

FFOREST GOCH BOG SITE OF SPECIAL SCIENTIFIC INTEREST



YOUR SPECIAL SITE AND ITS FUTURE

‘Your Special Site and its Future’ is part of our commitment to improve the way we work with Site of Special Scientific Interest (SSSI) owners and occupiers. In it, we explain what is special about the wildlife / geology on your site, and what care is needed to look after its wildlife / geology into the future.

All SSSIs are considered to be of national importance and we recognise the crucial role that owners and occupiers play in their management and protection. We need you to share your views and knowledge of this site with us, to help us safeguard it.

We hope that you will find ‘Your Special Site and its Future’ interesting and helpful. Please contact us if there is anything about the site and its management that you would like to discuss.

What is ‘special’ about the wildlife at Fforest Goch Bog SSSI?

Fforest Goch Bog has one very special feature:

Rain-fed (ombrogenous) raised bog

Active raised bogs generally have the appearance of a gently sloping mound within the landscape. At this site, attempted drainage of the bog by a large central drain has split a single bog dome, creating two bog domes either side. They consist of a deep accumulation of waterlogged peat and a surface covered by a living layer of plants. As the surface of the bog is raised above the local water table, the only source of water and nutrients feeding the bog is rainwater. Active raised bogs are those in which the peat is still able to accumulate because of the addition of partially decomposed material from the surface vegetation. The plants, mainly heathers, sedges, cotton-grasses and bog-mosses, are all specially adapted to live in waterlogged, nutrient-poor conditions. Subtle variation of these conditions controls the distribution of the species and this creates the distinctively undulating and often colourful pattern characteristic of the bog surface.

The peat beneath the vegetation surface has formed over several thousands of years and is likely to preserve within it a detailed record of local and wider environmental change in the form of plant and animal remains. These deposits are of enormous value, and tell us much about the evolution of Wales since the last ice-age. They also provide insights into the extent to which our climate has changed in the past – and this gives important information about how future climate change will affect our landscape.

Much of this type of habitat has been lost or modified through a combination of drainage, burning and excessive grazing. Much has also been lost through the planting of commercial conifer plantations.

Fforest Goch Bog is by far the best and much the least disturbed example of a very rare habitat in West Glamorgan and Llanelli, with only three other possible sites known in this area.

What do we want Fforest Goch Bog to look like?

The following is a description of how we would like to see the future development and distribution of plants and animals on the raised bog area of Fforest Goch:

From the centre of the site, two bog domes are visible as high points. At first glance, the site appears uniform greenish-brown, but a closer look shows a rich mix of reds, browns, greens, yellows and, in summer, the nodding white heads of cotton-grass.

A walk over the bog will further reveal the range of specialised plants that thrive here. Bog plants grow on a deep layer of waterlogged peat, often several metres thick and made up of the partly decomposed remains of previous bog plants. The surface of the bog consists of a mixture of small, moss-filled waterlogged hollows and slightly drier hummocks where heathers grow. You may also see an occasional small bog-pool. The tallest plants, standing at about knee-height, are cross-leaved heath, which

grows in the wetter areas, common heather and cotton-grass. Growing among these plants you will also find deer-grass and purple moor-grass.

Below the taller plants you can see sphagnum bog-mosses. These spongy, water-holding mosses form a hummocky and colourful carpet in a variety of greens and reds. You may also see insect-eating sundew and, where bare peat occurs, some small bog liverworts can be found. The larvae of the large heath butterfly feed on the flower heads of cotton-grass and so you may be lucky enough to see some of these rare butterflies on sunny days in early summer.



Bog pool with hummocks of cotton-grass

What management is needed on Fforest Goch Bog SSSI and why?

Although Fforest Goch Bog is an excellent place for wildlife, it will only remain so if the necessary management continues. CCW's priority is to work with you to ensure that this management is carried out.

What does this mean in practice?

There are a number of different factors that could damage the special features at Fforest Goch Bog if they are not properly managed. In addition, some management is essential to conserve the raised bog and maintain it in its current condition. These are the management issues we regard as most important.

- **Drainage**

No new drainage ditches should be dug on this site and, wherever possible, old drainage ditches should be blocked. Water is the very 'life-blood' of the bog, and saturated conditions close to the surface are necessary to sustain its characteristic wildlife. Un-drained bogs help to regulate the supply of water to headwater streams, and wet bogs also absorb carbon dioxide – the major greenhouse gas, whilst also retaining the very significant carbon store of the peat which has built up over thousands of years.

- **Burning**
Raised bog should not be burnt, as burning is likely to damage important plant species, especially bog mosses and liverworts. Past burning practice is likely to be at least partly responsible for the scarcity of some of these bog-moss and liverwort species.
- **Grazing**
Overstocking damages bogs by reducing the abundance of heathers and allowing purple moor-grass or cotton-grass to become dominant – it may even trigger peat erosion. We would wish to see low stocking densities of ideally cattle in a summer-only grazing regime to allow the recovery of heathers while preventing scrub establishing in areas of raised bog which have been damaged by ditching.

Finally

Our knowledge of wildlife is far from complete. It is possible that new issues may arise in the future, whilst other issues may disappear. This statement is written with the best information we have now, but may have to change in the future as our understanding improves. Any information you can provide on the wildlife of your site, its management and its conservation would be much appreciated.

If you would like to discuss any aspect of your SSSI, or have any concerns about your SSSI, please contact your local CCW office.

Your local office is;

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