

PRICKLY SEDGE *Carex muricata ssp. muricata* SPECIES ACTION PLAN

DESCRIPTION

It was only following completion of the herbarium work of Nelves in 1947 that prickly sedge, *Carex muricata ssp muricata* was first recognised as a native British plant. Previously it had been grouped with *Carex muricata*. Although having a wider habitat range in other parts of Europe, in Britain prickly sedge is a plant of calcareous habitats where it favours open, south-facing, lightly vegetated and consolidated limestone scree where there is limited shade and competition from other plant species. Where these conditions exist the plant thrives. It can be separated from the other superficially similar subspecies *Carex muricata ssp lamprocarpa* by its more robust habit, rigid erect flowering stems and earlier flowering. However, this latter species is more of a lowland plant and prefers acidic substrates.

LOCAL BIODIVERSITY IMPORTANCE

Prickly sedge has been recorded from seven localities in Britain. A resurvey of these localities was undertaken in 1999 and 2000 and the plant recorded at five localities (Foley & Porter 1999 and Foley & Porter 2000). There are populations at one site in Shropshire, one in Denbighshire and three within the Yorkshire Dales National Park. All are on Carboniferous limestone. Of the Yorkshire Dales populations two are on the Craven limestone, at Gordale Scar and Colt Park Wood, Ingleborough and one well to the north on a limestone outcrop in Swaledale. The Colt Park Wood population occurs on well vegetated, partly shaded limestone pavement, which is atypical in comparison to the other Dales sites where the plant can be seen in its favoured open consolidated scree habitat. Between these three populations the Yorkshire Dales is therefore a key area for the conservation of this plant.

NATIONAL & INTERNATIONAL BIODIVERSITY IMPORTANCE

Prickly sedge is classified as Critically Endangered in the UK due to the small population size and is consequently a UK BAP National Priority Species. The plant also receives general protection under the 1981 Wildlife and Countryside Act. All three Dales localities lie within sites having statutory protection.

CURRENT ISSUES, OPPORTUNITIES & THREATS

The main threat to the populations in the Yorkshire Dales comes from inappropriate levels of grazing at the Gordale Scar and Swaledale sites (the plant cannot tolerate heavy grazing, but if its habitat is too lightly grazed then it suffers from competition by more vigorous species), and increased shading and wild herbivore grazing at the Colt Park Wood site. However, research work has shown that where threats are removed then prickly sedge can quickly re-establish itself. Every opportunity should therefore be made to secure ideal conditions for prickly sedge at the three Dales localities.

In Swaledale an enclosure has been erected to protect the existing population from potential overgrazing. However, the vigorous growth of other species within the enclosure with the removal of summer grazing is likely to mean over time that prickly sedge will be

out-competed by vigorous grass growth. Despite sheep having access during the autumn and winter months the grass is insufficiently grazed down. Strimming (ideally in combination with autumn/winter grazing) will be necessary to ensure the sward height is kept in check. At Colt Park Wood a cage has been used to protect one of the prickly sedge plants. It appears that rabbits are eating fresh seedlings and therefore extending the size of the cage would protect this new growth.

Prickly sedge has been re-introduced to the Swaledale site. It is recommended, however, that attention is focussed first on habitat management and achieving favourable condition of the existing populations before considering re-introducing plants to bolster the wild population.

At all three localities ongoing detailed population monitoring will be required.

AIMS OF THE SPECIES ACTION PLAN

- To have self-sustaining prickly sedge populations at the three known sites within the Yorkshire Dales National Park.
- To allow these populations to increase in size in their favoured habitat, by providing ideal conditions to allow the plant to spread naturally.

OBJECTIVES

To achieve these aims we need to:

- Ensure all sites are in favourable management by 2003.
- Continue annual monitoring of existing populations.

ACTIONS & TARGETS

To achieve these objectives the following actions should be carried out and the targets achieved within the time-scale given:

Actions	Target date	3 year cost £
Re-visit the three Dales populations to identify any potential problems, and assess effect of management recommendations at the Swaledale site.	2003	1,000
Working in partnership with landowners and land managers, and through the use of management grants and advice, ensure all sites are in positive conservation management.	2003	1,000
If there is a risk ensure that prickly sedge plants are protected from accidental damage by walkers, botanists, climbers or other countryside users by working in partnership with relevant representative organisations.	2003	Officer Time
Erect larger cage at Colt Park Wood and keep immediate area around plants clear of tree and shrub cover.	2002	250
Undertake annual monitoring of the three Yorkshire Dales sites.	Ongoing	3,000

WHO WILL BE RESPONSIBLE FOR THE ACTION PLAN?

Lead Agency	Key Partners
English Nature	Ramblers Association British Mountaineering Council Landowners and managers Botanical Society of the British Isles Local Natural History Societies Yorkshire Dales National Park Authority DEFRA/RDS