

TAXON SUMMARY

# Little Tern (western Pacific)

1	Family	Laridae
2	Scientific name	<i>Sterna albifrons sinensis</i> (Gmelin, 1789)
3	Common name	Little Tern (western Pacific)
4	Conservation status	
	Australian breeding population	Least Concern
	Population visiting Australian territory	Least Concern

5 Reasons for listing

In south-eastern Australia, monitored and managed breeding sites of this subspecies are increasing in number, and the species is expanding in range to areas from which it was not recorded previously. There is also evidence that the range in Western Australia is increasing. It has been argued that the species should be listed as Conservation Dependent (D. Priddel) because, without active conservation management, the Australian breeding population, which contains about 3,000 mature individuals, could decline by 10% in 3 generations (15 years; Vulnerable: C1). However, even if such a decline occurred, the population is still likely to be higher than it was before protection began. Global status of subspecies is also Least Concern.

Australian breeding colonies	Estimate	Reliability
Extent of occurrence	20,000 km <sup>2</sup>	medium
trend	increasing	medium
Area of occupancy	500 km <sup>2</sup>	low
trend	increasing	medium
No. of breeding birds	3,000	low
trend	increasing	medium
No. of sub-populations	2	high
Largest sub-population	2,500	low
Generation time	5 years	low
Global population share	10 %	low
Level of genetic exchange	low	low

6 Intraspecific taxa

Other subspecies, found in Europe, Africa, Asia and America, do not occur in Australia. Globally, the species is Least Concern.

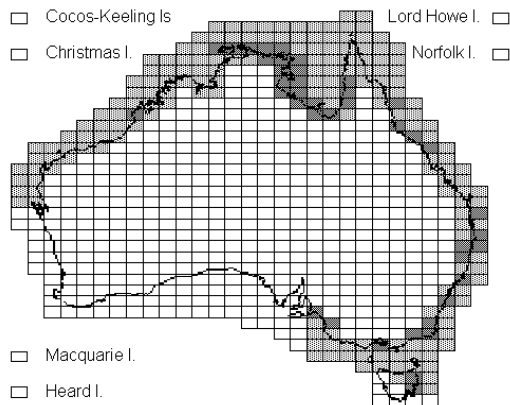
7 Past range and abundance

Breeding northern and eastern coasts of Australia, from Broome, W. A., to Gulf of St Vincent, S. A., including northern and eastern Tasmania, and some offshore islands. Non-breeding Australian distribution similar, but extending further south along Western Australian coast. In northern Australia, breeding birds probably resident, but supplemented by southern migrants during winter (Higgins and Davies, 1996, Collins and Jessop, 1997, R. Chatto). Extralimital

populations breed in east Asia, from Japan to India, with some birds migrating to north Australian coast between Shark Bay and south-eastern Queensland in Austral summer (Blakers *et al.*, 1984, Ross *et al.* 1996, Collins and Jessop, 1997).

8 Present range and abundance

Distribution as above. Population estimates: Western Australia, several colonies (Collins and Jessop, 1997, Johnstone and Storr, 1998, R. Johnstone); Northern Territory, at least 37 active breeding colonies recorded, mostly of less than 15 pairs, but some up to 100 pairs, another 25 colonies likely with many probably missed (R. Chatto); Queensland; 40 known breeding colonies, though only 27 known to have been used recently; New South Wales, 44 of 75 colonies used recently; Victoria 14 of 16 colonies used recently; Tasmania, 12 of 13 colonies used recently; South Australia, 1 of 2 colonies used recently (Starks, 1990, O'Neill, 1995, Higgins and Davies, 1996). Many of the breeding colonies in the Northern Territory had eggs and young in both May and October suggesting an extended breeding season or a short interbreeding interval (R. Chatto).



9 Ecology

Little Terns nest between the high tide mark and shore vegetation on undisturbed, unvegetated sites near estuaries and adjacent freshwater lakes, on estuarine and continental islands, on coral cays and on islands within commercial saltfields (Higgins and Davies, 1996, G. Carpenter). They feed on fish and probably arthropods, which they take from inshore waters,

apparently often relying on estuaries during breeding. Most nesting sites are ephemeral, being threatened from the shore by occasional, exceptionally high tides and rough weather and, on the dune side, by encroaching vegetation. Breeding success is thus naturally variable and often low. Adults, however, are probably long-lived (oldest banded *S. a. albifrons* 20.5 yrs; Cramp, 1985) and usually attempt to re-nest if the first clutch is lost (Higgins and Davies, 1996).

## 10 Threats

The naturally high rate of breeding failure has probably been increased by new threats since the arrival of Europeans, particularly near centres of human settlement. Nest sites are sometimes destroyed, abandoned as a direct result of human disturbance or succumb to predators associated with humans, such as dogs, Black Rats *Rattus rattus*, Silver Gulls *Larus novaehollandiae* or ravens *Corvus* spp. (Hill *et al.*, 1988, Reside *et al.*, 1989, Smith, 1990). Away from settlements, other new causes of nest predation are foxes and feral pigs (Higgins and Davies, 1996), and the expansion of the range of the Beach Stone-curlews *Esacus neglectus* has affected some colonies in New South Wales (Mardell, 1999). Away from nesting sites, the subspecies may be threatened by degradation of estuaries, pesticide residues in fish and oil-fouling of both birds and beaches (Smith, 1990).

Notwithstanding threats, active management of breeding sites has resulted in an increased population size and breeding success in at least Victoria and New South Wales, with an expansion of breeding range (Ross *et al.*, 1999). Given that interbreeding has been recorded between this subspecies and the Fairy Tern *Sterna nereis nereis* in South Australia, Victoria and New South Wales (Cox and Close, 1977, Norman *et al.*, 1996, Ross *et al.*, 1999), and may constitute a threat to the genetic integrity of the two taxa in the future, consideration should be given to future management of conservation efforts.

## 11 Recommended actions

- 11.1 Continued management of nest sites in areas with high rates of disturbance.
- 11.2 Determine genetic relationship with Fairy Tern.
- 11.3 Determine extent of interbreeding with Fairy Tern and whether it is likely to be exacerbated by continued active management.
- 11.4 Determine extent of interchange of birds between colonies and philopatry of breeding colonies.

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