off and allowed to grow. If possible, land drains that issue directly into a stream should be stopped up or broken to allow agrochemicals more time to breakdown in the soil.

RESTORATION OF SPRINGS

Many chalk springs have been constrained within a piped outfall, limiting the extent of valuable habitat. The simple removal of the pipe, where it is no longer needed, will allow the natural re-establishment of a localised "wet flush" and provide suitable conditions for colonisation by a range of important characteristic plants and invertebrates.

Chalk Streams of Lincolnshire

For further information and opportunities to improve Lincolnshire Chalk Streams contact:

The Lincolnshire Chalk Streams Project,
c/o the Lincolnshire Wolds Countryside Service,
Navigation Warehouse,
Riverhead Road, Louth,
Lincolnshire LN11 0DA

Tel. 01507 609740

Email. aonb@lincolnshire.gov.uk

Website. www.lincswolds.org.uk

Funded by the Environment Agency in partnership with the Wild Trout Trust (2005).

Text
Steve Brayshaw

Design and print
Status Design & Advertising

0605 • 3935(4) • 150