NSW GOVERNMENT

SAVING OUR SPECIES

Help save *Glycine latrobeana*

Glycine latrobeana

Saving our Species aims to secure as many threatened species and ecological communities as possible. This conservation strategy aims to secure the species in the long term. The strategy was developed by experts who identified the minimum number of priority management sites and conservation actions required to manage critical threats to conserve the species in NSW.

One priority management site was identified in NSW. It is:

- Kelly's Plain, Kosciusko National Park in Snowy Monaro Regional LGA

More information about each site is provided on the following pages.

Saving our Species is based on a cost-effective approach that maximises the number of threatened species and ecological communities conserved through on-ground management action. If you want to contact us please email savingourspecies@environment.nsw.gov.au

Strategic Importance: There is only one known population of *Glycine latrobeana* in a small area in NSW with approximately 500-1000 plants. The species is critically endangered in NSW and is listed as threatened in other Australian states where it occurs. The species typically inhabits lowland areas, but in NSW it inhabits sub-alpine grasslands at higher elevation. As the population occurs in unique habitat and is most likely isolated from other states, it is possible the population is genetically distinct. Historical records of the species outside Kosciusko National Park have not been resighted in targeted surveys, so are likely incorrect identifications. The species is rare and difficult to identify as it does not flower often and loses its leaves in summer; however, identifying additional populations during suitable conditions would help secure the species in NSW.

Conservation status in NSW:
Critically Endangered

Commonwealth status:
Vulnerable

Saving our Species management stream:
Partnership (range-restricted)

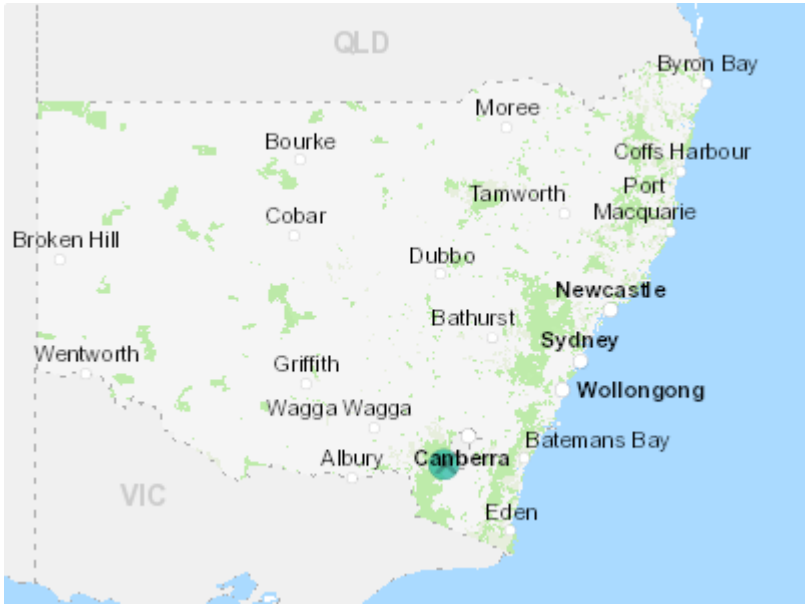
Species profile:
http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20256

Saving our Species delivers on the NSW Government's legislative requirements under the *Biodiversity Conservation Act 2016.*

Photo: Elouise Peach

*Recorded species sightings (BioNet).

Map of *Glycine latrobeana* occurrence and priority management site(s)

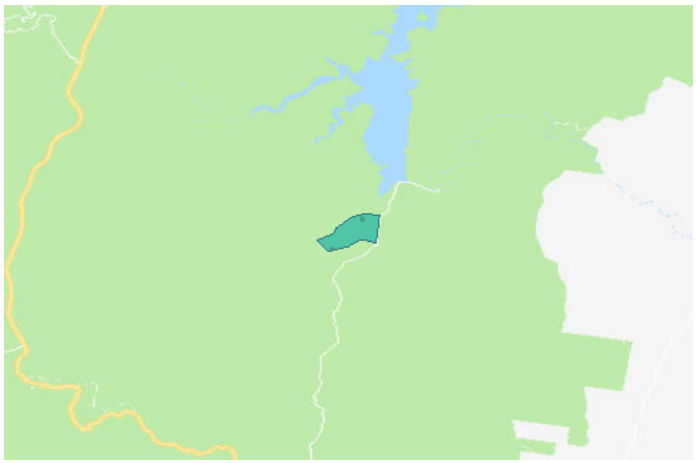


✕ Species occurrence(*) ● Priority management site

Site 1: Kelly’s Plain, Kosciusko National Park

Kelly’s Plain, Kosciusko National Park

Management site map



Priority management site

Total site area (ha):

244.35

Local government area:

Snowy Monaro Regional

National Parks and Wildlife Service reserve:

Kosciuszko National Park

Occurs on private land:

No

Monitoring actions

Regular monitoring of the species at the site will be conducted to determine the local population trends through time.

The extent and severity of threats will also be monitored to assess the effectiveness of management actions.

Management actions will be adapted, added, or removed over time in response to monitoring results, based on maximising the project’s effectivenes.

Monitoring, Evaluation and Reporting Guidelines for Conservation Projects.

Management activities to protect the *Glycine latrobeana* at the site

Threat	Objective	Action
Feral horses disperse weeds including Ox-eye Daisy, leave manure piles, and browse plants.	Prevent pest species invasion to the site	Erect exclosure fence around unfenced half of population to exclude feral horses.
Feral horses disperse weeds including Ox-eye Daisy, leave manure piles, and browse plants.	Reduce pest species densities and maintain at low levels	Undertake horse management in compliance with current legislation and policy
Ox-eye daisy competes with the species and dominates the habitat including through allelopathic (i.e. biochemical) exclusion	Eradicate weeds from the site	Conduct targeted weed control including hand pulling and spot spraying of Ox-eye Daisy plants at the site. Supported by horse exclusion fence to prevent dispersal into the site.
Feral pigs trampling and rooting at the site	Reduce pest species densities and maintain at low levels	Continue pig control actions at the site including trapping and aerial shooting with opportunistic shooting of deer.
Poor recruitment limiting the viability of the population	Preserve genetic material in perpetuity.	During productive years, conduct seed collection at the site for seedbanking. Seeds should be collected across the population to maximise genetic diversity. Plants can be caged during flowering if browsing is a concern. Grow seeds *ex-situ* to increase seed stock for seedbanking and potential future translocation.
Small population size (estimated at about 1000 plants within a few ha) increasing vulnerability to local extinction in NSW	Identify additional population(s)	Conduct surveys in the area around the site in suitable habitat to locate additional sites. Surveys should be conducted when the existing plants are flowering or after disturbance to increase detection.
	Track species abundance / condition over time	Count number of individuals and cover of co-occurring species in permanent 1 x 1 m plots. Use *Calotis pubescens* monitoring plots in exclosure (approx. 12) and set up 20 permanent plots outside the exclosure. Use markers to monitor survival of plants each year. Record any flowering or fruiting plants. Opportunistically monitor the response of species to disturbance or other conditions that may support recruitment.
	Track species abundance / condition over time	In species monitoring plots measure cover of Ox-eye Daisy
	Track species abundance / condition over time	Measure evidence of pig disturbance in 10 x 10 m plots at the site. Count the number of pigs killed each year in aerial shoots around the site.
	Track species abundance / condition over time	Establish permanent transects inside and outside the exclosure to measure effectiveness of horse removal including horse manure piles, evidence of grazing, and trampling.

Find out more about our program

Visit http://www.environment.nsw.gov.au/savingourspecies