

## **Sirhowy Woodlands**

### **'Fruiting Woodland'/Traditional Orchard**

#### **Biodiversity Action Plan 2016**



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Nadine Morgan, Biodiversity Officer

Blaenau Gwent County Borough Council

Baldwin House

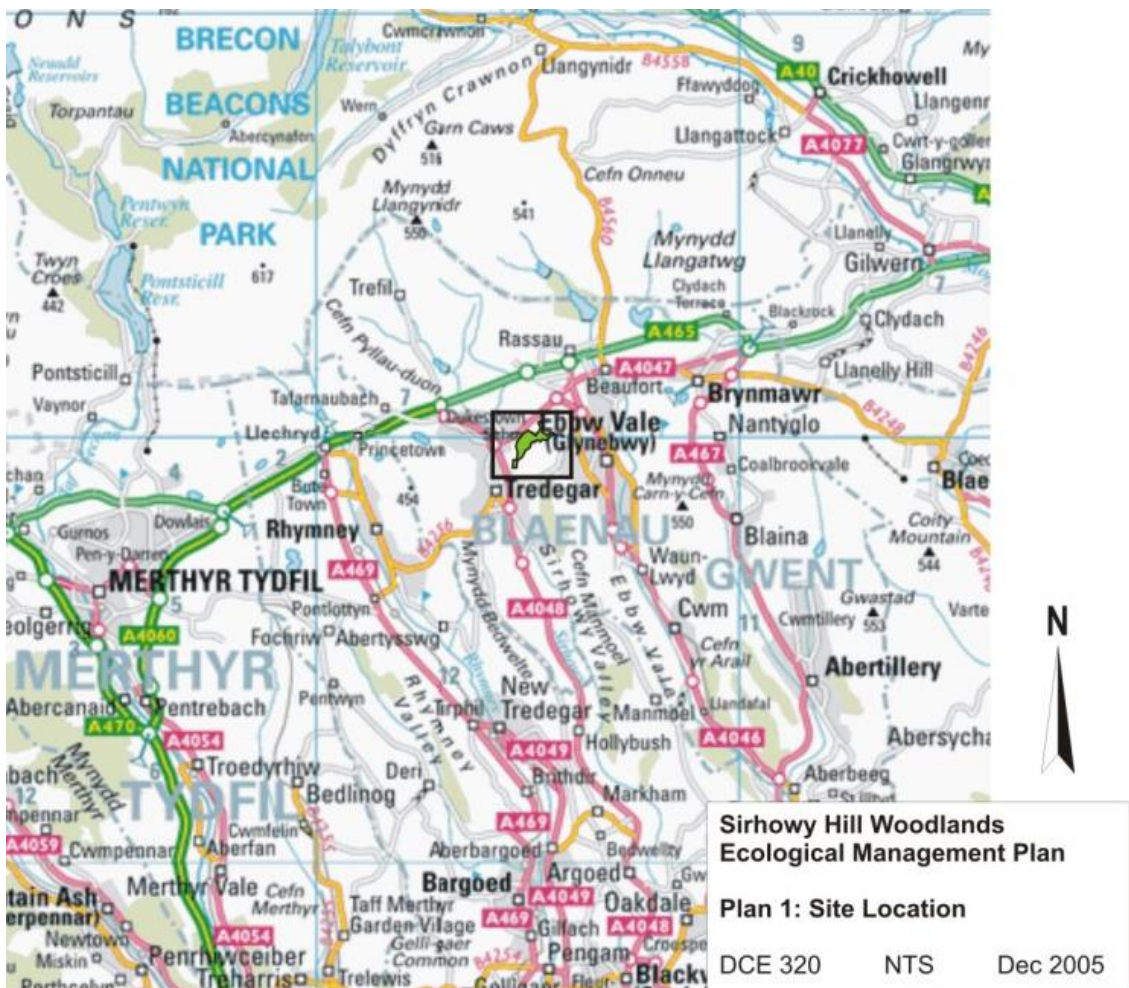
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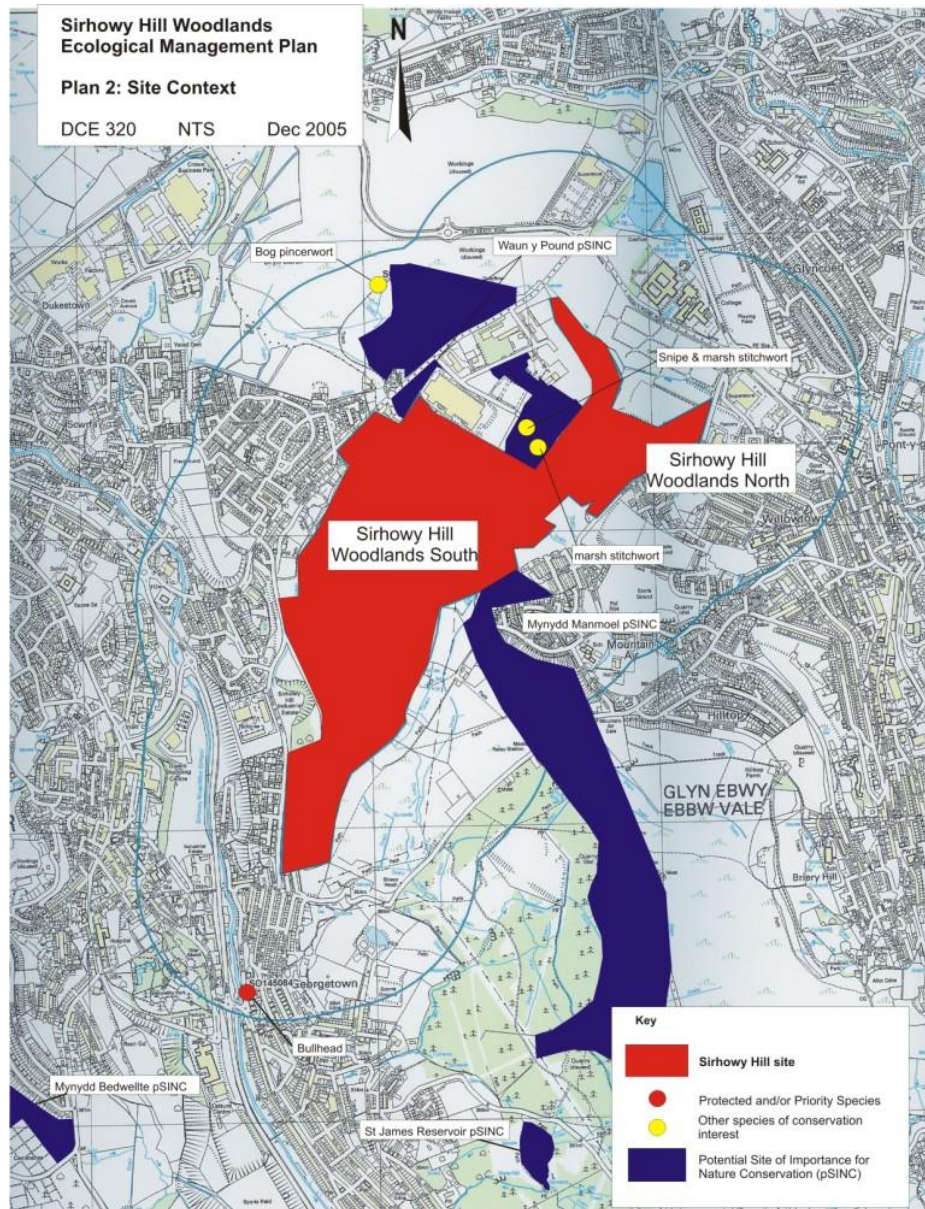
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## 1. Introduction to Sirhowy Woodlands

1.1 The location and context of the site is shown on Plans 1 and 2. The site is located on the northern border of the former county of Gwent and straddles a mountain ridge at the head of two steep sided valleys of the Ebbw and Sirhowy rivers. The site is divided into two separate areas by Man Moel Road, which crosses the site near the mid-point, running from northwest to southeast. The area north of the road, which is about 28 ha in extent is known as ‘Sirhowy Hill woodlands North’ whilst the southern area, which covers about 50ha and is known as ‘Sirhowy Hill Woodlands South’. Two small parcels of land in the Sirhowy Hill woodlands south area are privately owned by Pit Cottage and Newbridge Construction.





1.2 The majority of the site was historically worked for coal, both as patches of mines and from deep mines, whilst the remainder of the site was used as a depository for steel industry waste, together with a household refuse tip. The refuse tip and shale tips were closed in 1973-74 and subsequently landscaped as open grassland with small scale tree planting, although the majority of the grass species which were sown failed to take. More extensive tree planting has subsequently been carried out on the site since the early 1980s, in an attempt to afforest the site.

1.3 For the purpose of this Biodiversity action plan, management prescriptions will be focused on the traditional orchard/'fruiting woodland' area, shown on Plan 3. For management prescriptions for Sirhowy Woodlands and its different compartment please refer to Sirhowy Woodland Ecological Management Plan (can be obtained from BGCBC Ecologist).

## 2. Background

### 2.1 History

Traditional Orchards are a vital and characteristic feature of our rural landscape and heritage. We don't know how orchards came into existence but it is thought that our prehistoric ancestors cultivated fruit trees approximately 20,000 years ago with first records appearing in Anglo Saxon times. The Normans introduced their orchard culture to Britain from AD1100. As a result, orchards were now beginning to play a vital part in rural economy.

Orchards reached their peak of popularity during the 17<sup>th</sup> and 18<sup>th</sup> Centuries.

Traditional Orchards began to decline dramatically in the 20<sup>th</sup> Century, and by the 1950's over 60% were lost. This was a result of changes in land use; many orchards were cleared for other crops, some for development while others were simply neglected.

### 2.2 What are Traditional Orchards?

The definition and explanation below has been taken from the Traditional Orchard Habitat Action Plan Working document:

*“Traditional Orchards are defined, for priority habitat purposes, as groups of fruit and nut trees planted on vigorous rootstocks at low densities in permanent grassland; and managed in a low intensity way. Cobnut plants are also included...The minimum size of a Traditional Orchard is defined as five trees with crown edges less than 20m apart. However the potential biological and genetic interest of sites with fewer trees, such as relict orchards and individual trees within gardens, is noted”.*

See the working HAP document here

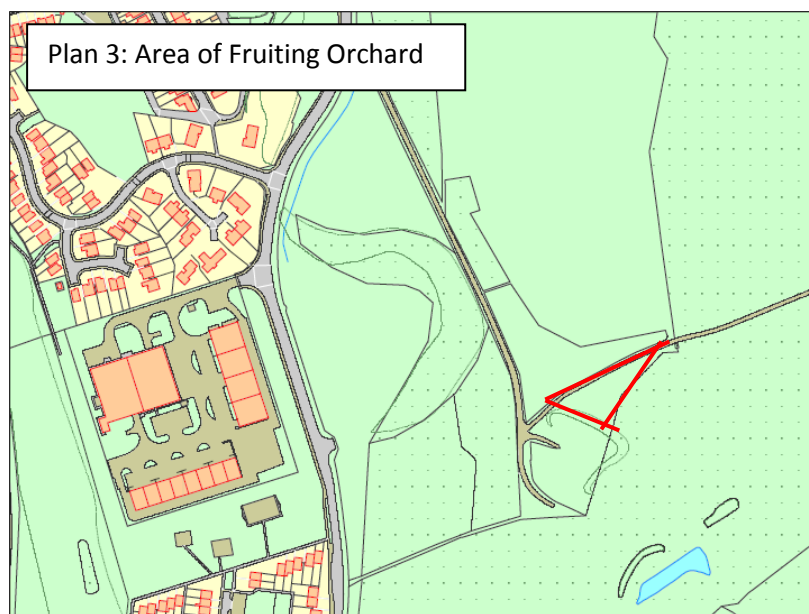
<http://www.orchardnetwork.org.uk/content/traditional-orchard-hap>

As a result, orchards that are managed traditionally use no chemical input, have vigorous rootstocks, are wide spacing, and low intensity.

They are wonderful places that also serve as wildlife havens. Orchards can contain elements of woodland, grasslands and can be often bordered by hedgerows. As individual habitats each has an ecological value for wildlife. However, by having a mosaic of each of these different habitats as part of the orchard will increase the wildlife value significantly. The different vegetation types enhance the plant diversity that is able to support a wide range of species.

### 3. Sirhowy Woodland Orchard/'Fruiting Woodland'

- 3.1.1 The Cynefin initiative has helped to coordinate interest in Sirhowy Woodlands with local community. Cynefin brings together different parts of the community- local residents, community groups, local businesses, youth groups and organisations that deliver services- to help improve the places where they live or work, making it cleaner, safer and generally nicer to live in as well as helping to provide more opportunities for business and for people to work and improve their incomes. It is an asset based approach to community development funded by the Welsh Government, run by Severn Wye Energy Agency.
- 3.1.2 Cynefin in collaboration with Blaenau Gwent County Borough Council, Gwent Wildlife Trust, Keep Wales Tidy, Tai Calon, Groundwork Wales and Llais y Goedwig have held a number of community engagement events which resulted in a constituted community group, Sirhowy Valley Woodlands being set up in January 2016. The group aims are to improve the local woodlands environment, increase community involvement in the woodlands, and enhance the biodiversity and to increase the use and uses of the woodland
- 3.1.3 The project was initiated resulting from a local resident contacting Blaenau Gwent County Borough Council in the summer 2015, complaining about the litter in the woodlands. The Local Authority had heard that Cynefin was working in the area and asked for assistance in organising a litter pick. From the litter pick that was organised it became clear to the Cynefin Officer that there was enough local interest to form a group. Through Cynefin and the community group a traditional orchard/ 'fruiting woodland' project was proposed to create an area within the site that has seen the introduction of 25 heritage trees. The fruiting woodland is shown on Plan 3.



3.1.4 The 25 heritage fruit trees consisted of:

Species	Root Stock
Baker's Delicious	M25
Bardsdey	M25
Cadwallader	M25
Llanachaeron Beauty	M25
Llandinam Permain	M25
Margoed Nicholas	M25
Oldchapel Discovery	M25
Painted Meadows	M25
Pendragon	M25
Pengaled	M25
Pertheyre	M25
Pig Yr Wydd	M25
Sam's Crab	M25
Tretower Cat's Head	M25
Twylldyn Gwydd	M25
Viv's Red	M25



Photo 1. Preparing to plant the trees



Photo 2. Volunteers helping to plant



Photo 3. Volunteers helping to plant



Photo 4. Planting complete

## 4. Orchard Management

- 4.1.1 On Sunday 28<sup>th</sup> February 2016, a tree planting event was organised with local volunteers, Members, Sirhowy Valleys Woodlands group along with other organisations such as Cynefin, Keep Wales Tidy and Blaenau Gwent County Borough Council helping to carry out the planting. The trees that were planted were 1year old saplings.
- 4.1.2 An orchard that is well managed, in a low intensity way, will both crop well and function as an important habitat for a diverse range of wildlife.
- 4.1.3 Low intensity management refers to orchards that are managed extensively, with little or no use of chemicals such as pesticides, herbicides and inorganic fertilisers, with relatively long-lived trees that are allowed to reach the veteran stage, and with a permanent grass sward (source: orchardnetwork.org.uk).
- 4.1.4 By managing an orchard in a low intensity way will provide important refuges for a number of different species. Some species are of conservation priority under the national Biodiversity action Plan (BAP) and Local Biodiversity Action Plans (LBAP), for more information on Blaenau Gwent LBAP get in touch with BGCBC Ecologist or visit <http://www.blaenau-gwent.gov.uk/leisure/7682.asp>. Over recent years that total area of traditional orchards has declined significantly and the conservation of remaining orchards is high priority. As a result, orchards have been made a national priority BAP habitat.
- 4.1.5 It is important to manage the orchard as a whole, not just the fruit trees. A vast variety of orchard wildlife will depend on the mosaic of habitats such as dead wood, scrub, hedgerows, unimproved grassland and ponds. They provide homes for wild plants and animals as well as a food source, most notably for many invertebrate species. For example, many bumblebee species, which help to pollinate the fruit trees, need tussocky grassland for nesting sites along with hedgerows or scrub to hibernate under through the winter. Many beetles and their larvae live in dead wood. Therefore, by providing a mosaic of habitats will result in being more beneficial for many species such as invertebrates, birds, mammals and amphibians.
- 4.1.6 To enhance the orchard for invertebrates habitat piles can be created from cut branches or brash, fallen dead wood or remains of old trees should be left on site.
- 4.1.7 Traditionally orchards are among fertile grasslands on a farm. As a result, the area around the fruit trees may have been dressed with manures to help maintain fruit productions and raise fertility of trees via them drawing up the nutrients (nitrogen and phosphorus from fertilizers). However, this often results in a less diverse grass sward. If the levels of nutrients are a lot less in the soil, the flora can be rich in herbs and



wildflower species. This provides an extra source of pollen and nectar for pollinating insects.

If it is a newly planted orchard with bare ground surrounding the trees and has been dressed with manure, it would be best to allow the area to naturally regenerate the grass sward as this will allow for time for ground to be less nutrient rich and will be a good indicator as to what species might be able to grow there.

Areas of rough grassland can be left in corners and along fencing or hedgerows. This will help benefit small mammals such as mice and voles. As the area is not being grazed at all the area will need to be cut once a year in the autumn.

- 4.1.8 Hedgerows can contribute directly to the biodiversity value of an orchard by providing shelter and food for wildlife. Native mixed hedgerows will attract pollinating insects, provide nesting places for birds and can also provide an added source of fruit. By trimming a hedgerow less frequently than once a year will allow for continuity of berry and blossom supplies. Trimming should be done in rotation, possibly by cutting each side of the hedgerow in alternate years. This will allow for some food supplies to be readily available at all times.

Sometimes allowing some hedge to grow tall and untrimmed can also be beneficial to species such as birds as this will further allow for potential nesting sites

- 4.1.9 It may be suitable to create a pond in a naturally wet area, but taking care so as not to affect the fruit trees or any sensitive rich habitats. Providing a source of water will further enhance the area for a variety of wildlife.

- 4.1.10 As a result, it is important for the connectivity of suitable habitats within the landscape, so that they provide networks that act as wildlife corridors, so that wildlife can move from one site to another. Habitat loss and fragmentation are two main threats to much of our wildlife

As well as orchards, other tree habitats such as hedgerows and woodlands in the surrounding landscape are also vital to help support viable populations of many species. Orchards, woodlands, species rich grasslands and hedgerows act as stepping stones, helping many species to disperse and interact. Therefore, the management of these associated habitats as a whole will benefit biodiversity overall.

- 4.1.11 The orchard at Sirhowy Woodlands is newly planted and consists of young trees (1 year old), it is important to help create the most optimum conditions to help establish the young fruit trees.

Prior to planting the area consisted of scrub with some scattered willow trees. In order to provide good growing conditions, the scrub and trees were removed with the ground being cultivated and improved with manure to help enhance the soil structure.

The trees were planted with a spacing of approximately 3-4 metres in an area that is approximately 50m x 45m x 37m.

As they are young trees they required staking with canes to provide support and protected with tree guards. The area has also been fenced off with stock proof fencing to provide extra protection, with a style for access to the area.

Adequate aftercare of new fruit trees is required to ensure the long term future of the orchard.

Each orchard is different, with its own set of characteristics and features, and each can provide a refuge for wildlife.

Future management of the area is outlined in the task register below.



Task	Year	Return	Lead	2016					2017					2018					2019					2020				
				J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	
<b>Community Events</b>																												
Produce and continue to produce leaflets for the site, advertise locally, develop links with local schools and organisations	1-5	-	SVW/Council																									
<b>Ecological Surveys</b>																												
Implement a series of ecological surveys for individual interests (e.g. invertebrates, amphibians, flora, bats, birds etc)	1-5	-	Council/SVW/ Ecological consultants																									
Set up central recording scheme to receive species records for site; develop links with local recorders and biological records centre	1	-	Council																									
<b>Bat and bird boxes</b>																												
Identify suitable bat and bird box locations in the surrounding woodland	1	-	SVW																									
Erect bat roosting and bird nesting boxes	1	-	Council/SVW																									
Monitor use of bat and bird boxes	2-5	Annual	SVW																									
Maintenance and cleaning of bat and bird boxes	2-5	Annual	SVW																									
<b>Habitat Pile Management</b>																												
Identify a suitable location on site to create habitat piles	1	As required	SVW																									



Task	Year	Return	Lead	2016						2017						2018						2019						2020											
				J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D	J-F	M-A	M-J	J-A	S-O	N-D						
Create a pond	1	-	SVW																																				
<b>Review Management Plan</b>																																							
Review and update management plan	5	5 yrs	Council																																				

## 6. References and Further Reading

Natural England 2010; Natural England Technical Information Note TIN020, Traditional Orchards: orchards and wildlife

Orchard Network 2016; Working together for Traditional Orchards (online source)  
Orchardnetwork.org.uk

Orchard Network 2016; Traditional Orchards Working UK Habitat Action Plan (online source);  
[http://www.orchardnetwork.org.uk/sites/default/files/files/Working%20HAP%20for%20Traditional%20OrchardsV4%20\(2\).pdf](http://www.orchardnetwork.org.uk/sites/default/files/files/Working%20HAP%20for%20Traditional%20OrchardsV4%20(2).pdf)

Orchard Network 2016; Orchard Pruning (online source);  
<http://www.orchardnetwork.org.uk/content/introduction-pruning>

People's Trust for Endangered Species 2016, Traditional Orchard Project (online source)  
<https://ptes.org/campaigns/traditional-orchard-project/orchard-biodiversity/orchard-habitat/>

People's Trust for Endangered Species 2016; Traditional Orchards a guide to wildlife management (online source) <https://ptes.org/wp-content/uploads/2015/10/Orchard-leaflet-for-web.pdf>