



Target: bolster wild populations through plantings, weed management and stock exclusion

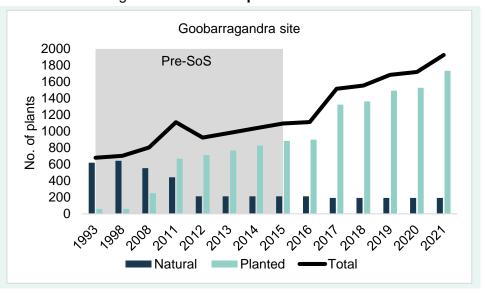
Over the last five years, the *Saving our Species* (SoS) program has increased the overall population size of <u>Tumut grevillea</u> (*Grevillea wilkinsonii*) through translocation plantings. This grevillea, characterised by its vibrant purple flowers and strong-smelling nectar, is only known from two populations: one along a six-kilometre stretch of the Goobarragandra River in southern New South Wales, and another isolated colony near Gundagai. The Goobarragandra population historically faced significant pressure from grazing by domestic stock, as it occurs on private land, and is also impacted by habitat loss and degradation due to competition from introduced and native plants and the impacts of flooding.

A major focus of this project is translocation plantings, with the SoS program helping increase the plantings that have been occurring since 1993 when Australian Botanic Gardens staff undertook a trial planting on a travelling stock reserve and on private land. Below are the most notable outcomes to date:

- Significant population increases have occurred at several sites, thanks to the translocation plantings.
- The decline of natural plants (i.e. those not originating from translocations) has been stabilised.
- The current total population for the Goobarragandra site is 1926 plants.

Trajectory: increasing

Five-yearly monitoring at the Goobarragandra site has revealed the total number of translocation plantings and seedlings has increased annually to about 1926 individuals. The number of natural origin plants has stabilised at around 200 plants.



Partners

This project is led by the SoS program in partnership with the Central Tablelands Local Land Services who have received funding from the NSW Environmental Trust since 2017 to engage DPIE to work on the project. The Riverina Highlands Landcare nursery has assisted the project by collecting seed used in propagating plants for the translocation plantings. Private landholders assist the project by protecting sites and allowing translocation plantings on their properties.

Riverina Local Land Services manages a travelling stock reserve where the Tumut grevillea occurs. The Goobarragandra Reserves Trust has agreed to allow a translocation planting on one of the Crown reserves they administer.

What did we find?

The translocations have been hugely successful, with an increase in the Goobarragandra population from 680 plants in 1993 to 1926 in 2021, and an increase in the Gundagai population from only eight plants in 2016 to 72 plants in 2021.

The various plantings between 1993 and 2012 were successful and resulted in natural recruitment, however, a major flood event in 2012 washed away around 80% of plantings undertaken since 2000 and 50% of the natural population. Since 2016, SoS has used funding from the NSW Environmental Trust to achieve a major boost in the efforts of the project. Enhancement plantings in suitable alternative protected sites out of the flood zone have since been the focus of the project. This modification to the planting strategy has been in response to the lack of remaining natural populations and the impacts of floods at the past sites.

The future of the Tumut grevillea lies in the continuation of this project, with further translocation plantings to target other potential sites and ground cover biomass control trials to encourage seedling recruitment planned.



One of the translocation sites along the Goobarragandra River. Photo: John Briggs/DPIE

Back from the brink: the role of translocations

- Seed and cuttings are collected and propagated from the natural and planted grevilleas.
- Interestingly, propagation from seeds has produced more robust and bushier plants with much stronger root systems that have a considerably higher survival rate postplanting compared to plants propagated from the traditional method using cuttings.



Propagated seedlings ready for translocation. Photo: Stuart Cohen/DPIE

Saving our Species is a NSW Government flagship program delivered by the Environment, Energy and Science Group in the Department of Planning, Industry and Environment. To find out more about threatened species in New South Wales and the Saving our Species program, visit the Saving our Species Program webpage.