

Saving our Species project 2016-2017 annual report card Southern Brown Bandicoot (eastern)

Species attributes

Scientific name:	Isoodon obesulus obesulus
NSW status:	Endangered
Commonwealth status:	Endangered
Management stream:	Site-managed



Photographer: Sharon Mormleaton

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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Populations at one or more sites are not on target.

Project summary

Priority management sites:	Garigal/Ku-ring-gai; South East Forests; Woronora Plateau
Action implementation:	6 of 6 management actions were fully or partially implemented as planned for the financial year.
Total expenditure:	\$313,342 (\$112,282 cash; \$201,060 in-kind)
Project partners:	Northern Beaches Council; Office of Environment and Heritage; SoS Volunteers; South32; University of New South Wales; Western Sydney University



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

Management site 1: South East Forests

Local Government Area: Bega Valley; Snowy Monaro Regional

Project partners: Office of Environment and Heritage; University of New South Wales

Estimated species population size: approximately 200-400

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Track species abundance/condition over time	To measure site occupancy of the Southern Brown Bandicoot across camera arrays set in each of Ben Boyd National Park (integrated predator control treatment) and Nadgee Nature Reserve (no integrated predator control treatment). To maintain naïve occupancy levels at >15% of camera sites.	Species abundance	During the 2016-2017 calendar year camera monitoring indicates the Southern Brown Bandicoot occurred at >15% of camera sites across both reserves.	Moderate	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$31,340	\$128,360
University of New South Wales	\$0	\$16,000

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?
Death or injury by fire and motor vehicles.	Keep species records and known/predicted fire regime requirements up to date and concurrent in all appropriate databases. Liaise with National Parks and Wildlife Service or relevant agency to incorporate species requirements into the Flora Fire Response Database and Reserve Fire Management Strategy.	Yes
Predation by introduced predators such as cats, dogs and foxes.	Implement fox threat abatement plan at South East Forests and Ben Boyd North sites.	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
Predation by introduced predators such as cats, dogs and foxes.	The objective is to maintain fox activity across the camera monitoring array in Ben Boyd National Park (treatment area) to <5% of units. The camera array in Nadgee Nature Reserve acts as a monitoring measure in an adjacent non-treatment or control area, where no 1080 baiting is carried out. There, fox activity should fluctuate "naturally" and provide a relative measure against which the success of the 1080 baiting program in Ben Boyd National Park can be measured.	On target	High
Death or injury by fire and motor vehicles.	Where fire management is implemented, measure the response of the Southern Brown Bandicoot population in terms of activity levels across camera arrays.	On target	Moderate

Site summary

Monitoring work in Ben Boyd National Park and Nadgee Nature Reserve indicates that the Southern Brown Bandicoot persists across a large portion of the landscape, particularly in areas where there has been an active, long-term fox control program. Further monitoring work will be essential to reliably report on long-term trends in the status of the species.

Management site 2: Garigal/Ku-ring-gai

Local Government Area: Hornsby; Ku-Ring-Gai; Northern Beaches

Project partners: Northern Beaches Council; Office of Environment and Heritage; SoS Volunteers; Western Sydney

University

Estimated species population size: not detected

Population status



On target (inferred)

Not on target (inferred)

Not on target

Baseline

Monitoring

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Track species abundance/condition over time	Conduct species monitoring at least 95% of sites.	Species abundance	One detection out of 69 sites sampled.	Moderate	Northern Beaches Council; Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$45,712	\$39,130
Northern Beaches Council	\$0	\$350
SoS Volunteers	\$0	\$6,720

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?
Death or injury by fire and motor vehicles.	Keep species records and known/predicted fire regime requirements up to date and concurrent in all appropriate databases. Liaise with National Parks and Wildlife Service or relevant agency to incorporate species requirements into the Flora Fire Response Database and Reserve Fire Management Strategy.	Yes
Predation by introduced predators such as cats, dogs and foxes.	Review Ku-ring-gai site plan for future implementation of active baiting. Also propose baiting be extended into Pittwater and Hornsby Local Government Area and seek funding from these councils.	Partial implementation - Logistical delays.
Predation by introduced predators such as cats, dogs and foxes.	Undertake fox control program as per the Garigal fox threat abatement plan.	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
Predation by introduced predators such as cats, dogs and foxes.	Trial the use of cameras to monitor fox activity along tracks across Ku-ring-gai National Park.	On target	Moderate
Death or injury by fire and motor vehicles.	Secure partnership with Western Sydney University to undertake targeted survey in known locations with and without fire.	On target	Low

Site summary

2016/17 saw the introduction of fox baiting and monitoring into Ku-ring-gai Chase National Park, while baiting continued in Garigal National Park. Although bandicoot monitoring was successfully completed across the site, the species was only detected at one of the 69 sites sampled. Work is commencing in partnership with the Western Sydney University to investigate potential factors affecting apparent local population declines and to improve our monitoring detection rates.

Management site 3: Woronora Plateau

Local Government Area: Campbelltown; Shellharbour; Sutherland; Wingecarribee; Wollondilly; Wollongong

Project partners: Office of Environment and Heritage; South32

Estimated species population size: not detected

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

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	\$10,500
South32	\$35,230	\$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?
Unsure of the species' localised distribution or abundance.	Targeted surveys in the Appin area. Set up cameras at approximately 50 sites. Review camera data post survey.	Yes

Site summary

Final year of a three-year externally funded project to representatively sample all vegetation types using infra red cameras and predator scat collection across the Woronora Plateau for the presence of the Southern Brown Bandicoot. Over 590 sites and 1038 predator scats were collected and analysed for the presence of the Southern Brown Bandicoot, however, none were detected via either method and the species is thought to be locally extinct from the Plateau.