

# Welcome to Pwllycrochan Woods

This *Background Information* document has been designed to be an informative introduction to Pwllycrochan Woods Local Nature Reserve. The themes covered within this document are aimed at providing environmental education for 7-11 year olds.

Themes included are:

- Recent history of Pwllycrochan
- Woodland habitat, food chains, wildlife, tree species
- Seasonal changes in Pwllycrochan
- Woodland management

Within this document, there is a map of how to get to Pwllycrochan Woods and a map of the Discovery Trail itself.

There is a separate *Discovery Trail* document (a 4 page hand out type document) that is designed to be used on the trail itself. The questions and activities are aimed primarily at 7-11 year olds.

The Teachers' Discovery Trail Guide Notes is an accompanying document that provides the answers and explanatory notes to the Discovery Trail activities.

There is a separate document, Health and Safety Information, which you may also find helpful.

Using the Background Information along with the Discovery Trail, Teachers' Discovery Trail Guide Notes and Health and Safety Information, you will be all set to successfully plan and lead your group independently.

A pre-visit is recommended to familiarise yourself with the site and the promoted Discovery Trail. Follow the blackbird discs.

What can be seen at Pwllycrochan Woods varies according to the time of the year. The table below gives you a rough idea of what might be seen, but a great deal depends on the weather, how quiet a visiting group is and perhaps how good a nature detective you all are.

	Jan	Feb	Mar	<b>A</b> pr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowers				~	~	~	~					
Butterflies						~	~	~				
Birds	~	~	~	~	~	~	~	~	~	~	~	~
Moss/Ferns	~	~	~	~	~	~	~	~	~	~	~	~
Fungi							~	~	~	~	~	
Trees	~	~	~	~	~	~	~	~	~	~	~	~



# The bigger picture

Have you ever wondered?

- How it has come to look as it does
- What influences there have been in the past and will continue to be in the future
- How these influences will affect its future

There are many factors that influence the mixture of tree species that develop in the woodland; this has a direct impact on the variety of wildlife that can be found here.

The most important factor is the soil type. Whether acid or lime, deep or shallow, dry or wet. The soil conditions determine what plants can thrive and where.

The <u>influence of people</u> is also important, for example their effect on young vegetation through trampling, or the planting of exotic tree species, which may then outcompete native trees.

The following pages will take you through the basics of Pwllycrochan Local Nature Reserve.



Countryside event



### About the woods

The woodland is almost entirely broadleaved. Broadleaved trees are **deciduous**; this means that they lose their leaves in winter (e.g. <u>ash</u>, <u>beech</u>). There are also some **coniferous** trees in the woodland. These are evergreen and do not lose their leaves (e.g. Scots pine).

Go to types of trees to find out more details about the trees in Pwllycrochan.

There is a mixture of both **native** and **exotic** tree species. Native trees occur naturally and have existed for many years in the area (e.g. oak, oak), whereas exotic trees have been introduced by human activity (e.g. sweet chestnut).



Speckled wood butterfly

There is a high level of competition between trees and other plants in the woodland. Trees are competing with each other for sunlight, water and space. This sometimes means that exotic trees out-compete native trees, or a single species takes over, having a negative effect on the overall woodland. Sometimes the Countryside Wardens have to remove non-native species, to allow the woodland to continue to grow as naturally as possible.

The site was declared a <u>Local Nature Reserve</u> in 2000, in recognition of the woodland's important habitat while providing many opportunities for public enjoyment and community involvement.



## History of the site

Pwllycrochan Local Nature Reserve is an 'Ancient Woodland'. This means it has covered the hillside since at least the 1600's, long before the town of Colwyn Bay existed.

The name Pwllycrochan is thought to translate to 'Cauldron Pool' and was no doubt inspired by the woodland stream, which in the 1800's would have flowed much faster and collected in a pool before disappearing underground. The bubbling of water was said to look like a boiling cauldron.

From 1821 the woodland, which formed part of an estate, was owned by Lord and Lady Erskine. They had a notable effect on the woodland, planting exotic trees and shrubs, and making additions including paths, benches and bridges.

They planted exotic trees such as:

- Sweet chestnut (native to Southern Europe, Western Asia and North Africa)
- Larch and firs (from North America)

and exotic shrubs such as:

- Snowberry (from North America)
- Flowering nutmeg, pheasants berry, rhododendron ponticum and laurel (from Eastern Europe).



1920's image showing the path along the Old Highway including a rustic bridge (© Conwy Archive Unit)

To find out more about life in the 1800's check out KS2 Victorians



### A wood for all seasons



Male fern in Winter

Winter is a less active time in the woods with some creatures hibernating. However, the wildlife moving about the woodland is more visible due to the broadleaved trees having no leaf coverage. Mosses and ferns have yet to be hidden in the undergrowth by the shrub layer, and so too are more obvious to see.



Wood anemone in Spring

Springtime awakens the wild flowers: wood sorrel, wood anemone, dog's mercury, woodruff and bluebells - all indicators of ancient woodland - bloom beautifully for a short time, taking advantage of light reaching the woodland floor. Young trees stretch up to reach the light, tree buds burst and the woodland canopy closes over, offering a cool dappled shade. Numerous insects provide ample food for chicks of both resident and visiting birds.



Red campion in Summer

Summer flowering plants, such as foxgloves, herb robert, red campion and yellow pimpernel stand out strikingly against the many shades of green.



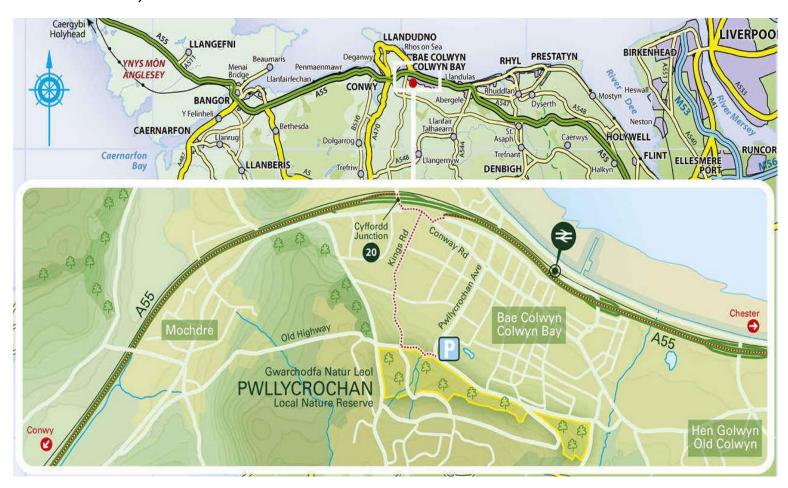
Fly agaric fungus in Autumn

The weather cools and Autumn's arrival is marked with multi-coloured leaves cloaking the trees before being discarded onto the ground to eventually form a thick bouncy golden carpet. The fruiting parts of the ever-present fungi become visible on bark and through leaf litter. Winter slowly returns and the cycle is complete.



### Map

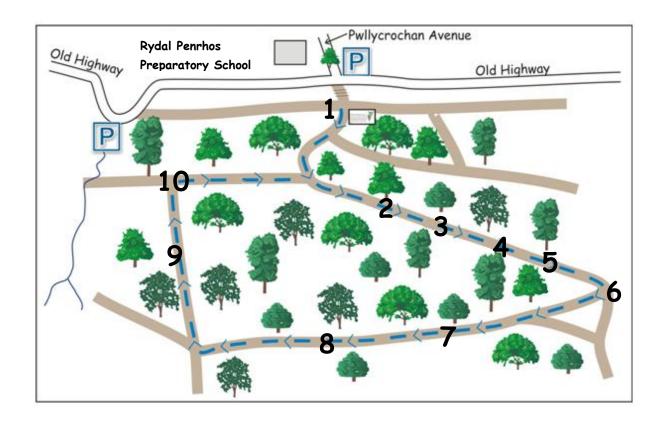
The following map shows you how to find Pwllycrochan woods and where to park (Pwllycrochan Avenue) to start the trail.





This map shows the *Discovery Trail* route through the woods.

At each numbered way marker post you can have a go at some exciting activities.



The Discovery Trail map

This woodland Discovery Trail has so much to offer, get out there and see for yourself!



## Types of trees

The two main groups of trees are BROADLEAVES and CONIFERS.

#### Broadleaves

- Broadleaves are so called because their leaves are wide, thin and flat, as if they were cut out of paper. There is a great variety of leaf shape and size.
- 2. The shape of a broadleaf tree is usually rounded at the top
- 3. Broadleaved trees all produce flowers, which develop into seeds. The seeds are often enclosed in a hard nut or a fleshy fruit.
- 4. Most broadleaved trees are deciduous, i.e. they shed their leaves every autumn.

The main broadleaved trees seen on the Discovery Trail are <u>beech</u>, <u>ash</u>, sycamore, rowan, <u>sessile oak</u>, <u>sweet chestnut</u>, horse chestnut and <u>hazel</u>.



#### Conifers

- Conifers have leaves like needles or tiny scales. Leafeating animals generally cannot eat them, due to their tough and waxy nature.
- 2. The shape of a conifer is usually upright and conical.
- 3. Conifers do not have true flowers instead they produce cones in which seeds develop.
- 4. Conifer leaves can stay on a tree all winter because they are tough and not easily damaged by frost.

Most conifers do not shed their leaves in the autumn and are called evergreen. On the *Discovery Trail* you can find two types of native conifer; Scots pine and yew.

Conifer tree

### Two exceptions:

- 1. Although the larch is a conifer it loses its leaves in the autumn.
- 2. Although holly is broadleaved it does not lose its leaves in the autumn.



CONWY

It is a tall slim tree with grey-green bark, which becomes rough with age, forming a diagonal or criss-cross pattern. Ash trees cast less shade compared to the beech, and many types of flowers, mosses and shrubs can grow beneath the trees.



Ash leaf buds and flowers

The leaf buds are a distinctive coal-black.

The leaves are made up of 7 to 15 leaflets with serrated edges, attached to a leaf stalk.

It is usually the last tree to come into leaf, in mid-May.

The flowers are purple-tinged tufts, visible near the tips of the twigs before the buds burst in the spring.



Ash leaves and fruit

The fruits are large clusters of keys that hang down from the twigs. Each individual key contains a seed. They ripen and turn brown, remaining in clusters on the tree until March when they are scattered by the wind.

In many parts of Britain it was used, along with oak, to predict the spring weather.

There are several regional variations - some conflicting with each other - but this is perhaps the best known:

"Oak before ash, we're in for a splash, Ash before oak, we're in for a soak!"

This may not have been that reliable, since in reality it is very unusual for ash leaves to unfurl before oak!

Ash was a sacred tree in pre-Christian times, believed to have protective and healing powers. It was traditionally used for wizards' wands and its wood was burned in mid-winter to ward away evil spirits.





#### Uses

Ash wood is very strong and elastic so can withstand sudden shocks and be bent.

Its coarse grain and toughness makes this tree great for making skis, furniture, tennis rackets and tool handles.







### Did you know?...

...That the ash has thirsty roots and is a great drainer thus it guards against erosion by water and prevents swampy conditions.





#### Oak leaves and fruit

Oak is less common than ash at Pwllycrochan Woods as it grows best in moist rich deep soils.

Oaks are long lived with a lifespan of 500 years, but trees up to 1500 years have been found. The mature trees often have a broad crown with many lower branches and a knobbly trunk. The distinctive oak leaves are 6-8 lobed. The pale green catkin-like flowers come out in April to May as the leaves unfurl and the fertilised seeds develop into acorns.



#### Wildlife Value

The oak supports more insect life than any other native tree - over 480 insect species have been recorded. The leaves nearly always show some signs of insect damage. Caterpillars tend to start on the outside edge of leaves and nibble inwards, whereas beetles often make a series of small holes. Look also for the winding trails of leaf miners that eat the green tissue between the outer coverings of the leaf.

The red circles 'stuck' to the leaves and the hard, round 'oak- apples' are galls made by tiny wasps. The adult wasp lays its eggs inside the tissues of the tree, which causes the galls, abnormal growths or swellings on the leaf or stem, to develop. The young wasps develop inside the gall, where they have a plentiful food supply and are safe from predators. The acorns too are a valuable food, not only for insects, but also birds and rodents.



#### **Folklore**

The oak was the most sacred tree to the Celts and continued to be valued in Christian times - oak leaves and acorns can often be seen carved on roofs and pews in cathedrals and churches. It has become part of our folklore and language, 'heart of oak', referring to people of great character and strength. It reputedly had many diverse powers: preserving youth, curing toothache and protecting from lightning!



Acorns and oak leaves - detail of carving on choir screen, Lincoln Cathedral

#### Uses

The acorns provided valuable food for livestock and could be used as a coffee substitute and sometimes ground into flour. The bark is used for tanning leather.

#### Did you know?...

...That the wood of oak trees was the main building material in medieval times before brick making became widespread.

The oldest example (we think) of a medieval house is on Castle Street in Conwy, Aberconwy House. The rings of one of the many timbers has been analysed and provided a date of construction of around 1420.

More information about Aberconwy house:

http://www.nationaltrust.org.uk/aberconwy-house/



Sessile oak



#### Hazel leaves & fruit

Hazel is a common smaller tree often found growing as a multi-stemmed shrub beneath ash or oak. The bark is brown and flecked and the leaf buds are rounded.

The male flowers are the very well known catkins that appear from January until March but the female flowers are less noticeable, bud-like with small red tufts. The wind blows the pollen from the male catkin flower, some is caught by the female flowers which have a tuft of sticky red stigmas. The autumn nuts develop from the small, bud-like female flowers.





Hazel leaves

Catkins - male flowers

The leaves, which unfurl from April, are rounded with deep veins, serrated edges and a pointed tip.

They are hairy and soft to touch. The fruits, the familiar hazelnuts, form in clusters of 2-4, each nut enclosed in a protective sheath.

Hazel is rarely single-

The nuts are initially whitish-green and turn brown as they ripen and fall off the trees from September. They are a favourite food of squirrels and many of the nuts you find will have been split open and eaten.



chewed hazel nuts stemmed because, if a branch is broken off by grazing animal or by weather, the tree sends out straight new shoots from its base. Man has managed this tendency for centuries, by coppicing, regularly cutting off the shoots, to provide a steady supply of even-aged poles.



#### **Folklore**

Hazel was also thought to be a magical plant and, even today, water diviners use the forked twigs to locate a supply of water. In Celtic legend hazelnuts are a source of concentrated wisdom. They were associated with kindly witchcraft and bestowed blessings ranging from wisdom and strength to health and fertility.

#### Uses

The hazel sticks can be easily split and are flexible so they can be bent and twisted without snapping. These properties made them invaluable for making woven hurdle fences and for making the woven wattle foundations for the wattle and daub walls in early houses.



Hurdle making

#### Did you know?...

...That the hazel has been used by welsh fishermen for 3000 years for making coracles, small round boat frames which were covered by the skin of stretched animal hides and made waterproof.



© <a href="https://pilgrim.ceredigion.gov.uk/index.cfm?articleid=1241">https://pilgrim.ceredigion.gov.uk/index.cfm?articleid=1241</a>



#### Beech

Mature beech trees are tall and broad with a thick cover of leaves. They have smooth grey bark and thin pointed brown leaf buds.

The leaves are oval, pale green and smooth to touch with a wavy margin. Clusters of small greenish flowers appear as the leaves unfurl in April and May.

The fruit is known as 'beech mast'. The threesided shiny brown nuts are held in groups of four in pointed green prickly husks that turn brown and split open in the autumn.

It is a favourite food for squirrels and mice.



Beech leaves and fruit



Beech tree

Beech trees cast a heavy shade so few plants grow beneath them but there may be a carpet of bluebells in the spring before the beech leaves unfurl. The leaves contain a lot of 'tannin', which makes them hard to decompose (break down) on the woodland floor. It can actually take up to three years for a beech leaf to completely disappear from view, so even when the trees are bare, very little can grow in the dense carpet of leaf litter.

#### Uses

The wood is strong due to its grain and lack of knots, but not weather resistant so it is used mainly for indoor furniture making and joinery.

#### Did you know?...

...That because beech wood makes great furniture, in some areas of the world, beech is grown in a similar fashion to conifer plantations.



#### Sweet Chestnut

#### Sweet Chestnut tree

The sweet chestnut is a very distinctive tree. Growing tall and large, the bark of the tree is deeply grooved and runs up in a spiral like fashion.

The leaves have parallel veins with teeth-like structure on the edge and can measure up to 20cm long. The fruit is a green spiny shell that in the autumn opens releasing between one and three nuts.

The flowers of the sweet chestnut are found nearly all over the tree. Male and female flowers are found on the same catkin with pollination occurring not by wind, but by insects.

The catkins have long yellow tassels that are male only, with small female flowers at the base.



Sweet chestnuts @visitwoods.org

The sweet chestnut is not native to Britain but was introduced by the Romans as a food source from the Mediterranean

The chestnuts were dried by a fire, and then mixed with milk to produce porridge. Chestnuts are still used in food in the present day, although not as often in porridge like the Romans ate it, but at Christmas. Roasted chestnuts and chestnut stuffing are traditionally found with the British turkey Christmas dinner.

### Did you know?...

...That the sweet chestnut can take up to 30 to 40 years to be mature enough to start bearing seeds



Sweet chestnut tree leaves



### Why are trees important?

Woodlands such as Pwllycrochan provide people with a place to walk and enjoy wildlife. It is important to ensure that Pwllycrochan, along with other woodlands; is around for future generations of people to enjoy in the same way.

Trees support all kinds of different insects, some more than others, as shown in the table below. Without the trees, there would far less wildlife diversity.

Number of species of insects supported by different types of trees:

TYPE OF TREE	NUMBER OF INSECTS
Oak	432
Hazel	106
Scots pine	91
Ash	68
Beech	64
Holly	7
Yew	4

Trees are one of the most important materials for building and producing furniture for homes and are also used to build boats, make paper, pencils, rubbers, wooden toys, chocolate and have many other uses.

As trees within woodlands are continually growing and developing, there is an ongoing supply of useful material. For this reason, woodlands are also known as a 'sustainable resource'.

The meaning of 'Sustainable' in this context is ensuring that the felling of trees in a woodland is carried out at a level and in such a way that the woodland remains healthy in the long term, through natural regeneration or planting.

Just how important are trees? They produce oxygen and oxygen is essential to life!



### Woodland Management

Native broadleaved trees like ash, hazel and oak are a favourite food source for lots of wildlife, including mice, voles, many birds and insects. A number of non-native species such as conifers were planted in Pwllycrochan before it became a Local Nature Reserve.

Coniferous trees do not support the range of wildlife that our native broadleaved species do and can prevent the growth of other species by blocking out the light.

Some broadleaved trees such as beech, with their dense foliage shade out all other plants.

Trees that are growing too close together and competing for the light, do not grow tall and straight. As these trees mature, the weight of the canopy puts stress on certain branches and limbs, causing them to break in strong winds. In areas where this is happening, certain trees are felled and the area thinned out. The remaining trees are given a better chance to grow stronger.

Once the canopy is opened out, tree saplings get enough sunlight to grow tall and straight, giving the woodland a mixed age structure.

The speckled wood caterpillar, which feeds on grasses such as false-brome that thrives in areas of dappled shade, cannot survive where trees are too dense.

See also "deadwood".





### Deadwood

Deadwood provides food and shelter for fungi, invertebrates and insects. They in turn are food for many birds and mammals.

Creation of deadwood habitats are an integral part of all felling works and you will see carefully constructed 'habitat piles' (stacks of deadwood) as you walk around the woods. Some dead trees are left standing, as long as they are not a danger.





### Woodland care

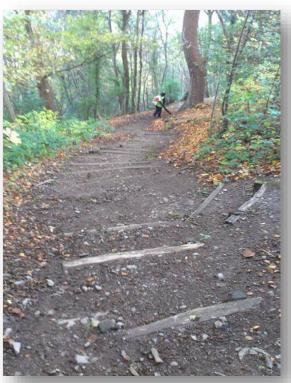
Pwllycrochan Woods is managed and cared for by Conwy County Borough Council. Staff members within the Open Spaces section carry out work directly.

Their work involves several aspects, such as:

- Countryside site management
- Countryside access
- Protecting certain trees and hedgerows
- Nature conservation
- Running countryside events, walks and activities
- Encouraging others to get involved



Bug hunt event in the countryside



Path maintenance



### Alien invasion

Rhododendron and laurel are both shrubs, brought here and planted throughout the woodland in the early 19th Century. They are very invasive, taking over large areas of land quickly and casting dense shade over the ground. This means that other plants and trees cannot establish and grow.



### What is being done?

Exotic shrubs upset the natural balance of the woodland. To address this the Countryside Warden, with the help of volunteers, clears areas of these shrubs to allow more light to the ground. This encourages native plants and trees to grow in their place. The native plants and trees provide habitats for many varieties of insect, which in turn support many birds and small mammals.



### Influence of people

Pwllycrochan Woods Local Nature Reserve is managed not only to help maintain and encourage more wildlife to thrive, but to help the public to enjoy the woodland too. This makes it an ideal site for looking at people's impact on the environment.

Looking around the woodland, there are many examples of how people have had an impact on the site.

Signs are used to encourage positive behaviour, e.g. dog walkers are advised to use dog bins.

Visible human impacts on the woodland have been the installation of steps, benches, bridges, dog bins and interpretation panels.

Less noticeable influences have been the stacks of wood called 'habitat piles', and log edging on paths.

The network of paths created within the woodland is another tool used to manage the impact that people have on sensitive woodland areas where young sapling trees grow. This network also directs people away from unsafe areas with steep ground.

Path edges have been put in to encourage visitor traffic (lots of pairs of feet) to be concentrated within a chosen width of path. The edging has helped to avoid paths becoming wider and wider and the ground becoming compacted so much that plants no longer grow. Pwllycrochan is on very steep ground, if outside path edges become worn down enough, the paths eventually disappear into the steep banks.



Human impact- dog bin, signs, way markers



Human impact- benches

There are interpretation boards at access points in the wood, to inform locals and visitors alike about the wildlife, history and management of Pwllycrochan. The Countryside warden organises a range of events for the public and publicises this through an <u>events programme</u>. Some events are run within Pwllycrochan Woods.



#### What's an 'LNR'?

A <u>Local Nature Reserve</u> is an area that is protected and managed to allow people to enjoy its wildlife. It is of local importance for one or a combination of the following: wildlife, geology, education, public enjoyment.

In the case of Pwllycrochan Woods... it was declared a LNR in 2000



Tree regeneration

#### Why does the woodland need protecting?

If the woodland habitat is not protected and managed, a great deal of the habitat's wildlife will disappear. This is even more important in Pwllycrochan as it is an ancient woodland. This habitat provides highly suited conditions for many species of plant and animal. It is a valued, irreplaceable environment.



Primroses



Did you know there are at least 10 different plant species that can be found in Pwllycrochan, that are indicators of an ancient woodland habitat?

Wood anemone Woodruff Yellow pimpernel Primrose

Opposite-leaved golden saxifrage Yellow archangel Wood mellick Wood speedwell

Pignut Hairy wood-rush Wood sorrel



#### Wardens

10 Local Nature Reserves and 11 other countryside sites within Conwy are cared for by the Countryside Wardens, who manage them for nature conservation and public enjoyment.



View of Great Orme Country Park and Local Nature Reserve from Little Orme

The Warden for Pwllycrochan Woods (cq.cs@conwy.gov.uk) is kept busy with tasks such as:

- Working with other organisations and people with a responsibility for caring for the environment.
- Seeking to ensure that no vandalism or other activities take place that may prevent people from enjoying the area or be harmful to the woodland's wildlife.
- Creating better access for people, e.g. paths for walkers and people with disabilities.
- Talking to the public, clearing litter and ensuring dog bins are emptied to keep high standards of cleanliness and encouraging visitors to respect and look after the woodland.
- Carrying out a wide range of practical tasks, often with volunteers, including woodland thinning, footpath maintenance and conservation tasks.



River cleaning with pupils from St David's College



Litter collection



### Biodiversity

Biological Diversity or 'Biodiversity' refers to the variety of life on the earth. It includes all living things and the habitats in which they live. So it includes species of wildlife that you see every day, such as the earthworm or blue tit, to the rarest animals, such as the blue whale or giant panda.

Check out **ARKive** to discover the world's endangered species.



Pwllycrochan Woods has a rich variety of important wildlife. Mixed deciduous woodlands, such as this one are one of the habitats that have been considered as being of high priority to conserve across the UK; more so due to its ancient woodland status.



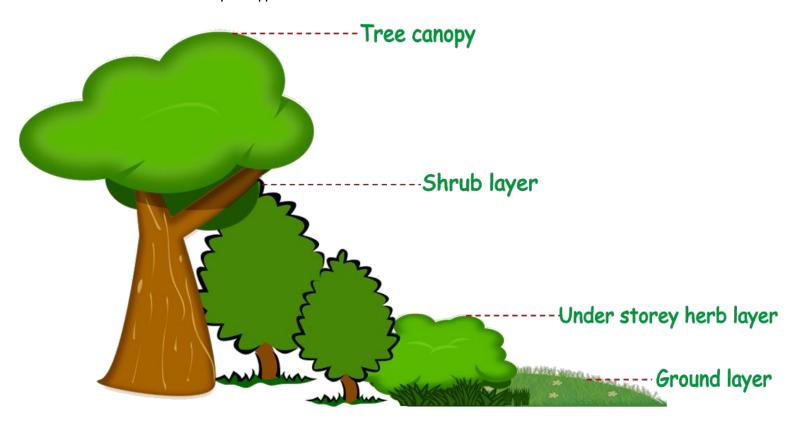
All of this biodiversity is being conserved in Pwllycrochan Woods by careful management. Seminatural woodlands, such as this one in Conwy are also included in Conwy's Local Biodiversity Action Plan (LBAP).

This plan identifies the actions that must be put into practice that will ensure that the biodiversity is maintained and if possible enriched.



### Biodiversity in Pwllycrochan Woods

The woodland habitat can be split into four different layers. There is a huge variety in the wildlife that each layer supports.

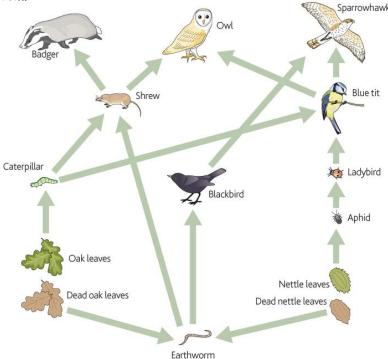


Tree canopy	Shrub layer	Under storey herb layer	Ground layer
Layer made up of trees	This layer has plants such	Layer made up of shade	The ground layer has
including oak, beech,	as holly, hawthorn, rowan,	loving plants: grasses, red	many different types of
birch and Scots pine.	hazel, ivy and brambles.	campion, wood anemone, dogs mercury, foxglove,	fungi, mosses and lichens.
Wildlife includes grey squirrels, buzzards, tawny	These plants are used by birds such as blue tits,	wood sorrel and violets.	It is also a home to many types of invertebrates
owls, jays, magpies, blue	great tits and	Butterflies lay their eggs	including spiders,
tits, bats and many insects.	chiffchaffs. Nuthatches and treecreepers are	on the grasses here.	woodlice, beetles, slugs, millipedes and centipedes.
	often found hunting for	Saplings (baby trees)	
	bugs on tree trunks.	begin to grow here.	Invertebrates are very important as they break
	Butterflies are also found	Small mammals use this	down all the dead leaves
	here, feeding on the	layer to move through:	and wood that falls on the
	nectar of plants such as bramble flowers.	bank voles, wood mice and hedgehogs are some examples.	forest floor.
		Badgers and foxes also	
		hunt in the woods	
		between dusk and dawn.	



### Why is biodiversity important?

Biodiversity is very important to both humans and other wildlife. All living organisms on earth are connected through a giant food web. The image below shows a small part of this web in a woodland ecosystem.



Woodland food web

Humans like any other animal need things to survive such as food to eat, air to breathe and clean water to drink. All of these factors come from nature, and if we break down any part of the web we do not know how this might affect other wildlife and our environment.

Biodiversity also has a major impact in other ways:

- It has a large influence on our health such as the conventional medicines it has provided, like penicillin and aspirin.
- It is directly linked to our economy in Conwy our three main incomes are tourism, farming and forestry all of which are linked to a healthy countryside.
- The variety of wildlife also acts as a source of genes for breeding new crops and our healthy and breathtaking countryside is also part of our local culture.







### What actions are being taken?

As a result of the Rio Earth Summit in 1992, the UK government produced a report called The UK Biodiversity Action Plan. This plan targeted certain habitat types and species with the aim of conserving biodiversity in the UK and therefore contributing to worldwide levels.

Local Biodiversity Action Plans (LBAP) were created across the UK to help identify important habitats and species. Conwy published its plan in 2003. This has a direct effect on what actions are taken by conservation organisations to help maintain and enhance biodiversity.

You can find the Conwy LBAP in your local library or by clicking here.





### Web links

Conwy County Borough Council

Natural Resources Wales

**BBC** Nature

Woodland Trust Nature Detectives

North Wales Wildlife Trust

**RSPB Youth** 

Snowdonia National Park Authority

# Thank you

Ysgol Pendorlan

St Joseph's RC Primary School

<u>Ysgol Peny y Bryn</u>

Ysgol Cystennin

Ysgol Llandrillo





