

Species attributes

Scientific name:	<i>Diuris venosa</i>
NSW status:	Vulnerable
Commonwealth status:	Vulnerable
Management stream:	Site-managed



Photographer: Barry Collier

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:	Barrington Trail; Polblue; Watergauge trail
Action implementation:	12 of 13 management actions were fully or partially implemented as planned for the financial year.
Total expenditure:	\$95,470 (\$75,290 cash; \$20,180 in-kind)
Project partners:	Office of Environment and Heritage

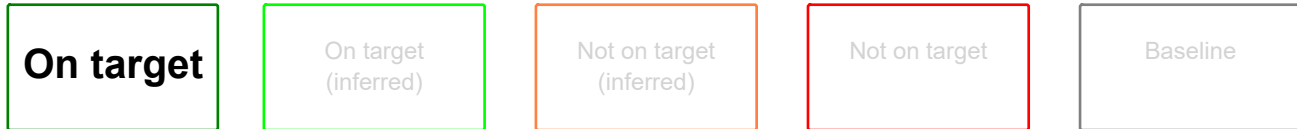
Management site 1: Polblue

Local Government Area: Upper Hunter

Project partners: Office of Environment and Heritage

Estimated species population size: 1100

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Population is maintained at 2017 numbers or increased, by 2037.	Conduct surveys in spring to record species abundance and area of occupancy, assess habitat condition and identify any threats impacting on the population.	Species abundance	Surveys located 1100 individual plants across the site.	Moderate	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$62,894	\$12,685

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?
Degradation of habitat by recreational 4WD vehicles driving off designated tracks.	Continue the existing cable and bollard fencing from the helipad to the creek. Install a gate for authorised access at the helipad entrance.	Yes
Degradation of habitat resulting from trampling by hikers.	Install permanent interpretative signs that convey the importance and sensitivity of local threatened flora species and warn campground users to stay on marked trails.	Yes
Feral pigs eating the underground orchid tubers.	Implement baiting and trapping of feral pigs across Barrington Plateau, as per the National Parks and Wildlife Service Regional Pest Management Strategy.	Yes
Feral pigs eating the underground orchid tubers.	Install 5x5m plots in areas where orchids have been identified. Plots will be predator proof e.g. from pigs.	Yes
Invasion of habitat by introduced weeds, particularly English Broom (<i>Cytisus scoparius</i>).	Implement integrated control of Scotch broom using ground spraying and cutting and painting, as per National Parks and Wildlife Service Regional Pest Management Strategy (412-Polblue Swamp Complex).	Yes
Poor knowledge of the species' full area of occupancy and population size.	Conduct targeted survey across the site and throughout surrounding suitable habitat, to identify and map full extent of the species in the area.	Yes
Potential for species' reproduction to be interrupted by insensitive mowing/slashing regimes.	Ensure that local National Parks and Wildlife Service staff or contractors undertake slashing of the campground and surrounding areas in March - October only (at 15-20cm recommended).	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
Feral pigs eating the underground orchid tubers.	Habitat condition and impacts from threats was assessed during species monitoring surveys.	On target	Low

Site summary

Surveys conducted for *Diuris venosa* identified over 1100 plants within the site, in addition to at least 60 plants at other disjunct sites as part of broader surveys for the species. Installation of 25 exclusion plots as part of a management trial looking at grazing impacts was completed. Extensive weed control was also undertaken across the site.

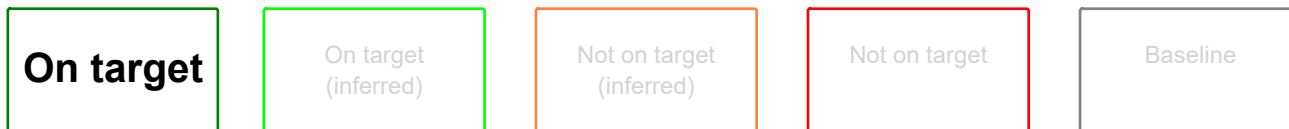
Management site 2: Watergauge trail

Local Government Area: Mid-Coast

Project partners: Office of Environment and Heritage

Estimated species population size: 71

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Population is maintained at 2017 numbers or increased, by 2037.	Baseline surveys across all known sites to record species abundance.	Species abundance	Surveys recorded 71 plants across the site.	Moderate	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$8,995	\$5,035

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?
Feral pigs eating the underground orchid tubers.	Implement baiting and trapping of feral pigs across Barrington Plateau, as per the National Parks and Wildlife Service Regional Pest Management Strategy.	Yes
Invasion of habitat by introduced weeds, particularly English Broom (<i>Cytisus scoparius</i>).	Implement integrated control of Scotch Broom as well as Ox-eye Daisy (where infestations occur) using ground spraying and cutting and painting, as per Biodiversity Priorities for Widespread Weeds (Little Murray Swamp).	Yes
Potential for native vegetation regrowth to outcompete the species for space and impede recruitment.	Identify 2-3 high density patches that have easy access (and where access is feasible while keep <i>Phytophthora</i> spread risk low) and slash in March-April to promote recruitment.	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
Feral pigs eating the underground orchid tubers.	Assessment of threats and habitat condition undertaken as part of species surveys.	Not on target	Moderate

Site summary

Surveys located 71 individual plants within the site. Extensive weed control was undertaken across the site and two exclusion plots were installed as part of management trials being undertaken for the species.

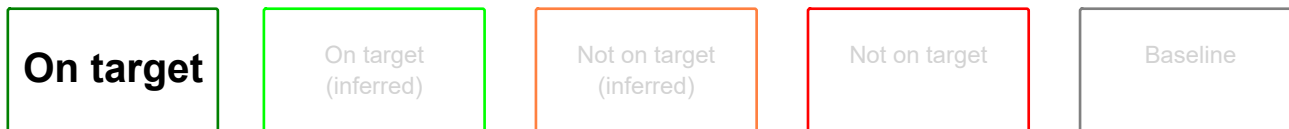
Management site 3: Barrington Trail

Local Government Area: Upper Hunter

Project partners: Office of Environment and Heritage

Estimated species population size: 30

Population status



Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Population is maintained at 2017 numbers or increased, by 2037.	Baseline surveys across all known sites to record species abundance.	Species abundance	Surveys recorded 30 individual plants across at the site including a new sub-population.	Moderate	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$3,401	\$2,460

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?
Feral pigs eating the underground orchid tubers.	Implement baiting and trapping of feral pigs across Barrington Plateau, as per the National Parks and Wildlife Service Regional Pest Management Strategy.	Yes
Feral pigs eating the underground orchid tubers.	Identify 1-2 small, high-density patches of orchids and erect 1.5m fence to exclude pigs (i.e. 20x20m enclosure).	Yes
Potential for native vegetation regrowth to outcompete the species for space and impede recruitment.	Identify 1-2 high density patches that have easy access and slash in March-April to promote recruitment.	No - Dependent on other component.

Site summary

Surveys successfully located this population. A second, previously unrecorded, sub-population was also discovered within the site. Overall 23 plants were located. One monitoring plot as part of the grazing disturbance trials was installed as part of ongoing studies.