

River Rede:

The Power of Partnership Working

Revitalising Redesdale Landscape Partnership is making great progress on the catchment-wide effort to improve the River Rede for wildlife and people.

Northumberland Wildlife Trust is a key delivery partner in the River Project, which is funded by The National Lottery Heritage Fund and the Environment Agency.

Enthusiastic farmers and land managers are helping the partners to re-establish natural river processes, capture sediment, create wetlands, plant trees and manage grazing. They are also rebuilding the historic bridleway at Smoutel Ford, allowing walkers and riders to enjoy trails between Monkridge Hill and Otterburn for the first time in decades.

The River Rede's Journey

The River Rede rises in the wild, upland bogs of Northumberland Wildlife Trust's Whitelee National Nature Reserve, at Carter Fell on the English-Scottish border.

The River and its tributaries add to the habitat diversity on the reserve. From here the Rede feeds Catcleugh Reservoir and flows 24 miles past forests and farmland to the River North Tyne, near Redesmouth village. As the streams flow through the surrounding moors, the peat bogs regulate the water quality and flow, helping the river to support salmon, trout and freshwater pearl mussels.

The Need for Action

The River's flow and form has been changed in many ways over the past century. It was straightened, gravel was removed, and more intense forestry and farming practices added soil to the river. All this has impacted on the river wildlife, in particular the endangered freshwater mussels. The mussels improve the water quality for other species by filtering water through their gills. They can live for 100 years, but sadly, there are few breeding mussels left in the Rede to sustain the population.

Action was clearly needed, so in 2015 a proactive partnership of Northumbrian organisations worked together to develop a catchment-wide initiative. Revitalising Redesdale was launched in 2018 with the River Improvement Project at the heart of the programme.

Reinvigorating River Flows

The River crossing at Smoutel Ford was

lost because so much stone and gravel was removed during the mid-1900s. Revitalising Redesdale's work will reintroduce about 1,400 tonnes of boulder and cobble sized stone to the river bed, to re-create the Ford and associated rocky riffle features. This will reinvigorate the flow in this deeper section and so improve the habitat for fish, river flies and mussels.

This restored section of the Rede had suffered from a lack of gravels upstream to feed the riverbed, so as well as reconnecting the bridleway, this action will benefit river ecology beyond the 300m restored length.

The Smoutel Ford project has been supported by the local landowners and received funding from Northumberland County Council. Already you can see how much the river flow is changing, from slow and flat, to bumpy rapids and small pools. The main work here will be completed in autumn 2019 with further introductions of gravel downstream planned for 2020, to further improve the form and flow.

Reducing Fine Sediment and Reconnecting Floodplain Wetland

During high flow events, the River is severely eroding its banks in some areas, taking chunks of soil with it. At Dunn's Houses, Otterburn, Revitalising Redesdale slowed the rate of change by cutting a high flow channel into an old meander on the opposite side, in order to take the pressure off the eroding bank. This has helped the River to reconnect with its floodplain and has created a small area of wetland habitat.

The contractors, Haywood Contracting,



Managing sediment on River Rede near Otterburn

Rede near Smoutel Ford was straightened and over-deepened, looking like a canal

Building Smoutel Ford, September 2019

Already you can see how much the river flow is changing

cut the eroding bank to form a shallower angle of slope, set the new fencing further back into the field, and secured seeded coir matting to help hold the soil in place. These changes will now allow the river to move across the floodplain and keep grazing animals off the bank edges.

Revitalising Redesdale partner, Tyne Rivers Trust, has been working with volunteers to plant riverside trees in this area, to stabilise the banks and create dappled shade over the river. They will be leading more volunteer tree planting tasks next year.

Slowing Stream Flows

The lower reaches of the Rede are in generally better condition, but flashy run-



Severely eroding river bank adding large amounts of sediment to the river

Fencing moved back, shallower bank angle, high flow channel reconnected on opposite bank

Brash Bundles at East Woodburn capture sediment from eroding gullies

High flow deflectors push water over the floodplain slowing the flow and reducing sediment in the streams

Log matrix of larch with willow and seeded matting laid to revegetate the riverbank

Water trough and new fence on the floodplain at Otterburn

off down gullies from the surrounding moors brings soil to the River, impacting on fish spawning habitat. At Woodburn Hill Farm, East Woodburn, the contractor pushed conifer brash bundles into eroding gullies to reduce the loss of soil to the streams and river. Low flows can trickle through, but the higher flows are slowed while sediment is captured in the brash and bank vegetation. They also built high flow deflectors made of larch logs to push water across the surrounding land, instead of it all flowing down the gullies, and dug ponds to catch sediment.

Livestock Watering

In areas where livestock regularly access the river or streams they create muddy

areas that wash into the river. Revitalising Redesdale has been putting in fencing and drinking troughs to get the hooves away from the riverbanks, like this example at Old Town Farm near Otterburn.

The contractor team, led by Groundwork North East & Cumbria, have developed the project with strong support from local landowners. The project has been made possible with funding from The National Lottery Heritage Fund, the Environment Agency and Northumberland County Council, through an active partnership led by Northumberland Wildlife Trust and Natural England. Revitalising Redesdale Partnership is very grateful for the continuing support of the landowners and managers and help from the partners.

Working together, the partners are able to achieve a much bigger outcome for the Rede catchment.

For more details, volunteering opportunities and events, contact Maria Hardy, Programme Manager at info@revitalisingredesdale.org.uk, call 02080 261 193 or visit revitalisingredesdale.org.uk

