

LLANTRISANT COMMON AND PASTURES SITE OF SPECIAL SCIENTIFIC INTEREST



Photograph by CCW

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 on your site, and what care is needed to look after its wildlife 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 Llantrisant Common and Pastures SSSI?

Most pastures in lowland Wales today have been enriched with artificial fertilizers, re-seeded and drained. As a result, they are dominated by only a few species of agriculturally productive grass. It is now unusual to see even small patches of grassland that have not received this treatment, and so still have a rich mixture of more delicate grasses and wild flowers. Areas as large as Llantrisant Common and pastures SSSI are very rare indeed.

Llantrisant Common and Pastures SSSI includes the whole of Llantrisant Common (Y Cymdda) and a group of enclosed fields on its eastern margin. The most northerly of these is known as Y Gweira. The special features of the SSSI are four habitats and two individual plants.

Marshy grassland

Acid flush

Acid grassland

Species-rich neutral grassland

Cornish moneywort

Bog earwort

Marshy grassland, dominated by purple moor-grass, covers extensive areas of the common. Much of it is characterised by tormentil, together with meadow thistle, carnation sedge and devil’s-bit scabious. Other areas are dominated by soft-rush and sharp-flowered rush, alongside frequent common marsh bedstraw and greater bird’s foot trefoil. In places, this grassland resembles heathland, with frequent patches of heather and cross-leaved heath. Elsewhere, grasses such as sweet vernal-grass, velvet bent and heath grass are prominent.

Acid flush occurs in association with the marshy grassland, and provides habitat for the moisture-loving sharp-flowered rush, star sedge, common cotton grass and bog mosses (*Sphagnum* species).

Acid grassland, in the drier areas of the common, is typified by common bent, with herbs such as heath bedstraw, autumn hawkbit and devil’s-bit scabious. The uncommon small fern, moonwort, is found on Llantrisant Common in this type of short, nutrient-poor grassland.

Neutral grassland is more or less restricted to the enclosed fields, with a range of grasses including common bent, red fescue, sweet vernal-grass and crested dog’s tail prominent. It also contains broad-leaved herbs such as common knapweed, common bird’s foot trefoil and devil’s-bit scabious.

	Where is it?	Typical plants	Special plants
Marshy grassland	Over extensive areas of the Common, and in Y Gweira	Purple moor-grass Tall rushes Tormentil Devil's-bit scabious Sweet vernal-grass Heath grass Velvet bent	Cornish moneywort Bog ear-wort Petty whin Ivy-leaved bell-flower Meadow thistle Royal fern
Acid flush	Associated with the marshy grassland, especially in the wetter, central part of the common	Cotton-grass Purple moor-grass Star sedge Rushes Bog mosses	Cranberry Ivy-leaved bell-flower
Acid grassland	In the drier parts of the Common	Sheep's fescue Heath bedstraw Autumn hawkbit Eyebright	Moonwort Waxcap and fairy-club fungi
Neutral grassland	Mainly in the enclosed fields	Grasses Common knapweed Bird's-foot trefoil Devils-bit scabious	

The inconspicuous **Cornish moneywort** grows at the edge of drainage ditches and in marshy grassland on the common. It is nationally scarce and is here at the edge of its geographical range. As its name suggests, it has a South-western distribution in Britain. The internationally rare leafy liverwort **bog earwort** is associated with marshy grassland on the common.



Photograph by Richard Pryce: Cornish Moneywort



Photograph by Richard Pryce : Moonwort

Other interesting plants are ivy-leaved bellflower, another tiny species associated with the edges of drainage ditches on the common, and the royal fern, which occurs in similar situations in Y Gweira. The marshy grassland supports a strong population of petty whin, and cranberry occurs in one locality on the common.

Waxcaps and related fungi are found mainly in long-established, nutrient-poor grasslands. They were once widespread throughout northern Europe, but have become increasingly scarce, with some of the best remaining sites for them being in Wales.

Llantrisant Common is now known to support numerous different species, and to be particularly important for those belonging to the genus *Entoloma*. They will not all appear every year, however.



Devil's-bit scabious is the food plant for caterpillars of the rare marsh fritillary butterfly, which we hope to see breeding on Llantrisant Common and in the adjacent pastures again one day. This small species, whose wings have an attractive chequerboard pattern of red, brown and cream, is now considered endangered in Europe. Wales and other western parts of Britain have a special responsibility for its conservation.

Devil's-bit scabious, food-plant of the marsh fritillary butterfly larvae. © Tristan Hatton-Ellis, CCW

Other habitats add variety. These include woodland and blanket bog in Y Gweira, and streams and scrub on the common. Management should aim to look after these species and habitats as well as the listed features of interest.

What do we want Llantrisant Common and Pastures SSSI to look like?

The following is a description of how we would like to see the grasslands here:

This extensive area of grassland, broken up by wetter flushes of sedges, bog moss and rushes, is an oasis of wildlife in the surrounding countryside. It supports a rich mixture of grasses and wild flowers, which bloom in succession from spring to late summer. Many different insects and other invertebrates also find the conditions they need here.

One of the earliest to flower in late spring in the slightly heathy areas of marshy grassland, is the small shrub, petty whin which has yellow pea like flowers. In the summer, the low-lying, brown-green marshy areas are dotted with the characteristic yellow, four-petalled flowers of tormentil, purple heads of meadow thistle and blue of devils-bit scabious. Sharp-flowered rush, star sedge and common cotton-grass grow in spongy cushions of bog mosses in the flushes. In winter, snipe can be seen taking off erratically from amongst the rush and grass tussocks.

The delicate heads of grasses such as red fescue, crested dog's-tail and sweet vernal-grass are found in the drier areas, with the yellow pea flowers of birds-foot trefoil and lilac heads of devil's-bit scabious scattered amongst them. On warm sunny days in late May, June and early July, marsh fritillary butterflies are a common sight. By the time most of the flowers have faded, colourful waxcaps appear amongst the short turf on the slopes.

By contrast, it is hard to find plants that are common in modern, intensively managed grasslands: white clover, rye-grass and docks are absent from the site, or restricted to the edges.

What management is needed at Llantrisant Common and Pastures SSSI, and why?

Although Llantrisant Common and Pastures SSSI is an excellent place for wildlife, it is not 'natural'. In fact it is the product of decades, or even centuries of management. Llantrisant Common itself has a long history of grazing. The Freeman of Llantrisant have held the rights to graze since the fourteenth century. The Common is regulated by the Trustees of the Llantrisant Town Trust and byelaws are in place. It will be essential to continue management, and CCW's priority is to work with you to achieve this. We place 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?

There is some management that is essential to conserve the special features. Other management actions could damage the features within a very short time. These are the ones we regard as the most important.

Grazing is very important, because it allows many different plants to grow together. Species that might dominate other plants, such as purple moor-grass, are eaten down and this prevents them from taking over the grassland. If grazing is stopped for some years, the grassland may even turn to scrub and, eventually, woodland. Light grazing, by cattle, or cattle and horses, is the best to maintain the grassland. This is because cattle will feed on the more dominant grasses, and also help to keep the vegetation down by trampling.

In contrast, sheep tend to nibble the more palatable species, including many wild flowers. Eventually, under heavy sheep grazing, these flowers can completely disappear. The by-laws of the Common do not allow sheep grazing and this is one of the reasons that it has so much interest.

Ideally, grazing of marshy grassland would be limited to between about April and October. The ancient rights of the Freeman of Llantrisant permit them to graze the common all year round but in practice far less grazing takes place in winter than in summer and livestock tend to avoid the wetter areas. The Town Trust has the power to order all stock off the common if damage were ever to be threatened by excessive grazing.

Too little grazing is potentially as much a cause for concern as too much would be. Fewer animals are being put onto the common now (2008) than in the past because of the danger from traffic on the lanes that cross the common. **Measures to reduce the speed of vehicles** would be desirable, as the further reduction and possible future cessation of grazing would be a serious management problem. The importance of grazing, particularly by cattle, cannot be over-estimated.

If grazing alone is not sufficient to prevent the gradual encroachment of the grassland by scrub, some **control of scrub**, by hand or machine, may be necessary. A three-year rolling programme, which was agreed in advance with CCW, is in place to control scrub on the Common. Topping of some areas of soft rush may also be desirable as ground conditions permit. The rolling programme also includes provision for **burning** small patches of rushes during the winter.

The **use of modern fertilisers and other chemicals** at Llantrisant Common and Pastures SSSI would be very harmful to the grasslands. This is because they stimulate the growth of one or two grass species at the expense of the many different plants we are trying to encourage. Eventually, it can cause these grasses to outgrow the many species of wild flowers present.

Any **ditch clearance** needs to be undertaken with great care, because all marshy grassland depends on a certain level of soil moisture for its survival. Some marshy grassland is naturally wetter in winter than in summer, whilst some is wet throughout the year. The best approach is to maintain ditches as they have been kept in the past, neither deepening them or neglecting them. Some of the ditches that were dug in the early 1990s were very deep and narrow and a hazard to livestock. They have already moderated naturally and would not be dug to the same profile again.

Invasive plants are a potential problem. Floating pennywort grows on the pond near the Town Gate and it is desirable to control it, following Environment Agency guidelines, to prevent it spreading. CCW can advise on the control of any Himalayan balsam or Japanese knotweed that may appear.

Finally

Our knowledge and understanding of 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 (March 2008), 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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