

Saving our Species project 2015-2016 annual report card Little Tern

Species attributes

Scientific name:	Sternula albifrons
NSW status:	Endangered
Commonwealth status:	N/A
Management stream:	Site-managed



Photographer: Keith Egan

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



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

Priority management sites:	Bongil Bongil; Conjola; Hearnes Lake; Lake Wollumboola; Manning River; Nambucca Heads; Tathra; Towra Point; Tuross Brou; Wallagoot Lake; Yuraygir South
Action implementation:	52 of 54 actions were implemented as planned for the financial year (includes species population monitoring actions + other project actions fully or partially implemented)
Total expenditure:	\$305,210 (\$56,008 cash; \$249,202 in-kind)
Project partners:	Bega Valley Shire Council; Coffs Harbour City Council; Department of Defence; Department of Industry - Lands; Department of Primary Industries NSW - Lands; Eurobodalla Shire Council; Mid-Coast Council; Hunter Local Land Services; North Coast Local Land Services; North Coast Shorebirds; Office of Environment and Heritage; Shoalhaven City Council; South East Local Land Services; Sutherland Shire Council

Management site 1: Towra Point

LGA: Rockdale; Sutherland

Project partners: Department of Industry - Lands; Office of Environment and Heritage; Sutherland Shire Council

Estimated species population size: 18 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.		Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$4,000	\$24,777
Department of Industry - Lands	\$0	\$2,500
Sutherland Shire Council	\$0	\$28,571

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Inundation of nests by high tides, storms and other flooding.	Manage inundation as per site plan	Yes
Predation of eggs and chicks by foxes.	Manage foxes as per Towra Point Site Plan.	Yes
Reduction of nesting area due to encroachment of vegetation.	Maintain availability of nesting habitat as per site plan.	Yes

Site summary

Management site 2: Tathra

LGA: Bega Valley

Project partners: Bega Valley Shire Council; Department of Industry - Lands; Office of Environment and Heritage

Estimated species population size: 61 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at "3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$2,400	\$5,989
Bega Valley Shire Council	\$0	\$1,237
Department of Industry - Lands	\$0	\$713

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	As per site plan	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	Manage domestic dogs as per site plan.	Yes
Inundation of nests by high tides, storms and other flooding.	Manage inundation as per site plan	Yes
Predation of eggs and chicks by avian predators (mostly corvids and gulls).	As per site plan	Partial implementation ()
Predation of eggs and chicks by foxes.	As per site plan	Yes

Site summary

Management site 3: Bongil Bongil

LGA: Coffs Harbour

Project partners: Office of Environment and Heritage

Estimated species population size: 24 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.		Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$616	\$17,682

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Predation of eggs and chicks by foxes.	Control foxes as per Bongil Bongil Site Plan.	Yes

Site summary

Management site 4: Lake Wollumboola

LGA: Shoalhaven

Project partners: Department of Defence; Department of Industry - Lands; Office of Environment and Heritage;

Shoalhaven City Council; South East Local Land Services

Estimated species population size: 36 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$4,875	\$29,016
Department of Defence	\$0	\$17,460
Department of Industry - Lands	\$0	\$1,665
Shoalhaven City Council	\$0	\$495
South East Local Land Services	\$0	\$5,590

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Predation of eggs and chicks by avian predators (mostly corvids and gulls).	Manage avian predators as per site plan.	Partial implementation ()
Predation of eggs and chicks by foxes.	Control foxes as per Lake Wollumboola Site Plan.	Yes

Site summary

Management site 5: Tuross Brou

LGA: Eurobodalla

Project partners: Eurobodalla Shire Council; Office of Environment and Heritage; South East Local Land Services Estimated species population size: 49 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at "3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$2,133	\$7,735
Eurobodalla Shire Council	\$0	\$330
South East Local Land Services	\$0	\$330

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per Tuross Brou site plan.	Yes
Inundation of nests by high tides, storms and other flooding.	Manage inundation as per site plan	No ()
Predation of eggs and chicks by avian predators (mostly corvids and gulls).	Manage avian predators as per site plan.	No ()
Predation of eggs and chicks by foxes.	Control foxes as per Tuross Brou Site Plan.	Yes

Site summary

Management site 6: Hearnes Lake

LGA: Coffs Harbour

Project partners: Coffs Harbour City Council; Office of Environment and Heritage

Estimated species population size: 11 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at "3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$2,450	\$18,898
Coffs Harbour City Council	\$0	\$3,755

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Predation of eggs and chicks by foxes.	Control foxes as per site plan.	Yes

Site summary

Management site 7: Wallagoot Lake

LGA: Bega Valley

Project partners: Bega Valley Shire Council; Office of Environment and Heritage; South East Local Land Services

Estimated species population size: 0 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.		species response	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$1,600	\$8,752
Bega Valley Shire Council	\$0	\$423
South East Local Land Services	\$0	\$817

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Manage domestic dogs as per site plan.	Yes
Predation of eggs and chicks by foxes.	Control foxes as per site plan.	Yes

Site summary

Management site 8: Yuraygir South

LGA: Clarence Valley; Coffs Harbour

Project partners: Office of Environment and Heritage

Estimated species population size: 9 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at "3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$1,100	\$4,988

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Inundation of nests by high tides, storms and other flooding.	Manage inundation as per site plan	Yes
Predation of eggs and chicks by foxes.	Control foxes as per site plan.	Yes

Site summary

Management site 9: Manning River

LGA: Greater Taree

Project partners: Department of Industry - Lands; Department of Primary Industries NSW - Lands; Greater Taree City Council; Hunter Local Land Services; North Coast Local Land Services; North Coast Shorebirds; Office of Environment and Heritage

Estimated species population size: 78 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Investment

Project participant	Cash	In-kind
Office of Environment and Heritage	\$23,100	\$14,947
Greater Taree City Council	\$0	\$1,155
Hunter Local Land Services	\$500	\$4,950
Department of Industry - Lands	\$0	\$2,650
Department of Primary Industries NSW - Lands	\$5,500	\$0
North Coast Local Land Services	\$0	\$1,817
North Coast Shorebirds	\$0	\$16,301

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	Minimise disturbance as per site plan.	Partial implementation (Funding issues)
Predation of eggs and chicks by foxes.	Manage foxes as per Manning River Site Plan.	Yes

Site summary

Management site 10: Conjola

LGA: Shoalhaven

Project partners: Department of Industry - Lands; Office of Environment and Heritage; Shoalhaven City Council; South

East Local Land Services

Estimated species population size: 36 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Species abundance	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$3,792	\$14,344
Department of Industry - Lands	\$0	\$1,303
Shoalhaven City Council	\$0	\$165
South East Local Land Services	\$0	\$4,640

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Inundation of nests by high tides, storms and other flooding.	Manage inundation as per site plan	Yes
Predation of eggs and chicks by avian predators (mostly corvids and gulls).	Manage avian predators as per site plan.	Partial implementation ()
Predation of eggs and chicks by foxes.	Control foxes as per site plan.	Yes

Site summary

Management site 11: Nambucca Heads

LGA:

Project partners: Office of Environment and Heritage

Estimated species population size: 15 breeding pairs (5 year average).

Population status

On target

On target (inferred)

Not on target (inferred)

Not on target

Baseline

Long term target	Annual target	Index	Monitoring result	Confidence in monitoring	Conducted by
Trend in the number of breeding pairs summed across sites = 0.	Fledging rates > unmanaged sites.	Reproductive success/recru itment	The sum of breeding pairs across sites has declined from 2001 to 2015 at ~3%/year. Fledging rates at mainland sites with and without fox control are estimated at 0.79 and 0.51 fledglings per breeding pair respectively. Allowing for variation with site and season, fledging rates were 36% higher with fox control. The fledging rate on islands was estimated at 0.86 fledglings per breeding pair.	High	Office of Environment and Heritage

Project participant	Cash	In-kind
Office of Environment and Heritage	\$3,942	\$5,207

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?
Disturbance of nesting shorebirds and direct mortality of eggs and chicks by trampling or removal by humans. 4WDs are a threat at some sites.	Minimise human disturbance as per site plan.	Yes
Disturbance of nesting shorebirds and direct predation of eggs and chicks by domestic dogs.	As per site plan.	Yes
Predation of eggs and chicks by foxes.	Control foxes as per site plan.	Yes

Site summary