

# **CARN INGLI**

## **SITE OF SPECIAL SCIENTIFIC INTEREST**



*Bolder strewn summit of Carn Ingli.*

## **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 and geology on your site, and what care is needed to look after its features 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 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 on Carn Ingli SSSI?

*Carn Ingli SSSI has numerous special features:*

A scattered patchwork of different vegetation types covers the hillsides at this site. Freely drained areas have **dry heath**, a shrubby mixture of bell heather, common heather and western gorse. In many places, grazing has turned this into **acid grassland** – a shorter turf of fescue and bent grasses studded with the small yellow flowers of tormentil and the white of heath bedstraw. Around and below the springs that well-up from the hillside, **flush** vegetation has developed. This often consists of carpets of mosses and sedges, and a variety of wetland plants like the fluffy white cotton-grass and the sticky-leaved, insect-eating sundew. Waterlogged peaty ground has **fen**, often with bogbean and marsh cinquefoil amongst the more obvious species. Peaty ground that dries out a bit in the summer has **wet heath**, which has various types of heather alongside bog-moss carpets and the golden spikes of bog asphodel. Elsewhere, species rich **marshy grassland** has developed, with rushes (‘reeds’) or tussocks of moor-grass.



*Aerial photo of the whole SSSI displaying an assembled kaleidoscope of habitats  
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There are a number of rare plants in the wetter habitats. The **pale butterwort** is a small but striking plant with sticky olive-green leaves and a delicate lilac flower. It likes wet, open ground and often grows well in hoof marks. The **bog orchid** is not a showy plant like the more familiar pink and purple orchids – it is all green and only a few inches high. It grows amongst bog-mosses and bare, wet peat but can be very difficult to find. Above Pont Ceunant the rare **slender green feather-moss** is known to exist but only as two small patches. Other **rare mosses on damp ground** are also of special interest here, as are the various other rare mosses and lichens on rocky tors.

The **rocky tors** are also regarded as a special geological feature, developed from volcanic rhyolites and dolerites. Carn Ingli, including areas of the Mynydd Preseli, was once covered by ice around 18,000 years ago, but escaped the more recent ice movements. The rocks and landforms provide a classic example of the impacts of glaciations on the landscape. Our wish is to see them continue to be shaped by natural erosion, whilst remain undamaged by human activity. Important is the fact that they should be covered with a sparse growth of plants including scarce lichens and the rare **Wilson's filmy-fern** that dwells in the damp shady recesses of the tors.



*Pale Butterwort*



*Bog Orchid*

A variety of unusual insects are also found in these special habitats. Mynydd Preseli is a particularly good place for rare damselflies, with the **southern damselfly**, **scarce blue-tailed damselfly** and **small red damselfly** thriving in the flushes, shallow streams and fen pools.



*Southern Damselfly*



*Slender Green feather Moss*

## **What do we want Carn Ingli SSSI to look like?**

*The following is a summary of our vision for the special features:*

The dry heath is a colourful mix of purple heathers and yellow gorse. Some areas have tall, bushy heather while others are more open, with fine-leaved grasses and herbs growing between the shrubs. The aim is to see this covering around two thirds of the site and displaying a range of typical plants, birds and insects. Heathers and bilberry should flourish alongside bushes of western gorse. Some of the heath should be short and open enough for smaller plants such as tormentil, heath-spotted orchid and short sedges to grow, but there should be plenty of taller, bushy heather as well. The wet heath should cover roughly one fifth of the site. Also displaying a colourful mix of purple heathers and moor-grass. Bog mosses carpet the damp ground and the golden flowers of bog asphodel are a colourful feature in summer. The vegetation height should be kept short and open enough for smaller plants to establish and thrive. Areas of acidic grassland are still common near the southern boundary of the site, but some have been allowed to develop back into heath. On the lower ground, the springs are still running strong and most of the flushes stay wet throughout the year. Around these seepages the rare plants, pale butterwort and the slender green feather-moss, should continue to flourish. While it should also continue to support a population of the southern damselfly.

Marshy grassland has a colourful variety of wetland herbs growing through the canopy of rushes or around the short tussocks of purple moor-grass. All the rare plants and invertebrates have thriving populations, and the geological features are maintained only by natural weathering.

## **What management is needed on Carn Ingli SSSI, and why?**

Although Carn Ingli is an excellent place for wildlife, the vegetation cover we see today is not entirely 'natural'. In fact it is the product of many centuries of management. If we want to achieve the vision outlined above, it will be essential to continue management. CCW's priority is to work with you to achieve this. We place a great importance on our relationships with owners and occupiers, because without your help, it will be impossible for us to safeguard the special features on your land.

## **What does this mean in practice?**

Some management is essential to conserve the special features. Other management actions could damage the features within a very short time. These we regard as the most important:

**Grazing** is crucial. It allows lots of different plants to grow together, by preventing the most competitive plants (like purple moor-grass, gorse or bracken) from taking over. The rare plants and damselflies all need open wet ground, and regular disturbance by grazing animals. As a general guide, most of the special vegetation types are at their best when the sward varies between ankle-height and knee-height. Ideally, larger animals like cattle or ponies would be stocked as their grazing habits produce the most varied, species-rich swards. Traditional sheep grazing will keep most of the vegetation short, but some of the special wetland features could suffer

without the trampling effect of heavier animals. Taking sheep off the hill in winter will avoid damage to the heather, which can be vulnerable to over-grazing at this time of year. If animals are out-wintered, any feeding should be done with care to avoid causing too much poaching or enrichment.



*Grazed, Wet Heath habitat near to Carn Llwyd*

**Bracken** has spread in recent years, particularly around Carn Ffoi and below Carn Ingli summit, to the North-East. Dense bracken reduces both the wildlife interest and the forage value, and further spread should be prevented if possible. Selective herbicide application could be considered. However grazing with heavy stock in July is regarded as being the best way of keeping the bracken in check in the long term.

Traditionally, much of Carn Ingli has been managed by **burning** during the winter, to keep the coarser plants like heather, gorse and bracken in check and provide better quality grazing. We advise that burning should be used carefully and sparingly, ideally through a rotation of small, managed burns. Too frequent burning of dry heath is damaging to some plants and insects, and burning wet heath can also damage the layer of *Sphagnum* bog-moss and the underlying peat. A combination of burning and sheep grazing can lead to stronger growth of the plants that it is used to control. Mosses and lichens on the rocks are easily damaged by burning, so the tors and boulder fields should be protected from fire. Accidental summer burns are particularly damaging, and every effort should be made to prevent these from occurring.

**Drainage works** can be very harmful to the wetland habitats and species. Any planned works, on or around the SSSI, should be discussed with us so we can make sure that the rare plants and damselflies won't be affected. **Water abstraction** can also cause problems, as the flushes and their rare species need a steady flow of spring water. Again, any plans to take more water from the hill would need to be discussed with us first.

**Recreational activities** are not currently thought to affect the special wildlife here, but increases in the number of walkers, mountain bikers and off-road vehicles could cause localised disturbance. To note also is the fact that a road cross' the SSSI and road works could affect the special features if not undertaken sympathetically. Special attention should be paid to works that could impact on the springs downstream of Pont Ceunant where the southern damselfly is found.

## **Finally**

Our knowledge and understanding of geology and wildlife is continually improving. 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.**

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