

HLF Programme Objectives							
Objective	Outcomes	Main (tick only)			Links areas	to	other
1	The heritage will be better managed					✓	
2	The heritage will be in better condition		✓				
3	The heritage will be identified/recorded						
4	People will have developed skills					✓	
5	People will have learnt about heritage					✓	
6	People will have volunteered time					✓	
7	Negative environmental impacts will have been reduced						
8	More people and a wider range of people will have engaged with heritage					✓	
9	The local area/community will be a better place to live, work or visit					✓	

### Objective 1: Restore and enhance habitats as identified by the landscape character action plan

# 1c: Improving our woodlands



Summary	Elan is home to some of the most important Atlantic oak and broadleaved		
	woodland in Europe. They support important assemblages of breeding		
	woodland birds, saproxilic invertebrates and lower plants, especially		
	lichens which are of global significance in Elan for their diversity and rarity		
	of species. These woodlands form the core of a Special Area of		
	Conservation (SAC), underpinned with various Sites of Special Scientific		

Interest (SSSI) and are also part of Plantlife's Important Plant Area particularly for their lower plant interest.

This project has developed in order to prioritise these SAC woodlands in Elan and to encourage better ecological management to ensure they maintain the diversity of ecological interest. This will be achieved through a variety of actions including:

- site and species specific thinning;
- bracken management;
- encourage grazing, particularly of heavier animals;
- additional oak planting to improve connectivity;
- producing an estate wide management plan to ensure the successful management of Elan's woodlands beyond the life of the project.

This project will have specific links with other areas of the Elan Links Project including the wethers programme, projects under objective 10 to include partnership with TirCoed, interpretation and access.

#### **Project Details**

Over the last few decades there has been a trend towards a lack of intervention management of woodland, driven by a loss of woodland value. Woodland products from British woods such as charcoal and pole products from coppice have been replaced with easier to manufacture products or produced more cheaply elsewhere, and with a change in farming practices, woodland grazing is not perceived in many places to be as valuable a resource as it once was.

Woodlands where traditional coppice or pollarding, along with grazing management over centuries led to the development of wood pasture with ancient old pollards, and the abandonment of some of these management practices has created a rapid change to the conditions within the woodlands. The woodlands were well spaced, fairly open and well lit, with mature trees with spreading crowns, provide good conditions for birds like pied flycatchers, spotted flycatchers, dead wood invertebrates and lichens, but in recent decades through lack of management and grazing some areas have seen a large dense tranche of young crowding regeneration appearing, and dense stands of bracken or bramble or both appearing. These features reduce the open conditions that are so important for much of our priority woodland wildlife and in some cases threaten the veteran trees causing crown die back.

It is important for the key wildlife thriving here, and for the cultural and landscape value of these woodlands and their veteran trees, to restore the right conditions and secure sustainable management practices including appropriate grazing into the future to ensure that these woodlands support this vast array of wildlife but also continue to do so for generations to come.

Within the five years of this project, we will seek to target the highest priority areas of Elan Woodlands, ranked by their important biodiversity such as their lichen flora, and by their threat category. The project will seek to restore suitable conditions through a mixture of halo thinning regeneration around veteran trees to remove their crowding and shading



effects and restoring appropriate grazing in these woodlands to manage encroaching vegetation including bramble and bracken. It will remove threats by managing invasive species such as rhododendron – one of the biggest threats at a UK scale to the condition of our Atlantic Woodlands, but as yet only with a toe hold in Elan – a good time to maximise impact with minimal cost against this invader. It will also look to secure the next generation of veteran trees by thinning stands and giving chosen younger trees more space to develop, and planting where required connecting ancient woodland fragments.

However the project seeks to go further. Considering that woodland operates on a timescale well beyond the average human lifetime; these trees can live for up to a 1000 years or more, and that woodland wildlife is some of the wildlife most threatened by fragmentation of habitat. These factors are what make woodland management more challenging than most habitats. As part of this project, there will be the creation of a management plan for the woodlands which will operate at a landscape level, integrating the woodland with neighbouring habitats including the ffridd, commercial forestry, hay meadows and upland which buffer or impact on these woodlands and do not operate in isolation. Grazing livestock are moved between these habitats and create part of the functional management unit. The management plan will layout a 200 year vision for the area to create a continuity of direction and guide the next generations towards this.

Monitoring through the life of the project will establish the changes in habitat as management is carried out, especially that of grazing and will seek to feedback into any changes in grazing practices to improve condition.

Monitoring through local volunteers on habitat condition and threats such as rhododendron will be key to providing information and evidence on where future action should be targeted.

## Need and Opportunity

This project has been developed to mitigate the threats identified in 4.2.1 and 4.2.6 of the LCAP:

#### 4.2.1 Damage to Elan's distinct habitats

The ancient SAC woodlands have been identified as under threat. These are home to some of the most important Atlantic oak woodlands in Wales. Due to changes over several decades of management practices, particularly around removal of grazing and introduction of non-native species, the special landscape characteristics of these woodlands and their specialist wildlife are under threat.

However, while these threats are present, it is timely in beginning to address them, and now is the opportunity to step in. Rhododendron has just started to get a toe hold in the area. It is costing Snowdonia National Park Authority millions of pounds to remove rhododendron from a small area of the national park and the estimated cost of removal from the whole park is in the tens if not hundreds of millions of pounds. Tackling this now in Elan is cost effective.



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	4.2.6 External impacts and the threat to Elan's heritage With the effects of climate change, more and more pressure is being pur on the natural habitats. Considering this threat it is important that we take this opportunity to 4.3.1.1 reinvigorate farming (and land management) practicesto maximise the resilience of this vital habitats in this time of change.			
	The opportunity to work at a landscape scale and over a long timescale in this particular area is key to the success this project could bring. With control of these woodlands lying primarily with DŵrCymru Welsh Water and the Elan Valley Trust plus a small network of tenants and graziers, this makes it an exciting project that could have a legacy well beyond the 5 years of HLF funding.			
Project Management	Natural Heritage Officer reporting to the Natural Heritage Sub-committee.			
Project Partners	Lead Partner: EVT			
	Other Partners: DCWW, RSPB,NRW, TirCoed, Woodland Trust and outside forestry contractors.			
<b>Project Development</b>	Meetings were held to discuss the scope of this project which initially			
	included all the woodlands of Elan. It was agreed in these meetings that a			
	focus be put on the most valuable assets which were the SAC woodlands			
	dispersed across Elan.			
	Initial formation and analysis of the sites and records was completed by			
	the RSPB and after some initial sites and actions were identified these			
	were dealt with specifically by members of EVT and DCWW.			
	The RSPB work included:			
	Woodland projects scoped and prioritised: integration of;			
	Site visits with local expertise including previous rangers			
	Local expert ecologists  Diamtifa afficient			
	Plantlife officers			
	Survey work of ASNW by RSPB			
	Survey work of PAWS and RAWS by Woodland Trust			
	<ul> <li>PONT advise provide expert input on grazing management,</li> </ul>			
	stocking and timing			
	Local information from DCWW rangers			
	Costing of projects based on quotes from contractors and experience of			
	similar work at RSPB's Carngafallt			
	On a site specific level, DCWW and EVT, then assessed the actions			
	identified and further ground-truthed to ensure practical projects were			
	achievable and budgeted accordingly.			
Key Audiences	Audiences that will primarily be Secondary audiences who will also			
(Please see Audience	targeted through this project: benefit as a result of the project:			
Development Plan,	A Land managers including A Families;			
appendix LCAP3, for	landowners, tenants and 🤚 Volunteers;			
more details about	commoners;			
Elan Links	Organisations working with (Birmingham Residents);			
audiences.)	harder to reach individuals   \( \text{ \text{Visitors}} \) who are within 1			
	locally. hour's drive away;			
	A Visitors coming for a specific			
	activity;			



	All other visitors; Residents in Elan and Rhayader.
Activities and Timescale	October 2017 – March 2019  Mechanical management works including;  Halo thinning of veteran trees as various sites  Thinning of heavy regen in mature oak woodlands (various sites) to allow remaining trees space to develop. Where practical, wood removed trackside to go for local charcoal production from a sustainable source  Mechanical bracken/ bramble management in specified blocks/ areas  Treat rhododendron in 4 places (Pen y Garreg island, tea rooms, Water treatment area, hotel)  Grazing management;  Reinstatement of grazing infrastructure as required at specified site: maintain/ repair fences, gates, clear cattle grids. Purchase heavier animal handling gates/hurdles.  Assess grazing animals and secure graziers/ animals and shepherding system where required depending on woodland block  Where possible, re-introduce grazing to identifiedblocks which are not currently stock excluded under Glastir or other scheme, or infrastructure already in place.  Begin work on the management plan and 100-200 year vision. Appoint project manager to write plan and identify the parties to consult.  Provide an Open Day where additional access, interpretation and demonstrations are available
	April 2019 – December 2020 Continue further mechanical management as required including; Ongoing bracken and bramble management where grazing is either not yet secured or not yet sufficiently controlling Re-cut regrowth from thinning where grazing not yet sufficiently controlling or not yet introduced. Grazing management; Re-introduce grazing in blocks where grazing infrastructure now secured Monitor impact of grazing where already introduced to assess if achieving required objectives and change level, timing as required. Complete work on the management plan; Hold a woodland crafts events alongside TirCoed to highlight the products and sustainable of our woodlands; Provide an Open Day where additional access, interpretation and demonstrations are available.  Through-out the timeframe: Increased interpretation and public participation, particularly at Pen y Garreg woodlands and Cnwch; Encourage people to volunteer and take part in tasks such as tree



	planting and scrub clearing.		
	Post scheme:		
	<ul> <li>Introduction of grazing in blocks that were glastir excluded;</li> <li>Continual management in line with the Management Plan prepared</li> </ul>		
Outputs	A Natural heritage is in better condition and better managed for the		
	future:		
	Total of 109 hectares of woodland in better ecological condition for their identified priority wildlife.		
	<ul> <li>The physical work undertaken will have improved the ecological condition of broadleaf conversion habitat in targeted areas:</li> <li>42 hectares of land cleared of rhododendron;</li> <li>81 hectares of woodland under sustainable grazing practices;</li> <li>73 hectares of thinning completed to enhance ecological understorey;</li> <li>9 hectares of bracken management.</li> </ul>		
	A SAC woodland will be more resilient because of an expansion in the		
	area of sessile oak woodland habitat:  8 hectares of native oak planting.		
	<ul> <li>Increased knowledge and coordinated action will ensure that land managers and decision makers make informed decisions that will strengthen Elan as a stronghold for nature:</li> <li>A management plan for the woodland landscape laying out management for the next 25 years, and with a 200 year vision.</li> </ul>		
	People will have volunteered time and learned new skills and benefited from being outdoors in the natural environment of the Elan  2 demonstration and volunteer sites;  25 volunteers engaged with woodland tasks with the Rangers;  2 sustainable product events held;  1 Woodland craft day with TirCoed to celebrate the works and products of the woodlands of Elan.		
Output indicators	109 hectares of woodland in better ecological condition for their		
and targets	identified priority wildlife		
	42 hectares of rhododendron cleared		
	<ul><li>73 hectares thinned</li><li>9 hectares bracken cleared</li></ul>		
	9 nectares bracken cleared     8 hectares of native oak planting		
	o nectales of flative oak planting		
	Works recorded by:		
	Project reports and evidence (including photographs and		
	timesheets)  A Photographic recording to monitor ecological change.		
	A Ecological monitoring biodiversity surveys		
	<ul> <li>Stakeholder days will be used to understand the benefits of the project from the point of view of farmers and other stakeholders.</li> <li>Data collection – management agreements, small grants, farmer</li> </ul>		





#### supported by Project 8b.

- Stakeholder days will be used to understand the benefits of the project from the point of view of farmers and other stakeholders.
- Ecological monitoring biodiversity surveys
- Photographic recording to monitor ecological change.
- Data collection management agreements, small grants, farmer groups active.

#### **Evidence**

The lichen report from Neil Sanderson at RSPB's Carngafallt provides much information and evidence on the impacts of lack of management, particularly on removal of grazing from these habitats on lower plants, especially on lichens. This report and similar reports for other key woodlands in Wales with high priority populations of lichens, provide further expert advice on the approach required to restore these habitats.

The N. Sanderson report also highlights the importance of these woods for lower plants and places them in a UK and global.

Evidence used to develop the project included:

- Local expert ecologists
- Plantlife officers
- Survey work of ASNW by RSPB
- Survey work of PAWS and RAWS by Woodland Trust
- PONT advise provide expert input on grazing management, stocking and timing
- Local information from DCWW rangers

Costings and work assessment completed alongside the experience of RSPB on their Carngafallt site.

#### **Wider Context**

Over the last few decades there has been a trend towards lack of intervention management of woodland, driven by a loss of woodland value. Woodland products from British woods such as charcoal and pole products from coppice have been replaced with easier to manufacture products or produced more cheaply elsewhere, and with a change in farming practices, woodland grazing is not perceived in many places to be as valuable a resource as it once was.

Elan is home to some of the most important Atlantic oak and broadleaved woodland in Europe. They support important assemblages of breeding woodland birds, saproxilic invertebrates and lower plants, especially lichens which are of global significance in Elan for their diversity and rarity of species. These woodlands form the core of a Special Area of Conservation (SAC), underpinned with various Sites of Special Scientific interest and are also part of Plantlife's Important Plant Area especially for their lower plant interest.

This woodland landscape is filled with veteran trees, many of which are more than 300 years old, some more than 500 years old and are of cultural and historical value to the area, one of the ancient oaks being an archaeological feature, pictured above.

Ancient woodland is now a fragmented habitat across the UK and this



project will focus on building the resilience of this ancient woodland network, securing appropriate woodland conditions for much of the special wildlife within it, increasing woodland connectivity to buffer and enhance the habitat and creating a vision for woodland management here for generations to come.

This project links to the RSPB's reserve plus work, working beyond the boundaries of the reserve to buffer, enhance and connect habitat.

This project also links to the WoodwildLIFE bid; a joint partnership between many conservation organisations seeking to secure woodland advisors that could work within focus areas across the UK. One focus area is planned for an area of Wales which includes the Elan Valley and would help to secure some of the legacy of this project building ongoing relationships with the stakeholders but networking Elan woodlands with other woodlands in the SAC outside the boundaries of this project.

Elan Woodlands are part of the Coetiroedd Cwm Elan/ Elan Valley Woods Special Area of Conservation (SAC), underpinned by various Sites of Special Scientific Interest including the Elenydd SSSI. It also sits within the Elenydd Special Protection Area and the Cambrian Mountains Important Plant Area. The area is heavily designated for its woodland habitat and biodiversity and recognised as being of global significance for its lichens and bryophytes.

The HLF bid is part of a larger bid across a larger project area so this project feeds into more landscape, culture, access and biodiversity work and is very much integrated with the rest of the project, the woodlands not developing or functioning in isolation.

## Legacy and maintenance of benefits

This project, being under the ownership for the majority of two stakeholders (DCWWand RSPB) and with a long term aims of management for water quality as part of the catchment and for its significant biodiversity interest, has the opportunity to secure landscape scale management for generations in a way which few projects can hope to.

The production of a management plan with a 1-200 year plus vision will bring together the stakeholders with a shared direction for the site for well after the project finishes. The 5 year project itself, while achieving much direct intervention on the ground, is still in fact only the starting point. The legacy will be ongoing for generations to come.

This Management Plan will capture more strategic thinking at a landscape scale and over lifetimes to provide an integrated vision for the woodlands with their neighbouring habitats, with a greater understanding of what is important here and how to manage for it. More than that it will bring together the partners and integrate their separate objectives for the area to demonstrate that these landscapes can deliver for biodiversity, ecosystem services, most notably water quality and carbon storage, economic productivity through forestry, recreation and leisure, tourism and historic culture.



### Risks and risk mitigation

<u>Risk 1:</u>Difficulty securing the right grazing animals and graziers to partake in the project. <u>Mitigation:</u> Continued interaction with the farmers involved and by ensuring they understand the benefits of the scheme. There is also the fall-back position of bringing stock in as most of this land is outside of the agricultural tenancies.

<u>Risk 2:</u>Difficulty in securing buy in from key stakeholders such as the tea rooms and the hotel for rhododendron removal at landscape scale. <u>Mitigation:</u> Early discussions have been undertaken with these people to reduce the problems of buy-in.

#### Link to projects

Objective 2a: 1c will work in conjunction with 2a with both providing beneficial actions for birds in Elan. Although they prioritise different species there is a connectivity between them and the benefits to one should have a positive effect on the other.

Objective 2b: 2b completes the majority of the survey work to ensure projects are developing and achieving the wider outputs.

Objective 3e: Through the requirement for heavier stock grazing this project links with the wethers scheme where the areas are too publically accessible to be safe for horses or cattle grazing.

Objective 4:The actions and management agreements are better informed by the Heritage at Risk survey and actions are considerate of the goals of this project. Vegetation works can be agreed as capital works within these management agreements.

Objective 6: Monitoring of this project is important and as noted above, photographic recording of the project will happen. This will be implemented through project 6.

Objective 7a: This project will be interpreted through objective 7a in various ways dependant on the project requirements.

Objective 7b: Information about this project will appear on the app as well as on the Elan Valley website and Elan Links' social media platforms. All of the events that are organised will be promoted on all of these platforms and they will be updated regularly to show the work that is carried out through the whole Scheme. Any content that is being recorded, either through photograph or film, will be shared and place on all of the platforms to ensure that the profile of Elan is raised and that all followers that have been gathered during the development phase are kept up to date and interested in the project throughout the delivery.

Objective 7c: Artists will take inspiration from some of the themes in these objectives. As well as inspiration, it is possible that some of the artists may wish to interpret the different themes in their own way.

Objective 7d: All events that will happen through this project will be organised through the work carried out in objective 7d.



Objective 8: The volunteers that are required for this project can be selected from the database of volunteers that is collected through objective 8. Volunteers who participate in activities that aren't already part of Friends of Elan can be referred over and from there they will be offered a wider range of volunteering opportunities.

Objective 9:The proposed routes and rights of way may go through some of the habitat areas in these projects. Project management for these projects as well as the project management for objective 9 need to be aware of the different habitat areas and ensure that the proposed routes does not interfere with the work proposed to the habitat and does not effect the rare upland birds in objective 2a.

Objective 10a: There is a possibility that the participants and trainees, who are taking part in the training courses at Elan, will undertake some of the work that is required in this project.

Objective 11: Working to expand the knowledge and the connection between the habitat and water management to the people who benefit from the water. Engaging in this elements supports the principles of payments for ecosystem services and raise the public profile of this concept between Elan and Birmingham. Thus developing a longevity to the actions.

### Background information

Elan is located in the Cambrian Mountains, Mid Wales, 5 miles to the east of the Market town or Rhyader. Elan's 20,000 hectares comprises 1% of Wales and is a unique landscape combining remote hill land, isolated farmsteads, steep-sided wooded valleys and the extraordinary feat of Victorian engineering that brought clean water to Birmingham.

The community of farmers, tenants, the town of Rhayader and the village of Elan are the backbone of this vast area, with farming and tourism activities being the most significant economic activity in the area.

Elan Links: People, Nature & Water Landscape Partnership has an ambitious vision: to generate a step-change increase in beneficial outcomes for people, communities and heritage.

Elan Links is a £3.5 million project with a significant £1.8 million secured from the Heritage Lottery Fund Landscape Partnership Scheme.

The Elan Links: People, Nature & Water Landscape Partnership is currently made up of 17 different organisations who aim to deliver 26 projects under 12 strategic objectives over 5 years.

