



## SAVING OUR SPECIES

# Gibraltar Mallee

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

<b>Management sites</b>	Dragonfly Swamp; Surveyors Creek
<b>Action implementation</b>	3 (of 3) management actions were fully or partially implemented as planned for the financial year.
<b>Total expenditure</b>	\$4,141 (\$241 cash; \$3,900 in-kind)
<b>Partners</b>	Environment, Energy and Science



**Scientific name:**  
*Eucalyptus dissita*

**NSW status:**  
Vulnerable

**Commonwealth status:**  
Not listed

**Management stream:**  
Site-managed species





Photo: Lachlan Copeland

# Priority management site: Dragonfly Swamp

**Local government area:**  
Glen Innes Severn

**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.*

<b>Monitoring metric</b>	Area of occupancy
<b>Annual target</b>	Minimum 900 mallee stems to be recorded during the secondary juvenile period post-fire.
<b>Long term target</b>	Monitoring population at Dragonfly Swamp site.
<b>Monitoring result</b>	1000 mallee stems
<b>Scientific rigour of monitoring method</b>	High
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$121	\$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?
Appropriate fire regime is unknown. Establishment of appropriate fire regime is being established through post-fire assessment and monitoring.	Post-fire monitoring to be conducted in 3 x 10 m <sup>2</sup> quadrats.	Yes

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Appropriate fire regime is unknown. Establishment of appropriate fire regime is being established through post-fire assessment and monitoring.	Fire does not impact the species at the site more than twice in a 5-year period.	On track

## Site summary





Biannual monitoring was undertaken this year to determine species fire response. Resprouting mallees were observed to be in a healthy condition. They have doubled in height since last year, and there is no evidence of mortality or ill health. Fire was excluded from the site this year.

# Priority management site: Surveyors Creek

**Local government area:**  
Glen Innes Severn

**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.*

<b>Monitoring metric</b>	Species abundance
<b>Annual target</b>	500 stems +/- 10%
<b>Long term target</b>	The population of the mallee remains stable and mortality is observed to be low.
<b>Monitoring result</b>	600 stems
<b>Scientific rigour of monitoring method</b>	High
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$121	\$3,100

## 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?
Appropriate fire regime is unknown. Establishment of appropriate fire regime is being established through post-fire assessment and monitoring.	Liaise with fire managers at the site (National Parks and Wildlife Service) to ensure that no prescribed burns occur that impact the species as a precautionary approach	Yes
Risk of extinction because of small total population size.	Collect seed during monitoring activity for storage in the seed bank at Mount Annan. Ensure seeds are collected from a variety of individuals to maximise genetic diversity captured.	Yes

## Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Appropriate fire regime is unknown. Establishment of appropriate fire regime is being established through post-fire assessment and monitoring.	Threat is reduced by excluding fire from the site while post-fire monitoring is undertaken.	On track
Risk of extinction because of small total population size.	Threat is reduced by undertaking seed collection activities to maintain a seed bank.	On track
Poor knowledge of the species' abundance and distribution.	Threat is reduced by undertaking post-fire population monitoring.	On track
Poor taxonomic knowledge of species	Threat is reduced by planning taxonomic studies this year.	Not assessed

## Site summary

Three 10 x 2 m<sup>2</sup> post-fire monitoring quadrats were established at the Surveyors Creek site in early 2021; 2 in the Surveyors Creek East sub-population and one in the Surveyors Creek North West sub-population.

Plot 1 - recorded 70 living mallee stems up to 0.7 m tall. All stems were healthy. There were 23 species associated with mallee including *Eucalyptus ligustrina*. Shrubs cover was sparse. The ground cover included *Ptilantherium deustum*, *Tetrarrhena juncea* and *Trachymene incisa*.

Plot 2 - recorded 43 living mallee stems up to 1.6 m tall. There were 24 species associated with the mallee including *Eucalyptus planchoniana*, *Eucalyptus ligustrina*. Shrubs were sparse. The ground layer included *Tetrarrhena juncea*, *Ptilantherium deustum* and *Aotus subglauca*.

Plot 3 - recorded 96 living mallee stems up to 1.8 metres tall. All stem were healthy. There were 18 species associated with the mallee including *Eucalyptus ligustrina* and *Eucalyptus williamsiana*. The ground layer consisted of *Ptilantherium deustum*, *Tetrarrhena juncea* and *Goodenia bellidifolia*.

A paper outlining the results of survey for the Gibraltar Mallee has been published in the *Cunninghamia Journal*. P. R, Sheringham, L, M. Copeland, R. Gray and K. Dijkstra (2021). Survey of the rare mallee *Eucalyptus dissita* in Gibraltar Range National Park, NSW Northern Tablelands. *Cunninghamia* (21): 17–26.

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Saving our Species 2020-2021 annual report card for Gibraltar Mallee (*Eucalyptus dissita*). For more information refer to the specific strategy in the Saving our Species program.