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Why do rivers need their wiggles?

Ever since humans have used rivers for transport, farmland irrigation and water powered mills they have tried to change the course of them to suit their needs. But in the past no one ever stopped to consider what the effect of their river engineering might be.

A new project in Cumbria has highlighted the problems straightening rivers causes and what can happen when they are given their 'wiggle' back.



Research has shown how important 'wiggles' are for life in rivers.



Swindale Beck was artificially widened about 200 years ago.

Swindale Beck was widened to increase the flow of the water and expand the amount of farmland in the area. The consequences were pretty drastic, the faster flowing water was to swift for fish like salmon to spawn, more sediment was carried downstream making the water murkier.

This meant less sunlight could penetrate the water, plants couldn't grow and the species that lived on the plants disappeared.



Planting wild hedgerow round fields leads to a dramatic increase in biodiversity.

In 2016 the RSPB and the landowning water company started an ambitious programme of 'rewiggling' and the transformation was almost immediate. The slower flowing water allowed vegetation to return, fish to spawn and very quickly ecosystems developed at each meander.

There are lots of amazing rewilding projects across the UK aiming to return different ecosystems to their original, untouched, state.

Can you research some rewilding projects where you live?

Swindale Beck - A river restored

Rewiggling a river

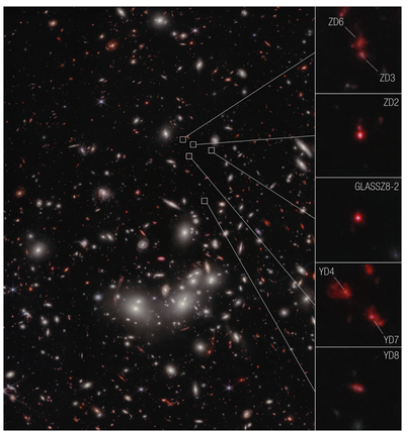
Explore rewilding projects across the UK

Why is rewilding important?

Webb Watch

It's been a while since we checked in with the JWST, so it's time to see what's been going on. Webb has recently imaged the oldest galaxies ever seen, a protocluster of seven galaxies about 25 billion light years away.

The galaxies formed only 650 million years after the big bang and are moving towards each other at more than 1000 km per second.



JWST, NASA, ESA, CSA

Oldest galaxies ever discovered

Redshift explained

Where's Webb