



SAVING OUR SPECIES

Weeping Paperbark

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)

Summary

Management sites	Braemar State Forest; Glenugie State Forest; Warragai Creek Nature Reserve
Action implementation	1 (of 1) management action was fully or partially implemented as planned for the financial year.
Total expenditure	\$8,400 (\$8,400 cash; \$0 in-kind)
Partners	Environment, Energy and Science



Scientific name:
Melaleuca irbyana

NSW status:
Endangered

Commonwealth status:
Not listed

Management stream:
Site-managed species





Photo: Lachlan Copeland/DPIE

Priority management site: Braemar State Forest

Local government area:
Richmond 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	Maintain number of individuals at 32 or above (80% of 2017 baseline).
Long term target	Track species abundance / condition over time
Monitoring result	The number of individuals in the 3 plots measured decreased to 36 from 40 measured in 2019–2020. Decreases were confined to 1 of the 3 plots only. This is still above the 32 individuals set as the annual target for this site.
Scientific rigour of monitoring method	Moderate
Conducted by	Environment, Energy and Science

Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$800	\$0

Management actions

No management actions were planned at this site for the financial year.

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Plantation development and logging activities.	No negative impacts from silvicultural activities.	On track

Site summary

The population at this site has been stable over monitoring in 2017–19, with plot counts remaining at 40 individuals. However this year monitoring showed a decline in numbers to 36.

Liaison with Forestry Corporation will continue to address potential impacts from silvicultural activities. This species is nominated for a 20 m buffer on all individuals under the drafted Coastal Integrated Forestry Operations Approval. At this time, forestry activities are guided by a site-specific management plan.



Whilst threats at this site are low (weeds, silviculture), a lack of recruitment is of concern and requires investigation and mitigation. No evidence of myrtle rust has been noted.

Priority management site: Glenugie State Forest

Local government area:
Clarence 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	Maintain number of individuals at 70 or above (80% of baseline)
Long term target	Track species abundance / condition over time
Monitoring result	Three rounds of biennial monitoring is showing steady decline in numbers at the 3 plots that are being monitored. Declines are 87, 78 and now 66. This is now below the annual target of 70 individuals which represents 80% of the baseline numbers established in 2017.
Scientific rigour of monitoring method	Moderate
Conducted by	Environment, Energy and Science

Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$800	\$0

Management actions

No management actions were planned at this site for the financial year.

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Plantation development and logging activities.	No negative impact from silvicultural activities.	On track

Site summary

Despite promising results in the previous monitoring conducted in 2018–19, active recruitment has not translated into increases in numbers of *Melaleuca irbyana* in the monitoring plots. Whilst there are individuals in all age classes, there was reductions across the plots. This year recruitment was noted as 'sparse'.





There are no active threats recorded at this site this year. Liaison with Forestry Corporation will continue to address impacts from future silvicultural activities. This species is nominated for a 20 m buffer on all individuals under the drafted Coastal Integrated Forestry Operations Approval. At this time, forestry activities are guided by a site-specific management plan. Some lantana was noted that the site, but not in volume that would impact *M. irbyana* at this stage.

Priority management site: Warragai Creek Nature Reserve

Local government area:
Clarence 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	Maintain number of individuals at 46 or above (80% of baseline)
Long term target	Track species abundance / condition over time
Monitoring result	The number of individuals increased from 58 to 68. Since the last monitoring event in 2018–19 several population improvements were recorded. These were: 5 more plants in the <150cm class, 1 more plant in the 30-150cm class and 3 new juvenile plants in 1 of the plots (recorded for the first time).
Scientific rigour of monitoring method	Moderate
Conducted by	Environment, Energy and Science

Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$6,800	\$0

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?
Invasion of habitat by weeds particularly introduced grasses.	Maintain previous weeding efforts at or near individual <i>M.irbyana</i> and work back to create a buffer.	Yes

Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Invasion of habitat by weeds particularly introduced grasses.	Weeds do not exceed 5% cover.	On track

Site summary

This site received its second biennial monitoring event. The total number of individuals increased from 58 to 68, and since 2018–19 several population improvements were recorded. These were: 5 more plants in the <150cm class, 1 more plant in the 30-150cm class and 3 new juvenile plants in one of the plots (recorded for the first time). It is possible that the plants are responding to increased rainfall (following the 2017–19 drought) and reduced *Lantana* abundance. This site was not burnt in the 2019–20 bushfires. While weeding work was significantly delayed by access issues due to wet weather, road conditions and also COVID-19 restrictions, the work was completed and there is significantly less *Lantana* at this site than 5 years ago.

Saving our Species 2020-2021 annual report card for Weeping Paperbark (*Melaleuca irbyana*). For more information refer to the specific strategy in the Saving our Species program.