

## RECOVERY OUTLINE

# Orange-bellied Parrot

1	Family	Psittacidae
2	Scientific name	<i>Neophema chrysogaster</i> (Latham, 1790)
3	Common name	Orange-bellied Parrot
4	Conservation status	Critically Endangered: C2b

### 5 Reasons for listing

There are about 180 mature individuals of this species in a single sub-population, with numbers continuing to decline (Critically Endangered: C2b).

	Estimate	Reliability
Extent of occurrence	27,000 km <sup>2</sup>	medium
trend	decreasing	medium
Area of occupancy	30 km <sup>2</sup>	medium
trend	decreasing	medium
No. of breeding birds	180	medium
trend	stable	medium
No. of sub-populations	1	high
Generation time	2 years	high

### 6 Intraspecific taxa

None described.

### 7 Past range and abundance

Breeding: south-west and central Tasmania; non-breeding: coastal southern Australia from Yorke Peninsula east to southern New South Wales as far north as Sydney (OBPRT, 1998, Higgins, 1999).

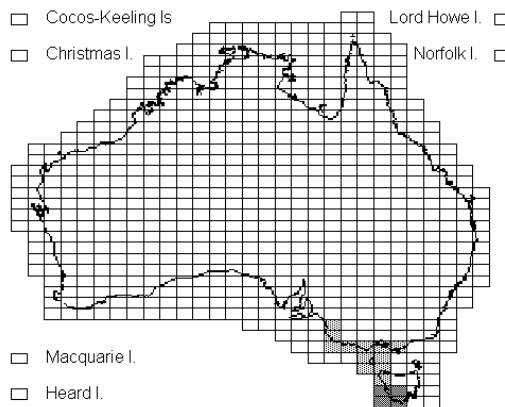
### 8 Present range and abundance

Breeding: Birch's Inlet to Louisa Bay, south-west Tasmania (OBPRT, 1998); non-breeding: King I. on migration then south-east South Australia east to south Gippsland, principally the Coorong, Lake Connewarre, Swan Bay and The Spit Nature Reserve. Annual winter counts in Victoria, South Australia 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, Tas., is at least stable and probably increasing (OBPRT, 1998). Numbers in outlying areas, however, have continued to decline (M. Holdsworth).

### 9 Ecology

Orange-bellied Parrots breed in a mosaic of eucalypt forest, rainforest and extensive moorland plains. They nest in hollows (average clutch size 4.5), mostly in live eucalypts, and feed on grass and sedge seed from the surrounding moorlands, where food availability is partly a function of fire history. Non-breeding 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).



### 10 Threats

The primary reason for the species' decline is thought to be fragmentation and degradation of over-wintering habitat by grazing, agriculture or urban development. Competition with introduced seed-eaters may also have affected food availability during winter, while some former breeding habitat may have been vacated because of a change in fire regime and competition with introduced Common Starlings *Sturnus vulgaris*, which render nest hollows unsuitable for parrots by filling them with nesting material. Because the population is so small, deaths from random events, such as storms at sea during migration, disorientation during migration from brightly-lit fishing boats, predation by foxes or cats or disease, such as Psittacine Circoviral Disease (PCD; recorded in both captive and wild populations), can be biologically significant (OBPRT, 1998).

### 11 Information required

11.1 Extent of losses during migration as a result of disorientation from fishing boats.

### 12 Recovery objectives

12.1 To create enough additional winter habitat for an extra 100 birds.

12.2 To secure known winter habitat from predators and competitors.

- 12.3 To find additional winter habitat and secure it as above.
- 12.4 To breed and release healthy birds from the captive population, all of which are to be vaccinated against Psittacine Circoviral Disease, and follow them using radiotelemetry.
- 12.5 To monitor and maintain optimal breeding habitat through use of fire.
- 13 Actions completed or under way**
- 13.1 Coastal feeding habitat in Tas. and saltmarsh habitat in Vic. and on King I. have been reserved or is being managed for the Orange-bellied Parrot.
- 13.2 Breeding habitat is actively maintained through burning, and monitored.
- 13.3 The size of the breeding population is monitored annually and used to verify a Population Viability Analysis model that is continually updated.
- 13.4 Over half the habitat around Port Phillip Bay is now fenced against stock grazing.
- 13.5 Detailed population counts are made each winter using volunteer observers.
- 13.6 A sample of juveniles is marked annually to determine survival rates, movements patterns and population levels.
- 13.7 A captive breeding program has been established in Tas. and Vic. and captive-bred young are regularly released.
- 13.8 A method for detecting suitable habitat using remote sensing has been developed by the Royal Melbourne Institute of Technology and satellite imagery analysis of saltmarsh in wintering range has been undertaken.
- 13.9 The nutritional value of seeds and their seasonal availability has been studied by students at Melbourne University.
- 13.10 Propagation and revegetation of winter habitat has been trialed.
- 13.11 The effects of grazing on winter food supply has been studied.
- 13.12 The effects of introduced finches on winter food supply has been studied.
- 13.13 A definition of standards of health in captive and wild birds has been developed.
- 13.14 Human disturbance at Victorian wintering sites is monitored and controlled.
- 13.15 Predators are controlled at mainland wintering sites.
- 13.16 Key wintering sites in S. A. are protected.
- 13.17 Vehicular use at wintering sites in S. A. is controlled.
- 13.18 Feeding sites are maintained with appropriate burning regimes in breeding habitat.
- 13.19 An Orange-bellied Parrot Recovery Team has been operating since 1983 and a Recovery Coordinator has been employed.
- 13.20 Starlings are culled from around nest hollows at existing and former breeding sites, and clear debris from nests.
- 13.21 Human disturbance at Melaleuca is being monitored and controlled.
- 13.22 Genetic heterozygosity is being monitored.
- 13.23 PCD in the captive population is being monitored and managed.
- 14 Management actions required**
- 14.1 Create new winter habitats.
- 14.2 Control feral cats at stopover site at King I.
- 14.3 Survey all saltmarsh in Orange-bellied Parrot wintering range using satellite imagery.
- 14.4 Model breeding and feeding habitat to assess availability.
- 14.5 Manage habitat and monitor the population using King I.
- 14.6 Develop and implement a media strategy including interpretive displays and a newsletter.
- 15 Organisations responsible for conservation**  
Environment Australia, South Australian Department of Environment and Heritage, Tasmanian Parks and Wildlife Service, Victorian Department of Natural Resources and Environment.
- 16 Other organisations involved**  
Birds Australia, other bird-watching societies, Department of Defence, Latrobe University, University of Melbourne, Melbourne Water, Royal Melbourne Institute of Technology, Parks Victoria, World Wide Fund for Nature (Australia), Healesville Sanctuary, Australian Regional Association of Zoological Parks and Aquaria, Australian Non-passerine Taxon Advisory Group, Australian Titanium Minerals Ltd.

