



Purple Milk-vetch (*Astragalus danicus*)

Biodiversity Action Plan | Cummey Yannoo Beiyn-Feie



Background

An attractive grassland wildflower that had declined in recent decades.

This Biodiversity Action Plan (BAP) has been reformatted from a Rare Species Action Plan, produced by Wildflowers of Mann in 2004, and approved by the Department of Agriculture, Fisheries and Forestry in the same year.

Description



A low growing purple flowered perennial of open grassland

British Isles Distribution

This species occurs predominantly on the east coast of Great Britain and southern limestone areas.

Isle of Man Distribution

The Isle of Man is one of several western outliers. On the Isle of Man, its distribution has declined from nine to three sites (Scarlett, Langness and the Sound). Although as a diminutive, inconspicuous species, some of the unrecorded sites may still have non-flowering plants.

Habitat and Ecology

Purple Milk-vetch is a native perennial legume. It is found in short infertile calcareous turf, often near the sea. On the Isle of Man, it is also able to grow on coastal grassland over Manx slate/mudstone and on old sand dune vegetation.

Its attractive purple flowers are insect pollinated. Seed is produced in mid-summer from pods, and it is likely that most seed germinates in late summer. It is an easy plant to propagate from seed, with high germination rates from fresh seed. A proportion of seed can go into long-term dormancy surviving for decades until conditions are suitable.

It is likely that in common with most vetches, it relies on ants as local vector of seed distribution. The species is unable to tolerate competition with tall or vigorous swards, thus is restricted to traditionally sheep grazed areas or summer parched soils. These are held down through a combination of coastal exposure and rabbits.



Legal protection

It is considered 'endangered' on the red data list of Great Britain and is a UK Biodiversity Action Plan species. It was part of the Botanical Society of Britain and Ireland (BSBI) Threatened Plants Project (2008-13).

Not listed on Schedule 7 of the Wildlife Act 1990 and red-listed under *Plants of Conservation Concern in the Isle of Man 2022*. The species has declined to a point where inclusion on Schedule 7 should be made at the next revision.

Threats

Declines on the Island are likely due to coastal erosion between Kirk Michael and Jurby; and withdrawal of traditional grazing from St Michael's Isle, Port St Mary and Balladoole. Scarlett Point remains the stronghold for the species with two large patches.

Reason for BAP

The species has declined and most remaining populations are just above the high water mark (top of spray zone) making it vulnerable to sea-level rise and increased frequency and strength of storms.

Aims

Create an inland population with multiple plants.

Linked BAPS

Shaking Grass Action for Wildlife, limestone grassland Biodiversity Action Plans

Delivery Options

Active

Challenges

An initial planting of 30 potted plants will be made, but these will be reinforced if more than 50% failure is evidenced within two years.

Management of the site should be as per the management plan (Dubbeldam A (2019); Billown Quarries Management Plan 2020-2026; Manx Wildlife Trust, Peel).

Periodic monitoring of its former sites would be worthwhile and should be undertaken when opportunities arise, especially at the Ballaugh raised dunes where they have been recorded in the past 30 years.

The extant colonies do not have grazing - opportunities to introduce this should be seized upon.



Delivery Plan		
Strategy	Lead	
<p>When grazed, the MWT Billown Quarries Nature Reserve, should provide a suitable, long-term site for Purple Milk-vetch.</p> <p>Site preparation will be a key to success, with parched, low fertility, calcareous habitats created. At Billown, grazing management will hopefully spread the species from Broomhouse to Rosehill Area of Special Scientific Interest, and into available niches via dung. Achieving the tight winter sward will also be an important factor for success.</p>	Manx Wildlife Trust	
Action	Timing	Responsibility
Grow 30 plants in nursery conditions.	2019/20	Wildflowers of Mann
Plant in MWT Billown Quarries Nature Reserve.	2021-2022	Wildflowers of Mann
Monitor plantings/spread.	2021 onwards	Wildflowers of Mann
Review for next management plan.	2025	Wildflowers of Mann /Department of Environment, Food and Agriculture
Periodically revisit old sites to check for presence.	2020 onwards	Wildflowers of Mann
Periodically check extant colonies.	2020 onwards	Wildflowers of Mann
Include in Schedule 7.	Next Review of Schedule 7	Department of Environment, Food and Agriculture
Annual Updates		
Year		
2022	Introduction of 5 plants to MWT Billown Quarries Nature Reserve (only one survived due to rabbit uprooting).	

