

Cynllun Dalgylch Yr Afon Eden Catchment Project

Lead organisation: Snowdonia
National Park Authority SNPA

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Grant Award: £815,444

Location: Eden Valley, Gwynedd

A farmer led project centred on improving ecosystem resilience of the Afon Eden and its tributaries at catchment scale, improving water quality and restoring habitats.

A group of 19 farm businesses and landowners in this area of special conservation collaborated on the project and with the help and support of SNPA they undertook a range of measures to tackle agricultural pollution and to improve ecosystem resilience across the landscape. Through implementing nature based solutions and a host of on-farm capital works all aimed at improving the water quality of the river catchment with a focus on the management of the endangered freshwater pearl mussel which is found in the area.

Collaborative working allowed for strategic interventions to be implemented at scale such as planting and managing native deciduous trees, restoring natural habitats and looking at erosion prevention aimed at improving biodiversity across the catchment. Replacing aging infrastructure, restoring coniferous 'shelter belts' to native woodland, and improving riparian habitats along the Afon Eden and its tributaries have been all been carried out.

Another key element the project was to develop the existing local tree nursery at Plas Tan-y-Bwlch in order to be able to provide quality native trees of local provenance to landowners as part of this project, and to others throughout the National Park.

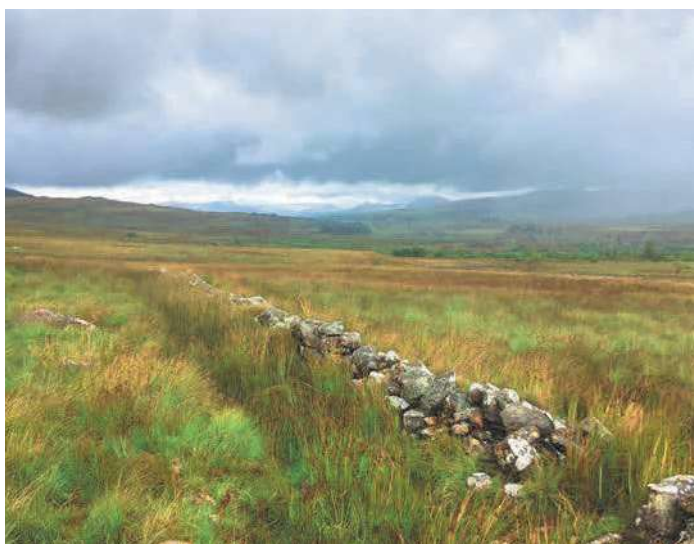


The project looked at further issues within the wider catchment and worked in partnership with the relevant authorities to address them. This led to the construction of a new bridge over the Afon Eden in place of an existing ford that had regular vehicle crossings, this infrastructure reduced the impact and water quality of the Eden.

The project also looked at ways to improve the design of the commercial plantations in the area and surrounding habitats and planned their removal in peatland areas and where appropriate allowing natural regeneration and planting with native trees.

Plans were made for looking at the feasibility of creating a multi-user path linking the community of Trawsfynydd with the nationally renowned mountain bike centre at Coed-y-Brenin to improve the visitor experience and recognise the outdoor recreation and tourism that the area offers.

The project have raised awareness amongst the local and wider community, providing ample opportunities for volunteering and learning; engaging the local community. The project has also offered work experience and internships allowing individuals to develop their skills for a career in the sector whilst contributing positively to the objectives of the project.



Habitat Restoration: Historic traditional boundaries, with over 7km of hedgerows planted and 3.5km of linear dry-stone walling completed

Training & Job Creation: Landowners and project staff undertook various training courses, including emergency first aid, project management, horticulture, brush cutter, wood chipper, chainsaw and pesticide use

Habitat restoration: Significant conifer clearance has been completed in afforested peatland areas. Unwanted conifer regeneration, in an approximate area of over 120ha has been cleared; with native natural regeneration encouraged

Natural Flood Risk Management: Approximately 1-1.5km of artificial drainage grip blocking has been completed

Training & Job Creation: Full-time Project Officer post created with 3 people for work placement, 2 of whom have gone on to fill other roles in SNPA, transferring their skills and knowledge

Volunteer Programmes: Volunteer days with the Snowdonia Society held through the SMS Eden's on-farm works scheme, during which volunteers planted 800 native trees

Increased access to outdoor spaces: For walkers, infrastructure and open access improved; bridges and footpaths upgraded with signage and education boards linking to the existing cycle and footpaths

Reducing Agricultural Pollution: Implementing sustainable infrastructure such as the low-level crossing constructed, improving a heavily used ford used by vehicles therefore reducing the pollution risk and disturbance to the river ecosystem and the construction of a settlement pond to intercept any sedimentation and associated pollutants before they reached the Eden

Woodland Management & Planting: Development of Snowdonia's tree nursery, allowing trees to be home grown and resilient to their environment, new polytunnels, equipment and training of staff in horticulture

Knowledge Transfer & Innovation (KT&I): Several feasibility studies carried out and Forest Resource Plans have all been completed and shared with relevant stakeholders

Woodland Management & Planting: 113ha of woodland management, 15ha of new tree planting as well as a further 19ha of natural woodland regeneration

Habitat Restoration: 0.6km of sensitive river restoration work completed, utilising innovative methods including boulder replacement, work gravel seeding and large woody material introduction

Volunteer Programmes: training and volunteer days held in order to engage new interest in sustainable land management and natural resources

Building Collaborations & Partnerships: Engaged with 120 stakeholders through a range of stakeholder engagement activities

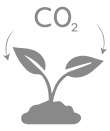
Community Engagement: Through contracted work the project has supported 89 different businesses, 90% of which were locally based. In this way it has contributed over £600,000 to the local economy and the local community

Sustainable Grazing: Introduced cattle to graze dense Molinia dominated areas, with infrastructure implemented to support the habitats while cattle graze

Educational Programmes: Through a Moorland Indicators of Climate Change Initiative (MICCI), 3 schools have been involved in various engagement activities, including environmental monitoring fieldwork and sustainable craft activities

Knowledge Transfer & Innovation (KT&I): The project has hosted site visits for students from University College London and has had representatives at local agricultural shows, in order to raise awareness of the work being conducted. Additionally it has held a project open day where stakeholders were updated on the progress achieved and site visits were conducted across the catchment

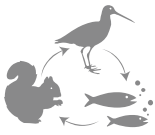
Building collaborations & partnerships: Partnership of 19 local farm businesses and landowners, SNPA, NRW and eNGO's coming together to work collaboratively to achieve multiple goals and benefits



Carbon Sequestration – supported by hedgerow planting, conifer clearance on peatland, grip blocking, tree planting, habitat and river restoration, woodland management and regeneration at catchment scale.



Climate Change Adaptation – supported by sustainable grazing, conifer clearance on peatland, grip blocking, tree planting, habitat and river restoration, woodland management and regeneration at catchment scale, development of tree nursery, horticulture training.



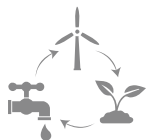
Enhanced Biodiversity – supported by hedgerow planting, conifer clearance on peatland, tree planting, infrastructure, habitat restoration, river restoration, woodland management and regeneration, sustainable grazing all at catchment scale.



Ecosystem Resilience – supported by hedgerow planting, conifer clearance on peatland, tree planting, infrastructure, habitat restoration, river bank restoration, woodland management and regeneration, sustainable grazing all at catchment scale.



Reduced Flood Risk – supported by drainage grip blocking, peatland restoration, creation of a low level crossing and settlement pond and river restoration work.



Soil, Air & Water Quality – supported by hedgerow planting, conifer clearance on peatland, tree planting, infrastructure, habitat restoration, river bank restoration, woodland management and regeneration, sustainable grazing all at catchment scale.



Health & Wellbeing – improvement of open access and outdoor recreation, cycle routes and footpaths and school engagement activities supported by training courses on first aid and safe use of equipment. Volunteer days and training and community engagement activities.



Community Cohesion – supported by training courses, creation of full time and work placement roles. Volunteer days, feasibility studies conducted and shared with stakeholders. Butterfly conservation training days, stakeholder engagement activities, contracting work with local businesses, school engagement activities and a project open day.



Rural Skills & Heritage – supported by hedge laying, dry-stone walling, training courses and woodland management. Volunteer days focused on native tree planting, development of Snowdonia's tree nursery, conservation training days, contracting work with local businesses, utilising sustainable grazing techniques and school engagement activities and education.



Development of Skills Capacity & Expertise – supported by training courses, creation of full time and work placement roles. Volunteer training, feasibility studies conducted and shared with stakeholders, site visits from UCL and a project open days.

Get Involved – If you would like to learn more or get involved in the work being done by Snowdonia National Park you can find more information at: