

COASTAL GRASSLANDS

What are COASTAL GRASSLANDS?

This plan refers to the Magnesian limestone grassland which is found where the Magnesian limestone outcrops along the coast of Durham, Sunderland and South Tyneside. The plant communities which occur on this rock type, particularly in Durham, are influenced by the proximity of the sea and because of this are referred to as paramaritime Magnesian limestone grassland.

Where are they found in the UK?

Magnesian limestone grassland is only found in the UK in a narrow band located between Nottinghamshire and south-east Tyne and Wear. The Magnesian limestone grasslands along the coast of the Durham area differ from lowland magnesian limestone grassland, as some maritime species occur, most notably sea plantain (*Plantago maritima*). Virtually all examples of paramaritime Magnesian limestone grassland in Britain occur along the Durham coast. The coastal grasslands in County Durham can be distinguished from those further north in the Plan area by the absence of blue moor grass (*Sesleria caerulea*).

Why are coastal grasslands of CONSERVATION IMPORTANCE?

Paramaritime Magnesian limestone grassland is rich in plant species and, therefore, invertebrates. Because of its limited distribution, the examples of this habitat which occur in the Durham Plan area of national importance. It forms part of a European series of limestone grassland sites which are under threat.

COASTAL GRASSLANDS IN THE DURHAM AREA

Along with the species-rich paramaritime Magnesian limestone the presence of scrub, mires and flushes and unimproved mesotrophic grassland means that a rich variety of plant communities is represented in these grasslands. The vegetation of the Durham coast is unusual because it is here that species with a northerly distribution such as birds-eye primrose (*Primula farinosa*) and melancholy thistle (*Cirsium heterophyllum*), overlap



Other action plans and statements covering issues relevant to coastal grasslands:-

- ⌚ MARITIME CLIFFS***
- ⌚ UPLAND AND COASTAL DENE ASH WOODLAND*
- ⌚ MAGNESIAN LIMESTONE GRASSLAND*
- ⌚ COASTAL GILLS***
- ⌚ JUNIPER SCRUB*
- ⌚ LOWLAND MEADOWS AND PASTURES*
- ⌚ LOWLAND HEATHLAND*
- ⌚ GREEN-WINGED ORCHID***
- ⌚ NORTHERN BROWN ARGUS*
- ⌚ CISTUS FORESTER MOTH***

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with those of a southerly distribution e.g. yellow-wort (*Blackstonia perfoliata*), and pyramidal orchid (*Anacamptis pyramidalis*).

What is the state of coastal grasslands in the DURHAM AREA?

Along the coast of Durham, the natural coastal grasslands were totally ploughed up for arable cultivation. By the 1940s, much of the coastal grassland had disappeared and the last meadow was destroyed in 1960. Fragments of cliff top grassland are now designated as SSSI along the Durham coast. Currently the Durham Coast Habitat Creation Project is aiming to re-create the natural habitats from what was arable land and colliery waste in order to enhance existing grasslands.

In South Tyneside, calcareous grassland accounts for only 0.54% of the land area of the district. The main sites are concentrated on cliffs and quarries in the east of the district. Harton Downhill is a coastal SSSI with a small, but very rich area, of magnesian limestone with rare plants including perennial flax (*Linum perenne*). Only part of the site is an SSSI, but the whole of the site is designated as an SNCI. The Leas, owned by the National Trust and designated as an SNCI, cover a large area of coastal grassland. It is managed for amenity and is popular for dog-walking, golf practice and kite-flying.

In Sunderland, the Magnesian limestone cliffs at Hendon and Roker have considerable botanical interest and plants include sea plantain (*Plantago maritima*), thrift (*Armeria maritima*) and thyme (*Thymus praecox*)

WHERE do they occur in the Durham area?

Fragments of paramaritime Magnesian limestone grasslands still occur along the Durham coast, in areas where cultivation has not been possible. In Sunderland and South Tyneside, paramaritime Magnesian limestone grasslands still occur on outcrops of Magnesian limestone at coastal locations. These include the Leas and Harton Downhill in South Tyneside, and Roker and Hendon in Sunderland.

Coastal grasslands are at RISK from:

AGRICULTURE - post war intensification of agriculture led to a reduction in livestock grazing along cliff tops and an increased ploughing up of level maritime grassland. Arable fields currently extend up to the very edge of sea cliffs along the Durham coast whilst those on sloping grassland have been abandoned and, where not maintained by exposure, are frequently overgrown by scrub.

UNMANAGED RECREATION - waste from caravan parks has led to soil enrichment, as has usage of footpaths by large numbers of dogs. Plants which require nutrient-poor conditions are threatened whilst species such as bramble proliferate. An increase in the number of walkers tends to increase the amount of litter and disturbance.

INTRODUCED SPECIES - exotic plants are colonising some cliff tops and these may smother less competitive native species. In some instances these are "escapees" from the gardens of static caravans.

LACK OF RESOURCES - insufficient availability of resources for management of SSSIs and re-created grasslands.

Coastal grasslands BENEFIT from:

RE-CREATION AND MANAGEMENT SCHEMES - the current habitat creation in County Durham will restore the paramaritime Magnesian limestone grassland on cliff tops and improve the nature conservation value of the land by restoring natural habitats and their associated diversity of species. In other areas, coastal grasslands could be managed for both amenity and nature conservation with the introduction of appropriate strategies.

LANDUSE - a reversion from arable farming back to pasture would allow continued cliff retreat and the retention of important wildlife habitat. This would also limit the rate of fertiliser run-off influencing cliff-top and flush vegetation.

CONSERVATION POLICY - protection from inappropriate uses for areas of high conservation value.

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BUFFER ZONES - these protect land of high conservation value from intensively farmed areas.

AGRI-ENVIRONMENTAL SCHEMES - Countryside Stewardship can make funds available to improve the conservation value of agricultural land and increase the value of land adjacent to cliff tops.

INCREASED AWARENESS OF CONSERVATION EFFORTS AMONGST VISITORS - all visitors of the coast should have the opportunity to be informed of habitat creation and management measures via an integrated coastal interpretation strategy.

Important SPECIES for coastal grasslands in the Durham area:

GREY PARTRIDGE

LINNET

SKYLARK

YELLOWHAMMER

REED BUNTING

CORN BUNTING

COMMON ROCKROSE

PYRAMIDAL ORCHID

NARROW-LEAVED MARSH ORCHID

BEE ORCHID

BIRDS-EYE PRIMROSE

DARK-LEAVED WILLOW

ROUND-LEAVED WINTERGREEN

WILD THYME

AUTUMN GENTIAN

QUAKING GRASS

CISTUS FORESTER MOTH

LEAST MINOR MOTH

TARGETS

- 1** *Recreate 195 ha of paramaritime Magnesian limestone grassland.*
(2005)
- 2** *Improve by appropriate management the quality of the recreated coastal grasslands and the remaining fragments of natural grasslands.*
(ONGOING)
- 3** *Designate all coastal grasslands of conservation value and manage accordingly.*
(2005)
- 4** *Involve the local community in practical projects, information gathering and awareness raising events such as guided walks.*
(ONGOING)
- 5** *Monitor the wildlife value of the coastal grasslands.*
(ONGOING)
- 6** *Include contingencies for managing coastal grasslands in local strategic plans such as the ICZM plan.*
(2002)

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ACTION PLAN

ACTION	DATE	Possible PARTNERS	Meets TARGET No.
POLICY AND LEGISLATION			
1. Increase the current area of the Durham coast NNR to include coastal grasslands.	2002	EN, DCC, SCC, EDC, STMBC	4
2. All grasslands owned by Durham County Council to be designated as LNRs/CWS.	2005	EN, DCC	4
SITE SAFEGUARD AND MANAGEMENT			
3. Continue to recreate coastland grassland at appropriate sites.	ONGOING	DCC, EN, NT, DWT	1, 6
4. Manage re-created grasslands as per the Habitat Creation Strategy (DCC) i.e. annual hay crop, add seed or lime as required and monitor for first five years.	ONGOING	DCC, DWT, NT	2, 6
5. Ensure that all management incentives and protection schemes are in place for key sites.	ONGOING	DWT, NT, EDC, EN, DEFRA	2, 6
6. Ensure appropriate management regimes for designated areas are implemented - SSSI, NNR, SNCI, LNR.	ONGOING	EN, DCC, EDC, STMBC, SCC	2
7. Establish Countryside Stewardship schemes for cliff tops e.g. creation of flower rich-pastures, provision of new footpaths access points and viewpoints.	ONGOING	DEFRA, FWAG, local farmers, NT, EDC, DWT, CA	4
8. Create supplementary winter feeding stations for farmland birds.	2001	EDC, RSPB, local farmers, NT, DBAP	2
9. Ensure that management proposals for key sites for BAP species and habitats incorporate relevant specific recommendations (see list of relevant species and habitats).	ONGOING	EN, DBAP, NT, DWT	2
10. Establish buffer zones between intensively managed agricultural land and semi-natural cliff and slope habitat.	2002	DEFRA, local farmers, NT, DCC, EDC, FWAG	2

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ACTION PLAN			
ACTION	DATE	Possible PARTNERS	Meets TARGET No.
SITE SAFEGUARD AND MANAGEMENT continued			
11. Consider habitat creation:- (i) Maritime heath-reintroduction of <i>Calluna vulgaris</i> . (ii) Coastal scrub and clifftop wetlands.	2005	EN, NT, DCC, DWT	2, 6
ADVISORY			
12. Encourage the adoption of policies and practices which are sympathetic to nature conservation. Prepare and disseminate "best practice" guidance materials.	ONGOING	DEFRA, EN, DWT, NT, DCC, EDC, CA	2
RESEARCH AND MONITORING			
13. Support national research projects in the areas of :- (i) A study to establish extent and quality of maritime grassland and slope in the UK to enable an effective assessment of progress to be made towards meeting national objectives. (ii) The identification of areas of the UK suitable for recreation of maritime grassland and heath. (iii) Monitor the develop of areas of secondary heathland that are currently present.	2003	EN, JNCC, EDC, DCC, NT, DWT	5
14. Monitor newly established paramaritime Magnesian limestone grasslands on an annual basis.	ONGOING	DCC, NT, DWT, EN	5
15. Monitor local wildlife populations e.g. birds, plants.	ONGOING	DBC, DWT, DCC, NT, EDC, SCC, STMBC	5, 6

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ACTION PLAN

ACTION	DATE	Possible PARTNERS	Meets TARGET No.
COMMUNICATIONS AND PUBLICITY			
16. As part of an integrated interpretation strategy for the Durham coast: foster public awareness of the unique nature of Durham's coastal wildlife, the need to preserve coastal grasslands, the pressures they are facing and their value as a wildlife resource.	ONGOING	EN, DWT, DBAP, NT, EDC, DCC, SCC, STMBC, CA	4, 6
17. Raise public awareness of the current habitat recreation schemes taking place on Durham cliff tops.	2001 onwards	DCC, EDC, NT, DWT	4
18. Encourage public participation in their management through membership of local conservation groups.	2001 onwards	DCC, EDC, DWT, NT, STMBC, SCC	4
19. Raise public awareness of the potential problem caused by invasive, exotic plants.	2001 onwards	EN, EDC, DWT, NT, DCC, STMBC, SCC	4