

**CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

CONWY

MYNYDD MARIAN

<u>Date of Notification:</u>	1997
<u>National Grid Reference:</u>	SH 890 773
<u>O.S. Maps:</u>	1: 50,000 Sheet number: 116 1: 10,000 Sheet number: SH 87 NE
<u>Site Area:</u>	14.2 ha

Description:

Mynydd Marian is of special interest for its range of limestone (calcareous) grassland communities as well as its population of the dwarf race of silver studded blue butterfly *Plebejus argus ssp. caernensis*.

Mynydd Marian is a small limestone ridge located on the outskirts of the village of Llysfaen between Colwyn Bay and Abergele. At its northern most extremity the site is two kilometres from the Irish Sea coast. It is at an altitude of between 170 -208 metres above sea level. The ridge is orientated along a north-west / south east axis. The bedrock is Carboniferous Limestone throughout, with the thinner soils derived from this. The south-western fringe of the site has been extensively quarried in the past, however there are still remaining areas of natural limestone outcrop. Along the southern section of the site there are a series of small limestone cliff ledges. The site is free draining and can be rather drought prone where the soils are thinnest.

The limestone outcrops and cliffs and the areas immediately above and adjacent to them where the soils are thinnest support the various calcareous grassland communities, whilst on the deeper soils scrub, mainly composed of common gorse *Ulex europaeus* occurs.

On the rockiest, thinnest and most drought prone soils there are small areas of *Festuca ovina* - *Carlina vulgaris* grassland. The turf is short and open, dominated by the grass sheep's fescue *Festuca ovina*. Other frequent grasses include crested hair grass *Koeleria macrantha* and quaking grass *Briza media*. with characteristic calcareous herbs such as salad burnet *Sanguisorba minor*, carline thistle *Carlina vulgaris*, wild thyme *Thymus polytrichus* and the Nationally Scarce hoary rockrose *Helianthemum canum*.

The less rocky areas with deeper soils which are more accessible to rabbit grazing support *Festuca ovina* - *Avenula pratensis* grassland. Frequent to dominant grasses include sheep's fescue, crested hair grass and meadow oat grass *Avenula pratensis*. On areas which have become modified by trampling crested dog's tail *Cynosurus cristatus* has become locally abundant. Herbs present include common rock-rose *Helianthemum nummularium* and common birds' foot trefoil *Lotus corniculatus*. The bryophyte *Dicranum scoparium* is also common.

The most extensive calcareous grassland community present is *Bromus erectus* grassland, the majority of which is located on the ridge top and adjoining south-west facing slopes. The low level of grazing is one of the most important factors which has enabled this grassland community to thrive. The turf is generally rank dominated by the grass upright brome *Bromus erectus* with abundant sheep's fescue, meadow oat grass, quaking grass and crested hair-grass. Herbs are less abundant but include salad burnet, birds' foot trefoil, kidney vetch *Anthyllis vulneraria* and wild thyme. This is the second largest area of upright brome grassland in Clwyd and the species is near the north-western edge of its range in Great Britain.

There is a transition of upright brome grassland to *Avenula pubescens* grassland. The latter covers much of the gently sloping north-east facing flank of the site. The tall sward contains abundant grasses including hairy oat grass *Avenula pubescens*, quaking grass, red fescue *Festuca rubra*, sheep's fescue and sweet vernal grass *Anthoxanthum odoratum* with prominent herbs including salad burnet, birds foot trefoil, harebell *Campanula rotundifolia*, ribwort plantain *Plantago lanceolata* and lady' bedstraw *Galium verum*. Glaucous sedge *Carex flacca* is also abundant. The most prominent bryophytes present include *Pseudoscleropodium purum* and *Rhytidiadelphus squarrosus*.

Other plant species present include the Nationally Scarce spring cinquefoil *Potentilla neumanniana* (*P. tabernaemontani*) associated with the stands of calcicolous grassland.

There is a well established population of the RDB endemic dwarf race of silver studded blue *Plebejus argus ssp. caernensis*. The butterflies were introduced into the surrounding Dulas Valley and subsequently colonised Mynydd Marian.

Remarks:

A section of Mynydd Marian is registered as common land.

Calcareous grassland is a Biodiversity Action Plan Habitat.

The endemic race of silver-studded blue is a Red Data Book invertebrate and Biodiversity Action Plan species.

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