

consequences of intensive agricultural practices include fertiliser run-off and land drainage, which can lead to an influx of 'weed' species and localised erosion. Alteration in drainage systems on adjacent land can detrimentally affect seepages and flushes on coastal slopes.

- Predators such as cats and rats can have an impact on nesting seabirds, particularly on island sites. In some areas alien plant species e.g. Hottentot Fig (*Carpobrotus edulis*) have had a detrimental effect on indigenous maritime plant communities.

3. ASSOCIATED GWYNEDD SAPS / HAPS

Arable field margins, Lowland heathland, Mudflats

Polecat, Chough, Grey bush cricket, A weevil (*Sitona gemellatus*), Bumblebees, Golden hair lichen

4. CURRENT ACTION IN GWYNEDD

4.1 Site and habitat protection

- Several stretches of the Gwynedd coastline have been designated as candidate SACs (Seacliffs of Llŷn) and / or SPA (Aberdaron Coast and Bardsey Island; Mynydd Cilan, Trwyn y Wylfa and the St Tudwal Islands).
- Most of Gwynedd's coastline is bordered either by the Pen Llŷn a'r Sarnau marine candidate SAC or by the Menai Strait and Conwy Bay marine candidate SAC.
- A number of areas of maritime cliff and slopes are included within SSSIs (including Glannau Aberdaron, Ynys Enlli, Glanllynau, Penarfynydd, Porth Ceiriad, Porth Neigwl ac Ynysoedd Sant Tudwal and Yr Eifl), also within areas identified as potential Wildlife Sites.
- Bardsey Island is an NNR.
- Much of the coast of Pen Llŷn is designated as a Heritage Coast and much of the Peninsula is included within the Llŷn AONB.

4.2 Management and programmes of action

- An independent partnership of coastal practitioners has been established in Wales called Arfordir.
- Over 700km of cliff coastline in the UK is owned by the National Trust, including a large proportion of Gwynedd's maritime cliff resources.
- A draft Shoreline Management Plan has been produced for Gwynedd county.

4.3 Survey, research and monitoring

- None identified

5. ACTION PLAN OBJECTIVES

1. Maintain and enhance the existing maritime cliff and slopes resource
2. Maintain wherever possible the free functioning coastal physical processes acting on this habitat.
3. Seek to lessen the impact of coastal defence and other engineering works

6. PROPOSED ACTIONS

Code	Action	Partner(s) ^h
Policy and legislation		
1	Use planning conditions to ensure developments in sensitive locations are compatible with conservation of maritime cliff and slopes TARGET/TIMESCALE: Ongoing	GC , Relevant partners
2	Ensure that all examples of maritime cliff and slopes which meet the relevant criteria are designated as Wildlife Sites TARGET/TIMESCALE: Start process of designation, by 2005	GC , CCW , NWWT
Species / habitat management and protection		
3	Include and implement conservation requirements for maritime cliff and slopes in all relevant site management plans, and in marine SAC management plans TARGET/TIMESCALE: Ongoing	CCW , GC
4	Ensure that the conservation requirements of maritime cliff and slopes are accommodated in relevant shoreline management plans (by Cardigan Bay Coastal Group, Ynys Enlli to Llandudno Coastal Group) - ensuring adequate mitigation, encouraging soft rather than hard engineering techniques where possible, and considering non-replacement of coastal cliff defences which have come to the end of their useful life TARGET/TIMESCALE: Ongoing	GC , Arfordir , CCW , NWWT , NT , RSPB Cymru
5	Promote and support grant schemes including Tir Gofal, Llyn ESA and / or use management agreements to secure favourable management and / or restoration of maritime cliff and slopes habitat, taking into account the needs of associated LBAP species and habitats TARGET/TIMESCALE: To be set, Ongoing	FWAG Cymru , CCW , CLA , DEPC , FUW , GC , NFU Cymru , NT , NWWT , RSPB Cymru
6	Seek funding for land management by developing a biodiversity grant scheme, which would include grants for appropriate management and / or restoration of maritime cliff and slopes habitat TARGET/TIMESCALE: By 2005	GC , Relevant partners
Advisory		
	None identified	NA
Survey, research and monitoring		
7	Identify important areas of maritime cliff and slopes in Gwynedd through a programme inventory of available data (Phase One, Wildlife Site and other surveys) and survey work, including survey for important lichen communities within the spray zone, and target key sites for management and restoration (information to be stored electronically) TARGET/TIMESCALE: By 2006	CCW , CEH , GC , NT , NWWT , RSPB Cymru , UWB
8	Ensure that habitat surveys of maritime cliff and slopes include identifying key invertebrate species wherever feasible TARGET/TIMESCALE: Ongoing	CCW , CEH , GC , NT , NWWT , RSPB Cymru , UWB
9	Assist with the development of coastal and sea defence strategies which are sympathetic to the nature conservation interests of maritime cliff and slopes, where appropriate and feasible. TARGET/TIMESCALE: Ongoing	EAW , CCW , CEH , GC , UWB
10	Identify areas where alien species are a problem (e.g. Hottentot fig) and draw up a programme for eradication where appropriate (information to be stored electronically) TARGET/TIMESCALE: By 2006	CCW , CEH , EAW , GC , UWB

^h Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

Communications and publicity		
11	Raise public awareness of the mobile nature of soft cliffs, the impact of coastal defences, its importance for uncommon invertebrate and bird species, and the potential damage to wildlife of introduced species. This may be achieved through attending local agricultural shows and events, creating local publicity, and in producing educational/advisory material TARGET/TIMESCALE: Ongoing	GC, CCW, EAW, NT, NWWT, RSPB Cymru

7. PARTNERS & OPPORTUNITIES

7.1 Overall lead partner for HAP

Countryside Council for Wales (CCW)

7.2 Key partners

Arfordir

Centre for Ecology and Hydrology (CEH)

Country Land and Business Association (CLA)

Department for Environment, Planning and Countryside (Welsh Assembly Government) (DEPC)

Environment Agency Wales (EAW)

Farming and Wildlife Advisory Group Cymru (FWAG Cymru)

Farmers Union for Wales (FUW)

Gwynedd Council (GC)

National Farmers Union Cymru (NFU Cymru)

National Trust (NT)

North Wales Wildlife Trust (NWWT)

RSPB Cymru

University of Wales Bangor (UWB)

7.3 Opportunities

Farming unions, landowners and managers, recreational users of the coast

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9. ABBREVIATIONS

AONB: Area of Outstanding Natural Beauty, BAP: Biodiversity Action Plan, HAP: Habitat Action Plan, JNCC: Joint Nature Conservation Committee, LBAP: Local Biodiversity Action Plan, NNR: National Nature Reserve, SAC: Special Area of Conservation, SAP: Species Action Plan SPA: Special Protection Area, SSSI: Site of Special Scientific Interest

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¹ UK Biodiversity Group classification - Jackson, D.L. 2000. Guidance on the interpretation of the Biodiversity Broad Habitat Classification (terrestrial and freshwater types): Definitions and the relationship with other habitat classifications. JNCC Report No. 307.

² Jones, P.S. et al, 2003. Priority habitats of Wales: a technical guide. CCW.