

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

SWANSEA

RHOSSILI DOWN

<u>Date of Notification:</u>	1972, 1983, 1988
<u>National Grid Reference:</u>	SS 423895
<u>O.S. Maps:</u>	1:50,000 Sheet number: 159 1:25,000 Sheet number: SS 48
<u>Site Area:</u>	334.2 ha

Description:

Rhossili Down is notable in demonstrating important evidence for the glacial and periglacial history of west Gower. Possibly the finest example of a solifluction terrace in South Wales occurs at the foot of Rhossili Down, and head deposits are exposed for some 2 kilometres. Towards the northern end of the Down a large exposure of shelly gravels occurs between head horizons. This material has been interpreted as outwash from an ice sheet located in Carmarthen Bay, and has been used as the chief evidence for the siting of the Late Devensian ice margin on west Gower. The site clearly illustrates the importance of aspect, slope and availability of source material in the formation of a solifluction terrace and is especially significant in demonstrating the rapidity of geomorphological processes during the Late-glacial. The sections demonstrate contrasting evidence to that at Worms Head and Broughton Bay and may provide a link in the reconstruction of Quaternary events in the area.

In biological terms Rhossili Down is of interest for its wide range of heathland communities developed over podsols derived from the underlying Old Red Sandstone. The central ridge supports the largest single resource of dry acid heath remaining in Cower and is dominated by ling *Calluna vulgaris* in association with other typical species such as western gorse *Ulex gallii*, bell heather *Erica cinerea* and tormentil *Potentilla erecta*. The rocky summit rises to a height of 632 feet and supports many species of moss and lichens characteristic of low atmospheric pollution levels.

Acid grassland dominated by sheep's fescue *Festuca ovina* and common bent-grass *Agrostis capillaris* is intermixed with the *Calluna* dominated heath over much of the central ridge. Further downslope the slightly deeper soils support extensive stands of bracken *Pteridium aquilinum* with gorse *Ulex europaeus* becoming dominant on sites exposed to sea winds.

The more gently sloping north-eastern side of the Down supports extensive soligenous flushes featuring a variety of mire types. Wet grasslands dominated by purple moor-grass *Molinia caerulea* grade into acid bog communities holding species such as cotton grass *Eriophorum angustifolium*, sundew *Drosera rotundifolia*, cross-leaved heath *Erica tetralix*, bog asphodel

Narthecium ossifragum and bog mosses *Sphagnum spp.*. Closest to the principal lines of water flow grow bog pondweed *Potamogeton polygonifolius* and bog St. Johns wort *Hypericum elodes*.

The ditches along the Whitemoor boundary are of interest for their extensive stands of royal fern, *Osmunda regalis*. The white beak-sedge *Rhynchospora alba* also occurs on this part of the site in one of only three locations on Gower.

Remarks:

Within Gower AONB.