



Clwydian Range and Dee Valley National Landscape

Moorland and Wildfire Partnership Moorland Officer Delivery Report September 2023 – March 2026

Prepared by:

Jack Parry

Moorland Field Officer



1. Executive Summary

This report outlines the delivery and impact of the Denbighshire Moorland and Wildfire Partnership between September 2023 and March 2026. Jointly funded by Natural Resources Wales (NRW) and Denbighshire County Council (DCC), the partnership was established to improve the condition of Denbighshire's uplands, reduce wildfire risk and coordinate action across multiple organisations and stakeholders.

Over the reporting period, the partnership has delivered a wide range of practical outcomes across the Clwydian Range and South Clwyd and Berwyn SAC. This has included large-scale habitat management, peatland restoration projects, fuel-load reduction works, public engagement campaigns, wildfire planning and the development of stronger partnerships between land managers, conservation organisations and emergency services.

Key achievements include:

- 1265Ha Delivery of habitat restoration projects across priority upland SAC and SSSI sites.
- 6.3Km of Hydrological interventions installed for peatland restoration as well as 2050Ha of Upland habitat surveyed for deep peat
- Securing and coordinating over £500,000 of external funding through programmes including NPAP, SLSP and LEI.
- Reducing wildfire risk through habitat management, wildfire planning, public engagement and multi-agency training.
- Maintaining and strengthening a multi-agency partnership involving NRW, North Wales Fire and Rescue Service, RSPB, Cadw and North Wales Councils Regional Emergency Planning Service.
- Development of GIS-based wildfire risk mapping and site-specific wildfire response plans.
- Improved understanding of habitat condition, wildfire risk and ecological trends through monitoring and survey work.

The partnership has helped move the management of our uplands from a largely reactive approach towards one that is increasingly proactive, with management decisions informed by monitoring, practical experience and partnership working.

2. Introduction

The partnership was established following the 2018 wildfire on Llantysilio Mountain, which highlighted both the vulnerability of our upland landscapes and the need for a more coordinated approach to their management. Since then, Natural Resources Wales (NRW) and Denbighshire County Council (DCC) have worked together to develop a partnership focused on reducing wildfire risk, improving habitat condition and supporting the long-term resilience of the uplands.

The partnership recognises that many of the challenges facing the uplands cannot be addressed by a single organisation acting alone. Effective management requires collaboration between landowners, graziers, conservation organisations, emergency services and public bodies. The partnership was established to help bring these groups together, coordinate activity and develop practical solutions to shared challenges.

The core objectives of the partnership are to:

- Reduce the risk and impact of wildfires.
- Improve upland habitat condition and biodiversity.
- Support and coordinate sustainable land management.
- Develop and deliver restoration and management projects.
- Strengthen partnership working across organisations and communities.

This report summarises the work delivered between September 2023 and March 2026 and demonstrates how the partnership has contributed towards these objectives. It highlights the practical work undertaken on the ground, the partnerships developed, the funding secured and the longer-term outcomes being achieved across the uplands of Denbighshire and the Clwydian Range and Dee Valley National Landscape.

3. Delivery Against Agreed Objectives

3.1 Llantysilio Restoration

Significant progress has been made in recovering habitats impacted by the 2018 wildfire through a programme of habitat restoration and fuel-load management delivered in partnership with NRW, common graziers, landowners and local contractors.

- Delivery of heather management, gorse control and conifer removal over 579Ha of upland habitat through S16 agreements and LEI funding.
- Continued fuel-load management and habitat recovery work in previously burned areas.
- Engagement with common graziers to identify priority areas for management, ensuring works complement traditional grazing practices and support the long-term sustainability of the common.
- Working with local contractors to deliver practical habitat management works, providing value within the local rural economy while ensuring specialist knowledge and machinery are available to undertake works safely and effectively.
- Targeted management to reopen overgrown access routes and grazing areas, improving sheep movement across the hill and encouraging more effective livestock grazing.

The approach has helped to balance habitat restoration, wildfire risk reduction and agricultural interests. By reducing dense stands of mature heather, gorse and scrub, the project has helped create a more varied vegetation structure, reducing fuel continuity while improving habitat diversity. Re-establishing access for grazing has further supported vegetation management by enabling livestock to utilise areas that had become increasingly difficult to reach. Together, these interventions have supported ongoing vegetation recovery, improved habitat resilience and contributed to a more sustainable long-term management framework for Llantysilio Mountain.

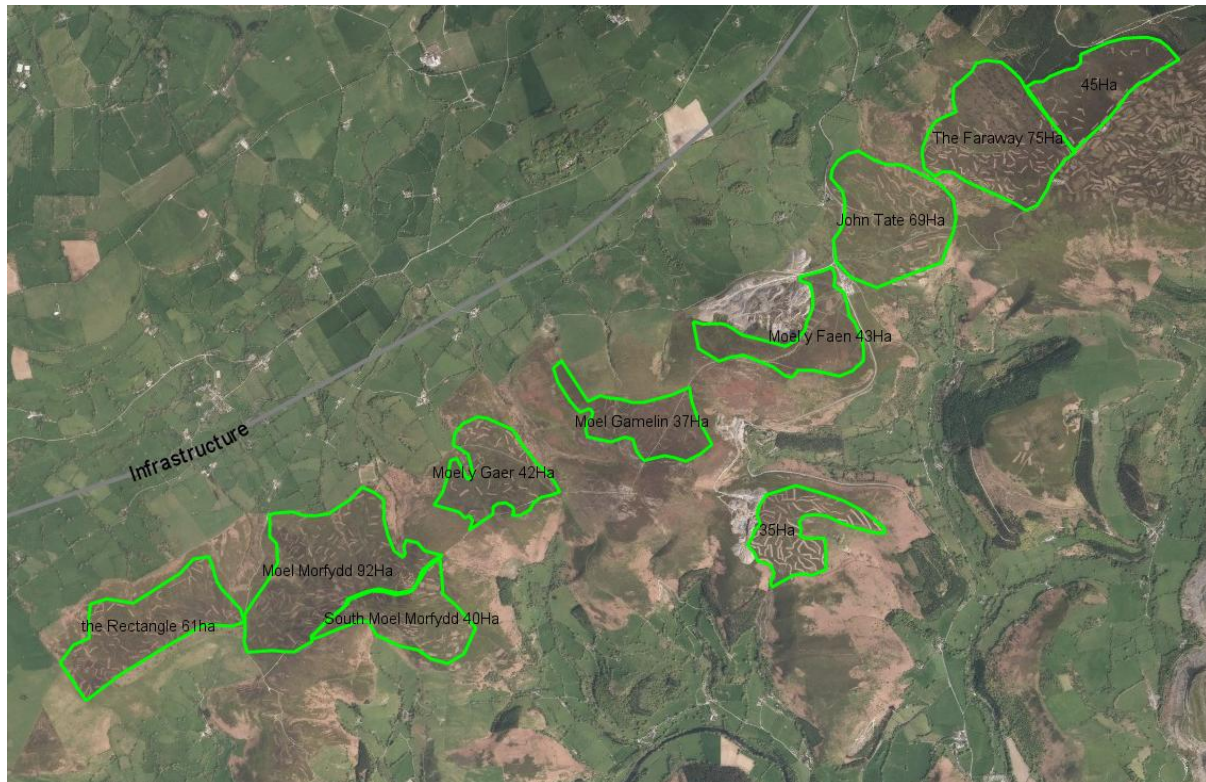


Figure 1. Map Showing heather management areas on Llantysilio Mountain

3.2 Fire Risk Reduction and Management

Reducing wildfire risk across the National Landscape has been a core focus of the Denbighshire Moorland and Wildfire Partnership. This has been achieved through a combination of practical habitat management, improved preparedness, public engagement, partnership working and the development of new tools to better understand wildfire risk across the uplands.

Practical fuel-load reduction has been delivered across multiple sites through heather management, bracken control, gorse cutting and conifer removal programmes. These works have been targeted at areas considered to present an elevated wildfire risk, whilst also improving habitat condition for upland wildlife and supporting sustainable grazing management.

A significant achievement has been the development of a GIS-based Wildfire Risk Mapping Tool. The tool assesses areas of moorland based on a range of factors including vegetation type, fuel

height, fuel continuity, topography and visitor pressure. Individual areas are then assigned a wildfire risk rating ranging from Very Low to Very High. This provides an evidence-based approach to identifying priority sites for future management works and allows resources to be targeted where they will deliver the greatest reduction in wildfire risk. Survey work is ongoing across the South Clwyd and Berwyn Mountains SAC and the Clwydian Range to populate the tool and improve our understanding of wildfire risk at a landscape scale.

Alongside the risk mapping work, site-specific Wildfire Response Plans are being developed in partnership with North Wales Fire and Rescue Service (NWFRS) and NRW. These plans are designed to support both operational response and decision making during wildfire incidents. Each plan includes access routes, land ownership and emergency contact details, water supplies, rendezvous points, critical infrastructure and other operationally important information. Sensitive environmental and heritage assets, including protected species interests and scheduled monuments, are also identified alongside known hazards and risks to firefighting crews. The plans aim to ensure that all responding organisations are working from the same up to date information.

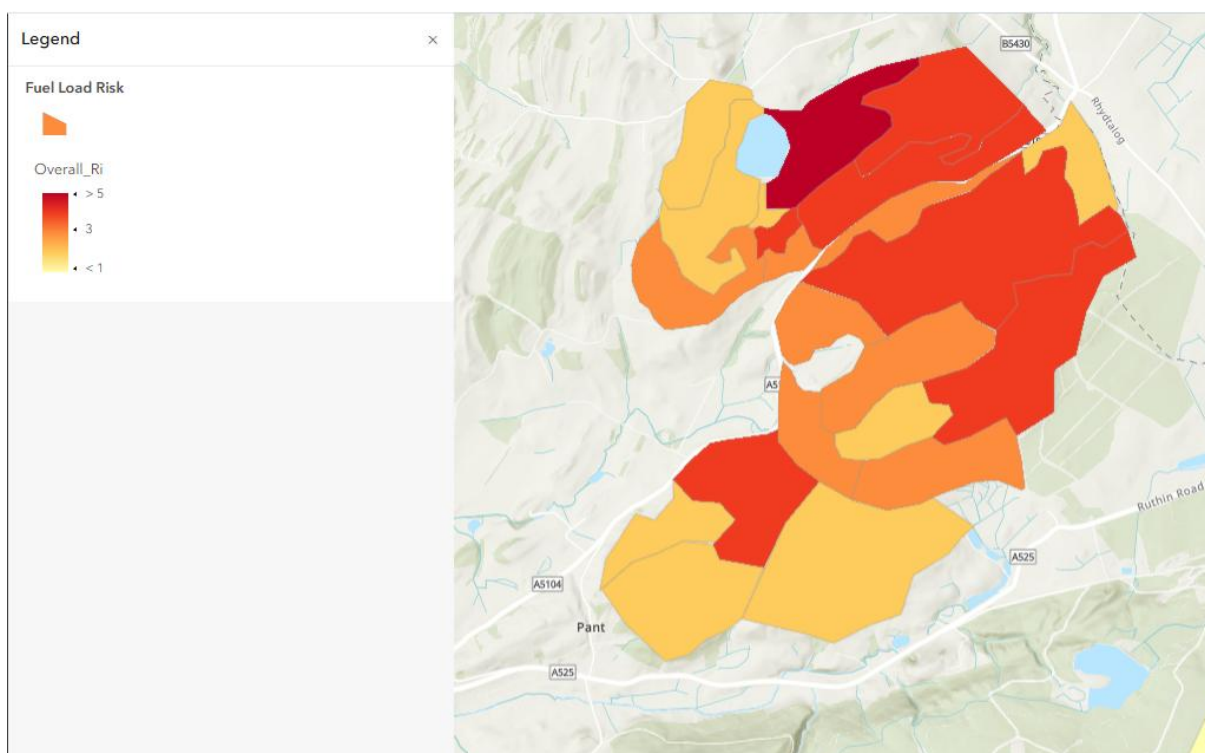


Figure 2. Fuel load risk assessment map

Public awareness and prevention activities have formed an important part of the project. Wildfire warning signage has been installed at key locations across the National Landscape, supported by seasonal social media campaigns and engagement activities aimed at increasing public understanding of wildfire risk on sensitive upland sites. Joint awareness days have also been delivered with NWFRS, including public engagement events at key visitor locations such as Horseshoe Falls. These events provide opportunities to engage directly with visitors, promote responsible behaviour and reduce the likelihood of wildfire incidents occurring.

The partnership has also worked closely with NWFRS to improve preparedness and build operational relationships. Tactical wildfire training exercises have been delivered at Moel Famau Country Park, bringing together Fire Service personnel, National Landscape Rangers and other partners. These exercises have focused on wildfire behaviour, suppression tactics, controlled burning techniques, use of specialist equipment and multi-agency coordination. Importantly, they have strengthened working relationships between organisations and improved understanding of each partner's capabilities during an incident.

The benefits of this work were demonstrated during the Moel Fferna wildfire in March 2025. The incident burned approximately 350 hectares over a four-day period and presented significant challenges due to difficult terrain, restricted access and the limited number of existing firebreaks within the area. The response involved close coordination between North Wales Fire and Rescue Service, the Clwydian Range and Dee Valley National Landscape Ranger Service, NRW, Rhug Estate, local graziers and contractors. Actions included early reporting and assessment of the incident, deployment of National Landscape Ranger service, establishment of control lines, contractor support for emergency firebreaks, drone assistance and the use of helicopter support to suppress the fire.

The incident highlighted the value of the partnership approach that has been established. Effective multi-agency coordination, improved communication channels, strong local knowledge and pre-existing working relationships were all critical in bringing the fire under control. Lessons learned from the incident are now helping to inform the ongoing development of wildfire risk assessments, response plans and future management priorities across the National Landscape.



Figure 3. Tactical Wildfire training day at Moel Famau CP

3.3 Habitat Management and Restoration

A significant programme of habitat management and restoration has been delivered across the National Landscape, working closely with landowners, common graziers, NRW, RSPB and local contractors. The focus has been on improving the condition of upland habitats through practical management interventions that benefit biodiversity, support sustainable farming practices and increase the resilience of the landscape to future environmental pressures.

Annual programmes of heather management have been undertaken across the Clwydian Range, Llandegla Moor and Llantysilio Mountain. This work has aimed to create a more diverse vegetation structure by managing areas of dense mature heather and encouraging a varied mosaic of age classes. In total over 1000 hectares of heathland habitat have been improved through rotational cutting and other management techniques. In more challenging terrain, specialist equipment including alpine tractors and remote-controlled Roboflails have been used to access steep and difficult-to-reach areas.

Alongside heathland management, extensive programmes of bracken, gorse and invasive conifer control have been undertaken. These works have helped prevent the loss of valuable heathland habitat, improved access for livestock and reduced competition with important upland plant communities. A particular emphasis has been placed on supporting common graziers by reopening areas that had become increasingly difficult to access, helping livestock to better utilise the hill and contributing to more effective grazing.

The project has also worked to address wider pressures affecting upland habitats. This has included managing areas affected by illegal off-roading and anti-social behaviour working with partners to reduce impacts on designated landscapes and protected habitats. At Ruabon Moor, works have included ditch reinstatement, stone revetments, managing parking pressures to reduce damage to the moorland.



Figure 4. Local contractor carrying out heather management

3.4 Peatland Restoration and Monitoring

Peatland restoration has become a major area of work within the partnership, with a focus on developing a robust evidence base, identifying restoration opportunities and securing funding to deliver landscape-scale improvements. Working closely with NRW, the National Peatland Action Programme (NPAP), RSPB, landowners and graziers, a structured approach has been developed to ensure restoration activity is targeted at the most suitable and beneficial locations.

An initial NPAP Development Grant enabled a comprehensive programme of survey work across four priority upland sites; Llandegla Moor, Llantysilio Mountain, Cynr y Brain and Moel Fferna. This work included the survey of over 2,000 hectares of upland habitat, the collection of more than 2,000 peat depth measurements and extensive aerial mapping using drone technology. Orthomosaic imagery, digital surface models and peat depth data have allowed a greater understanding of peat resources within the National Landscape and identified areas of degradation, erosion and restoration potential.

The information gathered has been used to develop peatland restoration plans, providing an evidence base for future investment and ensuring that restoration activity can be prioritised effectively. The surveys have also helped identify previously unmapped peat resources and improved understanding of the relationship between hydrology, vegetation condition and wider habitat management objectives.

Building on this work, the project has successfully secured significant peatland funding through the National Peatland Action Programme, enabling practical restoration works to be delivered across several sites. Restoration measures have focused on restoring natural hydrological processes through interventions such as ditch blocking, contour bunding and rewetting. These techniques help retain water within the peat body, slow surface water movement and create the conditions needed for long-term peatland recovery. The work also complements wider objectives around wildfire resilience, as wetter and healthier peatlands are generally less susceptible to sustained deep-burning wildfire events.

During the reporting period, restoration works have been delivered at Llandegla Moor, Dolydd Moor and Ruabon Moor. Across these sites, over 6.3 kilometres of hydrological restoration measures have been installed, helping to restore degraded peatland systems and reduce ongoing erosion. In addition, extensive programmes of conifer removal have been undertaken where self-seeded trees were negatively affecting peatland condition by drying out peat soils and altering hydrological function.

The partnership's success in developing and delivering peatland restoration projects has resulted in the securing of a £150,000 NPAP capital programme between 2025 and 2028, together with a further £30,000 development grant to continue survey and planning work across additional upland areas. This demonstrates the capacity that has been developed through the Partnership to identify, develop and deliver peatland restoration projects.



Figure 5. Contour Bunding at Llandegla Moor SSSI

3.5 Supporting S16 Management Agreements

The Moorland Officer has acted as an important link between NRW, landowners and common graziers in supporting the delivery of Section 16 Management Agreements across designated upland sites. Regular engagement with land managers has helped explain management objectives, identify practical opportunities and overcome barriers to delivery.

The role has coordinated habitat management works funded through S16 agreements, including heather management, gorse control, bracken management and wider habitat restoration activities. This has ensured works are delivered efficiently whilst remaining aligned with both conservation objectives and farming requirements.

By providing a point of contact and maintaining strong relationships with landowners and graziers, the role has helped facilitate more effective communication between NRW and land managers, leading to improved delivery of management agreements and positive outcomes on designated sites.

3.6 Partnership Working and Governance

The Moorland Officer has been central to establishing and coordinating the Denbighshire Moorland and Wildfire Partnership throughout the funding period. The Partnership has met on a quarterly basis, bringing together key organisations involved in upland management, conservation and wildfire response. Meetings have been chaired by Denbighshire County Council, the Moorland Officer has been responsible for the coordination of the Partnership, including organising meeting dates and venues, preparing and circulating agendas, managing communications between partners, recording minutes, tracking actions and providing regular project updates and progress reports. This coordination has ensured the Partnership has remained active and focused on delivery throughout the project period.

The Partnership has provided a valuable forum for sharing information, coordinating work programmes and identifying opportunities for collaboration. During the current agreement period, membership has expanded beyond the original partners, with RSPB, Cadw and the North Wales Councils Regional Emergency Planning Service joining the group. This has strengthened the Partnership's expertise and improved links between conservation, heritage protection, land management and emergency planning.

3.7 Engagement

Significant work has been undertaken to improve awareness of wildfire risk and promote responsible management and use of the uplands. This has included engagement with local communities, farmers, graziers, visitors and partner organisations to help build a better understanding of the relationship between land management, biodiversity and wildfire resilience.

A programme of public awareness campaigns has been delivered in partnership with North Wales Fire and Rescue Service, including joint engagement days at key visitor locations, seasonal social media campaigns and the installation of wildfire awareness signage at high-risk sites. These activities have focused on reducing the risk of accidental fires, promoting responsible behaviour in the countryside and increasing awareness of the impacts wildfire can have on wildlife, habitats, farming businesses and emergency services.



Figure 6. Joint Operation day with NWFRS at Horseshoe Falls

Regular engagement with farmers, common graziers and landowners has also been an important aspect of the project. Through site visits, meetings and practical project delivery, the project has promoted best practice in upland management, encouraged collaboration between land managers and provided opportunities to discuss issues such as grazing management, fuel-load reduction, habitat restoration and wildfire prevention.

This work has helped raise awareness of wildfire risk, promote responsible access and strengthen relationships with those who live, work and visit the uplands.

The effectiveness of this collaborative approach was recognised in 2025 when the Clwydian Range and Dee Valley National Landscape and its partners received the North Wales Fire and Rescue Service Community Safety Partner Award, recognising the partnership's contribution to wildfire prevention, public engagement and community safety.



Figure 7. NWFRS Community Partner Safety Award

3.8 Funding

A key outcome of the Moorland Officer role has been the ability to identify, develop and secure external funding to support habitat restoration, wildfire resilience and sustainable upland management across the National Landscape. By working closely with partners, landowners and funding bodies, the role has helped bring significant additional investment into the area that would otherwise have been difficult to coordinate and deliver.

Between 2023 and 2026, the project has successfully secured and delivered approximately:

£230,000	National Peatland Action Program (NPAP)	Peatland restoration, survey work and capital delivery
£85,000	National Grid Landscape Enhancement Initiative (LEI)	Habitat improvement and fuel-load management works.
£160,000	Welsh Government Sustainable Landscapes, Sustainable Places (SLSP)	Upland habitat management and restoration.
£30,000	Additional Small Grants	Support specific management, survey and restoration projects.
£505,000	TOTAL	

In total, this represents over £500,000 of external investment secured and coordinated during the current funding period, significantly increasing the scale and impact of work delivered across the National Landscape.

The Partnership is also leading the development of the National Lottery Heritage Fund (NLHF) Landscape Connections Project, a landscape-scale initiative with the potential to attract investment of up to £10 million over a ten-year period. If successful, this project will build upon the foundations established through the Moorland and Wildfire Partnership and further strengthen the long term resilience of the uplands.

In addition to direct financial investment, the Denbighshire Moorland and Wildfire Partnership has also been able to facilitate significant support from partner organisations, staff and volunteers. This has included assistance from the wider National Landscape Ranger Service to deliver habitat management works, public engagement campaigns and support during wildfire incidents. The project has also benefited from volunteer involvement through practical conservation work across the uplands and the National Landscape Volunteer Ranger programme. Volunteer Rangers regularly patrol key visitor sites during busy periods, undertaking litter picking, promoting responsible access, providing wildfire awareness messages and acting as additional eyes and ears on the hill, reporting issues and helping partners respond to problems.



Figure 8. Volunteer Rangers on patrol

3.9 Monitoring

Monitoring and survey work has become an increasingly important part of the Partnership, helping to build a much better understanding of habitat condition, wildfire risk and the effectiveness of management interventions across the uplands. This information is helping ensure that future management work is targeted where it is needed most and that funding applications and management decisions are supported by robust evidence.

During the funding period, a wide range of survey work has been undertaken across the National Landscape, including Phase 1 Habitat Surveys, National Vegetation Classification (NVC) surveys, peat depth surveys, peatland condition assessments, drone mapping and wildfire fuel-load assessments. Together, these surveys have significantly improved our understanding of upland habitats and identified priorities for future management and restoration work.

Particular progress has been made with the development of GIS-based wildfire fuel-load risk assessments. These assessments combine information on fuel type, vegetation height, fuel continuity and visitor pressure to identify and map areas of differing wildfire risk across the uplands. This work is helping to prioritise future management works and improve wildfire planning

Species monitoring also continues to play an important role. Annual Black Grouse surveys undertaken in partnership with NRW, RSPB, staff and volunteers indicate generally stable populations across much of the project area, with Llantysilio recording some of its highest counts since the 2018 wildfire. In addition, Curlew monitoring is being undertaken across the Clwydian Range and Dee Valley through the Curlew Connections Cymru project.

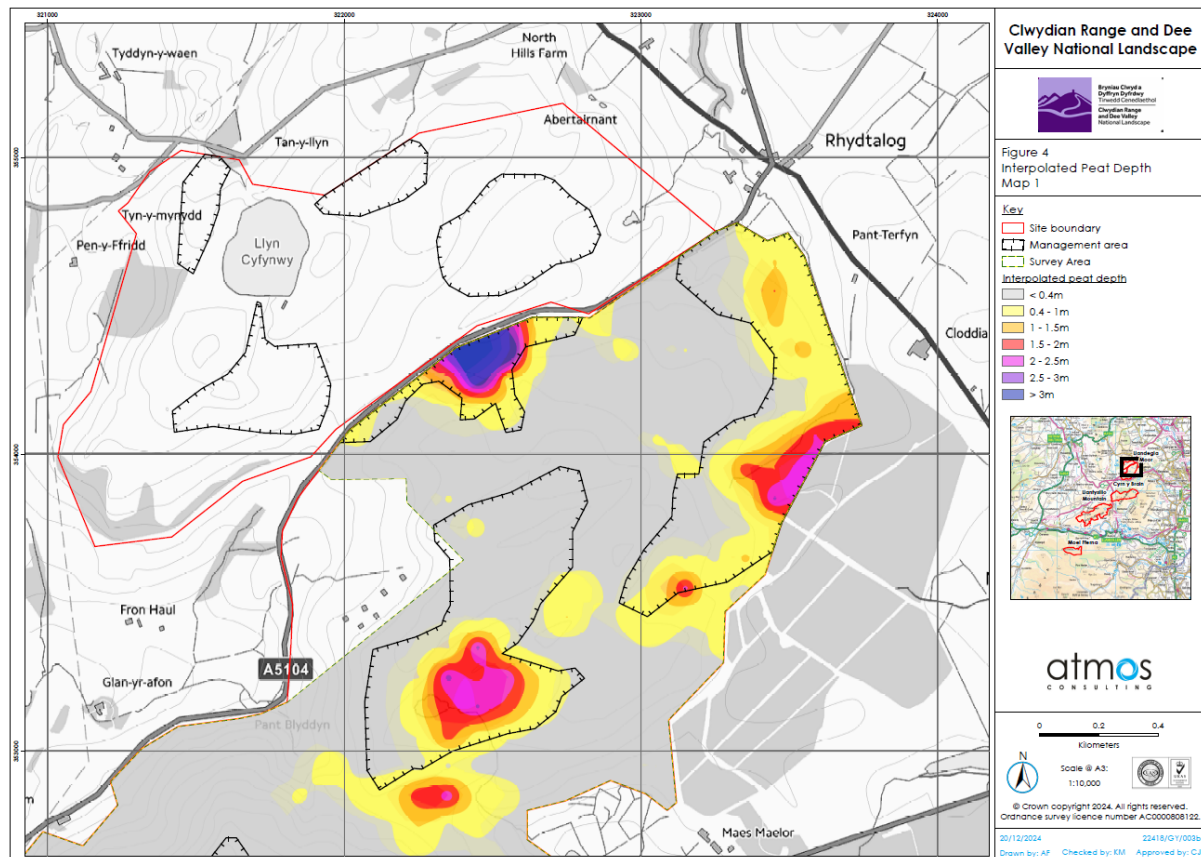


Figure 9. Peat depth map at Llandegla Moor SSSI

4. Project Outputs

	Activity	Total 2023-2026	Key Sites / Additional Info
Habitat and Fuel Load Management	Heather and Gorse Management	580Ha	Llantysilio SSSI
	Heather and Gorse Management	255Ha	Clwydian Range
	Heather and Gorse Management	350Ha	Llandegla Moor SSSI
	Invasive Conifer Control	10Ha	Ruabon Moor
	Invasive Conifer Removal	68Ha	Llandegla Moor
	Invasive Conifer Control	12Ha	Clwydian Range
Peatland Restoration	Orthomosaic and Digital Surface Model Surveys	2050Ha	Llandegla Moor, North Berwyn, Llantysilio and Ruabon Moor
	Upland Habitat peat probed	2050Ha	Llandegla Moor, North Berwyn, Llantysilio and Ruabon Moor
	Hydrological Works (Ditch Blocking and Contour Bunding)	6300m	Llandegla Moor, North Berwyn
	Restoration Plans Produced	4	Llandegla Moor, Cynr y Brain, Llantysilio, Moel Fferna
Wildfire Preparedness	GIS Risk Mapping Developed	2 Site surveys complete	All key upland sites, Llantysilio SSSI and Clwydian Range Surveys complete
	Response Plans	Framework Developed	Response Plans for Clwydian Range and Llantysilio at Draft Stage
	Multiagency Tactical Training	4 Days	Training days carried at Moel Famau CP
	Level 2 Tactical Wildfire training	2 Staff	Staff from National Landscape team trained
Community and Visitor Engagement	Joint Operations with NWFRS	4 days	Keys Locations across project area
	Wildfire Signage Installed	All High visitor access points	Keys Locations across project area
	Social Media Campaigns and press Releases	Continuous through fire season	
	Volunteers Engaged	230	Volunteer days including Volunteers Rangers and Conservation Volunteers
	Engagement with Landowners and Graziers	8	Meetings with Grazier Associations, Farmers and landowners
Funding	Additional funding	£505,000	NPAP, LEI, SLSP, Small Grants

5. Conclusion

The Denbighshire Moorland and Wildfire Partnership has helped turn ambitions into practical action on the ground, whilst also providing a platform for larger landscape-scale projects and funding opportunities. Over the last three years, work has been delivered across the Clwydian Range, Llantysilio, Ruabon, Llandegla Moor and the Berwyn, bringing together habitat restoration, wildfire prevention and partnership working under a coordinated programme.

Through this work, the condition of upland habitats has been improved through coordinated programmes of habitat management and peatland restoration. Peatland restoration works have helped restore natural hydrology to degraded sites, whilst practical management has reduced fuel loads, improved habitat diversity and supported species such as Black Grouse and Curlew. Alongside these environmental benefits, significant progress has been made in understanding habitat condition, wildfire risk and management priorities through habitat surveys, monitoring programmes and GIS based mapping tools.

The Partnership has also strengthened wildfire preparedness across the National Landscape. Fuel-load management has been delivered across priority areas, wildfire risk mapping and response planning have now been developed, and regular training exercises with North Wales Fire and Rescue Service have improved operational preparedness. The response to the Moel Fferna wildfire in March 2025 demonstrated the value of these relationships and highlighted the importance of coordinated working between land managers, emergency services and conservation organisations when responding to incidents in challenging upland environments.

The Partnership has also secured over £500,000 of external funding through programmes including NPAP, SLSP and LEI, whilst helping develop the proposed £10 million Landscape Connections project. In addition to financial investment, the project has benefited from substantial support from Ranger Service staff, volunteers, partner organisations, landowners and graziers, allowing significantly more work to be delivered than would have been possible through funding alone.

The Partnership is now in a much stronger position than it was at the start of this agreement. We have a better understanding of our habitats, better information on wildfire risk, stronger relationships with landowners and graziers, and a clear pipeline of future projects and funding opportunities. Whilst there is still much work to do, particularly in the face of climate change and increasing wildfire risk, the progress made over the last three years has created strong foundations from which to continue improving the resilience of our uplands for wildlife, farming, local communities and future generations.

Acknowledgements

The achievements outlined in this report have been made possible through the support and collaboration of Natural Resources Wales, Denbighshire County Council, North Wales Fire and Rescue Service, RSPB, Cadw, North Wales Councils Regional Emergency Planning Service, local landowners, common graziers, contractors, volunteers and National Landscape staff.

Jack Parry

Moorland Field Officer

Clwydian Range and Dee Valley National Landscape

Denbighshire County Council

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