# Wales Coastal Ecosystem Group Priority Action

## Soft Cliff Priority Area

Coastal soft cliffs are a significant but highly localised component of the Welsh coast, their total length of c.100km comprising less than 7% of the coastline (Howe, 2003). As well as their geomorphological importance and significance in terms of coastal processes, Welsh soft cliffs also support invertebrate species and faunas of national importance. These are associated with areas of bare ground and pioneer and ruderal plant communities promoted by regular landslips, and with seepages, pools and other hydrological features. Recent studies (Howe, 2002, 2003: Howe *et al.*, 2008) have identified 29 species of insect (Grade 1 species) in the UK that are confined to coastal soft cliffs and a further 78 species (Grade 2 & 3) with a strong affinity to the habitat. Key soft-cliff sites in Wales, which rank as among the top sites in the UK, include:

*North Llŷn Soft Cliffs* - 12.4km of predominantly northwest facing, slumping cliffs from Porth Oer to Gwydir Bay and including Porth Dinllaen, Porth Nefyn and Porth Pistyll. Cliffs of glacial till, sands and gravels support extensive leguminous swards and numerous springs and seepages, with some fen and localised stands of common reed. The area supports 17 soft cliff species including *Sitona gemellatus* and *Symplecta chosenensis*.

**South Llŷn Soft Cliffs** - 14km of predominantly south-facing, eroding cliffs from Aberdaron Bay to Criccieth and including Porth Ceiriad, Porth Neigwl and Porth Ysgo. Cliffs of glacial till and sand support extensive leguminous swards and numerous springs, seepages, pools and fen with localised stands of common reed. The area supports 23 soft cliff species including *Osmia xanthomelana, Symplecta chosenensis* and *Tachys micros*.

*South Ceredigion Soft Cliffs* - 1.2km of west-facing steep, vegetated cliffs of glacial till and sands & gravels at Creigiau Gwbert and Traeth y Mwnt with numerous springs and seepages and areas of bare ground. The area supports 16 soft cliff species including *Symplecta chosenensis*.

*Castlemartin Peninsula Soft Cliffs* - 1.25km of southwest and west-facing eroding cliffs at Great & Little Furzenip, Freshwater East, Swanlake & Manorbier Bay. Cliffs comprise head and blown sand with some base-rich seepages, and deposits of clays and gravels overlying Old Red Sandstone, with springs and seepages and small stands of common reed. The area supports 13 soft cliff species.

*South-West Gower Coast* - 8.6km of predominantly south-facing, sparsely vegetated low cliffs, from Worms Head to Oxwich Point, of dry, eroding head overlying Carboniferous limestone with headlands of limestone grassland and heath. Includes The Sands, Horton Cliffs, Overton Cliffs & Mere, Fall Bay & Rhossili Bay. The area supports 20 soft-cliff species.

Whilst many English coastal soft cliff sites have been the focus of engineering projects to prevent erosion, the main threats in Wales are the loss of headlands to agricultural improvement, alterations to natural drainage patterns, and fertiliser and pesticide run-off. Such activities disrupt natural erosion patterns, restrict less mobile species to the immediate cliff face and reduce connectivity between soft-cliff sites, lead to the loss of seepages, pools and fen vegetation, and encourage the growth of coarse grasses to the detriment of pioneer swards and bare ground.

## **Actions Required**

- Restoration of semi-natural vegetation on cliff tops to provide additional areas of flower- rich habitats and increased connectivity between soft-cliff sites;
- Restoration of natural drainage patterns to recreate dynamic coastal processes and enhance hydrological features;
- Prevention of fertiliser and pesticide run-off onto cliff faces to promote bare ground and early-successional swards;
- Establishment of grazing appropriate to the requirements of soft-cliff habitats and species;
- Prevention of improvement and upgrading to track surfaces with aggregate;
- Integration of coastal access and habitat management to ensure that people's enjoyment of the "wild" nature of this stretch of coast is enhanced without impacting on habitats and species. It is particular importance to address concerns regarding stock management and access to avoid coastal abandonment.

## **Priority Sites for Action**

Coastal soft-cliff sites are given priority rankings of A, B and C. The accompanying maps show Priority A sites which should be the major focus of action. Priority B and C sites will be included within wider biodiversity mapping work with management of B and C sites being undertaken when opportunities arise.

More detail mapped management action can be obtained from Mike Howe at m.howe@ccw.gov.uk

## **Species Interest**

## Section 42 Species

A mason bee Osmia xanthomelana

## Key Invertebrate Species

Grade 1	1	Osmia xanthomelana, Sitona gemellatus, Symplecta chosenensis, Tachys
species		micros.
Grade 2	2	Andrena pilipes, Andrena rosae, Bembidion saxatile, Dicranomyia
species		goritiensis, Eucera longicornis, Idiocera bradleyi, Leucoptera
		lathyrifoliella, Odynerus melanocephalus.
Grade 3	3	Andrena dorsata, Andrena fulvago, Andrena humilis, Andrena labiata,
species		Andrena niveata, Andrena ocreata, Andrena proxima, Andrena
		trimmerana, Anostirus castaneus, Argogorytes fargei, Astenus lyonessius,
		Bembidion stephensi, Bombylius discolor, Calosirus terminatus,
		Cathormiocerus maritimus, Chrysotoxum elegans, Clinocera nigra,
		Diachrysia chryson, Dichrorampha senectana, Enoplops scapha, Eubria
		palustris, Gonomyia conoviensis, Heterocerus fusculus, Hylaeus pictipes,
		Lasioglossum puncticolle, Lasioglossum xanthopum, Lesteva hanseni,
		Limnephilus hirsutus, Longitarsus fowleri, Methocha ichneumonides,
		Platycleis albopunctata, Ochthebius poweri, Orchisia costata, Policheta
		unicolor, Sitona waterhousei, Sphecodes reticulatus, Trapezonotus
		ullrichi.

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