



# BROUGHTON HALL - FLOOD MITIGATION AND WILDLIFE MANAGEMENT

› **Location:**  
Broughton Hall

› **Client:**  
Scurrah Associates

## SERVICES



**Vegetation Management**



**Ecology**



**Landscaping**

## OVERVIEW

Broughton Hall Estate is set within the beautiful Yorkshire Dales in Skipton. It boasts 3,000 acres of wondrous mixes of rolling meadow pastures, ancient woodland, heather moorland, wild reservoirs, and meandering rivers.

The estate has initiated a nature recovery programme, with their rewilding project at the forefront of the programme. On the completion of the initial ground preparation and planting phases by Scurrah Associates, ATM were tasked with restoring water courses for natural flood mitigation measures and wildlife management. Our works on site included the creation of 119 leaky dams, 440 metres of deculverting, and three gully-blocking dams.



## CHALLENGE

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The project has overseen the transformation of approximately one third of the land to a much wilder state, kickstarted with new woodland creation on 180 ha of former agricultural grazing land.

As well as aiming to increase biodiversity and health and wellbeing opportunities for people, this nature recovery will also deliver a wide range of other benefits to society, known as “ecosystem services”. Through this project, Broughton Hall Estate is also helping to grow White Rose Forest, the community forest in North and West Yorkshire, and the larger Northern Forest, which will stretch from Merseyside to the Yorkshire coast.



The estate also aims to carry out work to reduce flood risk downstream, improve water quality in our rivers and streams, and lock up carbon.

## OUR SOLUTION

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This is all being achieved through the creation and restoration of wetland habitats, and sensitive woodland management. We completed this via:

**Leaky Dams:** We utilised the natural material available at each site to create the leaky dams. They were set out 50 metres apart, utilising existing trees where possible. Once suitable strainers and cross braces were in place, smaller materials such as brush and leaf litter were placed behind the dam, upstream, to start creating the blockage.

**De-Culverting:** Due to the area’s naturally wet nature, ground mats were used to create a trackway so that water drains away as it works. Operatives strimmed the area to identify the line and reduce vegetation to allow water to naturally flow over the top.

**Gully blocking:** Gully blocking was required on the moorland to construct three earth bunds across the narrower points of the gully. Vegetation was moved and set aside for reinstatement, with locally sourced timber at the base of the bunds to block the drain. Utilising the natural undulations of the land, our operators dug access into the area by levelling the ground. Once in position, the large larch logs extracted from Yellison Wood were laid across and positioned using the timber grab fitted to the 8-tonne excavator. Upon completion, access and egress tracks were reinstated.

