



SAVING OUR SPECIES

Philip Island Wheat Grass

2019-2020 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)

Summary

Management sites	Northern Hills
Action implementation	5 (of 5) management actions were fully or partially implemented as planned for the financial year.
Total expenditure	\$234,394 (\$30,394 cash; \$204,000 in-kind)
Partners	Environment, Energy and Science; Lord Howe Island Board



Scientific name:
Anthosachne kingiana
subsp. kingiana

NSW status:
Critically Endangered

Commonwealth status:
Critically Endangered

Management stream:
Site-managed species

Photo: Craig Stehn

Priority management site: Northern Hills


Local government area:

Lord Howe Island -
Unincorporated Area

Partners:

Environment, Energy and
Science; Lord Howe Island
Board

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	Population increased to 70 individuals (2 year rolling average).
Long term target	By 2032, maintain a population (Northern Hills and Translocation site) of Philip Island Wheat Grass consisting of at least 100 individuals (three-year rolling average) across a mix of age classes (N.B. includes contributions from both threat management and translocation actions).
Monitoring result	The Philip Island Wheat Grass population is currently being monitored at 10 locations on Lord Howe Island. Total population size is 567 individuals. This includes 54 mature wild plants, 395 seedling/juvenile wild plants and 118 planted individuals. A total of 140 plants were translocated in 2019-20 with 118 of these plants surviving.
Scientific rigour of monitoring method	High
Conducted by	Lord Howe Island Board

Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$30,394	\$4,000
Lord Howe Island Board	\$0	\$200,000

Management actions

The following actions are those identified as being required in financial year 2019-2020 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Exotic weeds including <i>Briza minor</i> (Shivery Grass), <i>Bromus diandrus</i> (Great Brome), <i>Bromus catharticus</i> (Prairie Grass), <i>Conyza bonariensis</i> , <i>Ipomoea cairica</i> , <i>Paspalum dilatatum</i> , <i>Sonchus oleraceus</i> (Common Sowthistle) and <i>Sporobolus africanus</i> (Parramatta grass).	Complete 5 ha of site based weed control around Philip Island Wheat Grass habitat.	Yes
Exotic weeds including <i>Briza minor</i> (Shivery Grass), <i>Bromus diandrus</i> (Great Brome), <i>Bromus catharticus</i> (Prairie Grass), <i>Conyza bonariensis</i> , <i>Ipomoea cairica</i> , <i>Paspalum dilatatum</i> , <i>Sonchus oleraceus</i> (Common Sowthistle) and <i>Sporobolus africanus</i> (Parramatta grass).	Implement weed strategy in the Northern Hill SoS site focusing actions on the Malabar Landscape Unit. Complete 25.5 ha of weed search and control.	Yes
Predation and browsing by Black Rats.	Biodiversity and Conservation Division to provide support to the Lord Howe Island Board to help implement the Lord Howe Island Rodent Eradication Project when appropriate.	Yes
Risk of extinction due to small population size.	Continue to implement Stage 1 of the species translocation plan.	Yes
Risk of extinction due to small population size.	Collect seed opportunistically when undertaking weed control and species surveys.	Yes

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Exotic weeds including <i>Briza minor</i> (Shivery Grass), <i>Bromus diandrus</i> (Great Brome), <i>Bromus catharticus</i> (Prairie Grass), <i>Conyza bonariensis</i> , <i>Ipomoea cairica</i> , <i>Paspalum dilatatum</i> , <i>Sonchus oleraceus</i> (Common Sowthistle) and <i>Sporobolus africanus</i> (Parramatta grass).	Reduce cover of exotic species in areas adjacent to Philip Island Wheat Grass habitat to less than 10%.	On track
Exotic weeds including <i>Briza minor</i> (Shivery Grass), <i>Bromus diandrus</i> (Great Brome), <i>Bromus catharticus</i> (Prairie Grass), <i>Conyza bonariensis</i> , <i>Ipomoea cairica</i> , <i>Paspalum dilatatum</i> , <i>Sonchus oleraceus</i> (Common Sowthistle) and <i>Sporobolus africanus</i> (Parramatta grass).	Number of weeds controlled per hectare searched reduced by 15% from 2018-19 levels.	On track
Predation and browsing by Black Rats.	Maintain support for delivery of Lord Howe Island Rodent Eradication Program as required.	On track
Risk of extinction due to small population size.	Document all seed collections undertaken for the species.	On track

Site summary

Populations of Philip Island Wheat Grass have continued to increase in the Northern Hills SoS site with a total of 567 individuals now recorded at ten locations within the permanent monitoring plots, this is an increase of 371 from the 2018-19 count. Translocation actions have added 118 plants to this total, with the majority of these plants setting seed this year. Large numbers of seedlings and juveniles (395 plants) were also recorded this year showing that recruitment is also occurring commonly at most Philip Island Wheat Grass sites.

In 2019-20, a total of 3064 hrs of search effort across 71 ha resulted in the control of 12,758 target weeds. In 2019-20 12% of all recorded weeds were mature, while in 2018-19 8% were recorded as mature. The number of mature weeds controlled per hectare has increased from 11.5 per/ha in 2018-19 to 22 per/ha in 2019-20. While the number of mature weeds controlled per hectare increased in 2019-20 this is due to weed searches again targeting areas with higher weed densities in 2019-20 rather than an actual increase in weed threats in this landscape unit.

Baiting for the Lord Howe Island Rodent Eradication Program was completed in late 2019. The last evidence of a rodent was detected in October 2019. There is now a high level of confidence that the rodent eradication project has resulted in the eradication of rodents from Lord Howe Island, however eradication can only be declared after two years of nil detections (August 2021).

Saving our Species 2019-2020 annual report card for Philip Island Wheat Grass (*Anthosachne kingiana* subsp. *kingiana*). For more information refer to the specific strategy in the Saving our Species program.