

Saving our Species project 2015-2016 annual report card Bauer's Midge Orchid

Species attributes

Scientific name:	Genoplesium baueri
NSW status:	Endangered
Commonwealth status:	Endangered
Management stream:	Site-managed



Photographer: Kylie McClelland

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.

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

Project summary

Priority management sites:	Bomaderry Creek; Callala; Ku-ring-gai Chase National Park; Ku-ring-gai Wildflower Garden
Action implementation:	18 of 21 actions were implemented as planned for the financial year (includes species population monitoring actions + other project actions fully or partially implemented)
Total expenditure:	\$79,290 (\$21,326 cash; \$57,964 in-kind)
Project partners:	Australian Orchid Council; Australian Plants Society NSW; Ku-ring-gai Council; Office of Environment and Heritage; NSW Environmental Trust



Management site 1: Ku-ring-gai Chase National Park

LGA: Hornsby

Project partners: Australian Plants Society NSW; Office of Environment and Heritage; NSW Environmental Trust Estimated species population size: 90

Population status

On target	On target (inferred)	Not on target (inferred)	Not on target	Baseline
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Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Maintain population at or above 90% of known maximum (69) based on a three year rolling average	Survey over 55 individuals	Species abundance	Increase of 30% over previous maximum of 69 in 2012	High	Australian Plants Society NSW; Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$0	\$400
Australian Plants Society NSW	\$0	\$15,046

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2015-16 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Maintenance of utilities such as powerline easements has the potential to damage some known sites.	Liasion with National Parks and Wildlife Service staff and contractors using the road about sensitivity of the species and the need to avoid slashing during December to May.	Yes

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Bauer's Midge Orchid (Genoplesium baueri)

Threat status

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

Threat	Annual target	Threat status	Confidence in monitoring
Maintenance of utilities such as powerline easements has the potential to damage some known sites.	No observable impacts to the species from track maintenance.	On target	Low
At one site in Ku-ring-gai Chase National Park recreational users (e.g. mountain bike riders and walkers) have caused physical damage to the habitat.	No evidence of disturbance to the plant from recreational activities.	On target	Low
At one site in Ku-ring-gai Chase National Park water leakages have changed the hydrology and caused the habitat to become too wet (the species requires well drained areas).	Assess the presence of the threat.	Baseline	Low

Site summary

All actions undertaken at this site and the population is doing well following a recent fire.

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Management site 2: Bomaderry Creek

LGA: Shoalhaven

Project partners: Australian Orchid Council; NSW Environmental Trust; Office of Environment and Heritage

Estimated species population size: Estimated 38

Population status



Index	Monitoring result	Confidence in monitoring	Conducted by
Species abundance	Baseline of 12 individuals in census sites	High	Australian Orchid Council; Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$0	\$584
Australian Orchid Council	\$0	\$1,518
NSW Environmental Trust	\$172	\$0

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2015-16 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Urban, rural residential and infrastructure development.	Provide advice to planning authorities to inform planning decisions and environmental assessment.	No (Dependant on other component)

Site summary

Numbers of individuals were less than previous estimates, although not all sites could be found. Permanent plots have been established with marked individuals.

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Bauer's Midge Orchid (Genoplesium baueri)

Management site 3: Callala

LGA: Shoalhaven

Project partners: NSW Environmental Trust; Office of Environment and Heritage

Estimated species population size: 72

On target (inferred) Not on target (inferred) Not on target Bas

Species population monitoring was not conducted at this site this financial year. The species population is inferred to be on target based on threat management being on target.

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$0	\$800

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2015-16 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Urban, rural residential and infrastructure development.	Provide advice to planning authorities to ensure informed environmental assessment and planning decisions are made.	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
Urban, rural residential and infrastructure development.	Impacts from development do not degrade or remove the population.	On target	Moderate

Site summary

No formal access to the site, although consultants undertook surveys as part of development proposal. Results have not yet been obtained. Consistent liaison to help manage impacts.

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Bauer's Midge Orchid (Genoplesium baueri)

Management site 4: Ku-ring-gai Wildflower Garden

LGA: Ku-Ring-Gai

Project partners: Australian Plants Society NSW; Ku-ring-gai Council; NSW Environmental Trust; Office of Environment and Heritage

Estimated species population size: 247

Population status

On target	On target (inferred)	Not on target (inferred)	Not on target	Baseline
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Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Maintain population at or above 90% of the known maximum (247) based on a rolling 3-year average.	Species abundance is greater than 194.	Species abundance	142 plants at Ku-ring-gai Wildflower Garden East (down 21%); 54 plants at Browns Trail (up 32%); 51 plants at Senses Track (up 132%).	High	Australian Plants Society NSW; Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$0	\$1,600
Australian Plants Society NSW	\$0	\$32,546
Ku-ring-gai Council	\$0	\$5,470
NSW Environmental Trust	\$21,154	\$0

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Bauer's Midge Orchid (Genoplesium baueri) For more information refer to <u>species project</u> or the <u>Saving our Species program</u>.

Management actions

The project actions below (including research and survey actions) are those identified as being required in 2015-16 to secure the species in the wild.

Threat	Management action	Implemented as planned?
At one site in Ku-ring-gai Chase National Park recreational users (e.g. mountain bike riders and walkers) have caused physical damage to the habitat.	Install fence on two sides of the population.	Yes
At one site in Ku-ring-gai Chase National Park recreational users (e.g. mountain bike riders and walkers) have caused physical damage to the habitat.	Find the source and repair the leakage which is causing the exsting trail to be impassable (and causing people to go into the bush).	Yes
Browsing by swamp wallabies and possibly rabbits is known to have removed flowering and fruiting stems at the site in Ku-ring-gai Wildflower Garden. Whilst this damage is not expected to kill plants it will adversely impact future recruitment potential.	Install a temporary fence on the third side of the triangle (30m) - standard rabbit netting. Investigate impact of excluding browsers and potentially open the fence after flowering and fruiting is complete (June). Close during flowering period (December - May).	Yes
Maintenance of utilities such as powerline easements has the potential to damage some known sites.	Install Green Post markers to minimise impacts on roadside populations. Increase staff (and contractor) awareness of the location and importance of sites to reduce impacts of slashing and track maintenance.	Yes
Urban, rural residential and infrastructure development.	Provide advice to planning authorities to inform planning decisions and environmental assessment, particularly with regard to road development.	No (Dependant on other component)
Weed invasions resulting in loss of habitat pose a threat to some populations around Ku-ring-gai.	Physical and chemical control of weeds throughout Wildflower Gardens.	Partial implementation (Logistical delays)

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Threat status

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

Threat	Annual target	Threat status	Confidence in monitoring
Maintenance of utilities such as powerline easements has the potential to damage some known sites.	Reduced impact from maintenance and increased awareness.	On target	Low
At one site in Ku-ring-gai Chase National Park recreational users (e.g. mountain bike riders and walkers) have caused physical damage to the habitat.	Determine if trail works and fencing prevented the threat.	On target	High
Browsing by swamp wallabies and possibly rabbits is known to have removed flowering and fruiting stems at the site in Ku-ring-gai Wildflower Garden. Whilst this damage is not expected to kill plants it will adversely impact future recruitment potential.	More than 82 flowering plants (3 year rolling average).	On target	Moderate

Site summary

Surveys have been undertaken and many of the threats have been monitored. Interpretive signs were developed for the gardens providing increased education about the orchids. Continued monitoring will provide further understanding about the impact/control of herbivores.

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