Silvery Hawkweed (*Heiracium argenteum*)

Biodiversity Action Plan | Cummey Yannoo Beiyn-Feie

Background

Silvery Hawkweed only appears in a select few sites across the Isle of Man.

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

Silvery Hawkweed's hairy, silvery leaves make it the most distinctive, easy to identify and attractive hawkweed which is native to the Isle of Man.

British Isles Distribution

Predominantly a Scottish species, Silvery Hawkweed also occurs in the uplands of England and Wales where it is much less common.

Isle of Man Distribution

On the Isle of Man, it was only ever recorded from Dhoon Bay, thus has probably been very rare on the Island for a long-time. Its present Isle of Man population is estimated at 5-10 plants over $1m^2$ on a grassy bank adjacent to the beach. It once grew here with Carline Thistle (*Carlina vulgaris*) which became extinct on the Island in the 2000s.

Inaccessible coastal slopes north of Dhoon Bay could have unrecorded populations of this species.

Habitat and Ecology

It tends to be found in low fertility, rocky, mesotrophic and calcareous conditions, particularly on grassy banks. It is both an upland, lowland and coastal species on open ground. Individual plants are long-lived perennials that spread via seed. Like most hawkweeds, it is late flowering, with yellow dandelion-like flowers appearing from August to October. While the seeds come attached to a pappus (like a dandelion parachute), hawkweeds rarely spread far from the mother plant and small discrete colonies are a norm. Hawkweeds are apomictic (reproduces clonally through seeds); thus all Silvery Hawkweeds are genetically highly similar (with just small mutational differences across the UK).

Silvery Hawkweed is an uncompetitive plant with basal rosettes that are easily overtopped by rough vegetation. It is easily lost from a habitat due to too much grazing (which stops flowering) or too little grazing (which makes vegetation too tall). This is especially bad due to grazing later in the season when it flowers.

The individual exacting ecological requirements for most hawkweeds is not well studied. Thus only limited clues can be gleaned from the Hawkweed atlas distribution maps and summary paragraphs, as to species such as silvery hawkweed.

Legal protection

Not listed on Schedule 7 of the Wildlife Act 1990 and red-listed under *Plants of Conservation Concern in the Isle of Man 2022*.

Threats

Like most Manx native hawkweeds, Silvery Hawkweed occurs in a single, small, isolated population. Even modest predicted sea-level rises will cause erosion which will sweep away this small area of habitat. At the same time, the Dhoon Glen woodland is gradually expanding downhill towards the sea, so there is no avenue for retreat for this species.

Goats are likely to be a main factor in slowing the woodland expansion and maintaining the grassland in a suitable condition. It is possible that the expanding feral goat population will be removed over time due to the wider damage they are causing to coastal woodland habitats and farmland, along with the agricultural biosecurity and road safety hazards they pose.

Reason for BAP

All these factors point to Silvery Hawkweed as being one of the most critically endangered species on the Island, with extinction being a when, not if, end-result.

Finding a suitable receptor habitat for Silvery Hawkweed may be very difficult, as there is probably a reason why it is so naturally rare in the first place. The plants are growing on a dry, sunny microclimate within the Dhoon area, which enjoys a cool, humid wider microclimate. The cool humidity is likely to be important for a species that is essentially an upland, Scottish plant.

Aims

To save species from extinction on the Island, through seed collection and planting in created, mesotrophic habitat.

Linked BAPS

Delivery Options	Active	Challenges
Introduction at MWT Billown Nature Reserve.		Hot, dry, microclimate and grazing patterns which coincide with the late flowering period.
Volunteer growers.		As the species is aptomitic, maintaining genetic variability over long-periods of time is not a concern.
Mesotrophic, lightly-grazed, upland, grassland habitats are very rare on the Island, with lime kilns, mine-deads and unenclosed road verges the most likely candidates. Creating new mesotrophic conditions is very simply done over		Favourable grazing regimes is likely to be harder to achieve.

smaller areas, with the application of crushed limestone or crushed hardcore.		

Delivery Plan

Strategy	Lead
Gain Area of Special Scientific Interest consent to collect seeds from Dhoon Bay.	Manx Wildlife Trust

Action	Timing	Responsibility
Collect seed from Dhoon Glen Area of Special Scientific Interest.	2023/24	Manx Wildlife Trust /Department of Environment, Food and Agriculture
Maintain ex-situ population with volunteer help.	2023 onwards	Manx Wildlife Trust/Volunteers
Introduce 20 plants to MWT Billown Nature Reserve.	2024	Manx Wildlife Trust
Evaluate and develop and implement plan to establish upland receptor sites.	2024	Manx Wildlife Trust /Department of Environment, Food and Agriculture
Evaluate success/failures at MWT Billown Nature Reserve and adjust management where possible.	2024-27	Manx Wildlife Trust
Assess and review plan.	2027	Manx Wildlife Trust

Annual Updates

Year	