HOW TO IMPROVE YOUR RIVER

Are you doing your bit to help wild trout? Shaun Leonard of the Wild Trout Trust reveals ways you can make a difference this winter

First, enjoy yourself

Working on a river is a great opportunity to gather members of a club or syndicate. Get everyone involved and not just the overworked officers of the committee. Give people notice. Be organised. Discuss what you want to achieve on the day. Be safe. Refreshments are important. Don't undertake major works without gaining necessary permissions and seeking expert advice. Visit www.wildtrout.org

Tree choice

Fallen trees provide food and cover for trout and river-flies, and can scour pools and keep gravels free of silt. Don't remove fallen trees unless they may cause excessive erosion, flooding, or an impassable barrier to fish. Then, move them to a suitable position and secure. Find out how to do this on the WTT website "How to" page.

Review your catch returns

Most clubs have a catch book and know how many fish are caught and killed or released. If you stock the river with farmed fish, it is worth reviewing the numbers of fish you stock in the light of how many stock fish are caught. Many clubs are finding that they can reduce stocking, spend the money saved on habitat improvement and catch returns actually increase. See the Trust website for advice on stocking and case studies from fishing clubs.

Consider marking stocked fish so that you know how many are caught, and remove as many stocked fish at the end of the season as possible.

Clean spawning gravels

Trout eggs need a flow of oxygenated water to hatch successfully. If gravels are full of silt, or concreted with tufa (as happens in calcium-rich water), the conversion of eggs to fry can be low. Tufa can be broken up with a fencing spike, and gravels cleaned in 20m^2 patches by water jets (pictured, left) or by raking.

The longer-term solution is to fix woody flow deflectors in the river to create fast, turbulent water that prevents silt from depositing. Clean gravels in September and early October before trout spawn. If you spot redds this winter, you'll know where to focus your efforts next autumn.

Find and fix the "sediment pathways"

Excessive silt and nutrients are a problem in many rivers, and it's not an easy problem to fix. If you walk the river after heavy rain, you can see the "pathways" that carry sediment to the river. These may be farm tracks leading to the river, road drains, or bare ploughed fields. If you know the landowner you can try to tackle the problem together, or work with your local Catchment Sensitive Farming advisor. In some cases you can create a buffer zone or build a sediment trap, but take advice on this and be aware of the maintenance obligation.

Make life difficult for predators

Tree roots, twiggy branches trailing in the river (see picture below), and undercut banks with vegetation flopping into the water all provide trout with places to hide from predators. A nice "tidy" river is easy to fish but predator heaven, especially in winter. Strike a balance between refuges for fish and keeping the river fishable.

Provide food by encouraging fly life

A shaggy fringe of bankside plants, twigs and branches in the river and leaf litter all help to promote fly life by providing food and shelter. Understanding the lifecycle of river flies will help you to provide habitat for flies as well as fish. For example, some Mayfly nymphs live in silt, some under stones and some on weed. Freshwater shrimp (*Gammarus*) are detritus shredders and feed on leaves and decaying woody material. Many river-flies will crawl up vegetation (pictured) to emerge and crawl down to lay eggs. Most river-flies need bankside shrubs and trees or long grass to complete their lifecycle.

Be messy!

Rivers are not gardens and they don't need to be tidy. Messy rivers are better for wildlife and that includes trout. There is a careful balance to be struck between keeping the river fishable and removing the messy stuff that is vital cover for trout and insects. Having sections with a "wild" (maybe no fishing) bank and a "managed" (fished) bank is one way to achieve some balance.

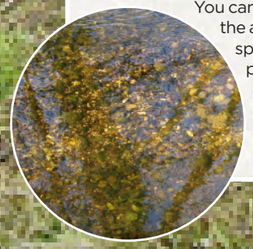
Repair and create access points

Make your river a pleasure to fish by ensuring access to the right spots is as easy as possible. Stiles and boarded walkways help. Cover barbed wire. Consider cutting access points through reed beds. If you have steep banks, a rope, post, ladder or steps will help those less steady on their feet.

Give young fish a helping hand

Walk the river over the winter and spot the trout redds and over-wintering habitat for juvenile fish. Most trout spawn between November and January, so walk the banks at this time of year and look for piles of clean gravel downstream of a shallow depression (redds – pictured below). Now look down stream – is there submerged and overhead shelter provided by plants, twigs, branches and submerged rocks where a small trout might live and escape a heron, goosander or cormorant? Is that shelter present throughout the year, especially in winter when plants die back?

A combination of good clean spawning gravels and good juvenile habitat will increase the numbers of fish that make it to adulthood.



You can increase the amount of spawning, fry and parr as well as adult habitat – ask the WTT for advice tailored to your river.

Manage bankside trees

Trees provide vital shade and trout food in the form of terrestrial insects as well as root systems that protect banks and provide refuges for trout. Too much shade can reduce weeds and the general productivity of the river.

Aim for 60 per cent shade and 40 per cent light and coppice or pollard to achieve dappled shade. Coppice trees on a five- or seven-year rotation or you'll end up with a tunnel! In areas that need more cover, plant goat willow whips in the bank at an angle so they lean over the water. Work from October to February, but save "veteran" trees and don't disturb bats – take advice!

Deal with eroding banks

Bank erosion is a natural process and is part of the river's dynamic system that creates gravel for spawning and pools for holding fish. In an ideal world, we would leave the river to do what it wants. In the real world, some banks will need protecting from excessive erosion. The exact methods used will be specific to each location and depend on the cause and the energy of the river.

Brushwood faggots secured with chestnut stakes will be fine on a low-energy river but may not withstand a flood on a high-energy river. In general, "hard" engineering to reinforce banks creates as many problems as it solves. It's better to work with the river by slowing/absorbing flows, not deflecting the river's energy to cause problems elsewhere.

Ask the Trust

The Wild Trout Trust has a number of publications that suggest ways to manage and improve river habitat for trout. These are available to buy as printed versions or CDs or to download from the library section of its website: wildtrout.org/library.
The website includes a series of short "how to" videos.
For advice for your river, contact the Wild Trout Trust on 023 9257 0985 or projects@wildtrout.org

WILD TROUT TRUST