

## Action Plan Scope:

This Action Plan covers strandline habitat created by the accumulation of organic matter around the high water mark. This habitat occurs on a range of other habitats including Coastal vegetated shingle, Coastal sand dunes and Coastal saltmarsh (all UK BAP priority habitats, with the latter two also having their own Natur Gwynedd action plans). It often consists of a line of seaweed, shells, sponges, hydroids, bryozoans and even tropical seeds, stranded at the high water mark at the top of the beach either as a result of recent storms or natural life-cycles. These accumulations of drift material and gravel supports annual strandline vegetation. As well as the organic material, strandlines often contain litter, including damaged fishing gear, plastic containers, sanitary refuse, wood, glass, and many other discarded items.

Surprisingly, strandlines can support annual vegetation and invertebrate communities by providing stable, sheltered and moist conditions. Such accumulations of material provide the required habitat for a number of species of wildlife living on the shores of Gwynedd including large numbers of feeding seabirds and migratory waders. Strandlines occur on all but the most vertical of shores, each supporting its own characteristic wildlife. In Gwynedd, strandlines are widespread and are found at the back of bedrock and boulder shores, sandy beaches and saltmarshes.

## 1. CURRENT STATUS

### 1.1 Legislation and priority status

International	Habitats Directive <sup>a</sup> Birds Directive <sup>b</sup>
UK and Wales	SSSI legislation <sup>c</sup> UK BAP <sup>d</sup>
Gwynedd	Snowdonia BAP Llyn AONB



### 1.2 Status in Wales and beyond

Strandlines occur around the UK coastline but are best developed on flat sandy beaches. Generally strandlines are an ephemeral habitat but they can become more permanent and extensive in sheltered bays and estuaries. Currently there is no estimation of the amount of strandline in the UK or Wales. Such an estimate would be difficult to arrive at because of the highly transitory nature of the habitat that may develop on any coastline.

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<sup>a</sup> Strandlines are indirectly protected through legislation of associated priority habitats included within some SACs under the “Habitats Directive” – Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

<sup>b</sup> Strandlines are indirectly protected through legislation of associated priority habitats included within SPAs under the “Birds Directive” – Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds.

<sup>c</sup> Wildlife and Countryside Act 1981, Countryside and Rights of Way (CROW) Act 2000. Strandlines are not a feature of SSSIs but may be indirectly protected through associated habitat features.

<sup>d</sup> Strandlines are not covered by a separate UK BAP - they are covered by the Coastal sand dunes, Coastal vegetated shingle and Coastal saltmarsh UK BAP Priority Habitats.

### 1.3 Status in Gwynedd<sup>e</sup>

The coastline of Gwynedd (outside the Snowdonia National Park) exceeds 200km in length and extends from Abergwyngregyn on the north coast, along the Llŷn Peninsula, then east to Porthmadog and also includes short coastal sections at Barmouth and Tywyn which are outside the Snowdonia National Park. The aspect of a particular section of the coast is fundamental as to the accumulations of sea borne debris that accumulates on any shore. The predominant wind is from the southwest, therefore, the beaches along the southern and western coastlines have large accumulations of seaweed and general litter. Gwynedd is one of the key areas for sand dunes and saltmarsh habitats in Wales, and contains an extensive amount of coastline, therefore the county is likely to be very significant in Wales for strandline habitats.

## 2. FACTORS AFFECTING THESE HABITATS IN GWYNEDD

- Pressure on local authorities to clean up bathing beaches, often in order to meet the requirements of the good beach awards, which are now often seen as a valuable asset to the local economy. Using machines to clean beaches can be disastrous for the ecology of the strandlines. Mechanical beach cleaners not only clear the litter but also remove and destroy the natural strandline community.
- Motor vehicles. Driving across the strandline invariably destroys colonising plants and damages embryo dune formation, e.g. at Black Rock Sands, Morfa Bychan.
- Marine pollution, including oil and litter.
- Human disturbance (e.g. trampling) on heavily used tourist beaches, e.g. Morfa Bychan, may affect the development of a species-rich invertebrate fauna and damage the vegetation.
- Excessive removal of driftwood including both natural wooden debris and wooden elements of the flotsam or jetsam. If left, wood can provide an important habitat for creatures such as the colourful bee chafer *Trichius fasciatus* and the nationally scarce weevil *Pselactus spadix*.
- Collection of seaweed for horticulture.
- Coastal squeeze and loss of sediment supply, which can result from sea defence works and are likely to destroy strandline habitat.
- Changes in climate change (long-term) and weather (short-term) patterns, resulting in more frequent storms and heavy seas.

## 3. ASSOCIATED GWYNEDD SAPS / HAPS

Mudflats, Coastal sand dunes, Coastal saltmarsh

Twite, a ground spider (*Haplodrassus minor*).

## 4. CURRENT ACTION IN GWYNEDD

### 4.1 Site and habitat protection

- Several stretches of the Gwynedd coastline have been designated as SACs (Pen Llyn a'r Sarnau; Menai Strait and Conwy Bay) and / or SPA (Aberdaron Coast and Bardsey Island; Mynydd Cilan, Trwyn y Wylfa and the St Tudwal Islands; Traeth Lafan).

<sup>e</sup> Within this document the term "Gwynedd" refers to areas outside the Snowdonia National Park area, except where specified otherwise

- Strandline habitat occurs within Morfa Madryn, Morfa Aber and Y Foryd LNRs on the northern coast of Gwynedd
- A number of strandlines areas are included within SSSIs (Dyfi; Porth Ceiriad, Porth Neigwl and the St Tudwal Islands) and also within areas identified as potential Wildlife Sites.
- Dyfi and Bardsey Island are NNRs.
- 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

- Gwynedd Council does not remove any part of the strandline unless it constitutes a hazard to public health, and this only on popular bathing beaches. Since 1996 the strandline has only been removed from the beach area of Morfa Bychan, and this work has been undertaken on seven occasions.
- Coastal LNRs, which often support strandline habitat, are managed and protected by Gwynedd Council wardens.
- DEFRA has issued guidance for the production of the second generation of Shoreline Management Plans to include provision for the protection of biodiversity as well as opportunities for biodiversity enhancement.
- CCW have management agreements on SSSIs that ensure sympathetic management of habitats including sand dunes, saltmarsh and shingle, which is also likely to benefit strandline habitats.
- Two draft shoreline management plans cover Gwynedd – one prepared by the Ynys Enlli to Llandudno Coastal Group and the other by the Cardigan Bay Coastal Group.
- CCW have published a booklet raising awareness of strandline habitat value and conservation requirements.

## 4.3 Survey, research and monitoring

- CCW has compiled an intertidal survey along the whole of Wales including the distribution of strandline habitat.

## 5. ACTION PLAN OBJECTIVES

1. No reduction in the current extent of naturally occurring strandline habitat in Gwynedd, subject to natural influences
2. No reduction in the current quality of strandline habitat in Gwynedd, subject to natural influences.

## 6. PROPOSED ACTIONS

Code	Action	Partner(s) <sup>f</sup>
Policy and legislation		
1	Through the planning process, ensure developments in sensitive locations are compatible with the conservation of strandlines. TARGET/TI MESSCALE: Ongoing	GC, Relevant partners
2	Adhere to the Gwynedd Council policy that strandline habitat on public beaches are not to be cleaned unless they constitute a hazard to public safety.	GC, Relevant

<sup>f</sup> Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

# STRANDLINES

	TARGET/TIMESCALE: Ongoing	partners
3	Incorporate policies, within the UDP and other local authority-led strategies and policies, which safeguard the strandline habitat in Gwynedd. TARGET/TIMESCALE: To be set	GC, Relevant partners
Species / habitat management and protection		
4	Include and implement conservation requirements for strandlines in all relevant site management plans. TARGET/TIMESCALE: Ongoing	CCW, EAW, GC
5	Ensure that the conservation requirements of strandlines are accommodated in relevant shoreline management plans (by Cardigan Bay Coastal Group, Ynys Enlli to Llandudno Coastal Group), and promote plans that permit the natural functioning of coastal sediment processes. TARGET/TIMESCALE: Ongoing	GC, Arfordir, CCW, EAW, NWWT, RSPB Cymru
6	Ensure the promotion/maintenance of sensitive beach cleaning practices on beaches and allow natural restoration of the strandline in areas where the habitat has been lost. TARGET/TIMESCALE: 5% increase in strandline extent, by 2010	GC, Relevant partners.
7	Avoid damaging natural strandline communities during clean-ups in the event of an oil spill – add guidance for strandline conservation to Gwynedd's oil pollution contingency plans & in the Oil Pollution Advisory Group's Beach Data & Clean-up Guidelines TARGET/TIMESCALE: By 2007	EAW, GC, CCW
Advisory		
8	Provide advice on appropriate strandline management for Gwynedd Council officers carrying out beach cleaning operations. TARGET/TIMESCALE: Ongoing	GC, Relevant partners
Survey, research and monitoring		
9	With the help of university or voluntary groups, monitor the development of the strandline, in terms of quantity and ecological quality, at selected sites in Gwynedd. TARGET/TIMESCALE: By 2010	GC, UWB, Buglife, Relevant partners
10	Encourage surveys of associated species found on strandlines and research into the management requirements of key species. TARGET/TIMESCALE: By 2010	Buglife, GC, CCW
Communications and publicity		
11	Raise awareness of the ecological importance of the strandline through beach cleaning events for community groups, and the distribution of the Seashore Code at public places e.g. car parks, caravan sites. TARGET/TIMESCALE: To be set.	KWT, GC
12	Raise awareness of the value of strandlines by distributing copies of CCW's strandlines booklet among key organisations and at key beaches. TARGET/TIMESCALE: Ongoing.	CCW, GC, NWWT, RSPB

## 7. PARTNERS & OPPORTUNITIES

### 7.1 Overall lead partner for HAP

Gwynedd Council (GC)

Countryside Council for Wales (CCW)

### 7.2 Key partners

Welsh Assembly Government (WAG)

Environment Agency Wales (EAW)

North Wales Wildlife Trust (NWWT)

RSPB Cymru

Buglife

Arfordir

## 7.3 Opportunities

Landowners and managers, Recreational users of the coast, Community groups, Volunteers.

## 8. ACKNOWLEDGEMENTS

Principal authors: Kate Williamson (GC)

Consultation: Barry Davies (GC), Aethne Cooke (CCW), Peter Rhind (CCW), Karen Rawlins (CCW)

Line drawings: English Nature

## 9. ABBREVIATIONS

BAP: Biodiversity Action Plan, SAP: Species Action Plan, HAP: Habitat Action Plan, LBAP: Local Biodiversity Action Plan, SSSI : Site of Special Scientific Interest, AONB: Area of Outstanding Natural Beauty, SAC: Special Area of Conservation, SPA: Special Protection Area, LNR: Local Nature Reserve, DEFRA: Department for Environment, Food and Rural Affairs, NNR: National Nature Reserve.

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