

Our river bank is eroding – should we do anything?

Rivers do not stand still and are constantly moving within their floodplain. Depending on their direction of flow they tend to deposit mud, sand and earth in some areas, while eroding the river bank in others. Erosion is an important part of a natural river's behaviour and is important for wildlife, such as lampreys which live in silty deposits, or kingfishers which nest in bare vertical banks.

WHY deal with erosion?

Action is only necessary where erosion is causing problems. For example erosion can damage property, undermine fencing or just make it harder for people to access the river.

Sometimes erosion has an underlying cause such as heavy use by people or livestock, inappropriate riverbank management or structures in the river focussing the energy of the water in a particular place. Occasionally it may be caused by one-off events such as severe floods.

WHAT can be done?

If the erosion is not causing any problems then it is best to do nothing and leave the river to get on with its natural behaviour.

If the erosion is causing damage to property then the most obvious intervention would be the repair and reinforcement of the river bank to either prevent or slow down the erosion process. Bank protection can be undertaken using a range of different techniques. Soft engineering with natural materials can achieve good protection and enhance wildlife habitats. Heavy engineering using steel and concrete can be very damaging to natural features and is nowadays only undertaken where erosion would cause significant damage.

Where erosion is not causing damage to property alternative solutions should be considered first, starting by looking at the way the river bank is used and managed at the moment. Temporarily fencing off some sections to prevent people from accessing the bank will help bank side vegetation to grow and protect the river bank naturally. It is always beneficial to have a 'buffer strip' of taller vegetation along the bank to help stabilise the soil and to provide refuge for wildlife. Allowing access to larger areas along the river bank may reduce pressure on the already accessible sections. If livestock are poaching the banks then reducing the number of animals or restricting their access to the river bank may alleviate the pressure on the eroding parts. Providing information to encourage people to use the area differently could further reduce the problem.

WHO can do it?

Small scale projects can be carried out by individuals or teams of volunteers. Remember you are likely to need a range of tools and equipment. Support from somebody with experience in supervising volunteers would be useful. Larger scale projects should be undertaken by contractors used to working in river environments.

Living River volunteers repairing an eroded footpath on the River Avon



Erosion of footpath caused by the river



Volunteers install wooden posts



Repaired path and new bank revetment

WHAT needs to be considered?

- ▶ Before planning any work find out who owns the area of river concerned and contact everyone who has an interest in the river: landowners, farmers, river users such as fishing clubs etc. A coordinated approach yields the best results.
- ▶ Get the necessary consents and permissions for work in the river and along the river bank – early contact with the Environment Agency, Natural England and your local authority is vital.
- ▶ Cover insurance and health and safety issues. Risk assessments are crucial at the outset of any work in and around the river. The BTCV handbook 'Health and Safety Overview' provides useful advice for community groups (see right).
- ▶ Avoid disturbing protected species such as otters or water voles. Plant and animal surveys may need to be undertaken by an ecologist. Your local Wildlife Trust or Natural England can provide advice. Any sightings of protected species should be reported to your local biological record centre (see right).
- ▶ Have a good look for funding – local authorities can often provide funding advice.
- ▶ Choose a reputable contractor.

WHO can help?

There is plenty of written and direct help available from the organisations listed right.

WHERE can I get more information and ideas?

- ▶ **River Restoration Centre:**
www.therrc.co.uk/rrc_manual_pdf.php
- ▶ **Wessex Chalk Streams Project:**
www.wiltshirewildlife.org/standingup/wessexchalkstream/emailform.aspx
- ▶ **British Trust for Conservation Volunteers:**
www2.btcv.org.uk
- ▶ **BTCV handbooks:**
'Health and Safety Overview', 'Waterways and Wetlands' and 'Environments for All' (<http://handbooks.btcv.org.uk/handbooks/index>)
- ▶ **STREAM project:**
'Layman's report' (www.streamlife.org.uk/resources/publications)
- ▶ **Wild Trout Trust:**
'Chalkstream Habitat Manual' (www.wildtrout.org)
- ▶ **Environment Agency:**
www.environment-agency.gov.uk
- ▶ **Natural England:**
www.naturalengland.org.uk

