Common Cow-wheat (*Melampyrum pratense*)

Biodiversity Action Plan | Cummey Yannoo Beiyn-Feie

Background

A rare woodland and hilltop species that has disappeared from many of its historic sites.

This Biodiversity Action Plan (BAP) has been reformatted from a Rare Species Action Plan produced by Wildflowers of Mann in 2005, and approved by the Department of Environment, Food and Agriculture in the same year.

Description

Common Cow-wheat is a short (normally <30cm) plant with yellow flowers which appear in late spring and early summer.

British Isles Distribution

This European species is widespread and common throughout most of the British Isles, although more so in the west and south.

Isle of Man Distribution

On the Isle of Man, Allen (1984), records 6 historical sites. Recent attempts to re-find this species on its former recorded sites have proved to be unsuccessful. However, the plants are easy to overlook, so Island extinction is still far from certain.

Habitat and Ecology

An annual plant, found in woodland and upland habitats. This plant is partly parasitic upon neighbouring plant roots (it favours Bilberry) and also has its own root system.

It is a part of the figwort family that includes many other parasitic annuals, including Yellowrattle - a signature meadow plant. Over most of its range, the plant will most commonly grow in light woodlands such as open oak woods or coppice woods on acidic soils. On the Isle of Man, there are more records of this species growing at higher altitudes (>400m), where it grows with Bilberry on open moor. It tends to grow in closely packed colonies, where their wiry stems hold each other up. Manx populations tend to be quite diffuse. Most seeds fall close to the parent plant but there will also be some local dispersal by ants.

Legal protection

Listed on Schedule 7 of the Wildlife Act 1990 and red-listed under *Plants of Conservation Concern in the Isle of Man 2022*.

Threats

The rarity of this plant is difficult to explain as there are many open woodlands on acid soils with Bilberry. The more recent nature of many of these woods is the probable clue to its absence, as this plant is not particularly mobile (it is an ancient woodland indicator in the UK). Its rarity on upland Bilberry moors is easier to understand, as heavy grazing and burning will rapidly extinguish populations. This explains why only the very tops of hills support relic populations.

Reason for BAP

Decline in Isle of Man distribution.

Aims

The numerous Victorian wooded glens should provide many potential release sites.

Linked BAPS

Delivery Options	Active	Challenges
Glen Helen, Dhoon Glen (a former recorded site for the species) and Ballaglass Glen all contain suitable open woodland with bilberry and grass.		

Delivery Plan

Strategy	Lead
Assuming that some colonies still exist in their recorded sites, establishing new sites should be straightforward. It should just require the seed to be sown in suitable receptor sites while still fresh. As the National Glens are fairly secure from burning and grazing, and have many poor soils with bilberry, it would make sense to establish new sites here rather than try to introduce in open bilberry moor. The successful introduction into three new woodland sites with two or three clusters in each site should give this species a fairly secure long term prospect.	Manx Wildlife Trust

Action	Timing	Responsibility
Find source plants	Summer 2006/7	Wildflowers of Mann, Department of Agriculture, Fisheries and Forestry
Identify receptor sites	Summer 2006/7	Wildflowers of Mann
Collect and sow seed	Summer 2006-08	Wildflowers of Mann
Monitor	Summer >2008	Wildflowers of Mann
Review	Summer 2009	Wildflowers of Mann, Department of Agriculture, Fisheries and Forestry

Annual Updates	
Year	
2006	Plants found on North and South Barrule.
2007	Seed collected from South Barrule and sown at Churchtown.
2008	Zero germination at Churchtown.
2010	Plants found at Narradale.
2011	Larch Garrad records found of the plant occurring in large numbers at Glen Maye after landslides and works around the middle bridge in 1980s (site checked and no longer present here).
2016-2022	Hairpin site progressively managed to create areas of acidic coppice habitat with oak. Not expected to be suitable until around 2030.
2022-2023	Surveys of South Barrule populations show they are robust with tens of thousands of plants over 6 ha area around summit. Strongly associated with Bilberry here.