

the
species
recovery
trust

SPECIES HANDBOOK

Rabbit Moss

(Cheilothela chloropus)

Ecology, conservation, survey
and management



Conservation Status

VULNERABLE

- A rare moss occurring on a scattering of coastal and inland sites in the southwest
- Threatened by poor reproductive ability, habitat degradation and decrease in rabbit numbers

As its name suggests Rabbit Moss can only survive in very tightly grazed grasslands, and its fortunes have been closely linked to the decline in rabbit numbers since the introduction of myxomatosis.

It is generally a coastal moss, and on the Torbay limestones its habitats are largely maintained by coastal winds and erosion; maintaining short sward grasslands. This combines with intermittent desiccation in hot summer months, allowing the moss to survive while surrounding grasses die back.

At Walton Common in Somerset, which is an inland site, this management has had to be done painstakingly by hand for the last few years, but this has resulted in an excellent response by the plants.



Description

A dull yellowish to brownish-green turf-forming acrocarpous moss, up to 10mm tall, with rigid, spiky leaves and a thickened beak on the capsule lid.



Lifecycle

Dioecious. Sporophytes are unknown in Britain and rare throughout its range, meaning it only reproduces asexually in the UK. It acts as a colonist and spreads locally via clonal reproduction.

Habitat

Predominately found in coastal habitats, on short, rabbit-grazed, herb-rich grassland, or on thin soils amongst rocks on south-facing limestone hills and sea-cliffs. Also found on a dune slack in one location.



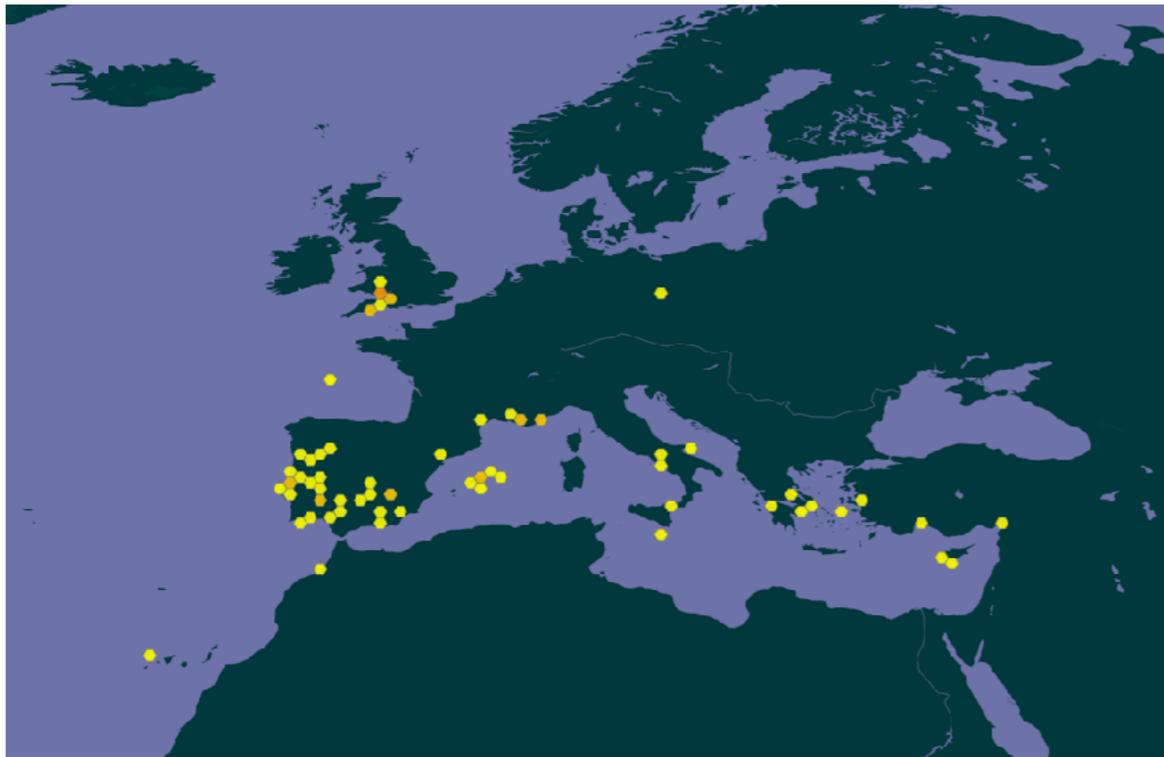


Distribution

Found in only two vice-counties (North Somerset and South Devon) and on the edge of its range in the UK. Frequent in the Mediterranean and along the Atlantic seaboard. Also recorded in North Africa, South Africa and Macaronesia.

Status

Vulnerable, meaning it is facing a high risk of endangerment in the wild.



Reasons for decline

The principal threat is habitat degradation through scrub encroachment and shading, which is linked to a decrease in rabbit numbers. Its reproductive ability is likely to be poor, as sporophytes are unknown in Britain, probably because conditions are sub-optimal on the edge of its range.

Protection under the law

Currently unprotected under British law.



Overgrown rock at Walton Common



SURVEY

Habitat

Rabbit Moss will only grow on bare rock or areas of extremely short turf, so it is worth focusing survey efforts on these areas.

When to survey

Surveys can be carried out at any time of year, but the moss is much easier to spot when wet, so it's an ideal rainy day survey!

What to record

- Number of plants
- Area occupied
- Presence of available habitat, and threats from encroaching vegetation

Pegs, or any form of marker, are essential for allowing plants to be marked and the area measured once located.

SURVEY

Confusable species

Can be muddled with the *Didymodon* mosses, but these have much more curved leaves.

Trichostomum occupies a similar habitat, but has broader leaves and forms denser tufts



Didymodon fallax © HermannSchachner [CC0]



Trichostomum crispulum © HermannSchachner [CC0]

MANAGEMENT

Management consists of two approaches;

1. Creation of bare substrate for the moss to colonise.

This should be carried out over a long period to avoid dramatic changes in microclimate which may impact on existing plants. In addition considerable care should be given to conserving the overall integrity of the substrate, and not altering the structure in a way that could lead to excessive erosion. As it relies on small fragments breaking off to form new plants, good areas of suitable available habitat should be maintained close to the plants.

2. Maintenance of short sward

Suitable swards can be created by grazing by cattle or sheep, but monitoring must be carried out to assess the efficacy of this. In some situations additional scrub removal may have to be carried out.

The optimum swards is very short (<1cm), which may also be aided by coastal winds.

Climate change is likely to play an increasing part in the outlook for this species - with hotter drier summers possibly favouring it, but more extreme weather events having negative impact, so consideration should be given to this when undertaking any site work.



OUR WORK

- Establishing a monitoring network across all sites
- Carrying out habitat restoration work across the network of sites to enlarge the areas where Rabbit Moss can grow.

SUCCESS

- Gradual expansion of Walton Common population
- Annual data collected across all sites



*Habitat management with
SWT staff and volunteers
at Walton Common*

The Species Recovery Trust is a charity set up to tackle the loss of some of the rarest species in the UK.

There are over nine hundred native species in the UK that are classed as under threat, with several hundreds more currently widespread but known to be in significant decline. The countryside is now bereft of many species that were a familiar sight a mere generation ago.

A small number of these species are on the absolute brink of existence, poised to become extinct in our lifetimes; our goal is to stop them vanishing.

Our aim is to remove 50 species from the edge of extinction in the UK by the year 2050. In addition we are reconnecting people with wildlife and the natural world through training programmes and awareness raising.



A photograph of a forest floor in spring. The ground is covered with a dense carpet of small purple bluebells. Several large, weathered tree stumps are scattered across the scene, some with moss growing on them. The background is filled with tall, slender trees with fresh green leaves, suggesting a young forest or a woodland in early growth. Sunlight filters through the canopy, creating dappled light on the ground.

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