



# Woody Debris

Part 2: How to get it and



# woody debris

## and how to keep it

I have to start first with a word of caution. You cannot just go ahead and put woody debris into a river; as with everything, there are a load of people you need to consult and a host of permissions to obtain. Do not be put off by this as there will be people out there who will be quite happy to help.

Before beginning any project to get some new woody debris into a river you must speak to the landowner and get their permission. It's their river and if you want to mess with it, you have to get their agreement.

Life may be made more complicated if the stretch of river has more than one owner (it is common for opposite banks of a river to have different owners) and you might need to ask upstream and downstream owners in case they have any objections.

If you do not own all the fishing rights, you might also need to get the other fishing clubs on board as well. To get these people on side, you have to have your arguments well thought out and have a good idea about what you want to do. Do not just turn up with a vague idea about what you want to do; a plan showing where the woody debris is to go, how it is to be attached, staked or secured and what form it will take is invaluable and should not be too much problem to sketch out. Outline any risk (flood, large pieces of woody debris getting dislodged, blocking footpaths, etc) and how you intend to mitigate this.

If all that sounds a bit challenging, help is at hand. Contact the person in the Environment Agency fisheries function who has most contact with your club water. They should be able to provide you with a lot of help and advice and assist you with negotiations with the landowners and other fishing clubs.

Not all of them are fully

aware of how valuable woody debris is in a fishery, but many are now enthusiastic about it and will work hard to help you to get some will-planned and well-structured woody debris in place. Best of all, they may even be able to provide some budgetary support, perhaps in the form of plant and labour.

The other reason you need help from your local fisheries team is that there may be a lot of negotiations needed with other EA functions and with other bodies. It might seem quite simple – you put woody debris in the river and create some hot new barbel swims and that's that, but life is never that easy these days. You may have to carry out an environmental impact assessment for other species. Will it have an impact on the endangered water vole, for example? Do not be put off by this; if you want to create some barbel swims with woody debris, you will have to do some work to get it, but there will be people out there who can help you.

You can even turn all

that to your advantage as the additional habitats created by putting woody debris in place can enhance the environment for other species which will help to gain you some valuable bonus points from conservation groups. Wildlife trusts may be quite happy to work with anglers on such schemes and it is better to have them on board and supporting you. If you do not have good contacts with your local wildlife trust, sound out your EA fisheries officer who should be able to advise you who to speak to.

So far, so good; let's assume you have everyone on board, what techniques can be used to get woody debris in place?

#### **Dead wood**

Dead wood works pretty well for creating barbel swims but bear in mind that it will rot and that the smaller branches will only last a few years at most. Large lumps of wood such as stumps or tree trunks can last for many years as long as they do not get swept away by floods.

That brings us to the first point which is that, having put your woody debris in place, you want to make sure that it stays there. Large pieces of tree floating off in a flood not only mean the loss of all that hard work in creating the habitat in the first place, but can also place downstream structures at risk (as discussed on Part 1).

The wood must be firmly anchored, staked or secured in place so it cannot break free. There are a number of ways of doing this which a fairly simple in practice. A tree trunk anchored to the river bank by a cable will be quite safe if it is done properly as you can see in the picture below. This is not a major bit of engineering and is the kind of thing that can be done simply with a few willing bodies and a bit of muscle.

Another thing which helps to keep the wood in place is to place it parallel to the bank. This not only makes anchoring simpler, but also reduces the water pressure making it less likely that the wood will shift.

Having the wood parallel to the bank also helps to calm fears about flooding as it will create very little impediment to flow.

#### **Live wood**

Living trees can be an excellent way of creating woody debris in rivers. Different species of trees respond in different ways, but the star of the show is the willow. These can be felled into the river and, if the trunk is only cut part way through, will carry on living quite happily for many years (see Figures 2 and 3 below). The cut might stimulate the tree to produce a lot of new growth around the cut and affectively give you a new upright tree. The felled part will tend to sit and think for a while and then produce a lot of new shoots which will grow upwards. These tend to be smaller than the original branches so you will end up with a lot of new growth which does not grow very tall. It will be leafy however, providing shading which will attract barbel.

What happens underwater is just as important. Unlike dead wood, living trees often carry on living below water and, in the case of willows will also start to sprout roots which will create and even more attractive habitat for fishes. The roots will also help to anchor the tree to the river bed and bank helping to stabilise the whole structure.

You might need to provide some additional anchorage for some trees, but by and large, the fact that it remains firmly anchored by its trunk means that the tree is very unlikely to move while it is alive.

A willow or a branch of a willow which has fallen into a river is one of my favourite areas for fishing as they always seem to hold a good number of barbel.

#### **What do you want to achieve?**

You do need to think carefully



*Dead tree tethered*

about what you want to achieve before you place any woody debris. Do you want to just create some new barbel swims or do you want to have a bit of river engineering as well, such as creating an area of scour and deposition? Is the woody debris intended just to enhance fishing or to enhance the fish population? In the latter case, what are you trying to do – create a shelter

from predators, create juvenile habitat or create new spawning grounds? You should also plan in any additional benefits such as wildlife habitats before you begin to make sure that you are adding the woody debris in the right place. Adding and/or managing woody debris is a fairly simple and cheap way to enhance a fishery and make it a better habitat for the fishes, including barbel.

**A warning!**

Please be aware that this article can only provide a very brief outline of what can be done and how to do it. Before you do any work at all, you do need to get some specific advice on where to place the woody debris, what to use (what's there already or timber brought in from nearby) and exactly how to place it in the river. All of these things are very site specific and you need to get

this all figured out before doing the work. Again, your EA fisheries officer should be able to help you out with this.

And finally . . . do remember that you might need a bit of heavy lifting to get this done.

Many thanks to Dominic Martyn from the Environment Agency for help in producing this article and for providing pictures to illustrate it.



*Half cut tree trunk*

*Live tree felled and tethered*