Red Kite

Gilfach Nature Reserve
Interpretation Strategy and Action Plan

Radnorshire Wildlife Trust

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Gilfach Interpretation Strategy and Action Plan

Radnorshire Wildlife Trust

The Griffiths
Heritage Consultancy Ltd

Red Kite Environment
Pearcroft Pearcroft Rd Stonehouse Gloucestershire GL10 2JY
Tel: 01453 822013 *Fax:* 01453 791969
Email: info@redkite-environment.co.uk

Cover Gilfach Nature Reserve is a microcosm of the landscapes of Mid-Wales *RKE*

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Gilfach Nature Reserve: The beauty of detail *Polytrichum commune RKE*

Executive Summary

This Interpretation Plan was commissioned by the Radnorshire Wildlife Trust (RWT) from Red Kite Environment working in partnership with Anglezarke Dixon Associates, Touchstone Heritage Management Consultants and Griffiths Heritage Consultancy.

The plan guides the development of interpretation at Gilfach, concentrating on interpretive proposals for the new hub at Pont Marteg car park and for the visitor centre in the former byre at Gilfach longhouse.

The plan provides a brief overview of the environment and history of Gilfach. The key features are:

Landscape – its traditional hay meadows and pastures, hedges and stone slab boundaries, the spectacular views along the valley and over to the Cambrian Mountains, the waymarked routes and the facilities for visitors.

Habitats and wildlife – its varied habitats, each with its associated plant and animal species, making the reserve an excellent place to see a variety of wildlife.

Historic environment – the evidence of settlement and use over 5000 years including a Bronze Age cairn, a Roman road and ford, medieval houses, routes and pathways, the mid-Wales railway and ancient field boundaries.

Consultation with Trust staff, volunteers and representatives of other organisations nearby revealed wide ranging views about the character of Gilfach and its use by visitors and the potential for its interpretation in the future. The reserve clearly has a distinctive character, which is much appreciated by both residents and visitors.

The aim for interpretation at Gilfach is:

To help people to understand and enjoy the significance of Gilfach Nature Reserve, its origins, development over time and its environmental and historic resources.

The plan presents a series of learning, behavioural and emotional objectives that help to achieve this aim.

The plan's **overarching theme** is:

Gilfach nature reserve is an historic upland farm where visitors can explore a traditional mid Wales rural landscape rich with biodiversity and cultural heritage, and experience a deep sense of tranquillity.

Its **secondary themes** are:

Gilfach is a varied and interconnected landscape that can be viewed at different scales, from the whole valley and its context within the Cambrian Mountains to the smaller, more intimate scale of a lichen encrusted stone or a rocky pool in the river.

Gilfach has outstanding biodiversity due to its range of habitats. It is home to over 1300 species of plants and animals living on moorland, wetland, woodland and farmland. Many of these species are vulnerable and nationally rare.

People have lived at Gilfach for over five thousand years, making their living rearing sheep and cattle. The valley has long been an important transport route through the heart of Wales, used by Cistercian monks and drovers, as well as travellers on the Mid Wales railway.

Gilfach is a living, working landscape, which is carefully managed to sustain its wildlife.

These themes provide a framework for developing storylines that can be used to interpret Gilfach Nature Reserve. A selection of the storylines is included in the plan.

The plan presents guiding principles for interpretation, which include that it should essentially be low key, subtle, appealing and memorable. It should be:

- **Layered** with a clear hierarchy of explanation;
- **Subtle** to blend with the landscape as much as possible, supported by more detailed interpretation at the byre;
- **Attractively designed and evocatively written** reflecting the natural beauty of the landscape and encouraging an emotional response to the reserve;
- **Developed to reflect local distinctiveness and skills** to be in harmony with the landscape and appropriate for specific locations;
- **Delivered by people as well as by media** including by Trust staff and volunteers who can enthuse visitors with their understanding and knowledge about the reserve;
- **Accessible to all** in ways that enable all visitors, whatever their abilities, to understand and enjoy the reserve, and;
- **Bilingual** in Welsh and English, and including summary sheets in other languages such as French, German, Dutch and Polish.

We present a programme of interpretation media that includes the following:

Whole site interpretation
- A design approach for Gilfach
- A map of the reserve
- Low-cost colour flyer
- Interpretive leaflet and trail guide
- Enhanced website
- Posters, postcards and badges

Welcome zone – at the entrance to the reserve
- Improve the appearance of the entrance area
- Provide site name panels at all entrances
- Interpretation in the new interpretive hub, including a map, panels with images and evocative text, images on the glass panels and text on seating and picnic tables
- Installation of a solar powered Info-Point in the hub
- Clear orientation at the start of the nature reserves
- A current events panel
- 3D map of Gilfach

Explore zone – around the nature reserve
- Clear waymarking along all the trails
- Small interpretive panels set into vertical posts
- Text and images routed into rails and gates
- Simple benches with carved interpretive text
- Interpretation panels in the otter hide
- Sculpture trail using natural materials

Discovery zone – the byre at Gilfach farmyard
- Road signs giving direction to the farmyard
- Welcome panels and waymarking near the entrance to the farmyard
- Permanent exhibition in the byre
- A series of changing exhibitions in the byre
- Browsing flip-books
- Installation of an Info-Point and a touchscreen unit
- A series of short films, audios and pdf-based information materials
- Relocating the shelter from Pont Marteg car park to provide information on walking routes

Events and activities
- Programme of activities and events led by staff and volunteers
- Self-guided trail activity for families
- Workshops in photography, illustration, creative writing and arts and crafts
- Activities with other organisations, including Elan Valley, Rhayader Museum, CARAD, RSPB and the National Trust
- Community archaeology project

Gilfach Nature Reserve: Layers of history in the landscape *RKE*

1 Introduction

1.1 Setting the scene

Gilfach, on the edge of the Cambrian Mountains, is an historic upland hill farm that is now the flagship nature reserve of the Radnorshire Wildlife Trust (RWT). Its landscape is, in many ways, a microcosm of rural upland Wales, demonstrating how traditional farming methods allowed natural biodiversity to thrive, making Gilfach a very special place in the hills of Mid Wales.

The development of its landscape and biodiversity, and people's settlement and management of the land over thousands of years, result in a place that has many attractions for casual visitors, enthusiastic naturalists and expert ecologists. Visitors value Gilfach for its beautiful landscape, its abundant wildlife, its open access and its outstanding peace and tranquillity.

This interpretation plan is an essential component of the overall management planning process for the Exploring Gilfach HLF project. It guides the development of interpretation materials at Gilfach that can help to explain its special character and wildlife and inspire visitors to explore and enjoy the reserve and find out more about its wildlife and history.

1.2 Process

This plan is the output of a contract let by RWT to a consortium led by Red Kite Environment and including Anglezarke Dixon Associates, Touchstone Heritage Management Consultants and Griffiths Heritage Consultancy.

During the course of the contract, between August and November 2015, we visited the reserve several times and had meetings, discussions and held workshops with RWT staff, trustees and volunteers. We consulted representatives of relevant organisations and the tenants of Gilfach farmhouse. A list of consultees is shown in Appendix 1. A summary of this consultation is provided in Appendix 2.

Designs for the visitor hub at Pont Marteg car park were being developed at the same time as this interpretation plan was being prepared. Site visits and discussions were undertaken with the architects, George + Tomos from Machynlleth, to ensure that the design of the hub and the proposals and approach for interpretation were complementary. We worked with Arwyn George to discuss the details of our interpretation proposals for the hub.

Part of the consultation included a questionnaire for staff and volunteers which asked the following questions:

- What makes Gilfach special?
- What do visitors like about Gilfach?
- What do you think are the top three stories to tell about Gilfach?

- Where are the best viewpoints?
- What are the key habitats?
- What three easily seen plant species are characteristic of Gilfach?
- What three easily seen animal species are characteristic of Gilfach?
- Where are your favourite places?
- Where are visitors' favourite places?
- What are the seasonal highlights? Such as footpath routes, views, species, atmosphere and experience, etc?
- Choose five single evocative words that describe Gilfach

Responses to this questionnaire have been used to inform the preparation of the plan. A summary of responses is shown in Appendix 3.

Initial proposals for the approach to interpretation at Gilfach were discussed with the RWT steering groups and were displayed at the Annual General Meeting on 1st October 2015 where staff were available to discuss ideas with members. Following the delivery of a first draft of the Interpretation Plan on 19th October, a presentation was given at a meeting of Trust staff and members on 6th November. Responses from both the AGM and the presentation were incorporated into the plan text.

Gilfach Nature Reserve: A landscape created by centuries of farming *RKE*

2 Interpretive resources

2.1 Overview of Gilfach Nature Reserve

The biodiversity and management aims of Gilfach Nature Reserve are described in detail in the Management Plan. We will not duplicate this work and instead provide a brief summary as context for this plan. We then list the key characteristics, which form the resources for interpretation.

The historic environment of Gilfach is not currently well described, despite there having been significant prehistoric human presence in the area and evidence of settlement throughout history, including from the Roman, medieval and Victorian periods. A review of the historic interest of Gilfach was commissioned for this plan from Griffiths Heritage Consultants and this is included at Appendix 8.

The following natural and cultural assets of the reserve can be considered as its interpretive resources.

Landscape
Gilfach is located in a valley with a traditional farmed landscape of small fields and meadows bordered by hedges and stone boundaries, rising to rough grassland and open moorland on the hilltops. There are several waymarked footpaths through the valley, with excellent views.

- Traditional hay meadows and pastures with field names reflecting historic use and ownership.
- Laid hedges and stone slab boundaries.
- Sheep varieties, farming, hefted flocks and transhumance with hafod and hendre.
- Historic drovers' routes passing through the Marteg valley to Rhayader, Hereford and beyond.
- Spectacular views throughout the reserve looking:
    - Up and down the valley
    - Over to the Cambrian Mountains
    - Towards the Marcheini valley and Allt-Goch
    - Up to Yr Wyloer hill and Gamallt
    - From the Bronze Age Cairn, the bench on the Monks' Trod and the top of Wyloer.
- Waymarked routes
    - Wye Valley Walk – a section of the route passes through the reserve
    - Gwastedyn Church Trail – linking seven historic churches
    - Nature trail
    - Wyloer Walk
    - Easy access path
    - Oak Wood Trail.
- Facilities
    - Car parks at Pont Marteg and Gilfach Farm
    - Picnic tables at Pont Marteg and Gilfach Farm

  - Gilfach Longhouse and Barn, with visitor centre, interpretation, toilets and limited refreshments
  - Otter hide beside the river
  - Salmon watching platform on the river
  - Panel in small shelter in Pont Marteg car park
  - Stone sculptures near Pont Marteg car park
  - Series of interpretive panels along the nature reserve route
  - Other interpretation via events, courses, site leaflet and RWT website.

Habitats and wildlife

Gilfach has diverse habitats, each with its associated plants and animals, making the reserve an excellent place to see a variety of wildlife, including key species such as pied flycatcher and redstart, salmon and otter. Its collection of lower plants, particularly lichens, is spectacular and, for the lichens, clearly visible on the stone walls (orthostats) and trees around the reserve.

- Varied habitats
  - Afon Marteg, a rocky upland river with wet flushes
  - High moorland
  - Rhos pasture
  - Wetlands and marshy grasslands
  - Enclosed meadows and pastures
  - Broadleaved and conifer woodland
  - Scrub and ffridd
  - Rocky outcrops.
- Mammals
  - Otter
  - Badger
  - Daubenton's, natterer's and brown long-eared bats
  - Stoat and polecat
  - Hare
  - Water vole.
- Birds
  - Redstart
  - Pied flycatcher
  - Cuckoo
  - Red kite
  - Raven
  - Dipper, buzzard, goshawk, peregrine, grey wagtail, woodpeckers, nuthatch, treecreeper, curlew and wood warbler.
- Plants
  - Mountain pansy
  - Harebell
  - Whinberry
  - Gorse and bracken.
- Invertebrate species
  - Dor beetles
  - Banded and beautiful demoiselles
  - Bloody nosed beetles

    - Purple hairstreak, green hairstreak and small pearl-bordered fritillary butterflies
    - Yellow meadow ants.
- Other species
    - Over 400 species of lichen clearly visible on stone walls and trees, numerous fungi, mosses and liverworts
    - Salmon, brook lamprey and bullhead.
- Green lanes, boundary walls and hedges

Historic environment

Gilfach is an outstanding multi-layered upland Welsh historic landscape that is the result of a long period of human occupation, use and management for 5000 years. It demonstrates some of the most important periods of development and social change in Welsh history.

- Bronze Age 2300 BC to 800BC
    - Pont Yr Marteg Cairn
    - Afon Marteg Cairn
    - Pont Marteg Standing Stone
    - Pont Marteg Mounds.
- Roman Period AD 43 – AD 410
    - Roman road and ford
- Medieval period c.1066 – c.1400
    - Longhouses and long huts – up to five in Marteg Valley, with the best example being Gilfach Farmhouse
    - Platforms and enclosures – up to eight in Marteg Valley
    - Gilfach barn complex and farmyard
    - Monks' Trod path – ancient road across the Cambrian Mountains linking the 12th Century Cistercian monasteries of Abbey Cwmhir and Strata Florida.
- Post Medieval – >1400
    - Quarries and Gilfach well
    - Turnpike road
    - Routes and pathways of historic significance
    - Pont Marteg lead mining level
    - Yr Wylorn Sheepfold, and Yr Wylorn Dam.
- Victorian period – 1837 – 1901
    - Mid Wales Railway
    - Railway tunnel
    - Skew bridge
    - Railway track
    - Ford across the river
    - Construction camp
    - Pont Marteg Old Bridge.
- Other features of interest
    - Field boundaries
    - Census returns
    - Historic maps
    - Upland farming.

2.2 What makes Gilfach special?

The resources listed above contribute to Gilfach being regarded as a 'special' place. From our conversations with consultees and from our research we select the following as the key attributes that make Gilfach special.

- A peaceful and tranquil valley that offers an opportunity to step aside from everyday life and enjoy the beauty of nature.
- An integrated story of natural habitat and long-term human occupation.
- A traditional farmed valley with a wide range of mid Wales habitats from rocky river in a wooded valley floor to hill top moorland.
- Its apparent wildness at the heart of Wales.
- It offers 'accessible remoteness', a place where visitors can walk on and off waymarked paths and experience farmland and open hills without worrying about trespassing or needing map-reading skills.
- There is visible presence of several iconic species including a large number of lichens.
- Rich mix of natural and cultural history.
- Bronze Age cairns, 15th century longhouse, the remains of other medieval longhouses and the remains of the Victorian railway.

Gilfach Nature Reserve: Diversity of lower plants *RKE*

3 Consultation

During consultation for the preparation of this plan we prepared a short questionnaire for Trust staff and volunteers, and met representatives of organisations in the Rhayader area. The consultation aimed to elicit views on the value of Gilfach and on opportunities for its interpretation. The consultees are listed in Appendix 1.

We asked a series of questions during the consultation and the responses are summarised below. They are also provided in more detail in Appendices 2 and 3. We have used these responses to guide the development of objectives, themes and delivery mechanisms in the next sections.

What makes Gilfach special?
The most frequent responses emphasised the combination of the landscape, the rich biodiversity and the cultural heritage as the key features that make the reserve special. Features such as the range of habitats, the hills, river, meadows and the farmyard were also considered to be important. The reserve is an example of mid-Wales habitats from open hill, down through fridd and enclosed pastures and woods to the valley bottom wetlands and meadows.

What do visitors like about Gilfach?
From visitor surveys and talking to visitors informally the key responses were the attributes above and the sense of peace and tranquillity at the reserve. Visitors enjoy the range of habitats, the beautiful landscape, the rich wildlife and the opportunities for walking around the reserve.

What do visitors dislike about Gilfach?
Visitors disliked the fact that the visitor centre is often closed and that it has poor facilities. They were also disappointed not to be able to access the longhouse. They disliked the steepness of the approach to the centre and having to keep their dogs on a lead. The lack of a coherent approach to interpretation and engagement was also noted.

What are the top stories to tell about Gilfach?
Responses were varied but included the variety of species, especially those of the uncharismatic groups such as lichens and other lower plants, the landscape and its change over time, the history of settlement and the role of the Radnorshire Wildlife Trust in managing the reserve for wildlife. There is also interest in the railway and the Monks' Trod as historic routes through the valley.

What are the best viewpoints?
Responses to this question included the view from the Bronze Age cairn, from above the visitor centre, from the picnic area below the visitor centre and along the Marteg river valley looking west and east. There are fine views also from the nature trails and the hilltops.

What are the key habitats?
The main habitats of note included the river and associated wetland habitats, the unimproved grasslands, meadows and fields, the oak woodland and the heather and heathland. The lichen-covered trees and boulders, the rocky scree crags and the dwarf heath scrub were also considered to be important habitats for a range of species.

What are the easily seen plant and animal species that are characteristic of Gilfach?
The characteristic species that were listed by consultees included heather, mountain pansy and harebell, and redstart, dipper, pied flycatcher, salmon and small pearl-bordered fritillary. The range of lichens on trees and rocks, and other lower plants were also noted.

Where are your, and visitors', favourite places?
The responses to this question were varied and included places throughout the reserve. The most scored places were the waterfall, the river, the wildflower meadows, the farmyard and Pont Marteg. The trails around the reserve are also popular.

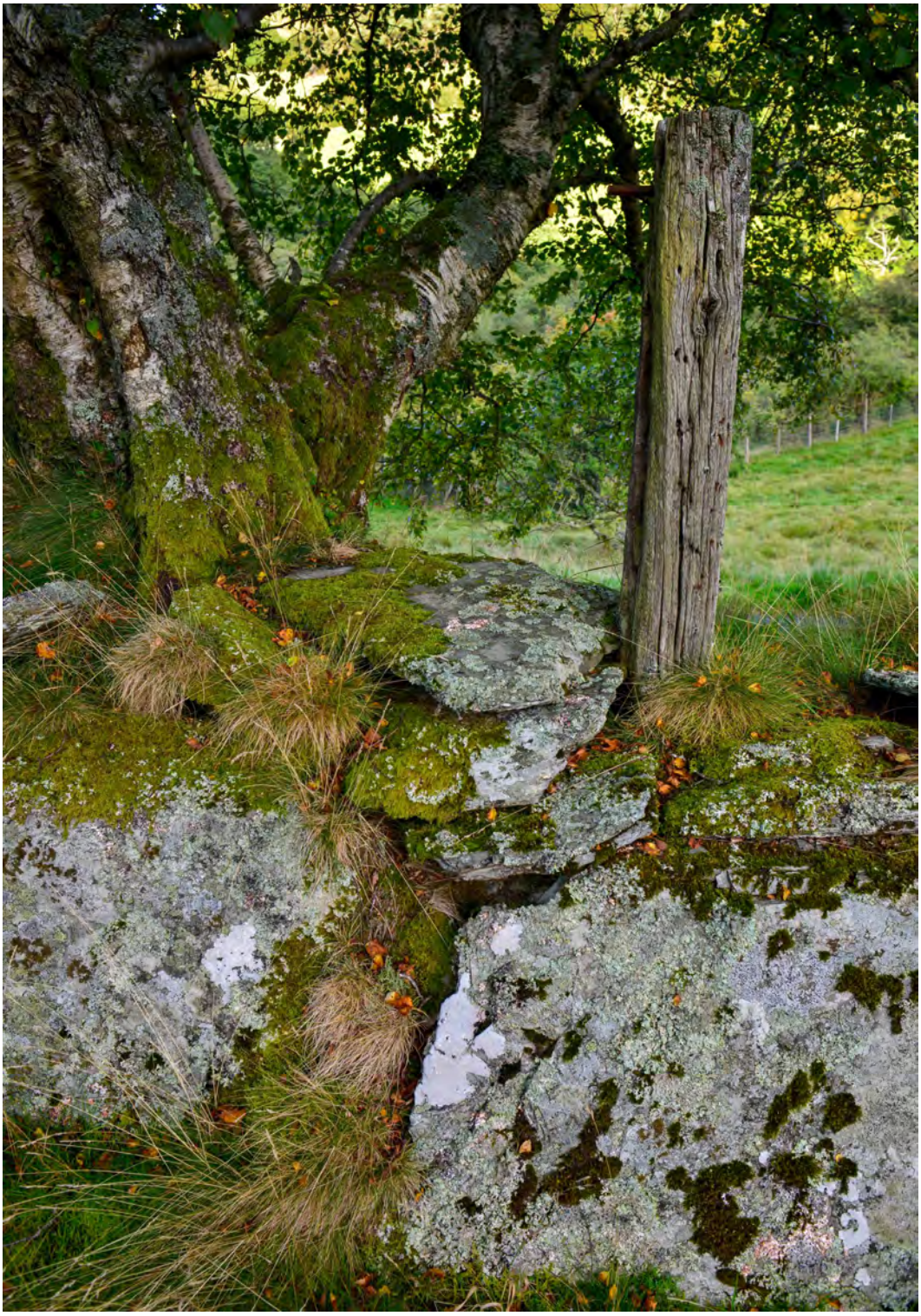
What are the seasonal highlights?
In winter, people liked the frost, snow and ice-covered trees, the river in spate, the waterfall and leaping salmon in the river. In spring the arrival of migrant birds was considered most important, particularly cuckoo, redstart and pied flycatcher. The spring flowers in the woodlands are also popular. By summer the breeding birds, flowering heather, the wildflowers and butterflies in the meadows and the anthills are particular highlights, while in autumn the leaping salmon, the autumn colours, berries and fungi are characteristic of the reserve.

Evocative words
We asked people to list evocative words that describe Gilfach. The most popular responses were beautiful, tranquil, rich, wild, rewarding, timeless, inspiring and hidden.

Consultation with other organisations
The consultation revealed much support for Gilfach, the Wildlife Trust and Gilfach's Heritage Grant project. CARAD, Rhayader Museum and the Elan Valley were keen to build contacts with the Trust to explore joint activities, particularly involving local communities and visitors. The RSPB and the National Trust would also be keen, in principle, to participate in joint activities.

The museum has run activities already to record local people's reminiscences of the region, and staff and volunteers would be keen to develop further these types of activities. The museum would be interested in participating in an audio project that would record contemporary memories of farming and other work in the area. Staff would be keen to run joint local history days, for example to gather photographic records and to compare these with photographs of farms today. The outputs of these and other activities would form the basis of exhibitions that could be shown in the museum, at the Elan Valley Visitor Centre and at Gilfach.

The Heritage Lottery Fund has approved a Landscape Partnership Scheme for Elan Valley Trust that will help to fund significant improvements to interpretation in the valley. There is opportunity for a wide range of joint activities that will help to encourage both residents and visitors in widening their understanding and enjoyment of the area and its features.



Gilfach Nature Reserve: Historic boundaries *RKE*

4 Current interpretation

4.1 Existing interpretation at Gilfach

There are interpretation materials currently available at the reserve, as well as on the Radnorshire Wildlife Trust website. A representative sample includes:

- General leaflet – *Gilfach Nature Reserve, the farm that time forgot…* The leaflet provides introductory information about the reserve, an explanation of the wildlife to be seen through the seasons and a description of the farmyard. There is a map that includes the routes of the nature trails.
- Interpretation panels around the site, some with audio, at the car park, at Gilfach Farm and along the nature trails. The panels have a number of different styles and most are faded and in need of revision. The panels are rectangular with white backgrounds and in some places intrude on the visual appearance of the reserve.
- Exhibition materials in the byre and the barn, including panels, leaflets and objects. The exhibition panels are very dated.
- Activities and events – Trust staff work with schools and other groups.
- Website. There is a page on the RWT website with basic description and directions to the reserve. The site is not the most user-friendly. There is a link to Gilfach on the home page, which goes directly to the Gilfach Nature Reserve page. If searching through other nature reserves, or places to visit in the area, to find Gilfach it takes 4 clicks to get to the Gilfach Nature Reserve page. This is backed up by evidence from the 2013 visitor survey that showed that few visitors had found the reserve in internet searches before visiting the site.

Gilfach Nature Reserve: Fragrant gorse brightens winter walks. *Ulex europeaus RKE*

5 Audiences

5.1 Audiences for outdoor recreation

Statistics on the use of the countryside for outdoor recreation were gathered by the Welsh Outdoor Recreation Survey commissioned in 2008, 2011 and 2014 by Natural Resources Wales, (formerly the Countryside Council for Wales (CCW), Forestry Commission Wales (FCW) and Environment Agency in Wales. The survey gathers data about the use by residents of Wales of the outdoors for informal recreation, the places visited and activities undertaken, motivations for using the outdoors, barriers to visiting the outdoors and the frequency, duration and intensity of activities. It also surveys 'latent demand' for outdoor recreation.

The three surveys were conducted by telephone and each involved around 6000 telephone interviews.

Key findings from the 2014 survey[1] that are relevant to RWT and Gilfach include:

- 93% of adults had visited the outdoors at least once in the last 12 months.
- 22% of adults visited the outdoors frequently – 21 times or more in the four weeks before the survey.
- 83% of respondents gave walking as the most regularly undertaken activity.
- 27% of respondents gave wildlife watching as their most frequent activity.
- The average total visit duration to the outdoors was 4 hours 26 minutes in 2014.
- 15% involved taking children to outdoor play areas.
- Health and exercise was the most frequently mentioned motivation, 23%.
- Walking a dog was the second most frequently mentioned motivation, 22%.
- 55% use a car as their main mode of transport to get to the outdoors.
- 60% of adults would like to visit the outdoors more often.
- 97% of respondents visit the outdoors at least once during Aril to October, 93% during October to April.
- Physical disability and other health reasons were the main barriers to outdoor recreation, sited by 29% and 21% respectively.

NRW recently published the Outdoor Recreation and Access Enabling Plan 2015-2020. This has the stated aim of: *More people participating in and benefitting from outdoor recreation more often.*

A study commissioned by the Tourism Partnership Mid Wales in 2011 found that day visits are particularly important in Mid Wales accounting for nearly three quarters of all visits to the region. Just over 80% of day visitors visited Powys, which was the greatest proportion for the region.

The Visit Wales – Wales Visitor Survey 2013[2] found that nature attractions are the places most visited by visitors staying in Wales (73%) and the second most visited

[1] Welsh Outdoor Recreation Survey 2014: First Release, NRW
[2] Visit Wales – Wales Visitor Survey 2013, Visit Wales, October 2013

attractions by day visitors (58%). Walking generates £562m of additional demand on the Welsh economy.

The Wales Visitor Survey 2013, undertaken by Visit Wales, which involved face-to-face interviews and follow-up telephone interviews, had the following key findings:

- Satisfaction ratings were up in 2013 from 2011, scoring over 90%.
- Quality of the natural environment scored the highest rating, 95%.
- There was significant rise in outdoor activities, probably due to the sunny weather of summer 2013.
- Active Family Explorers and Pre-family Explorers are the most likely visitor segments to be attracted to Wales.
- 96% of visitors say they would definitely recommend Wales.

Rough Guide readers voted Wales as one of the best places to visit in 2014.

5.2 Visitors to Gilfach

Recent Gilfach visitor surveys show that the average group visiting Gilfach consisted of two adults, mostly with no children or dogs. They were mainly over 55, with many fewer in the 25-34 age group and none aged 18-24. Around half those interviewed on the reserve and at Marteg Bridge were first time visitors and 63% were on holiday. Almost half of those on holiday had visited Gilfach before, indicating that they had enjoyed their visit enough to make the effort to visit Gilfach and the local area again.

Around 75% of visitors interviewed at Marteg Bridge had come for a walk or short break, while almost half of those interviewed around the reserve were there to watch wildlife.

Preferences for interpretation at Gilfach were for information about wildlife, the history in the landscape and the history of the old mid-Wales railway. Although the internet is the most popular source of information for visitors, very few had accessed information about Gilfach before their visit. It would suggest that the online presence of the reserve within the RWT's website is poor. Many interviewees commented on the need for leaflets at key locations and at other local tourist attractions and holiday accommodation.

5.3 Target audiences for interpretation

We feel that the target audiences for Gilfach are likely to remain much the same at present though there is potential to increase the numbers from certain groups. Targets audiences should include:

- Existing visitors to nature reserves, including visitors to Gilfach and other nature sites in mid-Wales.
- Day visitors and people on short breaks and other holidays.
- Interest groups – local communities and groups with specialist interests, such as walking, photography, plants, bird watching and local history groups.

- Car travellers who are seeking somewhere to stop and take a break from their journey.
- Active family explorers. This group is currently targeted by events organised by the Trust's People and Wildlife Officer, although few family groups participate. There is scope for expanding this audience.

5.4 Expanding the audiences

Providing enhanced interpretation will help significantly in developing audiences for Gilfach, but this should be accompanied by other actions that will help to develop use of the reserve by specific groups. We suggest some mechanisms below that could help to develop audiences:

- Working with partner organisations, such as Rhayader Museum, Elan Valley, National Trust, Woodland Trust and Gigrin Farm, to coordinate annual programmes of nature and countryside related events for the Rhayader area.
- Working with accommodation providers to explore ways of promoting Gilfach to guests.
- Developing an email distribution list of accommodation providers, tourist attractions, tourism service providers and tour operators and sending out monthly events programmes.
- Developing an email distribution list of countryside interest youth groups, such as the Young Ornithologists' Club and Young Archaeologists' Clubs, and offer Gilfach as a venue for some of their events.
- Responding to the growing demand for experience- and interaction-based events by offering walks and talks with a catering element. Catering could be bought in if needed.

5.5 Barriers to audience involvement

The NRW Outdoor Recreation Survey 2013 identified old age, disability and health issues as the three main barriers to people undertaking outdoor recreation. Lack of time, bad weather, lack of information, cost and transport issues are other factors.

The RWT should work with organisations serving people with disabilities such as local groups for RNIB, Age Concern and Action on Hearing Loss, to develop a small number of activities suitable for people with a range of disabilities. The Trust should also, with the help of this plan, make information and interpretation about Gilfach more widely available to the local communities and specialist interest groups. Improving the website will greatly help raise the profile of the reserve and enhance remote access for people with disabilities.

6 Aim and objectives for interpretation

In this section we set out what we propose should be the overall aim and key objectives for interpretation of Gilfach Nature Reserve.

6.1 Interpretive aim

To help people to understand and enjoy the significance of Gilfach Nature Reserve, its origins, development over time and its environmental and historic resources.

6.2 Interpretive objectives

The key objectives for the interpretation, as distinct from the management, of the reserve, are set out below, in three groups relating to intellectual (or learning) objectives, behavioural objectives and emotional objectives. As far as Gilfach Nature Reserve is concerned, emotional objectives (related to behavioural ones) are as important as learning objectives.

Learning objectives

- Visitors will appreciate that Gilfach is a microcosm of upland Mid Wales landscape
- Visitors will understand the significance of Gilfach's biodiversity
- Visitors will understand the effects of human occupation of Gilfach
- Visitors will appreciate the importance of seeing these elements as two parts of one story
- Visitors will understand the relationships between habitat and species on the reserve
- Visitors will learn about different species and be able to associate them with Gilfach
- Visitors will discover in particular the fascination of lichens and their place in biodiversity of the reserve
- Visitors will understand the challenges of farming in upland landscapes
- Visitors will appreciate the continuing story of land use and management in the Gilfach landscape.

Behavioural objectives

- Visitors will wish to explore Gilfach on their first and subsequent visits
- Visitors will return to discover more about Gilfach
- Visitors will spend more time at the reserve finding out about Gilfach's biodiversity and farming history
- Visitors will want to take part in learning and volunteer activities at Gilfach

- Visitors will contribute, where able, to the interpretation of Gilfach through participation in interpretive activities
- Visitors will encourage friends and relatives to visit Gilfach
- Visitors will support and possibly join the Radnorshire Wildlife Trust and remain as active supporters.

Emotional objectives

- Visitors will appreciate the special landscape qualities of Gilfach
- Visitors will absorb and enjoy the sense of remoteness, the peace and tranquillity of Gilfach
- Visitors will develop a strong attachment to Gilfach – even a sense of 'ownership'
- Visitors will wish to share this enjoyment and appreciate with friends and relatives.

These objectives should be used as the basis for monitoring and evaluation, as described in Chapter 9.

Gilfach Nature Reserve: Stones with stories *RKE*

7 Themes and storylines for interpretation

Themes are a valuable mechanism for encompassing the key strands of a story when devising and developing interpretation. The themes lend themselves to creating 'messages' that visitors can take away with them. We suggest one overarching theme and four sub-themes for Gilfach.

7.1 Overarching theme

Gilfach nature reserve is an historic upland farm where visitors can explore a traditional mid Wales rural landscape rich with biodiversity and cultural heritage, and experience a deep sense of tranquillity.

7.2 Sub-themes

The following sub-themes allow the whole story to be encapsulated in a series of statements that will guide the interpretation. They stem from the key topics identified above.

Sub-theme 1 Landscape

Gilfach is a varied and interconnected landscape that can be viewed at different scales, from the whole valley and its context within the Cambrian Mountains to the smaller, more intimate scale of a lichen encrusted stone or a rocky pool in the river.

Storylines

- The Marteg valley is part of the Wye river catchment that drains the Cambrian Mountains to flow into the Severn Estuary.
- The landscape of Gilfach can be enjoyed for its tranquillity and absence of development and for the contrasts between the lush valley bottom and the wilder open hillside.
- Gilfach sits at the eastern edge of the Cambrian Mountains, contrasting with the open exposed landscape of the mountains and the engineered landscape of the Elan Valley and its reservoirs.
- The development of the Mid Wales Railway saw a significant growth in tourism at the turn of the 20th century to Rhayader and the surrounding area as people travelled to see the reservoirs in the Elan Valley. Tourism and outdoor recreation continue to be important activities today.

- Gilfach is the embodiment of many mid Welsh landscapes all contained in a single valley. There is an element of surprise and discovery that this gem is here.

Sub-theme 2 Nature

Gilfach has outstanding biodiversity due to its range of habitats. It is home to over 1300 species of plants and animals living on moorland, wetland, woodland and farmland. Many of these species are vulnerable and nationally rare.

Storylines

- Gilfach has a wide range of habitats, including broadleaved woodland, wetland, grassland, moorland, ffridd, wet flushes and river.
- There is high biodiversity, with over 1300 species of plants and animals, including many lower plants, invertebrates, migratory and breeding birds.
- Over 400 species of lichens and over 140 species of mosses and liverworts can be found here.
- Gilfach is an essential genetic bank of lichens, mosses and liverworts, and other plants and animals.
- The habitats are a legacy of thousands of years of managing the land to rear livestock and produce timber. Farming has had both beneficial and damaging effects on these habitats.
- Salmon are a key part of the ecology of the Marteg and the Wye, passing through the reserve each year in November to spawn in the Marteg near St Harmon.
- At Gilfach it is possible to see some of the notable upland species that are uncommon in lowland Britain, such as salmon, otter, pied flycatcher, dipper, redstart and red kite.
- Gilfach can demonstrate some of the big ecological stories, such as migration, natural succession, the interconnectedness of species and habitats through food chains, and the relationships between habitats and management.

Sub-theme 3 History

People have lived at Gilfach for over five thousand years, making their living rearing sheep and cattle. The valley has long been an important transport route through the heart of Wales, used by Cistercian monks and drovers, as well as travellers on the Mid Wales railway.

Storylines

- Evidence of three Bronze Age burial cairns indicates settlement by people for a long time.
- The climate in the early Bronze Age, which was warmer and drier than today, favoured major farming expansion and forest clearance with uplands being used at a much greater scale than today.

- A possible route of a Roman road and ford crossing the Afon Marteg may be part of the Caersws Roman Road running from Llandrindod Wells almost to Newtown.
- There is evidence of three deserted longhouses dating from the medieval period.
- The Monks' Trod is an ancient road across the Cambrian Mountains linking the 12th century Cistercian monasteries of Abbey Cwmhir and Strata Florida. The Trod passes through Gilfach running along the lower parts of the valley close to the river.
- Gilfach longhouse, dating from c.1550, is a significant example of a Welsh longhouse revealing several stages of conversion and development.
- Small quarries provided stone for building houses, barns and walls.
- The Mid Wales Railway was a significant transport route through Wales. Its arrival in 1864 transformed the lives of the people living here, making it possible for people to travel further afield and bring in goods.
- The railway was used to transport coal during WW1 – the 'Jellicoe Specials'.
- There is a long tradition of local people using the train to gather whinberries from the hills.
- People have lived in the Marteg Valley for thousands of years, farming the land by grazing livestock and growing crops. The way people have farmed has changed over the centuries.
- Poaching of salmon has been an important part of the local economy for hundreds of years.
- The bridge over the Marteg allowed road transport up the Wye Valley.
- There are conservation issues for the historic features such as the longhouse, field boundaries, the railway tunnel and the bridge.

Sub-theme 4 Gilfach today

Gilfach is a living, working landscape, which is carefully managed to sustain its wildlife.

Storylines

- Gilfach is a nature reserve that uses some traditional farm management techniques to maintain or develop habitats in a state that attracts desired plant and animal species.
- Habitats at Gilfach are continually changing through natural succession. The habitats are maintained through ongoing management, or are being deliberately left to develop naturally through scrub and then to woodland, which is the climax vegetation type.
- The fields and meadows are grazed to maintain diversity in grassland plants and animals.
- Hedgerows and woodlands are managed to optimise biodiversity.
- The railway tunnel is protected for its population of bats.

8 Interpretive approach

8.1 Guiding principles

Gilfach's character is of a tranquil valley with unspoilt views, a place to discover the river and wetlands, wet pastures and meadows, woodland, moorlands and a landscape with subtle traces of human occupation over thousands of years. The interpretation of the reserve should respect this character and help to enhance, rather than detract from, its very special features.

We recommend that the approach to interpretation at Gilfach should be essentially low key, subtle, appealing and memorable. It should be layered with a clear hierarchy of explanation and detail and a distinctive identity that reflects the special qualities of Gilfach and its ownership and management by the RWT. The overall approach should be light and evocative at the Pont Marteg entrance, expanded with some specific cultural, habitat and species interpretation at key sites and viewpoints, with more detailed interpretation and information about farming and local history, habitats and species in the byre. Interpretation in the byre should be presented through an imaginative exhibition, audio and film / video presentations, a changing handling collection, books for browsing and computer-based information.

Research shows that personal interaction is one of the most effective forms of interpretation. RWT has an opportunity to develop the existing programme of events with more guided walks, talks, course and activities, possibly linking these in with local visitor services and accommodation providers as well as Rhayader's new 'Spectacular 52 weeks a year' marketing approach.

Interpretation at the hub and around the reserve should be creative and visually stimulating. It should be produced using natural materials where possible, such as stone and timber, or carefully designed to fit into the landscape, while still being visible and easy to locate. The use of vertical stone slabs, known as orthostats, slate slabs and timber panels should be considered for interpretation, along with shaped panels and carved seating.

Layered
There should be a clear hierarchy of interpretation at Gilfach with introductory materials at the new interpretive hub and shelter at Pont Marteg, some interpretive media around the reserve supported by more detailed interpretation and information at the byre in the longhouse. The byre will be the place to find out more about the reserve, its farming history and its ecology, via interpretive displays, printed media and computer-based information.

'Layering' of content should also be used in interpretive leaflets, panels and website pages, where the first paragraph provides all the essential explanation of the story, and later paragraphs providing more detail. Further layers can also be provided on websites and in downloadable information that is easily accessible if desired.

Subtle
Interpretation at Gilfach should be based on self-discovery and exploration, with more detailed interpretation at the byre in the longhouse supported by well presented detailed information using flip books, downloads and other web-based information. Out in the reserve the interpretive media should blend with the landscape while still being easy to see and understand. Media should use natural materials such as timber and stone, ideally sourced from the reserve or locally where possible, or designed to look natural. There are also opportunities to work with local artists and craftspeople such as glass engravers, sculptors and stonemasons.

Attractively designed and evocatively written
Interpretation that reflects the natural beauty of the landscape and encourages an emotional response to the reserve, as well as an intellectual appreciation, can resonate well with visitors. High quality and attractive designs help to present a professional image, drawing the visitor in for a positive and emotional experience of the place. Similarly, short, evocatively written texts that can easily be read and absorbed provide a powerful mental image of a place or a feature.

Developed to reflect local distinctiveness and skills
Interpretation on the reserve should be in harmony with the landscape and appropriate for their specific locations. The materials used should be sensitively chosen, attractive and robust and use natural materials, such as stone and timber, where possible, avoiding inappropriate visual and noise intrusion.

Interpretation should also be multi-sensory. There should be things to feel, to smell and even to taste. This can use local photographs, 2D and 3D graphic images and incorporate creative writing and audio reminiscence materials produced during workshops and projects with local people. The writing and images should include human stories associated with Gilfach and the communities that live in the area, making connections between people and the land.

Delivered by people as well as by media
Research shows that personal interpretation is the most effective way to tell the stories of a site. The Radnorshire Wildlife Trust has skilled staff and volunteers who can enthuse visitors with their understanding and knowledge through a programme of guided walks, activities and events.

Accessible to all
Physical and intellectual accessibility are critical. Interpretation should be delivered at various levels for different target audiences. It should accommodate different learning styles – audio, visual and kinaesthetic. Interpretation should be developed in ways that enable volunteers, staff and experts to jointly deliver a cohesive message about Gilfach with confidence. It also needs to be accessible for a range of abilities and access needs, including those with hearing, visual and mobility impairments.

Language
All interpretation produced for Gilfach should be bilingual – in Welsh and English. A summary sheet for the reserve should also be made available on the website and as an information sheet in French, German, Dutch and Polish.

9 Proposed interpretive media

We have structured the interpretive proposals into **Whole Site Interpretation**, three 'zones' – **Welcome**, **Explore** and **Discovery** – and **Events and Activities**. Media and activities for each of these areas provide interpretation at different levels for different audiences.

9.1 Whole Site Interpretation

This includes interpretive media that are available off- and on-site and provide an introduction and more detailed interpretation of Gilfach Nature Reserve. All the information and interpretation should be bilingual. The Welsh version should be written for Welsh speakers and not just be a translation of the English.

Design approach and map
RWT has its own branding and identity and a design style that runs through its publications and its website. Gilfach should follow this branding style and should also have its own distinct design identity that will become recognisable by visitors. This design approach will become a highly visible signpost for the reserve. Part of the design process will be an improved map of the reserve that can be used on the website, on panels and in leaflets and other printed materials.

- Develop a design approach for the reserve that will be used on all interpretation media. The use of images of lichens and lower plants would be an attractive and distinctive part of the design approach.
- Develop a map of the reserve that will provide clear orientation, showing key features and walk routes with time and distance. The map will be used in the interpretation hub and also on leaflets and other interpretation materials.

Site and trail leaflets
Despite the growth of digital media, leaflets are still very popular ways of conveying interpretation of a site or a service. They can be made easily available for visitors and act both as a guide and as a souvenir.

- Produce a low-cost colour flyer leaflet for the reserve that can be distributed widely for free. The flyer should be a single sheet at 1/3 A4 size that introduces the reserve, provides a location map and brief explanation of what visitors can see and do at the reserve.
- Produce an interpretive leaflet for the reserve that is also a trail guide. The leaflet would have the reserve map on one side showing the routes of each trail, colour coded and each with a distinct symbol, with timings and route details for disabled or mobility-impaired users. The reverse side should introduce the reserve and its features and explain what can be seen on each trail. The trail guide should be A3 folded to A5 or 1/3 A4.
- The interpretive leaflet should be available at the interpretation hub in a dispenser on the back wall, and at the byre. It should also be distributed to local TICs, shops, accommodation providers and the museum.

- A small number of leaflets should be encapsulated or printed on an appropriate substrate to make the leaflet more weather-resistant. These would be made available at the hub and the byre, for return at the end of the walk. They could also be provided to local accommodation providers to lend to visitors.
- Produce a tactile version of the map for people with visual impairments. The map can be made available for people to borrow. Tactile maps are produced by PIA in Wales. See http://www.pia.co.uk/en/Services/TactileDiagrams.aspx

Website

For many people the website is the first point of access to information and interpretation about a place or a service. Statistics from the Welsh tourism partnerships show that the proportion of people who access websites and download relevant information prior to their visit is increasing and is likely to continue increasing. Web presence is therefore essential and a high quality site is needed for the Trust's flagship reserve.

The website is the means for many visitors to download information onto tablets and smartphones which they can subsequently use during their visit. The website is also a dynamic medium that allows the Trust to provide new information and to respond to new issues about its reserves.

We would recommend that to help with accessibility the website is tested before it goes live to make sure it works for a range of groups, particularly young people, elderly people and those with learning disabilities.

- Create a dedicated series of pages for Gilfach on the RWT website with simple introductory pages, more detailed technical pages, activities and games for families, downloadable pdf- based information, audio and photographs. Web-based material should be bilingual.
- Ensure that the web pages are considered as an interpretive medium for the reserve not simply as providing details of how to get there and selected background details of its features.
- Include a concise description, and photographs, of the location of the car parks, the visitor facilities and the length of each trail, including surfaces, steepness and provision of seating. This description helps people with accessibility issues.
- Ensure that the interpretive leaflet and trail guide above is downloadable from the website, along with other relevant information. These should be easily downloadable to smartphones and tablets. It should also be possible to download audio materials that may be produced during workshops and reminiscence events – see *Events and activities* below.
- Ensure that the website includes links to other nearby nature reserves and sites such as the Rhayader Museum and the Elan Valley. Include links to Rhayader 52.
- Include the 360^{o} view of Gilfach with the links to other information and interpretation. This is a very useful introduction to the reserve and provides interactive interpretation about its features. The 360^{o} view should also be available on the screen in the byre, below.

Posters, postcards and badges

Posters and postcards using artworks and photographs produced during workshops held at Gilfach could be a dynamic way of sharing the interaction between the

reserve, its visitors and the community. They could encourage a sense of ownership about the site and helps foster good relationships with users and the community.

- Produce a series of posters and postcards with images and messages about the reserve produced by participants and tutors at photography workshops at Gilfach. The posters can be used in shops, museum, libraries and other public places. The postcards should be available for sale.
- Produce a series of 'I like lichens', or similar badges using artwork developed during workshops.

9.2 Welcome Zone

The **Welcome** Zone is the entrance to the reserve for the great majority of visitors. It includes the entrance gate from the A470, the car park, the new interpretation hub and the area around the existing sculptures with the picnic tables. The purpose of the Welcome Zone is to provide an introduction to Gilfach, its history and its wildlife, together with orientation and an understanding of Gilfach's location within the wider landscape. It encourages and reassures visitors to explore the reserve and to continue their visit up to Gilfach Farm to find out more. The Welcome zone also introduces the visitor to the design and style of interpretive media that will be used throughout the site.

Reserve entrances
The entrance from the A470 is a key point of arrival, providing an initial image of the reserve and setting the tone and expectations for the visit.

- Improve the appearance of the main entrance area from the road. The entrance consists of a cattle grid with timber and galvanised steel railings that are in poor condition and are provided and managed by the Highways Authority. The entrance is an unattractive introduction to the reserve. A simple improvement would be to paint the gates and fencing the same colour, which should be one of the key colours of the branding palette for Gilfach.
- Provide site name signs at the main entry points on the road and on all footpaths leading into the reserve, in the branded colours. The signs should be similar to the existing sign at Pont Marteg, constructed from timber with horizontal slats attached to vertical posts with the name and other details routed into the slats.

Interpretation hub
The hub is the introduction to Gilfach for most visitors and needs to inspire them to stay and spend some time exploring the nature reserve and enjoying its sights, sounds and wildlife. The hub should be a 'tempting taste' of Gilfach rather than a detailed explanation of everything in the reserve.

The hub welcomes the visitor to the reserve and sets the scene. It explains its importance as a nature reserve, the diversity of habitats and its location within the Cambrian Mountains. It provides orientation and information about the trails and their starting point just outside the hub. It describes the main visitor features of the reserve, such as Gilfach Farm longhouse, the river hide, the Bronze Age cairn, the

railway. It explains the location and function of the byre end of the longhouse as the reserve's visitor centre, and encourages visitors to walk, or drive, up to it to find out more about the reserve. The hub will encourage visitors to choose a trail and explore the reserve.

Interpretation in the hub should have strong, arresting graphic images and minimal evocative text to stir imagination and encourage people to walk into the reserve to discover its treasures. The hub provides an introduction to the reserve, while the byre is the place for detailed explanations.

The existing shelter, which has a map of the reserve, should be moved to Gilfach Farmyard to interpret the farmyard and provide information about walking routes from the yard.

Hub interpretation

- Produce a series of panels to attach to the back wall of the hub. The panels should cover much of the rear wall under the roof – approximately 6m in length and shaped to follow the top edge of the wall. They should have strong and attractive images of the reserve, with minimal text. They should include the map of the reserve showing the routes of the trails and the location of key features, such as the cairn, the longhouses, the railway and Gilfach Farm. Some of these panels could be made in clear polycarbonate to allow visitors to appreciate the beauty of the stone wall. The map and interpretation messages would need to be located at a height suitable for children and people in wheelchairs.
- Etch images onto the glass panels in the hub, or print onto self-adhesive vinyl, introducing a small selection of the iconic species of the reserve, such as lichens, mosses, leaping salmon, circling kites and a hunting otter.
- Rout short poetic text into the timber supports to the windows in the side of the hub shelter.
- Carve evocative statements about the reserve and its distinctiveness on to some of the stone elements of the building to reflect its history and wildlife and on to vertical slabs, or orthostats, placed outside the hub.
- Include small niches within the stone structure of the hub to hold carvings, found items from the reserve, such as colourful leaves, stones and snail shells, and other 'treasures'. The carvings will need to be fixed securely to avoid theft but visitors can be encouraged to take and/or replace the found items.
- Install a solar powered Info-Point at the hub to enable downloading of interpretation materials such as leaflet and trails. See the interpretive proposals for the byre exhibition below and Appendix 4 for more information. The Info-Point at the hub would provide introductory audio and visual material about the reserve suitable for all visitors, including those with visual and hearing impairments. The solar panel could be incorporated into the hub's roof.
- Provide outside seating and picnic tables close to the hub, designed and constructed to include interpretive text and images. Seating should be 450-480mm high and should allow for wheelchair access with a minimum 700mm clear knee room beneath the table. Some of the seating near the car park should have back and armrests suitable for people with disabilities.
- Provide clear orientation at the start of each trail from the hub.

- Produce banners or feather flags to be used at the hub to promote events. These could be produced as part of a community activity using artwork produced by participants.
- Provide a current events panel, or cabinet, with a designed template into which A4 sheets can be mounted.
- Install a 'welcome to Gilfach' panel in the first car park closest to the A470 to encourage visitors to visit the hub.

3D map of Gilfach
- Produce a map of Gilfach as a 3D model that can be located outside the hub. This could be an arts project involving an artist working with local communities and schools, or an arts commission for a sculptor to create a 3D installation of the valley. If the 3D map is cast in resin or other material two copies could be made, with the second located in the farmyard. The model should show the walk routes colour coded, and each with a unique symbol, to link with waymarking on the routes.

Shelter interpretation
- Re-locate the shelter to Gilfach farmyard.

9.3 Explore Zone

The **Explore** Zone is the majority of the reserve with its trails, viewpoints and sitting areas, and its rich mix of habitats from the river up to the hilltops. It includes the road up to Gilfach Farm and the otter hide. This is where visitors can experience the site and enjoy its features.

Themed trails or walk routes
Themed trails are attractive to many visitors as they offer a safe route to key features in the reserve. Circular routes are popular, as they bring people back to the start point and do not require navigation or map-reading skills. It is useful to indicate the average time required to walk the route, as well as giving the distance, to help people plan their visit. Where possible, it is good to have 'figure of eight' routes that offer the option of a short-cut or 'escape' route on longer circular trails. This means that walkers can easily and quickly return to the start point if necessary. This is very useful for families with small children who may lose interest or energy along the trail.

- Clearly name, colour-code and provide individual symbols for, the existing trails on the trail guide.
- Provide clear and frequent waymarking located at each point where the route changes direction. Ensure that the name, colour coding and symbol are consistent throughout the trail and also with the map at the hub and with the trail guides. The waymarkers at the start of each trail should include the length of the route and the expect duration for walking.
- Provide small interpretive panels that can be set into the vertical posts of footpath signs. The panels can be attached to the post or set into it. Examples of these panels are in Appendix 5.
- Provide text and/or images carved into rails and gates. Examples of interpretation routed into fence rails are shown in Appendix 6.

Benches
Seating in nature reserves offers visitors an opportunity to stop and enjoy the view, absorb the atmosphere and watch or listen to wildlife. Gilfach offers a valuable opportunity to escape the hustle and bustle of everyday life and simply enjoy being in a peaceful landscape surrounded by nature. Seating in the reserve needs to be sensitively designed so that it blends into the landscape. Timber logs or benches are ideal.

- Provide simple benches with interpretation carved or printed on to the seats or the seat backs, with additional vertical stone slabs, or orthostats, interpreting key features such as the river, the railway and its bridge and tunnel as well as the views. See Appendix 7 for examples of benches. We estimate the installation of up to five benches, located at the Bronze Age Cairn, along the southern section of the nature trail with views down the valley, on the road up to Gilfach Farm and alongside the river. The exact locations of these benches would be determined during the implementation phase.

Otter hide and other potential shelters
Hides are an important part of many nature reserves, allowing visitors to sit and watch wildlife in comfort. We recommend that the otter hide should be renamed the River, or Dipper, Hide to avoid visitors having unrealistic expectations of seeing an otter. The hide gives visitors the opportunity to enjoy the river and to watch for dippers, otters and other wildlife.

Gilfach Nature Reserve is a large and exposed site and some additional shelter is useful for walkers, especially on the long distance Wye Valley Walk. The otter hide should have interpretation inside explaining wildlife, history and agriculture relevant to their location within the reserve. As the hide has low light levels inside, interpretation needs to have high contrast with strong images and minimal text. Messages should include the wildlife that can be seen from the hide, such as dipper, kingfisher, wagtails, aquatic vegetation, invertebrates, salmon and otter. The interpretation should include aspects of the food chain, explaining the relationships between species. There should also be a section on how and where to look for wildlife from a hide.

The panels should include a chalkboard for people to record what they have seen during their visit (‘What have you seen today…?’).

- Produce a series of panels in low cost materials, which would fill much of the rear wall of the hide. The panels should have a strong visual element explaining the wildlife that can be seen from the hide and the associated food chain.
- Consider locating other shelters around the reserve in the future, which could include a shepherd’s hut or railway wagon, containing interpretation about farming and the railway.

Sculpture trails
Sculpture trails have become popular features at many countryside sites. They can broaden the audience and offer opportunities for the Trust to work with local artists, run creative workshops using natural materials and to exhibit the artwork created by

workshop participants. Activities could link with the Powys Arts Forum and Rhayader – Open 52 weeks a year.

- Consider relocating the existing stone sculptures of animals and plants by the car park to create a short, circular sculpture trail that starts from, and returns to, the car park. The individual sculptures could be placed in locations that are relevant to each sculpture, for example the newt could be by damp stones near the river, the fern on the edge of the woodland.
- Create a trail made of natural material sculptures that reflect the wildlife of Gilfach. These could be produced as part of a sculpture workshop led by an artist specialising in natural material sculptures. The sculptures and the trail could be renewed each year with appropriate publicity.

9.4 Discovery Zone

The **Discovery** zone is the byre at Gilfach Farm, where visitors can find out more about the reserve, the farm and the use of the byre itself. This is the zone where activities and events will be based and where visitors can be directed to more detailed information and interpretation if desired.

The key messages to be delivered at Gilfach Farm are farming and the history of the building, the natural history of the reserve, the people of the valley through time and the historical evidence of settlement.

The former byre at Gilfach Longhouse
The sense of welcome at the entrance to the farm area is poor with limited waymarking and orientation. There is a name panel but there is little to welcome the visitor or to explain the importance of the longhouse and the role of the byre as a visitor centre. There is inadequate waymarking from the upper car park to the farmyard, and once in the farmyard it is not clear which buildings are open to the public.

The upgrading of information and interpretation at the site should include waymarkers, a welcome panel and some introductory interpretation about the site and its history. Information should include the location of the car parks and the need to keep access to the workshop clear, waymarkers to the farm buildings, the location of toilets, provision for disabled people, and opening times for the byre. It should include information that the farmhouse is private, and that the ‘easy access’ trail starts from the yard.

The byre of the Gilfach Longhouse will become the visitor centre for Gilfach. It will provide interpretation about the reserve, its history, the role of farming and the history of the longhouse itself. The interpretation can be provided on panels that can be attached to walls or mounted into timber frames. The panels need to be washable as swallow and bat droppings will need to be removed regularly.

The byre needs enhanced lighting, ideally provided by low energy lights such as LEDs. The lighting should be motion sensitive with a timer to prevent it being

switched on at night. It should be installed in the roof trusses with the lights directed downwards to avoid disturbing the bat colonies.

The raised area to the left of the entrance to the byre should continue to offer refreshments as this is much appreciated by visitors, especially walkers on the Wye Valley Walk. This area should include interpretation about Longhouses and how they are a European housing style accommodating people and livestock. It should include a plan of Gilfach longhouse. A simple cartoon could tell the story of the Gilfach longhouse through time.

- Install two road signs at the junction of the road to, and from, St Harmon and the access road to Gilfach farmyard to provide clear waymarking to the visitor centre from both directions.
- Install a new welcome panel that explains what is available at Gilfach Farm and that the byre is open to the public.
- Install a waymarking system from the top car park to the farmyard, explaining the need for unobstructed access to the workshop.
- Provide a permanent exhibition in the byre that includes big and attractive images, carefully crafted text and 2D images of cattle as a background to the displays. The exhibition should focus on the following themes and storylines:
    - Farming and history of the building. Interpretation should include a plan of the longhouse with a cartoon-like image of its development and change over time. It should explain the functions of the three buildings – the byre, the barn and the private farmhouse.
    - The nature of the reserve including the big overview stories about its history, why it was bought, what makes it so important as a nature reserve and key species.
    - The people of the valley in history, including the use of the Monks' Trod and the Mid-Wales Railway.
    - Install 2D graphic images of cattle as a backdrop to the exhibition panels.
    - Retain the old farming hand tools in the byre and place them higher on the walls.
- Provide a series of changing exhibitions. These could be in the form of Foamex, or other waterproof material, panels that are low cost. The content of the changing exhibitions should include:
    - Four seasonal exhibitions of things that can be seen at the reserve each season. They should include both the common and the spectacular, such as lichens and robins for winter, spring flowers and swallows for spring, bats and summer visiting birds for summer, and salmon and autumn colours for autumn.
    - Children's interpretations of the reserve.
    - People's writing about the reserve and its wildlife and history.
    - Local Welsh words and expressions for the area and its features.
    - Information on the events and activities programme and nearby places to visit.
- Develop a series of browsing flip-books on key subjects such as the restoration of the farmhouse, the projects being undertaken as part of the HLF project, ecological management and key species. Flip-books are low cost and easy to produce and update and would be available for people to use while sitting in the byre or outside in the courtyard.

- Install an 'Info-Point' to enable downloading of interpretation materials such as leaflets, trails, games for children and more detailed technical information. The Info-point will also allow downloading of audio materials. Info-points are Wi-Fi hotspots that enable people with smartphones or tablets to navigate information with the browser as if they were browsing the real web. Content is uploaded directly to the Info-point from a laptop or a tablet. It does not give access to the Internet. See the information sheet about Info-Point in Appendix 4.
- Develop pdf-based technical information about the reserve, its ecology and archaeology with maps, species lists and designation data, that can be available from the Info-point. The Info-Point can also be uploaded with the material on the RWT Gilfach website pages.
- Install a touch screen unit in the byre containing videos and audio recordings. The touchscreen unit will contain specially made audio and visual content that is different from the material that would be available from the Info-Point. Videos with commentary should have subtitles for people with hearing impairments.
- Develop a series of short films or videos of the reserve, including an introduction to Gilfach, and key species and habitats such as lichens, redstart, pied flycatcher, meadow flora and life in anthills. The videos could also include edited highlights of nest box footage. The 360^{o} view from the website should be included in the video programme.
- Develop a series of audios with historical reminiscence and contemporary farmers talking about agriculture in the Gilfach area, and sounds of cattle and other livestock. The audio materials can be developed on-site or sourced from Rhayader Museum, which has a library of audio recordings of local people. The audio should also include a 'soundscape' of the reserve, with recordings of bird song, insects and the wind through leaves.
- Keep the farm equipment in the farmyard and provide interpretation about this equipment and its use on the Info-Point in the byre.
- The shelter from the Pont Marteg car park should be relocated into the farmyard to provide information about the farm and walk routes starting from here. Renovate all woodwork at the shelter and ensure the roof is waterproof.
- The existing wind-up audio unit could be re-furbished and used at other sites.

9.5 Events and activities

Events and activities will take place at the reserve and in neighbouring communities, such as Rhayader. We suggest a selection of activities that can be provided by staff, volunteers and experts and also by people from communities and Rhayader Museum.

- Provide a programme of guided walks led by staff and volunteers aimed at a variety of audiences including families, walkers and experienced naturalists. The walks can be pitched at a variety of levels, from 'beginners' and first visitors, to nature and history enthusiasts. It is essential to provide the leader of all the guided walks with background information about the reserve to ensure consistency of approach and information about the reserve.
- Develop a self-guided trail and activity for families to enjoy during each of the school holidays

- Develop workshop events, including photography, illustration, creative writing and other arts and crafts based workshops.
- Develop a programme of activities in partnership with Rhayader Museum, Elan Valley and community groups, including intergenerational reminiscence workshops on childhood activities, food, farming and journeys. Audio recordings of reminiscence events should be made available for downloading from the RWT website and the Info-point in the byre.
- Organise a programme of site-based activities offering a catered element such as a dawn chorus breakfast event, and moth and bat evenings with themed supper. Catering can be bought in from a local supplier.
- Develop a spring and autumn walking weekend that includes guided walks around the reserve, and from the reserve to other areas, such as Elan Valley and along the Wye Valley Walk. The walks would help set the reserve in its wider landscape context and help develop working partnerships with walking groups, other interest groups and local organisations.
- Develop and run a hay making festival to celebrate the farming traditions in the valley.
- Develop and run a community archaeology project that will help to record and further understand the archaeology of Gilfach Nature Reserve. The project should involve local communities in researching, understanding and learning about the heritage of the area. The project would include training local communities and staff at the reserve in researching, identifying and managing archaeological landscapes. It should also involve preparing and producing a toolkit for participants that helps them understand the landscape and its historic features. Potential partners for this project would include Cadw, the Clwyd Powys Archaeological Trust, Rhayader Museum, the Elan Valley and Powys County Council. See Appendix 8, Section 3.3 for more information. The trust should undertake a scoping study to assess the potential viability of this project.

Gilfach Nature Reserve: Hallucinogenic, toxic and arresting, *Amanita muscaria RKE*

9.6 Summary of projects with provisional budget allocation

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
Whole Site interpretation							
	Create a design approach for Gilfach	Design approach for Gilfach Nature Reserve within the RWT design style. Design	All	√			500.00
	Map	Map of the reserve for use in panels, leaflets and the website. Design	All	√			800.00
	Low cost flyer	Produce 1/3 A4 colour flyer. Text and design Print 10,000	All	√			500.00 550.00
	Interpretive trail guide leaflet	Full colour with map – A3 folded to A5, or to 1/3 A4. Text and design Print 5000	All	√			1500.00 800.00
	Website	Create dedicated pages on the RWT website. Text and design Uploading on to website	All	√			2000.00
	Posters, postcards and badges	Posters, postcards and badges with images and text from workshops. Produce template and use artwork from workshops. Design Workshop costs met through activities budget	All	√			300.00
Sub-total				**6950.00**			

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
Welcome Zone							
	Reserve main entrance	Improve appearance of entrance from the A470 – Powys CC responsibility. Budget for paint / labour		√			500.00
	Other reserve entrances	Site name panels at entry points. Construction and installation by RWT		√			500.00
	Interpretive hub panels	Produce and install Interpretive panels – total length approx 6mx2m – in the hub with map, introduction to the reserve, evocative images and introduction to the nature trails. Text and design Manufacture in Duralite, RWT to install, ***or*** Manufacture in Polycarbonate, RWT to install	All	√			1800.00 5000.00 3000.00
	Interpretive hub	Etch or carve 3 large images and text on the glass, ***or*** Print on to self-adhesive vinyl. Design Installation – etching, ***or*** Installation – print on to vinyl and install	All	√			1000.00 6000.00 1000.00
	Interpretive hub	Route text into the timber supports. Text and routing		√			1000.00
	Interpretive hub	Carve or route text and images on stone elements of the hub and on to orthostats around the hub Source materials, text, design, artwork and installation	All	√			2500.00
	Interpretive hub	Install a solar-powered Info-Point into the hub with solar panel in the roof.		√			4100.00

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
	Interpretive hub seating	Provide 2 picnic tables with interpretive messages. Text and design Construction and installation by RWT	All		√		500.00
	Banners or feather flags	Produce banners or flags to promote events. Design and manufacture	Individual Themes		√		500.00
	Interpretive hub waymarking	Orientation waymarking for trails. Purchase of timber Construction and installation by RWT		√			300.00
	3D map	Develop the map as a 3D model and as a tactile map for people with visual impairments Develop as an arts project or commission a sculptor. Commission a tactile map from PIA	All	√			5-10,000.00
	Existing shelter	Relocate shelter to Gilfach farmyard		√			
Sub-total				**19,700.00 – 31,700.00**	**1000.00**		
Explore Zone							
	Trail waymarking	Waymarking along the trails		√			200.00
	Trail waymarking	Small interpretive panels or text routed into posts. Up to 20 no. 75mm x 250mm panels. Text, design and illustration Production, and installation by RWT		√			4000.00 800.00
	Benches	Provide simple benches with interpretive messages. 4 x benches Purchase timber	All		√		400.00 1000.00

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
		Text and design Carving text by Rob Jakes Construction and installation by RWT					1500.00
	Road sign to Gilfach Farm	Install two road signs for the junction of the road to St Harmon and the access road to Gilfach Farm. RWT to manufacture and install		√			500.00
	Otter hide	Interpretation in the hide. I x large panel, 2m x 1m 1 x recent sightings board Text and design Production and installation	Theme 2	√			1500.00 500.00
	Other shelters	Interpretation materials in other shelters, such as shepherd's hut or railway wagon Text and design Production and installation	Themes 2, 3 and 4			√	1500.00 500.00
	Sculpture trail	Relocate existing stone sculptures to create sculpture trail – volunteer task with 1 day digger hire	Theme 2			√	300.00
	Sculpture trail	Create a natural material sculpture trail as part of an art project, or an activity project	Theme 2		√		2000.00
Sub-total				**6500.00**	**4900.00**	**2300.00**	
Discovery Zone							
	Gilfach yard	Produce new welcome sign		√			500.00
	Gilfach yard	Produce and install new waymarkers		√			500.00
	Gilfach yard	Install shelter from Pont Marteg car park Text, design and panel production		√			1000.00

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
	Byre exhibition	Permanent exhibition on natural and cultural history Text and design Production and installation	Themes 1,2 and 3	√			7000.00 3000.00
	Byre exhibition	Changing exhibitions using seasonal and dynamic interpretation. Four panels. Text and design Production	All	√			1400.00 600.00
	Byre exhibition	Install a panel for temporary notices about events, which would include a space, and a map, for visitors to record their own sightings on the reserve. Design, production and installation		√			700.00
	Byre exhibition	Flip books Design template and production for 4x books Research and text developed as part of Gilfach project	All	√			1000.00
	Byre exhibition	Install Info-Point in the byre.	All				3000.00
	Byre exhibition	Create PDF content for information Include interpretation of farm equipment in farmyard. Design template and conversion to pdf Text created in-house	All	√			500.00
	Byre exhibition	Provide 1x bespoke unit with touchscreen and audiopost suitable for exterior use for installation in the byre Installation and loading of audio and visual material	All	√			6500.00
Sub-total				**25,700.00**			

Gilfach Nature Reserve interpretation programme							
No	**Project**	**Description**	**Theme**	**Yrs 1-2**	**Yrs 3-5**	**Yr 5+**	**Budget allocation**
Events and activities							
	Events and activities programme	Per year	All	√			3000.00
	Community archaeology project	Organise and run a community archaeology project Produce a toolkit for event participants Undertake scoping study Deliver the project	Theme 3		√		Estimated at 2000.00 35,000.00
Sub-total				**3000.00**	**37,000.00**		

10 Monitoring and evaluation

Monitoring and evaluation are crucial parts of the process of planning and implementing interpretation programmes. They are also the phases that tend to be given least resources in funding and time. By designing a monitoring and evaluation programme at the start of the project with clear actions and outputs and then building in a feedback process that will enhance interpretive provision the process becomes less onerous and more effective. The objectives listed in Chapter 6 should form the basis for monitoring, providing a framework of desired outcomes that can be measured during the evaluation process.

Mechanisms for judging the success of new interpretive initiatives will need to be put in place and these are proposed below.

We recommend the following actions:
- Pre-testing of new interpretive media
- Monitoring of the use of interpretive media (including use by different audiences and those with accessibility challenges)
- Evaluation of media
- Evaluation of the interpretive approach as a whole

There are many methods that can be used to undertake each of these activities and we identify a number of them below. The list is not exhaustive but indicates some of the methods that can be employed to take stock of different elements of the interpretive approach. Wherever possible, pre-change data should be obtained in order to provide for immediate comparisons and to establish base lines of 'graphs' for continued monitoring and evaluation.

10.1 Pre-testing

Pre-testing is something that many organisations fail to do because 'deadlines' are cited as the need to get things on the ground, or out in the public domain. On the principle of 'getting it right, rather than getting it now', we advocate strongly that the RWT tests out new media, from our proposals for printed material and panels to audio materials and events, before committing final expenditure and implementation work. A further benefit of this approach is in ensuring that the local community is given a chance to feed into the development process both by commenting and by participating.

In terms of printed and similar material, this process is now simpler and cheaper with the availability of computer-derived artwork that can be produced inexpensively and circulated, if testing printed material, or set up with suitable lamination if testing interpretive text and graphic designs. Reactions can be sought from selected or random users / viewers, from 'focus groups' or otherwise chosen groups of people, or by other means that ensure wide pre-implementation appraisal and approval.

With any new video or audio material, sample scripts or 'sound bites' should be tested by visitors over a period to ensure, as far as possible, that they meet visitors' expectations of a visit to Gilfach as well as promoting the project's aspirations.

10.2 Monitoring

Once media are in place, then monitoring their use and / or success can be done in a variety of ways, often in conjunction with evaluation. For example, the following largely quantitative checks could be instituted:

- Including QR codes in leaflets, panels and other materials to enable the project to keep a record of the number of hits on the website, and inviting comments on the website about the interpretation.
- Maintaining accurate checks of questions asked – and the type of questioners – as well as of material issued and advice given at visitor centres where these are in place.
- Maintaining accurate records of printed material distributed and replenished.
- Maintaining accurate records of publications issued and / or sold, and comments made (many audio units now incorporate a comprehensive level of monitoring automatically, with feedback available on, for example, length of time used and areas of particular interest).
- Maintaining records of contact with members of the public expressing an interest in the reserve, by origin and profile of visitor.
- Making observation of visitors' use, behaviour, time spent etc when viewing interpretation.
- Making observation of visitors' use of graphic and printed material.
- Maintaining records of number of visitors during special events.
- Making systematic counts of website hits.
- Monitoring and analysis of the use of Facebook and Twitter sites, and of comments posted on Trip Adviser.

10.3 Evaluation

The more time-consuming and, therefore, costly, aspects of the work of appraising success are those that involve qualitative research, which can include:

- Face-to-face interviewing of visitors (and non-visitors) using the external interpretation and / or attending events / activities or guided walks / tours.
- Distribution of questionnaires for self-completion.
- Use of focus groups, private and public meetings etc.
- Analysis of questions asked and answered (or not) by visitors.
- Analysis of unsolicited written communications by email, letter or otherwise.
- Retention of visitor data for future marketing use.

Pre-testing, monitoring and evaluation provides essential data and anecdotal material that informs the interpretive approach and guides it throughout its implementation. It is recommended that the RWT dedicates appropriate time and resources to the evaluation process in order to determine those initiatives that are successful in developing and maintaining the audience for interpretation as a whole. This will help to ensure that resources are effectively targeted.

Appendix 1 Consultees

RWT Volunteers
John Lewis (Trustee)
Richard Rimington
Hilary Rimington (Trustee)
Kelvyn Curry
Joyce Austin
Charles Austin
Bronwen Jenkins
Stephen Mullard (trustee)
Pam Knight (trustee)
Chris Ledbury (trustee)
Ray Woods (trustee)
Liz Flemming Williams
Stuart Fry
Nondus Banning-Body

RWT Staff
Julian Jones
Jonathan Stone
Suzie Fraser
Emma Morgan
Rob Podmore
Darylle Hardy

CARAD / Rhayader Museum
Cath Allen
Krysia Bass
Alan Samuel
Liz Pugh

Elan Valley
Ed Parsons

National Trust
Hannah
Jo Daggart

RSPB Carngafallt

Appendix 2 Summary of consultation

Consultees: Viv and Pip, tenants at Gilfach farmhouse, 18.9.2015
Viv and Pip have lived at the longhouse farm for several years. They know the reserve well and over the years have become friends with many of the reserve's visitors, especially birdwatchers who are keen to photograph redstarts and pied flycatchers.

General points from discussion:

- RWT organised an Oat Harvest event, which was very successful and popular among local farmers although the actual event didn't make any money. It could have made money if run for a second time.
- Viv ran several Open days at the Visitor Centre, which raised c£6000 for RWT.
- Gilfach was farmed by Hughsie Lewis and the Powells. Hughsie was the first person to introduce Charolais cattle locally. He left in 1961, the place was tumbling down around him. He had sheep, cattle, poultry and geese. He was very religious, pedaled to church via the railway line. He apparently had a cage over his bed to stop rats biting him when he was asleep.
- The Lewis's were wonderful gardeners. They grew flowers and good root crops.
- Thomas Lewis was Hughsie's grandfather. Hughsie was brought up by his grandparents, which may be why he was old-fashioned and quite Victorian in attitudes.
- Monty Williams wrote a book – a Glimpse of Beautiful Mid Wales.
- The railway revolutionized the area, transported cattle out of valley, brought foodstuffs and coal in. There was a halt at Marteg. Kids used to walk through the tunnel.
- Local tradition of gathering whinberries.
- The longhouse worked well. The whole farm was run as a self-sufficient system. Cattle were brought into the byre for winter. There was a calf pen, a pigsty and a gathering stone. Sheep came down off the hills in winter to live on lower fields around the house. There were lots of little sheds.
- Before the railway bridge, there was a crossing point over the river at the same point. The crossing was partially made of wood with a pulley.
- Rhayader has lots of English incomers – especially after the 1960s hippie trail.
- Austin Morgan thinks there were sledge routes for peat cutting, from the hill-tops down to the valley.
- There is a stone memorial for a dog called `Patch' beside the river. He was a Jack Russell that jumped into the river and got swept away.
- The Monks' trod came through the Marteg valley – but there is controversy about exactly where it went. Gilfach is approximately half way between Strata Florida and Abbey Cwmhir.
- Drovers used to use Gilfach as a route, to avoid paying tolls in Rhayader.

Key wildlife features and species at Gilfach:

- River is superb to walk alongside, the sound of water in kettleholes is very special.
- There is a concrete plinth near the river, which used to be associated with a washpool where the fleeces were washed.
- Frank Griffiths, plaque for 1951.
- Oak Wood was clear felled in WW1.
- Oat Field has a good rich flora.
- Ant hills are very good in the meadows – indicate its never been ploughed.
- The Boundary walk is long and tough going – probably not for general public

Birds:

- Dippers on the river
- Kingfisher in winter
- Redstart from mid April to July, best place to see them in the yard, use the nesting boxes. Also use holes in the walls
- Pied Flycatcher from mid April to June, best place to see them in the yard, use the nesting boxes
- Tits
- Siskin
- Warblers – wood warbler, garden warbler, black caps and willow warbler
- Redpoll
- Nuthatch
- Yellowhammers on gorse
- Stonechat on gorse
- Kestrels
- Woodpeckers – green, Greater Spotted
- Ravens
- Buzzards
- Red Kite

Other animals:

- Salmon in October/Nov, natural salmon ladder on Marteg.
- Otters come to feast on the salmon – live ones and ones that have died.
- Voles in the meadows.
- Badgers – there are several sets, large one in Oak Wood. Others by boundary of larch wood, by the Marteg, by hay meadow.

Plants:

- Flowers in the hay meadows good – hay rattle, harebell, eyebrights.
- Butterflies – small pearl-bordered fritillaries.

Invertebrates

- Dragonflies and damselflies – Green-winged dragonfly.
- Fox moth caterpillars
- Welsh Clear wing recently found – probably under-recorded as little known

Consultee: Liz Pugh – representing CARAD and the Rhayader Museum, 19.9,2015

Liz was, until recently, the director of Rhayader Museum. She is now a volunteer and was happy to discuss the interpretation plan for Gilfach on behalf of the museum trustees and CARAD, Community Arts Rhayader and District. Cath Allan is the Acting

Chair of CARAD. CARAD aims to offer community film, spoken word and literature events, plus Saturday workshops and a café.

General points from discussion:

- Rhayader Museum made good use of volunteers for the development of art and design ideas when the museum was being refitted and there could be an opportunity for the RWT to adopt a similar approach to stretch the budget for the provision of interpretation and possibly even in the construction of the hub.
- The current audio materials in use at the museum feature material relating to farming and information about the use of the Mid Wales railway that could be relevant to Gilfach. The local population was much larger in the past and there was more industry locally including tanning.
- Gilfach, the Elan Valley and the Rhayader museum form a triangle of sites and there is opportunity to make more of their joint location.
- The Elan Trust would be useful to contact as they already offer walking events. Ieuan Joyce and Ed Parsons are the contacts at the Elan Valley. Could be keen to build social and community projects
- The museum knows of and has contact with many excellent and skilled craftspeople in the Rhayader area, including glass engravers, who could get involved in the development of interpretation at the hub.
- Moss walls and other living art could be developed at Gilfach.
- The museum was part of Rhayader 2000 – Liz was/is on the board with Alan Samuel, David Evans and Liz Lloyd.
- The museum would be interested in investigating a guided walk event linking Gilfach and the museum.
- Powys County Council has been involved locally in various projects – Mid Wales my Way, destinations Network and the Cambrian Mountains Tourism Network.
- The Tourism Destination partnership has arranged Familiarisation Days and Gilfach could offer these to raise its profile with tourism providers.
- Tourism Destination project did a Shop Window project.

The museum's current and future plans that may be relevant to Gilfach

The museum would be interested in participating in an **audio project** now, to record people's contemporary memories about farming and other work in the area. They know that local people have memories of using the Mid Wales railway – to get to school, for moving cattle, and for moving other goods into and out of the Rhayader area. It used to be said that local people didn't need a watch or clock as they could rely on the train's timetable to let them know what time of day it was!

Rhayader Museum would be interested in helping RWT run joint **Local History Days** to gather photographic records and perhaps in photographing and filming farms and people now. The joint product could become part of a temporary exhibition?

The museum is part of a new tourism marketing project for the town, called **Rhayader 52**, promoting the town as being open all year round. See website http://www.rhayader.co.uk/

National Trust, Abergweswyn Common
01874 625515
Spoke to Hannah and Jo Daggart. The NT ranger who used to look after Abergweswyn Common has left and the Trust are planning to appoint a new ranger in 2016, who will look after and work at Abergweswyn although they will be based at the NT Brecon offices. The previous ranger did some joint events with the Elan Valley Trust. The National Trust are interested in principle in developing some joint projects with Gilfach.

RSPB Carngafallt 01654 700222,
Lesley Fletcher, RSPB site manager.
Spoke to Lesley on 5 November 2015. She explained that the RSPB mid Wales area team, which looks after several sites including Carngafallt, is currently short-staffed and there are not many visitor events at Carngafallt. As a site Carngafallt has slightly difficult access, as visitors need to get to it by going through the Elan Valley. It is not a priority, honey-pot site for RSPB in terms of visitors, partly because of its access issues.

In principle RSPB is keen to support and get involved with a small number of people-orientated activities that the RWT may develop at Gilfach, such as a reminiscence project looking at gathering memories from people who have lived and worked in this Rhayader and Elan Valley area. The restrictions on this will be availability of officer time.

Lesley felt that there might be more opportunities for RSPB and RWT to develop some joint approach on ecological recording, habitat management and/or grazier issues. Carngafallt is a site with wonderful lichen diversity, as is Gilfach and there are good opportunities for the two organizations to explore aspects of volunteer training for ecological recording such as the Cobweb Science approach which involves volunteers being trained to identify indicator species, photograph them for more expert identification and record their location with GPS for future more detailed and expert survey.

Ray Woods is visiting Lesley on 17th November to discuss lichen recording.

Dave Lamacraft, ex RSPB staff, has recently joined Plantlife as their Lower Plant Life Champion.

Ed Parsons, Elan Valley
01597 811587

Ed Parsons is the Area Lands Manager for Welsh Water, based at Elan Valley Visitor Centre. The visitor centre has recently been upgraded with a temporary exhibition. The Elan Valley Trust, which owns much of the land in the catchment, has just had a Landscape Partnership Scheme approved. The rangers on the estate run activities for visitors, especially during school holiday times.

Key points:

- The LPS implementation will include permanent upgrading of the visitor centre, signs, waymarkers, refurbishment of buildings, restoring a medieval farmstead and funding of activities and events.
- Activities will include building links between the valley and communities in Birmingham.
- He is keen to establish links with RWT at Gilfach, to share information and to run joint activities and events.
- There are good opportunities for combined activities with RWT and Rhayader Museum. They already organize and run activities with the Museum.

Appendix 3 Summary of questionnaire responses

Interpretation Strategy and Action Plan Questionnaire

Summary of key responses

Results of amalgamating the results from 5 websites recording word frequency:
www.online-utility.org/text/analyzer.jsp
www.write**words**.org.uk/**word_count**.asp
www.**wordcounter**.com/
www.textfixer.com/tools/online-**word**-**counter**.php
www.textfixer.com

What makes Gilfach special?

Words most frequently used:

- Landscape
- Habitats
- Wildlife
- Meadows
- Hills
- River
- Nature
- Wild
- Farmyard
- Beautiful
- Mid Wales
- Range/variety of habitats and species

What do visitors like about Gilfach?

- Range of habitats and species
- Beautiful landscape
- Rich wildlife
- River
- Walks
- Birds
- Salmon
- Farmyard
- Peace and tranquillity
- History
- Wild

What do visitors dislike about Gilfach?

- Fact that visitor centre is often/sometimes closed
- Steepness of approach
- Having to keep dogs on lead
- Closure of bridge
- Cattle
- Cant get into the longhouse

– Cold or wet
What do you think are the top three stories to tell about Gilfach? Landscape Farm Salmon Wildlife – redstarts, pied flycatchers, otter History RWT's role Railway
Where are the best viewpoints? From Bronze Age cairn/tumuli Above visitor centre From Monk's Trod From picnic area below visitor centre from Bronze age tumuli Along river valley, looking west and east along Marteg River From Wyloer From Tynshimley
What are the key habitats? River and associated wetland habitats Unimproved grasslands, meadows and fields Oak woodland Heather/heathland Characteristics: Acidic, wet, upland
What three easily seen plant species are characteristic of Gilfach? Heather Mountain Pansy Harebell
What three easily seen animal species are characteristic of Gilfach? Redstart Salmon Dipper Pied flycatcher Small pearl-bordered fritillary
Where are your favourite places? Waterfall Wildflower meadows Riverside Railway line cutting
Where are visitors' favourite places? Farmyard River Waterfalls

<table>
<tr><td colspan="4">Pont Marteg
Hide
Walks</td></tr>
<tr><td colspan="4">What are the seasonal highlights? Such as footpath routes, views, species, atmosphere and experience, etc?</td></tr>
<tr><td>Winter
Frost, snow or ice covered trees, river, lichens and landscape
Waterfall
River in spate
Leaping salmon</td><td>Spring
Arrival of migrant birds
Cuckoo
Redstart
Pied flycatcher
Woodland in spring
Spring greens</td><td>Summer
Purple heather
Breeding birds
Wildflowers and butterflies in meadows
Anthills and thyme</td><td>Autumn
Salmon leaping
Autumn colour
Fungi
Berries</td></tr>
<tr><td colspan="4">Choose five single evocative words that describe Gilfach
Beautiful
Tranquil
Rich
Wild
Rewarding
Timeless
Inspiring
Hidden</td></tr>
</table>

Appendix 4 Info-Point

Published on Info-Point (http://www.info-point.eu)

No Internet?
No phone signal?
No problem.

Info-Point delivers mobile apps and web content direct to your visitors' mobile devices

What does it do?

It makes digital content available across a specific locality. Nearby users can browse that information using their smartphone or tablet. The user connects to the Info-Point Wi-Fi 'hot spot' and navigates the information with their browser – just as if they were browsing the real web. You upload your information (text, images, documents, audio, video, games or apps) direct to the Info-Point unit via its Wi-Fi, using a laptop or tablet.

Appendix 5 Examples of small panels

All photos Forestry Commission Scotland

Appendix 6 Examples of interpretation on rails

Westhay Moor, Somerset Levels

Appendix 7 Examples of interpretation on benches

Loch Leven Trail

Appendix 8 Historical assessment

the GRIFFITHS HERITAGE consultancy ltd.

Llanago, Old Rad
Presteigne, Powys LD8
T. 01544 350
M. 07444 311
info@thegriffithsheritageconsultancy.c

Gilfach Interpretation Strategy
Heritage Assessment

for
The Radnorshire Wildlife Trust
October 2015

1 The Physical Heritage Asset

Statement of Heritage Significance

An outstanding historical composite upland Welsh landscape which is the cumulative result of a long period of development: with likely evidence of human occupation, use and management for over 3000 years and demonstrating some of the most important periods of development and social change in Welsh history.

Radnorshire is well-known as a sparsely populated, rural county. The results of the heritage assessment of Gilfach have shown that the extent of human activity has extended beyond the limits of modern settlement and agriculture into landscapes which are now considered to be 'natural environments', but which are in reality heavily influenced by past human activity and key elements in understanding the history of the county and its communities.

There is an abundance of archaeological and historic sites within the Gilfach reserve. The majority are spread across the south facing slope to the north of the Afon (River) Marteg. Many features have been identified but not dated or there are conflicts in the official records (see Appendix A) and this provides opportunities for fieldwork and investigation, in order to unravel the story and historical development of the Marteg Valley. Many sites are also hard to recognise in the landscape but also provide opportunities for interpretation.

In general it would appear that there was substantial pre-historic human presence in this area, possibly as a ritual or funerary site. A possible road and ford between marching camps outside the area provides evidence of the Roman occupation of Wales, while in the medieval period there seems to have been substantial rural settlement of the valley slopes which was later abandoned. Post medieval there are is evidence of industrial use for quarrying and mining, while the Victorian period brought further change with the construction of the Mid Wales Railway through the valley.

There are strong links between the archaeological remains and the interpretative themes of: micro and macro; transport; land use and management; and the living working landscape. There are also opportunities for: managing the historic landscape through interpretation ('through interpretation, understanding; through understanding, appreciation; through appreciation, protection'); for involving people in discovering more about the historic remains (both through fieldwork and through desk based research); and for providing interpretation for hard to identify features. Increased understanding of the historic landscape could have social, communal, economic, and management benefits in addition to widening the audience base for the site.

1.1 Bronze Age (c.2300 BC - 800 BC)

Pont Yr Marteg Cairn - (Scheduled Ancient Monument)
Cairn circle situated on a prominent S-facing terrace of Yr Wylorn, above a major bend in the Afon Marteg and commanding an excellent view to the W and the mouth of the valley. It measures about 6.5m in diameter and up to 0.5m in height. Six

upright stones are visible in the kerb, all leaning outwards and measuring up to 0.7m in height. The grass-covered cairn has been disturbed in the past, leaving a large central hollow with what is probably the E side of a central cist now visible. This orthostat measures 1.8m in length from NNE to SSW. It seems likely that this is an early Bronze Age structure, as ritual monuments and burials went out of use in the later Bronze Age.

Due to a favourable climate, warmer and drier than today, the early Bronze Age was a time of major farming expansion and forest clearance, with upland areas being utilized on a much greater scale than previously. This is the period of Stonehenge and other great standing stone henges and structures. Control over land became as important as control over people.

Although disturbed this is a rare and potentially exciting monument, situated in a prominent and significant location on a rocky outcrop at the upper edge of the useable farmland landscape. This could be evidence of early Bronze Age settlement of the area or simply the creation of a sacred landscape, some distance away from the occupied area.

When first built it would have been visible as an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface. The importance of the monument is further enhanced by its identification as a likely cairn circle, a particularly rare element within the surviving prehistoric ritual landscape.

Afon Marteg Cairn
A small cairn of river-worn pebbles on top of a natural outcrop. It measures 4.2m x 3.4m. The date of this structure is unknown.

Pont Marteg Standing Stone
Possibly a bronze age standing stone comprising a large stone block almost vertical. 1.8 x 0.75 x 1.5m. Classified as a religious, ritual or funerary structure.

Pont Marteg Mounds
A group of five mounds or cairns, with unknown date. They may be associated with the bronze age settlement of the area or with later industrial activity.

1.2 Roman Period (AD 43 – AD 410)

Roman Road and Ford
Possible route of roman road and ford crossing the Afon Marteg. The remains have been identified just south of the western railway tunnel entrance on the river and also where the road up to the farmhouse crosses the river, close to the otter hide. This presumably joined the St Harmon Roman Road which runs from Llandrindod Wells almost to Newtown. Temporary Roman marching camps have been identified to the west side of the Wye Valley near Esgair Perfedd and in the next valley to the east, near Cwm Is-y-rhiw, St Harmon – the road may well have joined the two.

1.3 Medieval Period (The Middle Ages) (c.1066 – c.1400)

Longhouses / long huts, platforms and enclosures
Aerial photography by the Royal Commission on Ancient and Historical Monuments Wales (RCAHMW) and fieldwork conducted by the Clywd-Powys Archaeological Trust (CPAT)has discovered a dispersed pattern of longhouses, platforms and enclosures along the Marteg Valley. The current Historic Environment Record shows at least four longhouses / huts and several building platforms with associated enclosures and trackways. Four additional long huts / platforms were also identified on the next ridge to the north.

The orientation and location of these sites depends on the topography of the immediate landscape and would have been chosen to provide shelter, ease of build and in some cases proximity to a watercourse.

Longhouses, huts and building platforms where there has not been a continuous or on-going development of the site are commonly categorised as deserted rural settlements. Nearly 300 such features have been identified in Radnorshire, with Gilfach and its' surrounding area having a particularly rich resource. Deserted rural settlements are commonly associated with the medieval agricultural economy and often demonstrate the change in the C12th and C13th from building in wood to building in stone, at least for the lower parts of the walls. This increased the longevity of the building and may have been a reaction to the declining availability of timber as fields were enlarged at the expense of woods. The enclosures demonstrate a trend towards delineating the boundaries of properties. Much like today, the population growth of the C12th and C13th saw the subdivision of individual properties, as sons could not afford their own properties or holdings or for the accommodation of retired parents.

Enclosures are generally associated with settlements and early land enclosures, identifying ownership and providing safety for livestock. They are often found around the building platforms and longhuts at Gilfach. Banks and enclosures may also be associated with monastic lands or granges, such as the medieval grange of Dolhelfa, which was located to the north of the Marteg Valley.

Transport systems were not necessarily the oft thought of mud filled ruts during this period but well-built routes , with, for example, Edward I's household averaging 32km a day and transportation of goods via watercourse being preferred, with rivers and minor waterways being utilized far more than in later periods.

Pont Marteg (Marteg Bridge) Longhouse I
The Pont Marteg Longhouse I is an example of a platform with evidence of a building totalling over 35m in length, representing two buildings end to end. It is possible that this may have been a roofed sheepcote, possibly of monastic origin. Located on a terrace south of the road which runs through the site, near to the entrance and 450m east from Longhouse II. Possibly a medieval homestead.

Pont Marteg Longhouse II
Located immediately to the north of the road that runs through the site, close to the entrance across the road from the car park. The Pont Marteg Longhouse II is the

largest known example of a long hut in Radnorshire with external measurements of 27.4m x 6.4m and possibly four compartments. Stone walls survive to 0.8m wide and 0.5m high, with a cross wall and two definite entrances in the south wall.

Rhiw Riad (Hill Road) Longhouse
Foundations of a medieval longhouse (17.3m x 7.4m) with associated field / animal enclosures and banks. The longhouse is situated on a terrace along the contours of the hill to the north side of the road which passes through the site. Stone availability here was good and the remains survive as 2m wide stone walls approx. 0.8m high and show a two room dwelling with a stone slab on the south side at the west end possibly indicating the doorway and a return in the central cross wall perhaps the sign of a chimney breast. The enclosures (one to the west and north of the longhouse and one on the opposite side of the road) are delineated by orthostatic walling (upright stones on edge), banks and terracing and can clearly be seen (see below). This longhouse with enclosures is a typical feature of the upland landscape.

Yr Wylorn Longhouse
Located close to Rhiw Riad Longhouse, the building foundations measure 16.5m x 3.7m with a possible chimney breast at the S end. The entrance was probably on the W. The house appears to have been built on a terraced platform but this has been much altered by the encroachment of the modern road to the S. Dating unsure.

Yr Wylorn Hut
Undated but possibly medieval, this is a small sub rectangular enclosure 3.9m x 2.8m internally, bounded by outcrop on the W, on the other sides by a bank up to 2m wide and 0.2m high. There is a possible entrance 0.9m wide, towards the S end of the E side.

Yr Wylorn Platform
A building platform built on an E-facing slope, 33m x 8m at the S end, 5m at the N end, bounded on uphill side by a vague wall and on the N & S sides by banks. A vague E-W bank subdivides the structure to form a compartment at the end measuring 9m internally.

Yr Wylorn Enclosure x 5
Five sites are identified as Yr Wylorn enclosures. Going from west to east, the first shows three sides consisting of banks, a low narrow terrace, and an associated ditch. The second is a small enclosure formed by a low crescent-shaped bank set against a field hedge bank, measuring 8m x 2.8m. These features are undated but may date from the medieval or post-medieval periods. The third is a much more impressive feature of 23m x 13m at the N end, 8m at the S end, bounded on the S and W by a bank with orthostats and a substantial ditch to the W. There is a probable entrance at E end and is located next to the Yr Wylorn / Rhiw Riad Longhouse, with which it may be contemporary. The fourth enclosure is smaller and adjacent to the third and is surrounded by banks. The fifth is just across the modern road from the Yr Wylorn / Rhiw Riad longhouse and the third and fourth enclosures. It is bounded on the N, W and S sides by an earth bank with stone core and measures 15m x 12m.

Afon Marteg Enclosure
A small enclosure about 30m x 28m, bounded on the S by the river, on the E, N and W by a ditched bank.

Gilfach Farmhouse – Listed Building, Grade II*
Late medieval farmhouse of c.1550. A significant example of a Welsh longhouse, revealing several phases in conversion from stone walled peasant hall house to longhouse and being converted to a storeyed house c.1600. On the left side of the entrance is the medieval hall with flagstone floor and fireplace. There is evidence of three cruck trusses and a C17 parlour wing extension. The ornate timberwork in the room above the parlour may indicate a dower residence. Downhill is the cow byre with pigeon or dove holes in the loft gable.

Gilfach Barn Complex and Farmyard
The farmyard stands between the longhouse and the barn, which dates from the C19th, with a cowhouse under the upper end and stable under the lower end. There is also a central threshing floor with double door on the S and small high winnowing door on the N. A stone well stands in the farmyard close to the farmhouse.

The Monks Trod
An ancient road across the Cambrian Mountains linking the C12 Cistercian religious centres of Abbey Cwmhir in Radnorshire to the east to Strata Florida Abbey in the west. Its course runs generally west from Abbey Cwmhir, crossing Moel Hywel and descending to St Harmon, before crossing the River Wye at Pont Marteg and rising up towards Pont ar Elan, north of the Elan Valley Reservoirs. At this point it routes south-west, passing north of the western point of the Claerwen Reservoir, before passing the Teifi Pools and descending through Troed y Rhiw to Strata Florida. In many places the Monks' Trod survives as a well-built, terraced road, the product of a `cut and fill' method of construction producing long stretches which run around or along hillsides or breast steep slopes at 45° to the contour. Some sections at least were evidently paved or metalled. In sectors where the going for horses was easy, the road was not constructed. In the Trod's central zone, extra width suggests that provision was made for droving.

1.4 Post Medieval (1400 – 1837)

This period covers a number of features, most of which are difficult to date, but have been identified as post medieval. Many of these are industrial in nature showing a vibrant working landscape during this period. Dating of these structures / features would greatly assist with understanding the overall use and historic development of the valley.

Rhiw Riad Quarry
Small quarry in an area of good stone availability with two levelled platform areas which are possibly connected with the building of the railway.

Pont Marteg Quarry
Quarry.

Yr Wylorn Quarry x 4
Four sites are identified by this name stretching along the north side of the road across the site before reaching the railway tunnel. The first is a scooped platform, 5m x by 2.7m and 0.8m deep with upcast to SE. The second is a larger roadside stone quarry with smaller bay to W. It measures about 30m x 17m; a large spoil tip lies on the other side of the road. The third is a small roadside quarry about 11m x 6m. The

fourth was originally identified as two houses platforms but it is now thought unlikely. It is now suggested that one area is a construction shaft for the tunnel and the other is a small stone quarry.

Pont Marteg Quarry Scoops
A group of five scoops probably demonstrating small scale stone quarrying.

Turnpike Road
The creation of turnpike trusts in the C17th and C18th was mostly due to the increasing complaints regarding the state of the road systems, which had been built by unskilled and forced labour workforces. Legislation was introduced which allowed trusts to collect taxes from road travellers and employ more skilled labourers to provide well drained and maintained roads. The route of the old turnpike road dating from c.1830 roughly follows that of the modern A470 between Rhayader and Llangurig and passed either very close to or through the Gilfach reserve.

Other Paths / Routeways
Across the reserve are a number of identified historic routes and paths. Many of these are undated but show the rise and decline of routeways through this area. There is evidence of a terraced path along the steep hillside in the north west of the reserve. Further to the SE there is an identified hollow way and also a terraced and partially metalled trackway, a grassed over trackway (truncated by the railway cutting demonstrating it is earlier in date) and evidence of another to the other side of the railway line which may have been a continuation of this trackway. The Afon Marteg ditch and boundary is situated where the road through the site first turns to the north. It is a substantial ditch 2m wide and 0.5m deep running parallel to and on the W side of a field wall. In places it is almost a hollow way. Yet another terraced path runs along the edge of enclosed valley land close to the east end of the railway tunnel which may join up with further evidence of a terraced track to the north close to the Yr Wylorn longhouse and enclosure group. A further partially metalled track crosses the Afon Marteg at a ford close to the track which leads up to Gilfach farmhouse.

Pont Marteg Lead Mining Level
Industrial archaeology feature, with a pit about 5m in diameter, 1.3m deep, with a large upcast mound to the SW and another to the SE - access into the pit from the S, partially blocked by the spoil heaps. This pit is probably an open cast lead mine. There are many abandoned lead mines in the Cambrian mountains and several in the St Harmon area.

Yr Wylorn Sheepfold
A small sub circular enclosure formed by a low narrow bank against the E side of rock outcrop, with a possible entrance at the N end. It is close to the Yr Wylorn Hut.

Yr Wylorn Dam
A low earthen dam bank at the mouth of a natural run-off channel, probably creating a small pond behind. The dam is convex in plan, 9m across, 2m wide, 0.7m high. The purpose is unknown.

1.5 Victorian period (1837 – 1901)

Mid Wales Railway

Tunnel
A tunnel carrying the former Mid-Wales Railway, noted in 1992 as blocked by modern steel gates. The south end is stone-lined and the south facade made of engineering brick. A spoil heap presumably originating from the tunnel and cutting construction lies to the east end of the tunnel.

Skew Bridge
A skew-arched bridge, carrying the former Mid-Wales Railway formation across the Afon Marteg. Constructed of coursed stone blocks with brick barrel-vault, the bridge is some 18m long and the span is about 9m (see Appendix B).

Railway Bridge
Close to the track which leads from the modern road up to Gilfach farmhouse is a former railway bridge. This is a single span, girder well type bridge, carrying the former Mid-Wales Railway across the Afon Marteg.

Railway Track
To the east of Abermarteg, from west to east, the former Mid-Wales Railway crosses the Afon Marteg by a bridge, then a high embankment, passes through a rock cutting before entering a tunnel. In 1992, it was noted that the trackbed was used as a path and where it runs over the embankment is fenced on both sides by a modern wooden post-and-wire fence. The former railway line leaves a tunnel, passes through a rock cutting and over a former occupation level crossing, to cross another bridge over the Afon Marteg.

Construction Camp
An artificial levelling of the flood plain and scarping of the river bank, 50m x 7m with a bank across the E end. Possibly the site of a railway construction camp.

Pont Marteg Old Bridge
Just to the west of the entrance to the Gilfach site across the road is the old bridge, dating from 1864. An arched stone bridge, it is thought to have been close to the fording/bridging point of the Monk's Trod on its east-west course linking the abbeys at Strata Florida and Abbey Cwmhir.

2 Other features and matters of interest

Field Boundaries
There are no records of field systems surviving from the pre-historic period, although survey on the ground may discover new information. Enclosures relating to the medieval longhouses and building platforms have been mentioned above and aerial photographs may help identify any distinctive ploughing patterns.

At some point prior to the General Inclosure Act of 1801 (see below), probably in the early C18th, a number of pieces of land around the valleys in this area were enclosed. These included the land along the north slope of the Marteg Valley, east of

the spur later pierced by the railway tunnel and up the valley of the Marcheini Fawr. Existing field boundaries on the Reserve often still follow these enclosure patterns, which were shown on the Tithe Survey of 1839 (see below).

A number of pollarded or hedge laid boundaries were identified on site but there has been no recording or dating of these features.

Historic Maps and Land Enclosure
The Inclosure Acts (or 'Enclosure Acts') were a series of Acts of Parliament which enclosed open fields and common land in the country, creating legal property rights to land that was previously considered common.

A report by the RCAHMW identifies that sometime before the General Inclosure Act of 1801 some of the land at Gilfach was enclosed. No record of any relevant Act or enclosure agreement exists but it is speculated that this land was enclosed probably well before the mid-eighteenth century. The land at Gilfach was on the north slope of the Marteg Valley, east of the spur on which is located the Bronze Age cairn. The fields in this area are registered as being held by two holdings: Lechan and Rhiwrhiad, part of the Glanyrafon estate. Lechan was probably worked as part of Gilfach Farm as it had no separate homestead. It is possible that this was the first area to be enclosed as the boundaries of the holding are banks with hedging and revetted by orthostats with internal boundaries of banks and hedging alone. Rhiwrhiad had its own homestead and is identified on later maps as Rhiwrhudd. Most of the holding of Rhiwrhiad has bank and ditch enclosure with only rare use of orthostats. The present cottage of Rhiw Riad is in the same location but only dates to the late C18th or early C19.

Tithe maps were produced between 1838 and 1850 following the Tithe Commutation Act of 1836 as a part of the process to ensure that all tithes were paid with money rather than produce. They are the most detailed maps of their period and there are over a thousand of them covering more than 95% of Wales. The maps vary in detail and many of them do not have place names on them, but they all have associated apportionment documents which indicate how much tithe was due by the affected residents.

The Tithe map of this area dates from 1839 and provides some useful information regarding the land ownership and tenure of the enclosed land as well as field names indicating the use of the land (see Appendix C). Only the already enclosed useful agricultural land to the far east of the Gilfach site was enclosed leaving the majority of the site as common land.

The first and second edition Ordnance survey maps have very little to add to understanding the historic development of the Gilfach area apart from showing the line of the railway.

3 Issues and opportunities

There are a number of areas where there are opportunities for the interpretation plan to assist with managing and interpreting the historic landscape and its development,

providing opportunities for community engagement and for undertaking further research.

3.1 The Research Agenda for Wales

The Research Framework for the Archaeology of Wales identifies the following research questions, which future work at Gilfach could help to address:

Neolithic and Earlier Bronze Age Wales (4000BC – 1500BC)

Understanding Monuments - Following recent field assessment and cataloguing, the different types of Neolithic and Bronze Age monuments need to be understood through topographical analysis, environmental sampling, dating and re-examining material from past excavations.
Where were the settlements? - Few settlements of the Neolithic or earlier Bronze Age monument builders are known, creating a need to review cropmarks and artefact distributions, and consider targeted surface collection and sample excavation.
How did the prehistoric population use the landscape? – There is a need to examine the vicinities of monuments to identify field systems, seek evidence from natural channels and bogs, and examine the sources and uses of raw materials.

Later Bronze Age and Iron Age Wales (1500BC – AD43)

Settlement and land use – we need to identify undefended settlements, understand their relationship with defended sites and study land use and agricultural practices.
The Environment in Wales – environmental analysis is needed to establish the impact of climate deterioration on agriculture and society in the later Bronze Age.
Ritual and burial – it is important to identify sites that can tell us about ritual and burial, and provide human remains for study.

Roman Wales (AD43 – AD410)

Archaeology of the early campaign years – new site evidence has begun to question previous interpretations.

Early Medieval Wales (410 – 1100)

Settlement and society – fundamental work is needed to establish the hierarchy of secular settlement types and analyse regional and chronological differences.
Economy – greater understanding is needed of the exploitation of land and resources, climate change, crafts and mechanisms of exchange.
The early medieval church – more needs to be known of the process of Christian conversion, the evolution of religious sites and the broader impact of the church.

Medieval Wales (1100 – 1539)

Settlement – deeper, more intensive studies of secular settlement sites of different status together with their landscapes are needed, including excavations and environmental work.
Land use – there is need for better identification of land use in the Middle Ages, including the testing of current assumptions about function and date.
Industry – There is a lack of coherent knowledge of the locations, products and markets of medieval industries in Wales.

Post Medieval Wales (1539 – 1750)

Quantification – the rate of survival in this period creates opportunities to study regional patterns and changes over time, but this requires systematic assessment of the resource.
Settlement – changes in rural settlement and vernacular housing between the medieval and post-medieval periods should be better understood.
Economic change – changing agricultural, horticultural and industrial practices on the lands lost by the monasteries should be studied.
Land boundaries – interdisciplinary studies of parkland and field boundaries are needed to identify their value as ecological and archaeological resources.

Industrial and modern Wales (1750 – present)

Transport corridors – further study is needed to establish the significance of the canals, roads, railways and ports of Wales.

The Palaeoenvironment in Wales

Did Neolithic populations become more sedentary with the development of agriculture?
How did practices in animal and plant husbandry change?
In what periods is it possible to recognise seasonal exploitation or transhumance?

3.2 Specific Opportunities and Issues at Gilfach

- Opportunity for increasing visitor understanding / providing interpretation for archaeological features
- Many opportunities for archaeological research, fieldwork and survey
- Desire lines may be causing damage to features, interpretation could help to manage this sensitive landscape
- Maintain grass and heather cover but manage bracken, gorse and woody plants
- Restrict grazing
- Opportunity to date features
- Lack of knowledge of some features – opportunities for research, fieldwork and survey
- Sites not well identified or known
- Possible opportunities to understand more regarding the Roman occupation of Mid Wales
- Lack of correlation between different reliable historical sources, e.g. Coflein and Historic Environment Record - need for research and fieldwork to clarify
- Explore the connection to Monks Trod and monastic expansion
- Links with long distance historic walking trails
- Several other 'Monk's Trod' walks in the UK, especially in Yorkshire, Cumbria…
- Gilfach farmhouse is a tenanted property which will need careful management
- Byre available for interpretation / shelter
- Some lack of maintenance of Gilfach farmhouse
- Physical access across much of the reserve is restricted for those less mobile

- Installation of some (e.g. permanent) interpretation may need Listed Building Consent – opportunity for freestanding or movable media or live interpretation
- Research Glanyrafon estate links

3.3 Reading Gilfach's Landscape: Community Archaeology Project

The rich diversity of features and periods, the lack of existing field work and research, and the possibility of helping to answer questions for Wales' archaeological research framework make Gilfach an ideal site for a community archaeology project.

Project aims: to record and further understand the archaeology of the Gilfach Reserve in order to address questions raised by the archaeological research agenda for Wales and to help understand the historic development of the Cambrians, The Wye Valley, Radnorshire and Mid Wales. To involve local communities with researching, understanding and learning about their heritage. To train local communities and staff at the reserve in researching, identifying and managing archaeological landscapes. To disseminate information about the heritage at Gilfach. To mitigate negative impacts on the archaeological resource at Gilfach.

Possible partners: Cadw, RCAHMW, Clywd Powys Archaeological Trust, Rhayader Museum, The Radnorshire Museum, Powys County Council, Cambrian Archaeological Association, The Council for British Archaeology, Young Archaeologists Club, the Radnorshire Society, St Harmon Community Council, Rhayader Town Council, Welsh Water and Elan Valley Visitor Centre, Rhayader by Nature, universities, local schools, community groups and individuals.

Project activity ideas:

- Archaeological fieldwork – survey, recording, field walking, accurate mapping of archaeological features and possible sample excavation or environmental sampling
- Identification and mapping of historic field boundaries
- Fieldwork addressing specific research questions
- Creation of an Ysbyty Field
- Talks, training events and workshops
- Guided walks / tours – e.g. meet the archaeologist
- Food from the landscape – historical food / cooking events, oat field etc
- Archival and historic research, including aerial photography, historic maps and documents etc
- Development of interpretation, e.g. talks, trails, exhibitions, leaflets, website, interpretative art, experimental archaeology (e.g. bronze age round house, shepherd's hut etc), costumed interpretation, historical treasure hunts etc
- Development of a 'Reading Gilfach's Landscape' field guide or toolkit which can be used by visitors, schools, community groups and by other communities for researching their areas
- Medieval Fair

- Creation of a high quality academic Gilfach Historic Landscape book (with RCAHMW etc)
- Historic craft days
- Historic Agricultural Fete / Festival with demonstrations and exhibits of historic machinery and tools, horticultural competition for historic varieties of vegetables, flower / plant arrangements with hedgerow plants, historic cookery
- Links with the Council for British Archaeology's Festival of Archaeology

4 Glossary

Cairn: an intentionally-laid pile or collection of stones, stacked without mortar. Thought to have meanings associated with marking property ownership or control, such as a landmark, a territorial marker, or a grave marker. The word is occasionally used to mean a specific type of rock-covered burial.

Cruck truss: two blades or curved timbers forming a triangular frame, several of which would form the substantial frame of a building.

Hall house: a vernacular building of timber frame or stone with the majority of the building consisting of a large hall or open area with an open or chimney hearth for living, eating, cooking etc. Private rooms such as parlours, butteries or pantries often existed at either end of the building with the hall in the centre.

Henge: A prehistoric monument consisting of a circle of stone or wooden uprights.

Hollow way: A course of a former road, likely to be hollowed or worn into the countryside producing a flat-bottomed trough. The depth of incision depends on the underlying geology, the amount and type of road traffic and the length of time the road was in use. Hollow ways are often found near deserted settlements.

Scheduled Ancient Monument (SAM): Monuments and / or archaeological remains of national importance protected through legislation. More complete structures are usually protected as Listed Buildings.

Longhouse / long hut: a free standing hut / long dwelling not on a constructed platform. One room depth with the length divided into at least two parts under the same roof with human living accommodation at one end and accommodation for livestock in the byre / barn at the other. Quintessential upland Welsh vernacular dwelling.

Orthostat: an upright stone forming part of a structure or monument, often set into the ground.

Platform: artificially constructed bases on which long huts or possibly other structures were built. Rarely with any evidence of the structure remaining. The relative rarity of surviving evidence of buildings on these platforms means that it is likely they were mostly built of degradable materials. An obvious indicator of a deserted settlement.

Upland: Land over 250m AOD. Wales has over 40% of its total land mass above 250m with almost 70% of NW Wales over this height.

Appendix A: Mapping and Identifying Heritage Assets at Gilfach

As noted above, there are some discrepancies between the two main official sources (Coflein and the Historic Environment Record) for identifying the location and type of heritage asset in a particular area. This is not uncommon and this issue is known and being looked into by the various bodies involved. Most of the discrepancies occur between the naming of the assets but it is often possible to identify them from their descriptions. Where possible this has been undertaken above in the heritage audit. This appendix shows how to access the information from both sources to assist with further work, possibly a community archaeology project as stated above, which would hope to conclusively identify location and feature and accurately map and record this.

Coflein (http://www.coflein.gov.uk/)

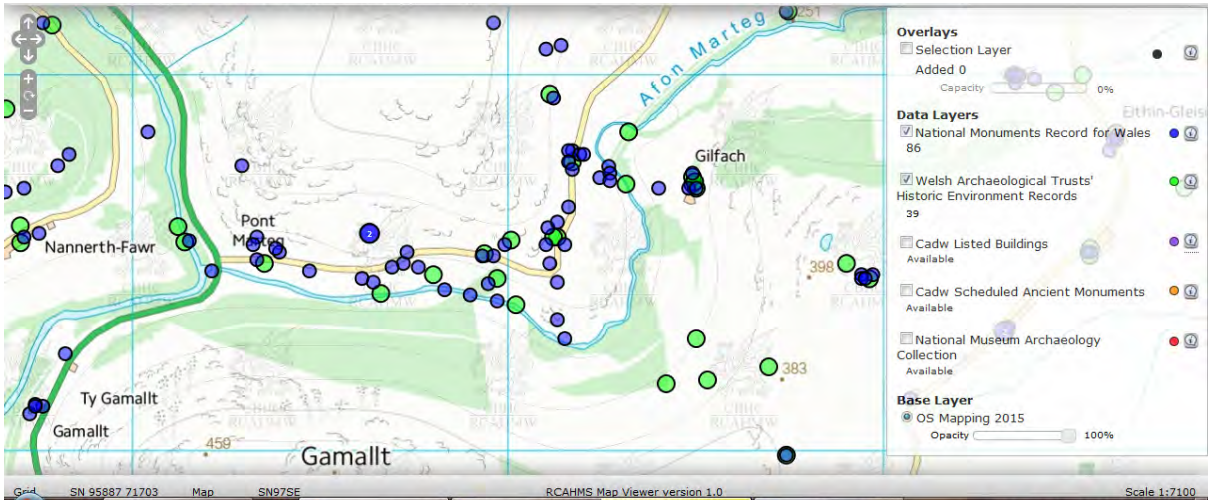
Coflein is the online database for the National Monuments Record of Wales (NMRW), the national collection of information about the historic environment of Wales. Coflein allows access to details of many thousands of archaeological sites, monuments, buildings and maritime sites in Wales, together with an index to the drawings, manuscripts and photographs held in the NMRW archive collections. The search for the Gilfach site returned 48 results. The site provides a map and database with links to various records in the NMRW (This cannot be reproduced here due to copyright issues).

Historic Environment Records (Archwilio) (http://www.cofiadurcahcymru.org.uk/arch/index.html)

Archwilio is the online access system to the Historic Environment Records (HERs) of Wales. The system has been developed through a partnership of the four Welsh Archaeological Trusts to provide wider public access to this resource. The four regional historic environment records compiled and maintained by the four Welsh Archaeological Trusts aim to provide a comprehensive catalogue of archaeological and historical sites and finds of all periods throughout Wales. The search through Archwilio returned 38 results. The site provides a map and database with links to various records in the NMRW (This cannot be reproduced here due to copyright issues).

Historic Wales (http://historicwales.gov.uk)

The recently developed Historic Wales portal allows you to view the records held by each organisation on the same map. The map below shows the overlaps and discrepancies between these two datasets.



Appendix B: Gilfach Railway Bridge

Information relating to consideration for inclusion of the statutory list of buildings of architectural or historic interest.

"A skew-arched bridge, carrying the former Mid-Wales Railway formation (nprn 303234) across the Afon Marteg some 700m east of Abermarteg. Constructed of coursed stone blocks with brick barrel-vault, the bridge is some 18m long and the span is about 9m."[3]

[3] RCAHMW. 2011. Coflein Entry for Abermarteg, Railway Bridge

Grid Reference: SN9589871416
This structure is located on the Gilfach Reserve, Radnorshire, Powys and is a stone built bridge / tunnel with skewed brick arch over the River Marteg. The construction date appears to have been between 1859 and 1863 with the Mid- Wales line formally opening in 1864. The engineer on this line was Benjamin Piercy, a local man from Montgomeryshire, with international credentials for railway construction and notable for being involved with virtually every engineering project that brought railways into Wales.

The Mid Wales Railway was unlike the railway lines which survive today in Wales as it was designed to link several quite significant rural centres and the key regional towns in central Wales (primarily Llanidloes, Rhayader, Builth Wells and Brecon). It ran through some of the most picturesque and rural parts of the country and was part of the through route from South Wales to Cheshire, providing an alternative to the mainline Hereford / Shrewsbury route. It ran from Llanidloes to Talyllyn, near Brecon. In 1854 the map of Welsh railways showed absolutely nothing in central or western Wales, the vast majority of the country having no rail connection. The northern Welsh line ran from Chester across to Caenarvon and Holyhead and the southern connected Cardiff (and routes into England) with Swansea and Carmarthen, both with some minor branch lines. Along the English border, ran the Cardiff, Hereford, Shrewsbury to Chester line. The railway lines which survive today, now (as then), in essence, connect Welsh communities with England rather than linking Welsh places together. The North, Mid, and South Wales rail networks all remain distinct entities today, without the connecting north-south link. The Mid Wales railway is interesting in that it faced some extremely challenging geographic obstacles and to succeed politically where other proposals had failed. In addition to the challenges of the gradient, 20 crossings of the Dulas, Marteg, Ithon and Wye rivers were needed. The Mid Wales Railway can be seen as a relic of a unique achievement in Welsh history.

Mid Wales Railway River Bridges

River	*Location*
Dulas	1/2 mile south of Penpontbren
Dulas	North of Tylwch
Dulas	North of Tylwch
Dulas	North of Tylwch
Dulas	South of Tylwch
Dulas	North of Glan-yr-Afon
Dulas	South of Glan-yr-Afon
Dulas	South of Glan-yr-Afon
Marteg	Pantydawr
Marteg	St Harmon
Marteg	East of Marteg tunnel
Marteg	East of Marteg tunnel
Wye (Gilfach bridge)	at Aber Marteg
Wye	South of Rhayader

Wye	Doldowlod
Wye	Newbridge
Ithon	at confluence with Wye
Iboway	1 mile north of Llanstephan
Wye	Boughrood
Llynfi	Trefeinon

The Mid Wales Railway company was formed in 1859 and parliamentary approval was received on 1 August for the northern section of the line.

Approval for the southern section was received on 3 July 1860. The formal opening ceremony was held on 23rd August 1864. The physical remains of the Mid Wales Railway line lie in their entirety within today's county of Powys, as the southernmost section from Builth to Llandovery was never constructed.

The constructed line was 46.7 miles long and carried both goods and passenger trains, although the size and therefore the weight of engine was restricted due to the gradients and many bridges.

In 1904 the Mid Wales Railway company was merged into Cambrian Railways. During World War I, passenger trains were withdrawn to allow the north-south link to provide a key role in allowing Welsh coal to be moved to Warrington and onto Scarpa Flow for use by the Royal Navy. The withdrawal of passenger trains allowed the maximum number of 'Jellicoe Specials' to run both day and night to feed the war machine. At this period signal boxes were manned 24 hours a day. The amount of coal required by the navy was phenomenal and the line became a key component in the supply chain for the armed forces. The task of taking essential welsh coal to the north was a major headache for the Government, as on other lines the coal trains had to compete with troop and munitions trains.

Another key event on the Mid Wales Railway in this period was the journey of King George V to Bronllys to open the Welsh National Memorial Hospital in July 1920. In 1921 the railway was released from Government control and in 1922 it became part of the famed Great Western Railway. Nationalisation occurred in 1948 but brought little change. The line was finally closed as part of the Beeching cuts in 1962. The Stevenson Locomotive Society ran the last train on the line on December 30th 1962 with the journey being undertaken in heavy snow during one of Wales' worst winters. The objectors at the time highlighted the importance of the line as a through line rather than a branch line of just local importance[4]. Nevertheless, after a century of service the all Welsh Mid Wales line, as many others, closed, never to re-open.

The structure was purchased in the late 1960s by Mr H Lewis, owner of Gilfach Farm and the Radnorshire Wildlife Trust purchased the farm from his estate in 1987. It remains today in the ownership of the Radnorshire Wildlife Trust. The Gilfach bridge survives as a remnant of Welsh social history, publically accessible on the Wye Valley Walk, within the Gilfach Nature reserve: an outstanding landscape location with excellent public access.

[4] Kidner, R.W. 2003. *The Mid-Wales Railway.* P149

Historic interest: illustrates an important aspect of the Nation's social history: i.e. the coming of the railways and importantly a north-south link through the country.

Historical association: *with events of importance to Wales:* i.e. the coming of the railways, the importance of the line during World War I and the association with the opening of the National Memorial Hospital. *With people of importance to Wales*: i.e. with engineer Benjamin Piercy.

Group value: It is considered that this structure has group value with the tunnel, embankment and trackbed in the Marteg Valley and with all other surviving structures along the length of the now defunct Mid-Wales Railway, which was an important and unrepeated innovation to introduce rail communications across the most rural areas of Mid-Wales and join up important rural centres. The Gilfach Railway Bridge along with Marteg tunnel, halt and railway cutting in the Marteg Valley, survive as examples of structures on this rural line that exemplify the character of the line and the quality of work which went into these structures.

Supporting comment by Mark Walters, CPAT: "The bridge is certainly interesting and the skewed brickwork in the arch is particularly impressive and quite an engineering achievement..."

Other Structures on the Mid Wales Railway line

As far as can be ascertained no other structures connected with this railway line have been Listed except for the former railway station at Llanidloes. This is perhaps an oversight considering the historic importance of this railway, the well preserved remains and the retention of the greater part of its line as a landscape feature across Powys.

Other surviving buildings and structures of interest along the line include the preserved signal box, at Erwood Craft Centre, now housing a Radnorshire Wildlife Trust information centre and bird viewing hide. This signal box was relocated from Newbridge-on-Wye in 2004. Erwood station is now the craft centre and also provides interpretation about the Mid Wales Railway. The station building at Twylch has been converted into residential accommodation, 'Twylch Halt', and the former station buildings at Rhayader now serve as a depot for the County Council. At Three Cocks a concrete memorial commemorates the date of the station closure. There are also a number of other bridges surviving, some of which have been reworked to carry farm roads while only the piers survive of others.

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(Summary of the archival holding GB 0210 PIERCY Administrative and biographical history: Benjamin Piercy (1827-1888), National Library of Wales)
http://www.erwood-station.co.uk/about-us/history-of-erwood-a-local-area.html
http://en.wikipedia.org/wiki/Mid_Wales_Railway
http://en.wikipedia.org/wiki/Cambrian_Railways
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Appendix C: 1839 Tithe Map

Fields: 252 – 257
Holding name: Lechan
Landowner: Oliver David
Occupier: Meredith Powell
Field Names: 252 Lower pasture, 253 Square piece, 254 Cae Bach (Little field), 255 Cae Bach, 256 Upper pasture, 257 Upper pasture

Fields: 258 – 272
Holding Name: Rhiwrhudd
Landowner: Oliver David
Occupier: Edward Powell
Field names: 258 Lone pasture, 259 New piece, 260 Cae Bach, 261 Homestead, 262 -264 Plock, 265 – 266 Not described, 267 piece below the house, 268 Y Ddol (The meadow), 270 Y Ddol, 271 Llayn?, 272 Middle meadow

Field 269
Holding name: Gilfach
Landowner: Oliver David?
Occupier: Meredith Powell?
Filed Name: 269 piece beyond river

Appendix D: Resources

Primary resources

1836 Tithe map
1st and 2nd Ed. Ordnance Survey maps
Clywd Powys Archaeological Trust: Historic Environment Record (Archwilio)
Cadw. Scheduled Ancient Monument Report RD204
Cadw, Listed Building Description 8732
Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW): National Monuments Record of Wales (Coflein)
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Prepared for Radnorshire Wildlife Trust by

Red Kite

ANGLEZARKE DIXON ASSOCIATES

Touchstone

The Griffiths
Heritage Consultancy Ltd

We would like to offer our thanks to everyone who provided the information and insights that enabled this work to be carried out. Any errors and misinterpretations in the report are in good faith and remain our responsibility.

Red Kite Environment
& partners
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