

TAXON SUMMARY

Grass Owl (eastern)

1	Family	Tytonidae
2	Scientific name	<i>Tyto capensis longimembris</i> (Jerdon, 1839)
3	Common name	Grass Owl (eastern)
4	Conservation status	Least Concern

5 Reasons for listing

Despite disturbance, this subspecies is common in many grasslands, as well as in many remote areas. Sporadic sightings over an enormous range makes any declines difficult to detect, but the subspecies is unlikely to be threatened in the near future.

Australian population	Estimate	Reliability
Extent of occurrence	4,000,000 km ²	medium
trend	stable	medium
Area of occupancy	50,000 km ²	low
trend	fluctuating	low
No. of breeding birds	10,000	low
trend	fluctuating	low
No. of sub-populations	1	medium
Generation time	3 years	low
Global population share	20 %	low
Level of genetic exchange	low	medium

6 Intraspecific taxa

T. c. capensis occurs in Africa and *T. c. papuensis* in New Guinea. No other subspecies have been recorded in Australian territory. Global status of the species is Least Concern.

7 Past range and abundance

Breeding in subcoastal environments between northern New South Wales and Cape York Peninsula, as well as in Northern Territory and Kimberley, W. A. Also inland on the Barkly Tableland and through catchments of Lake Eyre and upper Darling R., although presence at most sites sporadic (Schodde and Mason, 1980, 1997, Read, 1995, Maciejewski, 1997, Debus *et al.*, 1998, Higgins, 1999). Dispersing throughout the continent and to off-shore islands when favourable breeding conditions deteriorate (Hobcroft and James, 1997, Schodde and Mason, 1980, 1997). Extraliminally, through southern Asia and on New Caledonia.

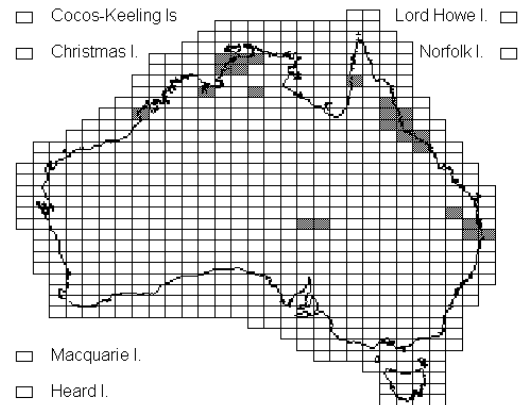
8 Present range and abundance

As above.

9 Ecology

Grass Owls are mainly found in tussock-grasslands, but also inhabit heaths, swamps, coastal dunes, tree-lined creeks, treeless plains, grassy gaps between trees, and crops (Brooker, 1976, Schodde and Mason, 1980,

Higgins, 1999). They nest on the ground, usually under tussocks, with both timing and density of nesting responsive to food abundance. The clutch size is 6-8 (Schodde and Mason, 1980, Higgins, 1999). They feed on rodents, notably Long-haired Rat *Rattus villosissimus*, Dusky Field Rat *R. sordidus*, Grassland Melomys *Melomys burtoni* and House Mouse *Mus domesticus*, but also take insects when their preferred food is scarce (Cox, 1976, Parker, 1977, Maciejewski, 1997, Debus *et al.*, 1998, Higgins, 1999).



10 Threats

Although native grasslands throughout Australia are threatened (Kirkpatrick *et al.*, 1995, Neldner *et al.*, 1997, Crowley and Garnett, 1998), and any developments that destroy them will also affect Grass Owls, the trends in observations do not suggest the species has declined. Poisoning with rat baits in sugar cane may be a local problem (Young and De Lai, 1997), but remains unproven (P. Olsen). Clearance for crops like sugar-cane may also provide an opportunity for grass owls to colonise previously wooded habitat. Given the range of the species, and its high density and fecundity in suitable habitat, it cannot be considered threatened.

11 Recommended actions

- 11.1 Use Australian Bird Atlas to monitor trends in abundance relative to other nocturnal species.
- 11.2 Make periodic monitoring trips to favoured sites (Herbert River valley, Goyder's Lagoon) to determine trends and conditions that correspond to times of abundance.

12 Bibliography

- Brooker, M. G. 1976. A record of the Eastern Grass Owl from the Northern Territory. *Emu* 76:154.
- Cox, J. B. Grey Grasswrens and Grass Owls at Goyder's Lagoon, South Australia. *S. Aust. Ornithol.* 27:96-100.
- Crowley, G. M. and Garnett, S. T. 1998. Vegetation change in the grasslands and grassy woodlands of central Cape York Peninsula. *Pac. Conserv. Biol.* 4:132-148.
- Debus, S. J. S., Maciejewski, S. E. and McAllan, I. A. W. 1998. The Grass Owl in New South Wales. *Aust. Birds* 31:29-45.
- Higgins, P. J. (ed.) 1999. *Handbook of Australian, New Zealand and Antarctic Birds. Vol. 4. Parrots to Dollarbird.* Oxford University Press, Melbourne.
- Hobcroft, D. and James, D. J. 1997. Records of the Grass Owl from southern New South Wales. *Aust. Bird Watcher* 17:91-93.
- Kirkpatrick, J., McDougall, K. and Hyde, M. 1995. *Australia's Most Threatened Ecosystem: The Southeastern Lowland Native Grasslands.* Surrey Beatty and Sons, Chipping Norton.
- Maciejewski, S. E. 1997. The Grass Owl *Tyto capensis* in north-eastern New South Wales. *Birds* Pp. 54-70 in *Australian Raptor Studies II.* G. Czechura and S. Debus (eds). *Birds Australia Monograph* 3. Birds Australia, Melbourne.
- Neldner, V. J., Fensham, R. J., Clarkson, J. R. and Stanton, J. P. 1997. The natural grasslands of Cape York Peninsula, Australia: Description, distribution and conservation status. *Biol. Conserv.* 81:121-136.
- Parker, S. A. 1977. The distribution and occurrence in South Australia of owls of the genus *Tyto*. *S. Aust. Ornithol.* 27:207-215.
- Read, J. 1995. The ecology of the Grass Owl *Tyto capensis* south of Lake Eyre. *S. Aust. Ornithol.* 32:58-60.
- Schodde, R. and Mason, I. J. 1980. *Nocturnal Birds of Australia.* Lansdowne, Melbourne.
- Schodde, R. and Mason, I. J. 1997. Aves (Columbidae to Coraciidae). *Zoological Catalogue of Australia. Vol. 37.2.* W. W. K. Houston and A. Wells (eds). CSIRO Publishing, Melbourne.
- Young, J. and De Lai, L. 1997. Population declines of predatory birds coincident with the introduction of Klerat rodenticide in north Queensland. *Aust. Bird Watcher* 17:160-167.

Comments received from

Stephen Debus, Penny Olsen.