RECOVERY OUTLINE

Wedge-tailed Eagle (Tasmanian)

1	Family	Accipitridae
2	Scientific name	*Aquila audax fleayi* Condon & Amadon, 1954
3	Common name	Wedge-tailed Eagle (Tasmanian)
4	Conservation status	Endangered: C2b

5 Reasons for listing

There are about 500 mature individuals in the single sub-population, which is slowly decreasing in size (Endangered: C2b). The subspecies cannot be considered Critically Endangered because its decline has been too slow for criterion A, its range is too large for B and its population has more than 250 mature individuals (excluding criteria C and D).

	Estimate	*Reliability*
Extent of occurrence	*70,000 km²*	*high*
trend	*stable*	*high*
Area of occupancy	*220 km²*	*high*
trend	*stable*	*high*
No. of breeding birds	*440*	*medium*
trend	*decreasing*	*medium*
No. of sub-populations	*1*	*high*
Generation time	*15 years*	*low*

6 Infraspecific taxa

A. a. audax (mainland Australia, southern New Guinea) is Least Concern, which is the global status of the species. The validity of the subspecies needs to be confirmed (P. Olsen).

7 Past range and abundance

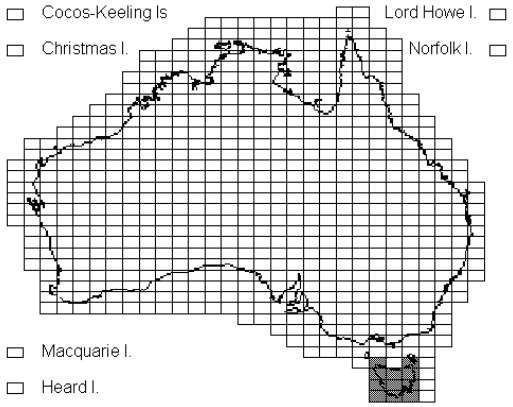
Breeding recorded throughout Tasmania, including Flinders I. and many of the other large offshore islands (Mooney, 1997a, b). The subspecific identity of birds visiting King I. (Blakers *et al.*, 1984) is unknown. There are no reliable historical estimates of abundance.

8 Present range and abundance

Distribution as above. Total population estimated at 220 nesting territories at a density between one per 20-30 km² in lowland eastern and northern Tasmania, and one per 1,200 km² in highland western Tasmania. Only 95 pairs breed successfully. Road counts (with a decrease in the proportion of immatures) suggest the population is stable or in slow decline. A dearth of immatures is also indicated by territories that are occupied by only one adult for up to 6 months after one member of a pair has died (Mooney, 1997a, b).

9 Ecology

The Tasmanian subspecies of Wedge-tailed Eagle forages in a wide variety of habitats including coastal heath, dry woodland, sub-alpine forest, temperate rainforest, old-growth forest, dwarf coniferous forest, grasslands and cleared land (Thomas, 1979, Mooney, 1997a, b). Most nests are built in emergent trees in old-growth native forest that are exposed to the early morning sun and where slope provides shelter from cold spring winds. The same nest site may be used for over 50 years (Mooney, 1997a, b).



10 Threats

The main threat to the subspecies is from nest habitat destruction and increased mortality as a result of shooting. Historically, habitat has been lost through clearance for agriculture. More recently, logging of old-growth native forests has often isolated forest patches with nest trees, increasing exposure of nest sites, and removing alternative nest sites from surrounding areas. The subspecies is also intolerant of ground-based disturbance, particularly on slopes above the nest site, and rarely breeds in isolated trees or in copses of less than 10 ha. About 80% of known nests are protected through the Forest Practices Code that applies to logging in State Forests or on some areas of private land. Adherence to protective recommendations and regulations varies greatly, depending on the attitude of individual forest managers and contractors. However, although pre-logging surveys are not mandatory, the inconvenience of conserving a nest that is discovered during logging has meant that, increasingly, managers try to identify nest sites before commencing operations. The remainder of nests on private land are subject to unregulated logging practices. Nests are also disturbed temporarily by road building, or intensive recreation or permanently by rural-residential development. Despite legal protection and a public education program, deliberate poisoning and shooting continues. Annual losses have been estimated at up to

35% of immatures and 5% of adults. Individuals also die from lead poisoning, electrocution or collisions with vehicles, overhead wires and fences (Mooney, 1997a, b), and as non-target species during illegal poisoning of Tasmanian Devils *Sarcophilus harrissi* and Forest Ravens *Corvus tasmanicus* (N. Mooney).

11 Information required

11.1 Refine predictive models of nesting habitat.

11.2 Undertake more comprehensive genetic comparisons with nominate subspecies.

12 Recovery objectives

12.1 An increase in the total population, and in the proportion of immatures, as indicated by monitoring.

12.2 Significantly increase the number of nests that are regularly successful.

13 Actions completed or under way

13.1 A set of recommendations for protecting nest sites has been published (Mooney and Holdsworth, 1991).

13.2 A model has been developed for predicting the distribution of nesting habitat (Brown and Mooney, 1997).

13.3 Aerial and ground-based surveys are undertaken to measure nest success.

13.4 There has been extensive publicity, including production of a brochure, *Eagles on the Farm.*

13.5 Initial comparisons of genetic heterogeneity with the nominate subspecies have been undertaken.

13.6 Recovery Plans have been produced (Gaffney and Mooney, 1992, Mooney, 1997a, b).

14 Management actions required

14.1 Search predicted areas for nests.

14.2 Trap then radio-track birds to their nests.

14.3 Search proposed logging coupes.

14.4 Protect nesting habitat on private land.

14.5 Assess eagle nest reserve security.

14.6 Maintain a nest site register.

14.7 Monitor abundance using road counts.

14.8 Update nesting habitat management prescriptions.

14.9 Monitor mortality reports.

14.10 Promote eagle conservation.

14.11 Manage the recovery process through a Recovery Team.

15 Organisations responsible for conservation

Tasmanian Parks and Wildlife Service.

16 Other organisations involved

Forestry Tasmania, Australasian Raptor Association of Birds Australia, timber extraction companies, private land-holders.

17 Staff and financial resources required for recovery to be carried out

Staff resources required 2001-2005

0.1	*Project Officer (modelling)*
1.0	*Technical Officer (nest searching, monitoring)*

Financial resources required 2001-2005

Action	*Conservation agencies*	*Other funding sources*	*Total*
Refine predictive models	$38,800	$0	$38,800
Find more nests	$37,000	$41,000	$78,000
Radio track birds to nests	$12,800	$6,800	$19,600
Search logging coupes	$35,000	$62,000	$97,000
Protect nesting habitat on private land	$28,800	$0	$28,800
Assess eagle nest reserve security	$7,000	$0	$7,000
Maintain a nest site register	$9,000	$0	$9,000
Monitor nest success	$29,000	$0	$29,000
Update management prescriptions	$2,500	$0	$2,500
Monitor mortality reports	$7,500	$0	$7,500
Promote eagle conservation	$30,000	$0	$30,000
Recovery Team	$5,000	$0	$5,000
Total	$242,400	$109,800	**$352,200**

18 Bibliography

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