

Maritime Cliffs and Slopes HAP



Objectives

1. To establish the 'one-field-back principle' along the coastline: buffer zones the width of a field along the cliff tops, to enable a natural wildlife zone to assert itself and replenish habitats lost to erosion
2. To prevent agricultural run-off causing pollution or excessive erosion
3. To reintroduce coastal grazing, where topography allows and where it will be beneficial to plant communities

Introduction

The North York Moors National Park has approximately 28 miles of hard and soft sloping cliffs of glacial till and Jurassic rocks (shale and sandstone). Around a third of the coastline is owned by the National Trust. The whole of the National Park's coastline falls within a 36-mile stretch defined as the North Yorkshire and Cleveland Heritage Coast. Most of the cliffs in the Park are not vertical, and are lower than 50m. The coastline's Jurassic geology is nationally famous but vulnerable.

Maritime cliffs and slopes form through land slippage and coastal erosion. Cliff profiles vary with rock composition and the geomorphology of the adjacent land. Cliffs tend to be defined as either 'hard' or 'soft', although many intermediate grades occur. The vegetation of these habitats varies according to geology, erosion, the gradient of the slope and the extent of sea-spray. Typical plant species include red fescue, thrift and sea plantain.

Soft cliff habitats are often particularly diverse, with large tracts of species-rich grasslands alongside wet flushes, pools, marsh, bog and wykes (wooded valleys which cut through the cliff slope). Scattered scrub is usually the only woody vegetation that grows on the coastal slope itself. The scrub is extremely important for migrant birds in winter and invertebrates in summer, but left unchecked it can choke valuable open-ground communities. Freshly eroded areas of unstable slope are of vital importance to early colonisers including rare ground beetles, weevils and shore bugs.

Hard cliff is primarily of geological interest, with much of it being designated as SSSI. The thin strip of clay on the cliff top can harbour diverse grassland and nesting burrows. The rock itself may have interesting lichen flora. The main ecological interest of hard cliffs is the breeding habitat they provide for vast seabird colonies.

Coastal slope habitats are relatively inaccessible and have so far largely escaped intensive farming. The natural cycle of erosion which supports their unique range of flora and fauna unfortunately threatens their long-term existence, as the eroding unimproved soils are being replaced by improved soils from cliff-top arable farms. In some areas the coastal slope is beginning to lose its distinctive species, and replaced by competitive species such as docks, nettles and thistles. In addition, much of the botanically diverse open slope along the coast has been lost to excessive scrub invasion since grazing was stopped. On the other hand,

coastal gorse has been identified in the North York Moors landscape appraisal as being particularly important to coastal birdlife.

Local maritime cliff and slope examples include Beast Cliff Special Area of Conservation (SAC) and Port Mulgrave.

Beast Cliff (which covers the southern end of the Robin Hood's Bay - Maw Wyke to Beast Cliff SSSI) is an extensive area of coastal slope vegetation including scrub, tall herbs and some very species-rich grassland patches. The habitat is home to many rare plants such as Dyer's Greenweed and is also of vital importance to rare invertebrate communities.

Port Mulgrave is the most accessible of the coastal slope habitats. It has excessive scrub, thistle and bracken, but is gradually being restored to species-rich grassland.

Progress (2008-2012)

- One of our main objectives was to reintroduce coastal grazing, where topography allows and where it will be beneficial to plant communities;
 - The Beast Cliff Grazing project has been arduous due to legal agreement reasons, however a HLS application has been submitted and we are awaiting a 10 year grazing licence from NT to support the HLS application so that the grazing project can commence.
 - By working with NT, tenants and other interested parties to support, maintain and monitor the grazing of Port Mulgrave, grazing of the site is continuing at current levels. Volunteers have carried out some scrub control and in 2010 encroaching creeping thistle were controlled. Continued discussions between NT and tenants are taking place.
- Advice to landowners to promote woodland management in coastal gills has been provided. Woodland management plans are in place for most of the gill woodlands either independently or through ESS / English Woodland Grant Scheme. Work is underway via the NPA's Improving Habitat Connectivity Programme to link woodland blocks to create larger stands of Ancient Semi Natural Woodland. Hayburn Wyke HLS Agreement includes a wooded gill (owned by the National Trust).
- The 'one-field-back principle' to develop / retain a wide strip of semi-natural vegetation along the coastline is being pursued wherever possible by;
 - Working with interested parties; farmers, parish councils, NE, EA, FWAG, SBC, NYCC.
 - Creating buffer strips around five metres wide along the cliff tops to enable a natural vegetation to assert itself and replenish habitats lost to erosion (continued to be promoted through our Improving Habitat Connectivity Programme.
 - In 2013 Coastal Access will be applied to the NP coastline and cliffs and beaches will be legally accessible for people to enjoy.
- The Ponds Project (as part of Improving Habitat Connectivity, 2012) is underway at Bay Ness Farm at Robin Hood's Bay. Large ponds / scrapes have been created at Johnsons Marsh in Scalby and a pond has been reinstatement at Scalby Lodge, pond was restored in 2011 at Laithes Farm, Whitby (these are just outside the National Park but on the Heritage Coast). We still need to promote pond projects on the coastal hinterland.
- The first hedgerows running inland from the Cleveland Way between Port Mulgrave and Sandsend and alongside the A174 between Lythe and Runswick Bay have been restored.
- Catchment Sensitive Farming works have directly related to coastal streams helping to prevent agricultural run-off which causes pollution or excessive erosion. NYMNP have funded £10k worth of works alongside Staithes beck.

- In 2008 it was hoped to work with local botanists and other interested parties to locate rare species and translocate locally important species to other coastal slopes, before loss through land-slippage occurs. Work was planned to use mobile vacuum suction pumps to collect seed from species rich grassland to be used to supplement green hay spreading for grassland restoration. Some translocation was taking place within the neighbouring Scarborough LBAP area, however due to resource limitations the Park decided it was not feasible to extend the work into the NYM LBAP area.
- A survey has been carried out across the whole of the Yorkshire coast to investigate the invertebrate importance of cliff and slope habitats, results are available from Buglife.
- All NYMNPA coastal slope is now digitally mapped (Phase 1 habitat survey 1988).
- NYMNPA has a comprehensive database of survey information on the coast including intertidal zones.
- The programme of updating the outdoor coastal information panels has been successful, five new panels were installed in 2008/09. New interpretation panels have also been installed at Crook Ness Farm and Scalby Lodge Farm (just outside the National Park on the Heritage Coast).
- The National Trust visitor information facilities at the Old Coastguard Station in Robin Hood's Bay and the Coastal Centre at Ravenscar are an excellent resource, with fantastic educational displays focusing on the local environment. Although there is a lot of information available about the local geology there is not a dedicated coastal slope message, which was the original intention regarding the LBAP, this action is on-going.

Case Study

Grazing Project

By John Beech, NYMNPA Coastal Officer and Heritage Coast Officer

In 2010, a pilot grazing programme was put in place for Common Cliff SSSI at Ravenscar. A grazer was found and the undercliff was grazed by a small herd of Highland cattle over the summer. A water trough and piping was installed and repair of existing fencing was undertaken by contractors. An area of approximately 40 ha on the undercliff was identified for an HLS application mainly consisting of low intensity grazing with suitable cattle species. Due to issues with leasing grazing rights the HLS was put on hold until further legal details could be sorted out. The infrastructure for continuing the grazing programme is in place and as soon as the legalities surrounding leasing the grazing rights are negotiated then the scheme will hopefully recommence for summer and possibly all year round grazing.

Low intensity grazing of the SSSI will reduce scrub encroachment and assist with getting the undercliff back into good condition. The SSSI was originally notified for its diverse seacliff grassland communities