

SPORT

Dee Beat



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Volunteers building enclosures on the Clunie. Inset: one of the trees planted on the banks of the river.

Planting trees to save fish

Action being taken now to combat effects of Global Warming in the future

Driving from the Glenshee ski centre into the Dee catchment before entering Braemar, you may have seen some small fenced enclosures (4 x 4 metres) that have been planted with trees along the banks of the River Clunie.

You can also see a substantial area of woodland planting on the Clunie at Newbigging. These young trees have been planted to restore the upper Dee as part of the ambitious UK wide Pearls in Peril LIFE project.

So why is it so important to plant trees along the riverbank? Well, trees provide a number of benefits - they provide shade and so reduce water temperatures, stabilise riverbanks and prevent erosion, improve the retention of rainwater by the land to reduce flooding, create habitat for wildlife and provide woody debris and leaf litter which is the start of the food chain for invertebrates and then fish.

All these benefits help salmon and trout, but let's focus on two examples, shade and leaf litter.

We are all aware that our climate is changing, with more frequent flood events and milder winters. This summer we recorded water temperatures of over 26°C on the Dee, which is concerning when you consider that when 27°C is sustained for several days it is lethal to young salmon and trout.

While these temperatures are of concern at the moment, government climate change predictions indicate things will get worse with an increase of 4°C by 2060. Planting trees along the riverbank now will provide shade which will alleviate the effect of climate change in years to come. Every autumn broadleaved trees shed their leaves onto the land and water to become 'leaf litter'.

The leaves decompose and are used as a food source by invertebrates just like in your compost heap, but when they fall into the river, invertebrates such as stoneflies, mayflies and freshwater shrimp reap the rewards. These invertebrates are the essential prey items for our young salmon and trout. So the more leaf litter, the more invertebrates



Small enclosures with trees on the Callater.

that results in more food for young salmon and trout to devour.

This increased food supply improves their condition making them stronger, fitter and better equipped when they turn into smolts and head to sea, which will increase the chance of them returning

as adults to the River Dee to spawn. Through the Pearls in Peril Project 70km of trees will be planted along the River Dee by 2016 with 40km already underway. These trees will take time to establish and provide shade but within a few years they will begin the process of inputting leaf litter into the

river and improving the conditions for invertebrates and therefore salmon and trout in the River Dee.

Thank you to the team of volunteers from Bibby Off-shore who spent a chilly Saturday building enclosures along the Clunie last month. Jamie, our biologist, took

photos using our newest toy - a remote control drone that flies with a camera attached and will help us record a range of work undertaken on the River. More photos can be seen on our Facebook (www.facebook.com/TheRiverDee) and Twitter pages (www.twitter.com/RiverDeeTeam).

Many thanks to Apache North Sea and private donors for financing further tree planting areas, which have been created this winter. One small enclosure costs in the region of £250 - please get in touch with the River Office if you would like to leave a legacy on Deeside by helping further riverbank woodland creation (info@riverdee.org, 01339 880411).

This large - £2.4 million - project is being delivered in partnership with the Dee District Salmon Fishery Board, River Dee Trust, SNH, Forestry Commission Scotland, Dee Catchment Partnership, SEPA, Cairngorms National Park Authority, the Estates of Mar, Mar Lodge and Invercauld and the Estate workers and farming community - all with vital financial support from the EU LIFE programme.

CLUNIE RIVER CATCHMENT 2015 LIFE PROJECT