

Species attributes

Scientific name:	<i>Caladenia arenaria</i>
NSW status:	Endangered
Commonwealth status:	Endangered
Management stream:	Site-managed



Photographer: Matt Cameron

Overall project status*

- Populations at all sites are on target.
- Populations at one or more sites were not monitored this year, but threat management is on target.
Populations at remaining sites are on target.
- Populations at one or more sites were not monitored this year, but threat management is not on target.
Populations at remaining sites are on target.
- Populations at one or more sites are not on target.

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

Project summary

Priority management sites:	Buckingbong; Lonesome Pine; Urana West; Yarranjerry
Action implementation:	16 of 18 management actions were fully or partially implemented as planned for the financial year.
Total expenditure:	\$80,704 (\$80,304 cash; \$400 in-kind)
Project partners:	Murray Local Land Services; NSW Environmental Trust; Office of Environment and Heritage; Royal Botanic Gardens Melbourne

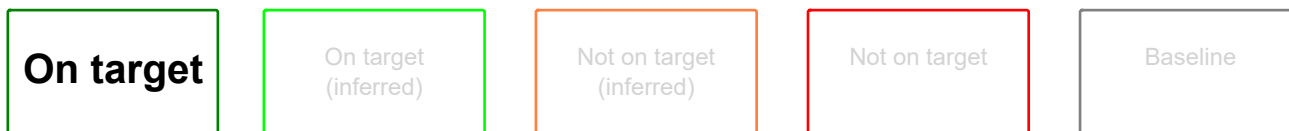
Management site 1: Buckingbong

Local Government Area: Federation; Narrandera

Project partners: Murray Local Land Services; NSW Environmental Trust; Office of Environment and Heritage; Royal Botanic Gardens Melbourne

Estimated species population size: ~100

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Not yet defined.	Not yet defined.	Other	Three permanent plots were established and 25 flowering plants tagged.	High	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
NSW Environmental Trust	\$3,853	\$0
Office of Environment and Heritage	\$26,984	\$0

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2016-17 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Hybridisation occurring at some populations reducing genetic viability of species.	Collect seed and fungi from site and propagate. Prepare site for planting.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	To be confirmed by the Orchid Conservation Centre of the Royal Botanic Gardens Melbourne.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	A contractor will be engaged to locate and assess suitable sites for translocations, including suitability of habitat and threats.	Yes
Sensitive to browsing by feral herbivores.	Erect and maintain goat proof fencing around population. Raise awareness of threats with land managers and public.	Yes

Threat status

This table includes critical threats that were monitored at this site, this financial year.

Threat	Annual target	Threat status	Confidence in monitoring
Hybridisation occurring at some populations reducing genetic viability of species.	Determine whether phenologically pure <i>C. arenaria</i> have any level of hybridisation.	Not detectable	High

Site summary

The flowering in 2016 was the most prolific since 2000. Emergent plant numbers fluctuate considerably in response to rainfall. The flora monitoring located 25 plants within plots. The actual species population is estimated to be about 100 plants.

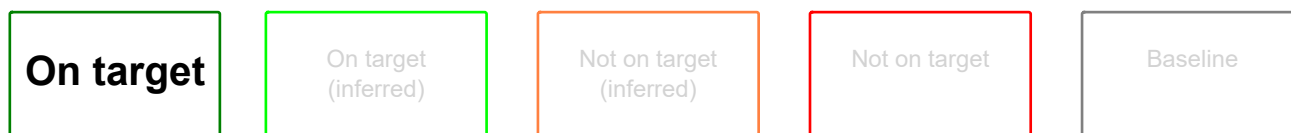
Management site 2: Lonesome Pine

Local Government Area: Federation

Project partners: Murray Local Land Services; NSW Environmental Trust; Office of Environment and Heritage; Royal Botanic Gardens Melbourne

Estimated species population size: 240

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Not yet defined.	Not yet defined.	Other	240 emergent plants.	High	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
NSW Environmental Trust	\$10,389	\$0
Office of Environment and Heritage	\$630	\$0

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2016-17 to secure the species in the wild.

Threat	Management action	Implemented as planned?
At risk from stochastic events because of the low number of plants.	Collect seed for storage and propagation.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	A contractor will be engaged to locate and assess suitable sites for translocations, including suitability of habitat and threats.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	To be confirmed by the Orchid Conservation Centre of the Royal Botanic Gardens Melbourne.	Yes

Site summary

Site is on track. There were more emergent plants in 2016 than have appeared for many years. Emergent plant numbers fluctuate considerably in response to rainfall.

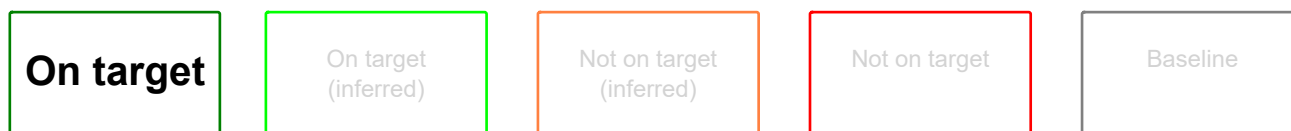
Management site 3: Urana West

Local Government Area: Federation

Project partners: Murray Local Land Services; NSW Environmental Trust; Office of Environment and Heritage; Royal Botanic Gardens Melbourne

Estimated species population size: 39+

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Not yet defined.	Not yet defined.	Other	39 emergent plants.	High	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$584	\$400
NSW Environmental Trust	\$18,139	\$0

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2016-17 to secure the species in the wild.

Threat	Management action	Implemented as planned?
At risk from stochastic events because of the low number of plants.	Collect seed for storage and propagation.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	A contract will be engaged to locate and assess suitable sites for translocations, including suitability of habitat and threats.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	To be confirmed by the Orchid Conservation Centre of the Royal Botanic Gardens Melbourne.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	Collect seed and fungi from site and propagate. Prepare site for planting.	Yes
Sensitive to grazing and ground disturbance by domestic stock.	The landholder has a current arrangement to manage grazing. The site is fenced with stock currently removed.	Yes

Threat status

This table includes critical threats that were monitored at this site, this financial year.

Threat	Annual target	Threat status	Confidence in monitoring
Competition from native Cypress pine regeneration.	Maintain an open woodland.	On target	High
Sensitive to grazing and ground disturbance by domestic stock.	Strategic grazing.	On target	High

Site summary

Site is in good condition. There were more emergent plants in 2016 than have appeared in many years. Emergent plant numbers fluctuate considerably in response to rainfall.

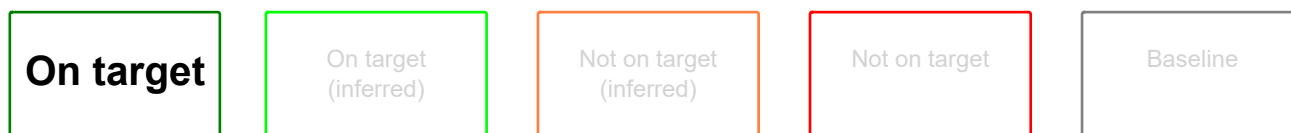
Management site 4: Yarranjerry

Local Government Area: Coolamon

Project partners: Murray Local Land Services; NSW Environmental Trust; Office of Environment and Heritage; Royal Botanic Gardens Melbourne

Estimated species population size: 1000

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Not yet defined.	Not yet defined.	Other	A total of 210 plants were tagged. The location of 686 others were recorded on a GPS.	High	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$1,030	\$0
NSW Environmental Trust	\$18,695	\$0

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2016-17 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Forestry operations such as thinning, harvesting, and road and track construction may impact the species.	Provide up to date information to Forestry Corporation on species locations and requirements. Ongoing liaison to reduce impact of silviculture on species.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	Collect seed and fungi from site and propagate. Prepare site for planting.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	To be confirmed by the Orchid Conservation Centre of the Royal Botanic Gardens Melbourne.	Yes
Hybridisation occurring at some populations reducing genetic viability of species.	A contract will be engaged to locate and assess suitable sites for translocations, including suitability of habitat and threats.	Yes

Site summary

Site is on track. There were more emergent plants in 2016 than have appeared for many years. Emergent plant numbers fluctuate considerably in response to rainfall.