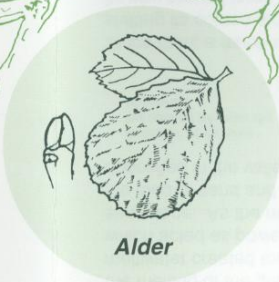


Den of Alyth

Trees are giant stores of sunlight energy. Green plants are the only things on this planet able to use the sun's energy directly for their growth.



Ash



Alder



Beech



Oak

In summer, leaves may be chewed on the tree by caterpillars, or their surface may be patterned by the burrowing of minute grubs. These larvae and the adult insects are food for birds and small animals. Every woodland provides a rich larder for all kinds of life.

The bark protects the timber beneath from attack by disease and water. Disease caused by fungi is common. Dead wood is food for some fungi; it may be easily bored into by grubs and pecked out by woodpeckers looking for their food. Holes in decaying wood provide homes for a variety of birds and small animals, and their stores of food.

How the Woodland Works - From Sunlight to Soil

Millions of unseen bacteria and other 'decomposers' bring about the decay of dead wood, fallen leaves and dead animals and recycle the released nutrients and energy. Worms, beetles and moles then help to mix this 'humus' with the other main soil ingredients - mineral particles (broken down from rock by water, frost and tree roots) - resulting in a rich brown soil to sustain the woodland.

Wildwoods are not tidy places. Growth beneath the leaf canopy depends on light. Sufficient light allows young trees and shrubs to grow causing a 'clutter'. Shade-tolerant plants, like the woodrush, will hide the ground. Where little light reaches, mosses, which tolerate low light levels and fungi needing no light, are still able to grow.



Hazel



The sound of flowing water is never far from you as you walk through the Den. In places, the Alyth Burn appears to have cut deeply through the rock creating high cliffs. In the cliffs, you will see a reddish rock exposed - this is known as **Old Red Sandstone**.

Old Red Sandstone because the sand and rock minerals. **Sandstone** because the sand and rocks being eroded off high mountains to the north were washed down in torrents into the lakes. Here the lake bottoms, and were later reworked by streams. Pressure over thousands of years has compacted this loose material into solid rock. The larger pebbles are rounded. This tells us that they have experienced a lot of grinding while being carried in fast flowing water.

Old Red Sandstone Cliff

Fine sandstone - laid down in layers (beds) by slow moving currents

Conglomerate - pebble beds laid down by faster moving currents

Later movements of the earth's crust tilted the sandstone layers which is why today we see the exposed rock layers sloping downstream.

The lower car park is built by the old quarry. Because of the layered and jointed character of the sandstone, and its attractive colour, the local stone was used to build Alyth town as it expanded rapidly during the 1800s. Look around the old buildings in your own area. These will tell you about the local stone and other rocks used for ornamental facings.

What About... The Rocks?

The steep cliffs and bouldery bed of Alyth burn are evidence of the more powerful forces responsible for the Den's shaping than exist today.

The force responsible was that of the valley glaciers moving south from the main Cairngorm ice mass. The ice finally receded some 10,000 years ago; with the melting of the glaciers, vast quantities of meltwater created torrents loaded with rock debris, which acted as powerful scourers of the soft sandstone. As the meltwater supply declined, so the load of sand and gravel in these rivers was deposited in the valley.

Boulder of Gneiss - brought by ice from the Highlands

Since then, a much smaller stream has been shifting its course along the valley bottom, making its way around large boulder and rock obstructions. The fluted nature of the steep western slopes was caused by the weathering of the loose gravels before the slopes were colonised and stabilised by plants as the climate warmed. Since the first colonising plants, woodland has developed and remained without much interruption to give the Den its character today.

Stonely Nymph - found under rocks in the burn

A stream is a dynamic and ever-changing environment. Any wildlife living in moving water are strong swimmers; the stonely nymph has hooks on its feet to hold on to rocks, while other small creatures take shelter in the slack water among the stones on the stream bed.

If you are lucky, you may see a dipper. You will probably hear its high pitched call before spotting it as it flutters past, close to the water surface. A dark brown coloured bird with a white bib, it is adapted to swim underwater to look for its food.

What About... The Den?

The Den has been wooded for several thousand years. This continuous history of broadleaved woodland cover has increased its value for wildlife. If the woods had been felled, certain species of insects, mosses and other plants would not have survived. The steep sides of the Den have probably protected the woods by making the removal of timber for some areas difficult.

A woodland is not simply a group of trees. It is a complex community of many different plants and animals, all with their own special needs - sunlight, food, water and soil. Good woodland management must try to maintain the natural balance of plants and animals.

The differing character of the woodland can be both seen and sensed when walking through the Den. On the western bank, the wood feels more natural. It is an untidy place with a mix of trees and strubs of all ages and types. A tree canopy of mainly native species allows light enough to encourage a variety of understory plants and dependent wildlife.

A Trout - look carefully for these in pools

In the past it was popular to plant attractive species from other continents. Where these are able to compete and dominate in a woodland, the natural mix is disturbed. On the eastern bank the paths lead you through such areas, dominated by mature beech which is not native to Scotland. Here deep shade and leaf litter prevent other plant and insect life from growing, especially insects.

By selective felling of mature trees, clearings can be made to encourage the growth of seedlings of native trees which need more light. In this way a return to a more varied and interesting woodland area can be achieved and the future of the woodland ensured.

What About... The Woodland?

Den of Alyth

PERTH & KINROSS COUNCIL

Planning & Transportation

Local Walks

The Den of Alyth

Walking in the Den

Welcome to the Den of Alyth where we hope you will have a pleasant woodland encounter!

The Den comprises the deep-sided wooded valley of the Alyth Burn. As well as being a quiet place to walk, rest or picnic, the Den is also a valuable wildlife site with plenty to see, smell and hear.

Several walks of varying lengths running through the shady woods may be enjoyed. The map overleaf indicates the car parks, footpaths and facilities available.

We recommend waterproof footwear, especially after wet weather. Sections of the path can be muddy and run along steep slope edges; **special care should be taken with young children.**

Because of its richness as a woodland habitat, the Den has been designated a Site of Special Scientific Interest (SSSI) by Scottish Natural Heritage. With sensitive, long term management in the Den the interests of both the wildlife and visitors can be conserved.

Please help us to maintain the Den's character by not disturbing the wildlife and by not picking the flowers or damaging the trees. Please keep dogs under control and take your litter home.

We hope you enjoy your visit and will tell others about the Den. For other sites to visit, please contact the Ranger Service.

We acknowledge the support of:

Europe and Scotland Making it work together

For further information please contact:

Countryside Ranger Service, Planning & Transportation, Perth & Kinross Council, Pullar House, 35 Kinnoull Street, PERTH PH1 5GD

Tel 01738 475392/475258

Map showing the Den of Alyth area, including paths, parking, and landmarks like To Tullyfergus, To Alyth, and To Glenisla.

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