

Regent Parrot (eastern)

Polytelis anthopeplus monarchoides Schodde, 1993
Psittacidae

Conservation status

Endangered B2ab(iii,v)

Reasons for listing

Probably occupies <500 km² scattered through 3 locations, the quality of which are declining as old trees die and habitat is overgrazed

Status 2000

Endangered B2ab(iii,v)

Status 1990

Endangered B2ab(iii,v)

Taxonomy

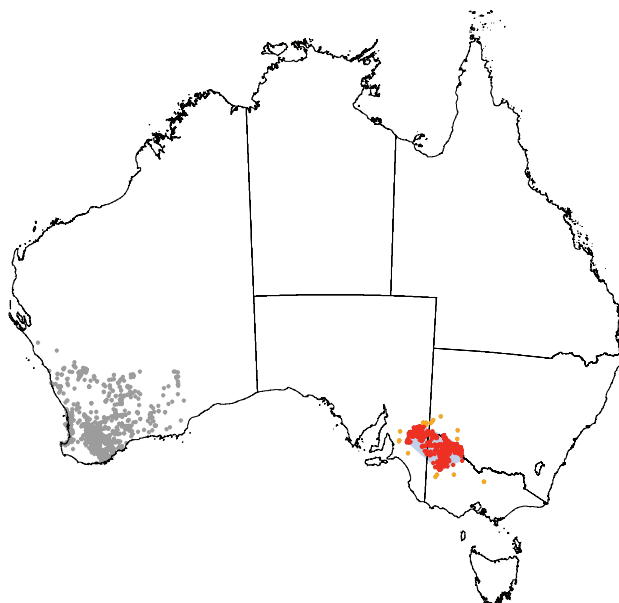
P. a. anthopeplus (south-west Western Australia) is Least Concern, as is the species
Taxonomic uniqueness: medium (76 genera/family, 3 species/genus, 2 subspecies/species)

Range

Occurs in the semi-arid interior of southeastern mainland Australia, breeding in 3 distinct and widely separated areas: southern mallee subpopulation along the Wimmera River/Outlet Creek system in western Victoria, predominantly in Wyperfeld National Park, Lake Albacutya and Lake Hindmarsh; the lower Murray River subpopulation in South Australia, upstream from Swan Reach to Lindsay I., far northwest Vic; the mid Murray River subpopulation in Vic and NSW, between Red Cliffs, south-east of Mildura and Piangil, including the lower Murrumbidgee and Wakool Rivers in NSW (Baker-Gabb and Hurley 2011; Department of Sustainability, Environment, Water, Population and Communities 2011). Non-breeding birds occur throughout the eastern mallee region (Higgins 1999) suggesting that there is mixing of the southern mallee and mid-Murray populations. Its range appears to have changed little in recent decades but has contracted since the late 19th century, when it bred in mallee Eucalypts in the Murray Sunset National Park, further south along the Wimmera River as far as Dimboola, much further north along the Darling River at Pooncarie and along the Murray River from upstream of Kerang and along the Avoca River to the lower reaches of the Murray River in SA (Baker-Gabb and Hurley 2011), although the birds may always have been sparse between the 2 extant Murray River breeding areas (Burbidge 1985).

Abundance

There are estimated to be 1500 breeding pairs including 600 in NSW, 500 in Vic (Sluiter 2007), and 400 in SA (Smith 2011), although flock sizes of up to 900 individuals suggest that there is also a substantial number of imma-



ture birds (Baker-Gabb and Hurley 2011). The number of birds breeding along the Murray River in SA declined by about 30% between 1991 and 2003 (Schultz 2006), with a continued decline upstream of Lock 3 and loss of 60% of colonies and 66% pair from 1991 to 2010 SMITH 2011 . The number in Mallee Cliffs State Forest and Kemendoc Nature Reserve, NSW, declined from 400 individuals in 1993 to 150 in 1997 (Webster and Leslie 1997).

Ecology

Nests in hollows in loose colonies of up to 76 pairs (Smith 2011) over areas of up to 90 ha in littoral River Red Gums *Eucalyptus camaldulensis* and Black Box *E. largiflorens* woodlands, though most colonies are smaller (Baker-Gabb and Hurley 2011). An unusual outlier population was recently discovered breeding in Slender Cypress-Pine *Callitris gracilis* in northern Wyperfeld NP (Hurley 2011). They lay 5–6 eggs but usually fledge only 2–4 young (Hurley 2009). They rely on vegetated landscapes and/or corridors to undertake foraging flights in both the breeding season (Sluiter 2007) and non-breeding seasons (Webster and Belcher 2008; Sluiter 2009). The parrots forage for seeds of grasses and herbaceous plants but also eat fruits, buds, flowers and occasionally insect larvae, psyllids and lerps. They usually feed in pairs and small parties, but sometimes in large flocks. They often forage in mallee within 20 km of the nesting site, particularly where Christmas Mallee *E. socialis* or Yellow Mallee *E. incrassata* dominate (Higgins 1999). They also forage on cereal crops in farmland and along roadsides and in open ground near remnant vegetation (Schultz 2006) although they are generally reluctant to cross open country (Webster and Leslie 1997; Sluiter 2007; Webster and Belcher 2008; Sluiter 2009). A generation time of 7.5 years (BirdLife International 2011) is derived from an average age at first breeding of 1.0 years and a maximum longevity in the wild of 14.0 years, both extrapolated from Superb Parrot *Polytelis swainsonii*.

Current eligibility against IUCN Red List Criteria

IUCN category	Criteria eligibility
A	Not applicable: past, current or future population declines are thought unlikely to exceed 20% in any 3-generation period
B	Endangered: AOO <500 km ² , at ≤5 locations with plausible future threat, inferred continuing decline in habitat quality, no. individuals
C	Vulnerable: population 2500–10 000 mature individuals, suspected continuing decline, 100% in 1 subpopulation
D	Vulnerable: ≤5 locations with plausible future threat
E	Not applicable: no population viability analysis undertaken

Threats

The main threat has been the clearing, fragmentation and degradation of riparian woodlands that are used for breeding, and of mallee areas used for foraging within 20 km of nesting colonies and of wooded flight corridors between the two (Burbidge 1985; Webster and Leslie 1997). Such habitat deterioration was historically caused by deliberate clearing and timber extraction. This loss has largely ceased but degradation continues through waterlogging of riparian trees, resulting in their death and eventual collapse, and grazing by both domestic stock and feral herbivores such as goats *Capra hircus* and rabbits *Oryctolagus cuniculus*, which prevents regeneration of trees or may reduce food availability, particularly away from the breeding colony (Baker-Gabb and Hurley 2011). Other causes of death, though not necessarily threats to the subspecies, include trapping for the cage bird trade, deliberate killing to reduce agricultural damage, accidental killing through collisions with vehicles, ingestion of poison grain (Burbidge 1985) and competition for nest hollows from other birds advantaged by agricultural development such as Common Starling *Sturnus vulgaris*, Little Corella *Cacatua sanguinea* and Sulphur-crested Cockatoo *Cacatua galerita* (Robertson and Hurley 2010; Baker-Gabb and Hurley 2011). Competition with feral European Honey Bees *Apis mellifera* was not found to be a significant problem in dry years (Oldroyd *et al.* 1994). However, a subsequent survey in 2009 found increases in the number feral bee hives occupying River Red Gums within Regent Parrot breeding colonies during that breeding season (Robertson and Hurley 2010).

Conservation objectives

- Existing subpopulations stable or increasing
- Major nesting areas, including breeding trees, foraging habitat and intervening corridors, secure

Information required

- Population and demographic trends in key populations
- Non-lethal, economically viable, damage mitigation techniques for fruit-growers affected by the parrots
- Significance of feral bee hives in breeding colonies during years of above average rainfall
- Impacts of grazing on foraging and breeding success

IUCN Red List assessment data

	Estimate	Reliability
Extent of occurrence trend	61 000 km ² stable	high high
Area of occupancy trend	500 km ² decreasing	low medium
No. of mature individuals trend	3000 decreasing	medium medium
No. subpopulations	2	medium
No. locations	3	medium
Largest subpopulation	1500	low
Generation time	7.5 years	low
Global population share	100%	low

- Extent of movement between subpopulations

Management actions required

- Locate and protect actual and potential nesting colonies, flyways to foraging areas and traditional watering points
- Improve foraging habitat quality by reducing grazing pressure
- Secure and supply environmental water to core breeding areas to simulate natural wetting and drying cycles
- Control recreational impacts near nesting colonies
- Reduce numbers of birds killed by shooting, poisoning and vehicles
- Increase community involvement in many aspects of the recovery program

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