



The Meuse river has been widened and the riverbanks lowered, expanding the floodplain

# ‘This is what a river should look like’: Dutch rewilding project turns back the clock 500 years

Europe’s largest river restoration is making changes across the entire landscape, bringing benefits to wildlife and people

by **Phoebe Weston**. Photographs by Judith Jockel

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On the way to being one of the most beautiful nature areas in Europe,” reads a sign overlooking a construction site near the village of Grevenbicht on the Meuse River in the southern **Netherlands**. Looking at the diggers, other bits of large machinery and bare soil, this is a stretch of the imagination. “You have to

sell your story,” says Frans Schepers, managing director of Rewilding Europe, who was leading the largest river-restoration project in Europe.

Construction work has already been completed along 50km of the Meuse River floodplain as part of the Border Meuse project to undo 500 years of world-renowned Dutch water engineering. Big infrastructure is at the heart of the Dutch “offensive” – as opposed to “defensive” – approach to sorting out rivers, which involves relandscaping entire catchments, rather than rewetting specific at-risk areas. This approach is particularly revolutionary given that the seed for this project was planted decades ago. By contrast, the UK has only started thinking about **implementing natural solutions** at scale in the past few years.



The project is mainly being paid for by companies wanting to extract sand and gravel from the riverbed. Pictured is a construction site on the Meuse River near the village of Grevenbicht in the southern Netherlands

Driving the length of the restored river – which runs from Maastricht to Roosteren – is like being in a time capsule. Some of the older sections of the project, further upstream, are already thronging with life. Borgharen, an area which has been farmed since at least Roman times, was one of the first sites to be let go. Dozens of sand martens are speeding into the cliff by the river to feed their chicks; there are blackcaps, stonechats, skylarks and swallows in the sky.

The river shape-shifts as it winds through the landscape. It is home to otters and beavers, and wolves – which are successfully spreading through the Netherlands – are believed to be watching the valley and could move in. Free-roaming animals such as galloway cows and konik horses (whose carcasses are sold as wild meat) graze along the banks. It is a reminder that nature isn't picky – it will move into an old construction site and quickly transform it into something beautiful. People are free to walk the length of the river along a tangle of footpaths.



Free-roaming konik horses graze along the bank of the Meuse River

Schepers believes radical river restoration projects should be taken more seriously. “People are not used to looking at green infrastructure in the way they look at other “hard” infrastructure like roads, railways and waterways. But this [type of project] is also for the common good,” he says.

Crisis point in the Netherlands arrived decades ago after a series of destructive floods in the 80s and 90s. Dead pigs were found stuck in trees as livestock that couldn't be moved away fast enough drowned in high waters. Thriving fishing communities had died out and rivers had become a threat to people. Momentum to radically overhaul them started building. The planning phase for the Border Meuse began in 1990, with work starting in 2007 and due to finish in 2027.



Frans Schepers, left, and Mykhailo Nesterenko of Rewilding Europe. They are standing by the Meuse River, which flooded badly before the restoration project

Rivers **should be biodiversity hotspots** but all over the world they are being damaged by human activity and slurry and pesticides runoff from farms. A key part of Border Meuse has been separating nature and agriculture by buying out farms along two river catchments and returning them to a natural state. Some farmers opposed being moved, but most were struggling to farm because of the flooding and were generously compensated. Farmers have moved away from hundreds of kilometres of Dutch rivers where flood protection and ecological restoration are priorities, says Schepers.

**The €550m project** is being paid for mainly by companies wanting to extract sand and gravel from the riverbed, which has helped widen the river and lower riverbanks and so expand the floodplain. Because of the involvement of industry, Border Meuse was the only large river restoration project that wasn't withdrawn during the 2008 financial crash. Today, **it attracts two million visitors a year**, bringing in about €1bn of revenue to the Meuse region.

**People talk about this as a new wilderness. But every square metre comes from the design table**

**Wouter Helmer, Rewilding Europe**

The system is designed to cope with a one in 250 year flood event. During serious floods in the Meuse basin in July 2021, all villages remained safe and dry, suggesting the project has already been successful.

“When we started designing this, people were completely unaware of what a river should look like,” says Schepers. “Everyone knows how beautiful French rivers are with these islands and beautiful forests, so a bunch of us took the politicians, decision makers and CEOs to the Allier River in France ... This river is quite similar to the Meuse, so we could see how this area might look in 30 years’ time.”



Over a 30-year period, beaver, otter and sturgeon have been reintroduced as part of the Gelderse Poort restoration project

Wouter Helmer, co-founder of **Rewilding** Europe shows me around a similar river restoration project called Gelderse Poort, which started in 1989 and has had impressive results. Over 30 years, restructuring the river has resulted in a rewilding floodplain of 5,000 hectares with dozens of dams removed and 50 homes relocated, including 10 farms.

Tens of thousands of kilometres of fences were removed, beaver, otter and sturgeon were reintroduced and rewilded land now runs alongside the river, where people are free to walk, cycle and sunbathe. “Sometimes people talk

about this as a new wilderness. But I always say no, this is actually a cultural landscape. Every square metre comes from the design table,” says Helmer.



Wouter Helmer, co-founder of Rewilding Europe

Since Rewilding Europe was founded, its projects have stretched across the continent, from Spain to Italy, Bulgaria to Sweden and the charity was recently been awarded **a grant of £4.1m** to scale up its work.

Dutch rewilding is often associated with **Oostvaardersplassen** – a controversial project created on land reclaimed from the sea which saw many animals starve to death. But these two river projects were the seed that encouraged Rewilding Europe to try to combat decades of managed decline caused by the failure of conventional conservation methods. They are also key parts of the **Delta programme** for Dutch rivers, a huge government initiative to reduce flood risk on Dutch rivers, rewild them and improve access for people.



The rewilding area next to the river Waal, Nijmegen, the Netherlands

In the UK, farming is the most significant source of water pollution, according to **government data**. Chicken and dairy manure washing into rivers has left some catchments in a **critical condition**. In April, the number of violations of farm pollution laws hit a record high, **according to a report** looking at breaches between 2021 and 2022.

But Helmer sees no reason why the UK couldn't copy the Dutch model. "We're close, the Dutch and British, in terms of how we think about the world. Most people following rewilding are from the UK, and that is where most of the questions are coming from," he says.

Schepers agrees. "It seems like it's a taboo in the UK to buy out a farmer, but here along the Border Meuse it has not been," he says. "I don't understand why you wouldn't pay to deal with flooding – you would pay for them to move if you were building roads or a town. Huge areas of the Netherlands are very productive for agricultural production, but to farm areas like this? It doesn't make any sense."



### 'We make nature here': pioneering Dutch project repairs image after outcry over starving animals

According to the **Rivers** Trust, paying farmers to move away from rivers would not be an approach that would work in the UK. "In Europe, they have much more of a top-down approach. In the UK, land ownership is very complex and generally that is not how we would do it," says the Trust's Dan Turner. "We tend to take a much more bottom-up approach and look to incentivise landowners and farmers by working collaboratively."

The Rivers Trust works with farmers to create landscapes such as wetlands and riparian forests in the floodplain. Turner believes educating farmers and communities, rather than compulsory purchase, leads to longer-term change, because everybody is invested in looking after the river.

Helmer says the Gelderse Poort project saw the loss of 30 agricultural jobs but 200 jobs have been gained in tourism and recreation. As well as creating new wild spaces for nature, the project has proved economically valuable: real estate value increased more than 10% faster than elsewhere in the country. The city where it all started, Nijmegen, was recently named **Green Capital of Europe**. "No one is complaining," he says.



The rewilded area next to the Waal River in the city of Nijmegen, which was recently named Green Capital of Europe

Helmer's proudest moment was seeing thousands of students enjoying the new beach-like river banks. "I know how good it is for biodiversity, but for 99% of people that is not at the forefront of their minds. In the end it is all about people. If they like it, there is no turning back."