



SAVING OUR SPECIES

Box Range Zieria

2020-2021 annual report card

Overall status*

- **Populations at all sites are known to be on track.**
- Threat management is known to be on track at all sites, and population status is unknown at one or more sites.
- Threat management is known to be off track at one or more sites, and population status is unknown at one or more sites.
- Populations at one or more sites are known to be off track.

* For SoS priority management sites (may not include all locations where the species occurs in NSW)



Scientific name:
Zieria buxijugum

NSW status:
Critically Endangered

Commonwealth status:
Endangered

Management stream:
Site-managed species

Summary

Management sites	Pambula
Action implementation	2 (of 2) management actions were fully or partially implemented as planned for the financial year.
Total expenditure	\$2,238 (\$1,438 cash; \$800 in-kind)
Partners	Environment, Energy and Science





Photo: John Briggs

Priority management site: Pambula

Local government area:
Bega Valley

Partners:
Environment, Energy and
Science

Population outcome

-  **On track**
-  **On track (inferred)**
-  **Not on track (inferred)**
-  **Not on track**

Monitoring

Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Monitoring metric	Species abundance
Annual target	The 2020 population of 184 plants is maintained or increased.
Long term target	By 2026 there are 120 reproductively mature plants more than one metre in height and at least 50 seedlings and young plants under one metre in height.
Monitoring result	A total of 404 plants were counted. This count comprised 183 plants of 184 recorded in 2020 and another 221 new seedlings.
Scientific rigour of monitoring method	High
Conducted by	Environment, Energy and Science

Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$1,438	\$800

Management actions

The following actions are those identified as being required in financial year 2020-2021 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Since mid-1986, ongoing and severe browsing damage has been inflicted by wallabies. Monitoring has shown that most individual plants located outside wire mesh guards have eventually been killed. Fortunately, the population occurs on a very steep rocky site and is unlikely to be subject to stock grazing.	Maintain external fence installed in 2017.	Yes
The site is on private land. The current owners are highly supportive of protecting this species, however there is uncertainty that future owners of the property would be as sympathetic to the protection of the species.	Maintain contact with landholder and seek their ongoing cooperation in protecting the species.	Yes

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Since mid-1986, ongoing and severe browsing damage has been inflicted by wallabies. Monitoring has shown that most individual plants located outside wire mesh guards have eventually been killed. Fortunately, the population occurs on a very steep rocky site and is unlikely to be subject to stock grazing.	No wallaby browsing of unguarded <i>Zieria</i> plants detected within larger fenced area and no browsing of guarded plants.	On track
The small population size (approximately 125 plants) occupying a small area (approximately 0.25 hectares) makes this species highly susceptible to extinction through events such as wildfire, drought and frequent browsing by native and non-native animals.	No more than a 5% loss of <i>Zieria</i> plants due to drought or other stochastic events.	On track
The site is on private land. The current owners are highly supportive of protecting this species, however there is uncertainty that future owners of the property would be as sympathetic to the protection of the species.	No adverse impacts on the species due to unsympathetic management activities by the landholder.	On track

Site summary

As expected, the good seasonal conditions experienced since the breaking of the drought in the Pambula area in June 2020 has led to the establishment of a substantial number (221) of new seedlings of the Box Range *Zieria*. Only two of the plants present in June 2020 had died within the past 12 months. This has resulted in a significant increase in the population, with the 2020 total population increasing from 184 plants to 404 in May 2021. This new recruitment event shows the benefit of having protected a large number of mature plants with individual guards over the past several years to allow the soil seed bank to be regularly replenished and seedlings thus able to recruit once favourable seasonal conditions occurred. The established plants have put on vigorous new growth and there is expected to be good flowering and seed production in the coming season, providing at least average weather conditions prevail through 2021.

The fencing of the entire site in 2017 has continued to be effective in excluding wallabies, as there are no signs of browsing damage to any of the 269 unguarded plants. All 135 guarded plants have remained un-browsed. The fence remained in good condition and a couple of trees that were leaning over the fence were removed using a contractor as a pre-emptive action before they fell and caused a breach in the fence. The full benefit of the perimeter fence should now come into effect by allowing the large number of new seedlings to establish and develop into mature plants without impediment due to wallaby browsing.

Saving our Species 2020-2021 annual report card for Box Range *Zieria* (*Zieria buxijugum*). For more information refer to the specific strategy in the Saving our Species program.