ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department for Environment and Heritage

BIRD

Neophema chrysogaster

Orange-bellied Parrot

AUS	SA	AMLR	Endemism	Residency
CE	Е	Е	-	Migratory Non-breeder



Photo: © Tom & Marie Tarrant (www.aviceda.org)

Conservation Significance

The AMLR distribution is disjunct, isolated from other extant occurrences within SA. Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'.²

One of Australia's most threatened species; estimates are of less than 150 individuals remaining in the wild.³

Description

Just bigger than a Budgerigar, with males and females varying slightly in appearance. Male is bright grass-green on the head, back and most of the wings, fading to a yellowish-green on throat and breast, to bright yellow to the vent and under the tail. Belly has bright orange patch. Between the eyes is a deep blue band, bordered above by a faint blue line. Male also has bright blue on the bend of the wings. Female duller, with less blue and smaller orange belly patch. Both sexes have greyish-black bill, dark-brown eye and greyish-brown legs.¹

There are three similar closely-related species: Bluewinged Parrot (*N. chrysostoma*), Rock Parrot (*N. petrophila*) and Elegant Parrot (*N. elegans*). All have similar colourings, are similar in size and some of them may have an orange belly.¹

Calls are variable. While feeding the call can be accompanied by soft warbling. The contact call uttered in flight is a sharp 'tzit' repeated every few

seconds. Most distinctive is the alarm call when flushed, a unique 'buzzing', described as 'metallic' and 'explosive'.¹

Distribution and Population

Exists as a small, single population. Current breeding range is a coastal strip of southwest TAS between Birchs Inlet, Macquarie Harbour, and Louisa Bay on the southern coast. Most breeding activity occurs within 20 km of Melaleuca (Brown and Wilson 1984).⁴ Entire population migrates along the west coast of TAS across Bass Strait to coastal VIC.⁴

Annual winter counts in VIC, SA and Bass Strait from 1979 to 1990 varied between 67 and 122, with no significant change in numbers (Starks et al. 1992). Numbers recorded in mainland surveys have since declined but records from summer population counts suggest the population at Melaleuca is at least stable and probably increasing (OBPRT 1998). Numbers in outlying areas, however, have continued to decline (M. Holdsworth).³

Now rarely recorded in large numbers from the western or eastern extents of its former range (Higgins 1999).

There are captive breeding programs at sanctuaries in Hobart and Healesville in Victoria, and at the Adelaide Zoo. Eighty captive bred Orange-bellied Parrots were to be released in TAS, VIC and SA in 2007 (ABC radio interview Mark Holdsworth 8 October 2007).

Across the range during the period 1890s to 1920s, reported as being common, or locally abundant (Jarman 1965). No estimates of population size were made during this period; however, anecdotal observations suggest a population of many thousands (Hutchins and Lovell 1985). Concerns for the plight of the species were first raised by Matthews (1917); abundance has declined steadily since that time.⁴

Former range on the mainland extended from Adelaide, and possibly Yorke Peninsula, south-east along the Coorong, Robe, Beachport and Port MacDonnell, east to Port Phillip Bay and South Gippsland, and north to near Sydney. In TAS the species extended along the west and south coasts, east to Bruny Island.⁴

The Adelaide Plains and Yorke Peninsula once represented the northern limits of this species annual

Further information:

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winter migration from south west TAS. Today, due to loss of suitable habitat this species is rarely seen north of the Coorong.⁵

Two post-1983 AMLR filtered record of this species in the AMLR: in 1999 from the Port Noarlunga area south of Adelaide and in 2006 from the Port Gawler/ Dry Creek area north of Adelaide.² Both records have been confirmed as valid sightings by Birds Australia (G. Ehmke *pers. comm.*).

Also two pre-1983 AMLR filtered records from Grange and inner Adelaide areas.²

Habitat

Breed in a mosaic of Eucalypt forest, rainforest and extensive moorland plains. Feed on grass and sedge seed from surrounding moorlands, where food availability is partly a function of fire history. Nonbreeding birds disperse to saltmarshes, dunes, beaches, pastures and shrublands, particularly on small islands and peninsulas, usually within 10 km of the coast (Brown and Wilson 1984, OBPRT 1998, Higgins 1999). There they feed primarily on seeds of saltmarsh and strandline species. Shortages of food may occur through the winter (Brown and Wilson 1984, Loyn et al. 1986).³

In the AMLR, now a 'vagrant' species that uses coastal communities (Graham Carpenter *pers. comm.*). Saltmarshes, littoral heathlands and low scrublands are preferred habitats as well as grassy areas, which can include golf courses. This habitat type is found at Torrens Island CP, Onkaparinga River RP, Little Para Estuary and Port Gawler CP. 5

Within the AMLR the preferred broad vegetation group is Coastal.²

Biology and Ecology

Mostly feed on the ground or on low shrubs. Food comprises seeds, fruits, flowers and berries of sedges, herbaceous plants and plants that grow in salty or alkaline conditions such as saltmarshes.¹

Breeding season November to December. Nest in hollows mostly in live Eucalypts. Clutch size three to six eggs with an incubation period of 23 days. Chicks' time in the nest is 35 days.¹

Aboriginal Significance

Post-1983 records indicate the entire AMLR distribution occurs in Kaurna Nation.²

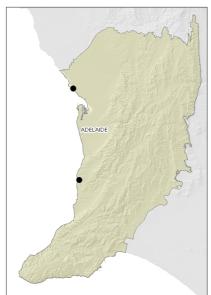
Threats

Threats include:

- fragmentation and degradation of over-wintering habitat by grazing, agriculture or urban development: competition with introduced seedeaters may also have affected food availability during winter
- competition with introduced Common Starlings which render nest hollows unsuitable for parrots by filling them with nesting material
- predation by foxes or cats
- disease, such as Psittacine Circoviral Disease (recorded in both captive and wild populations), can be biologically significant (OBPRT 1998)³
- grazing and/or trampling by livestock, kangaroos, rabbits and hares of over-wintering habitat
- alteration or degradation of saltmarsh for industrial and urban development
- weed invasion excluding native food species, e.g. Tall Wheat Grass, Rice Grass, Coast Barbgrass, Marram Grass and Sea Spurge
- other impacts in over-wintering range include recreational activities, sand mining operations, kelp and seagrass extraction (kelp harvesting on King Island), and wind energy development proposals.⁴

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

Regional Distribution



Map based on filtered post-1983 records.² Note, this map does not necessarily represent the actual species' distribution within the AMLR.

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References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

- 1 Australian Museum (2006). *Birds in Backyards: Bird Finder.* Available from http://www.birdsinbackyards.net (accessed November 2007).
- **2** Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database.* Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.
- **3** Garnett, S. T. and Crowley, G. M. (2000). *The Action Plan for Australian Birds*. Environment Australia, Commonwealth of Australia.
- **4** Orange-bellied Parrot Recovery Team (2006). *National Recovery Plan for the Orange-Bellied Parrot (Neophema chrysogaster)*. Department of Primary Industries and Water, Hobart.
- **5** Turner, M. S. (2001). *Conserving Adelaide's Biodiversity: Resources*. Urban Forest Biodiversity Program, Adelaide.



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