

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Proposals resulting from reviews by the Animals and Plants Committees

A. Proposal

Deletion from Appendix II, following the periodic review of the trade and biological status of the species by the Animals Committee, pursuant to Resolution Conf. 9.1.

B. Proponent

Australia

C. Supporting Statement1. Taxonomy

- | | |
|--------------------------|---|
| 1.1 Class: | Mammalia |
| 1.2 Order: | Diprotodonta |
| 1.3 Family: | Macropodidae |
| 1.4 Genus, species: | <i>Dendrolagus bennettianus</i> De Vis 1887
<i>Dendrolagus lumholtzi</i> Collett, R. 1884 |
| 1.5 Scientific synonyms: | None |
| 1.6 Common names: | Bennett's tree-kangaroo (<i>D. bennettianus</i>)
Lumholtz's tree-kangaroo, Boongarry (<i>D. lumholtzi</i>) |
| 1.7 Code numbers: | A-102-012-006-001 (<i>D. bennettianus</i>)
A-102-012-006-004 (<i>D. lumholtzi</i>) |

2. Biological Parameters

2.1 Distribution

Both species are endemic to Northeast Queensland, Australia.

The distribution of *D. bennettianus* appears to be patchy over a small range, extending from the Daintree River (16°15'S) north to Mt Amos (15°35'S), a distance of approximately 75km, and extending westwards 50km from the coastal lowlands (145°30'E) to the western edge of the Mt Windsor Tablelands (145°00'E) (Davidson, 1991). *D. lumholtzi* has a more southerly distribution, extending from about 16°20'S to about 18°30'S

A map of the distribution for both species is at Attachment A (Australian Heritage Commission, 1985).

2.2 Habitat availability

Dendrolagus spp. are rainforest-dependent species. *D. bennettianus* is found in a range of rainforest types. It utilises both gallery forest and small isolates of closed forest. The rainforests which support *D. bennettianus* and *D. lumholtzi* have a strong Gondwanan element, with 19 families of the more primitive angiosperms in the world being represented. The rainforests cover an area of approximately 11,000 km² on the coastal ranges of Queensland, in areas which experience mean annual rainfall ranges between 1200 to over 4000 millimetres, and (Anon, 1986).

2.3 Population status

Lower risk (both species) (IUCN, 1996; Maxwell *et al*, 1996).

D. bennettianus achieves moderate abundance (0.3 animal/ha) in notophyll vine forests, but comparative abundance between rainforest types is not known (Davidson, 1991). Abundance estimates are not available for *D. lumholtzi*.

2.4 Population trends

The reproductive capacities of both species are unknown, but Martin (cited by Davidson, 1991) suggests that *D. bennettianus* has a pouch life of around 9 months, with a reproductive interval of 12 months, possibly with synchronous breeding. The species appears to be polygynous, with a high degree of parental care between female tree-kangaroos and their young. Young males disperse from the maternal home range at around two years of age (Davidson, 1991)

2.5 Geographic trends

D. bennettianus and *D. lumholtzi* are restricted to closed forest (known generally as rainforests), a forest type which contracted in distribution in Australia between about 40,000 to 30,000 years B.P., due to a variety of factors, including a general increase in aridity over the continent, the evolution of sclerophyllous vegetation, and an increase in fire frequency and intensity (Kershaw *et al*, 1991).

European colonisation led to a further reduction in the distribution of Queensland's rainforests since 1859, with timber getting, and conversion of rainforest to pasture or other land uses (Frawley, 1991). There is, however, some suggestion that rainforests are now expanding into sclerophyllous forests where fire regimes are less intense (Maxwell *et al*, 1996).

2.6 Role of the species in its ecosystem

Both species are essentially rainforest folivores, although they do take fruits when seasonally available. *D. bennettianus* prefers foliage from a limited number of trees and vines including: *Ganophyllum falcatum*; *Randia* spp.; *Schefflera actinophylla*; *Aidia cochinchinensis*; *Pisonia* spp; and *Platycerium* spp. (Davidson, 1991).

D. bennettianus, and presumably *D. lumholtzi*, is preyed upon by dingoes (*Canis familiaris dingo*) and amethystine pythons (*Morelia amethystina*). In the recent past, Aboriginal hunting appears to have been intense and kept tree-kangaroo abundances low in lowland rainforests. Cultural taboos provided some protection to populations on upper reaches of mountains, such as at Mt Finnigan. There has been little traditional hunting for either *D. bennettianus* or *D. lumholtzi* over the past 40 years, and tree kangaroo numbers appear to have increased in lowland rainforests over this time (Davidson, 1991).

2.7 Threats

The 1996 *Action Plan for Australian Marsupials and Monotremes* (Maxwell *et al*, 1996) states that reduction of habitat, which was, historically, the main threat to *D. lumholtzi*, has now ceased with the declaration of the Wet Tropics World Heritage Area, although lowland populations of *D. bennettianus* could still be at risk by destruction of rainforest on freehold land.

The Recovery Plan for *D. bennettianus* states that, "based on current knowledge, no major threats are foreseen", although increases in the regime or intensity of hunting (by dingoes, feral dogs, amethystine pythons or traditional hunting) and increases in human activity and habitation may depress abundance in particular areas (Davidson, 1991).

3. Utilisation and Trade

3.1 National utilisation

Currently none, although, historically, *D. bennettianus* and *D. lumholtzi* were important food items for Aboriginal people.

3.2 Legal international trade

The Australian CITES Management Authority has never issued an export permit for either species. CITES trade data maintained by the WCMC show that 7 specimens of *D. bennettianus* have been traded since 1985. All were captive bred animals, presumably from founder stock which were exported prior to the creation of the Australian CITES Management Authority. Three animals were exported from France to Morocco in 1988, and four were exported from Sweden to Finland in 1990 (WCMC).

3.3 Illegal trade

None known or likely.

3.4 Actual or potential trade impacts

In both Papua New Guinea and Australia, the pelts of *Dendrolagus* spp. have cultural significance, particularly as a sign of status amongst hunters. Australian laws provide that Aboriginal people and Torres Strait Islanders have a right to hunt, fish and gather. Although unlikely, it is possible that, at some stage in the future, Aboriginal communities in Queensland may wish to trade in artefacts derived from *Dendrolagus* spp which have been hunted for traditional purposes. Such a proposal would require the preparation and implementation of a species-specific management program. under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982*.

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin)

None.

4. Conservation and Management

4.1 Legal status

4.1.1 National

The Commonwealth *Wildlife Protection (Regulation of Exports and Imports) Act 1982* provides the same degree of legislative protection to all native mammals as that afforded to taxa listed on Appendix II of CITES. If *D. bennettianus* and *D. lumholtzi* were to be delisted from CITES, the Wildlife Protection Act would still prohibit the export of live specimens, other than for *bona fide* zoological or scientific purposes. Commercial export of products derived from *D. bennettianus* and *D. lumholtzi* would require the preparation, approval and implementation of an effective management regime for the species involved. The Act establishes minimum requirements for management regimes.

4.1.2 International

D. bennettianus and *D. lumholtzi* are currently listed on Appendix II to CITES.

4.2 Species management

4.2.1 Population monitoring

There is no ongoing monitoring program for either species.

4.2.2 Habitat conservation

Extensive areas of habitat for *D. bennettianus* and *D. lumholtzi* are protected in the Queensland Wet Tropics World Heritage area. Lowland rainforests on freehold land may be subject to fragmentation and loss through sub-division and construction of housing and/or tourism infrastructure.

4.2.3 Management measures

Management activities to date have focussed on formal protection of tropical rainforests, including the inscription of the Queensland Wet Tropics Area, comprising an area of approximately 894,000 ha, on the World Heritage List.

Fire suppression activities in protected areas, production forests and areas of human habitation, and reforestation, may have benefited *D. bennettianus* and *D. lumholtzi*, as they have created conditions favourable to the expansion of rainforests in some areas.

4.3 Control measures

4.3.1 International trade

Export of live *D. bennettianus* and *D. lumholtzi* from Australia is prohibited except for *bona fide* scientific or zoological exchange. Commercial export of products of either species could only take place under a management regime which meets the requirements of the *Wildlife Protection (Regulation of Exports and Imports Act) 1982* - no such approved management regime currently exists. Enforcement of these export controls is conducted by the Australian Customs Service, in conjunction with the Australian Federal Police and the Biodiversity Group of Environment Australia (formerly known as the Australian Nature Conservation Agency).

4.3.2 Domestic measures

In Australia, conservation and management of wildlife is principally a responsibility of State and Territory governments; the Commonwealth is responsible for conservation and management of wildlife on Commonwealth lands and waters, and for controlling the import and export of wildlife and wildlife products. *D. bennettianus* and *D. lumholtzi*, and their habitat, are managed by the Queensland Department of Environment and Heritage and the Queensland Forestry Service.

5. Information on Similar Species

The genus *Dendrolagus* also occurs on the island of New Guinea, in both Papua New Guinea and the Indonesian Province of Irian Jaya, where at least 8 species are found, including a new species ("Dingiso") which is currently being described (Flannery, 1995).

A CITES identification sheet is available for 4 species of *Dendrolagus*, including *D. bennettianus* and *D. lumholtzi*, (Attachment B). Full descriptions of the remaining (New Guinean) species of *Dendrolagus* are given in Flannery (1995).

6. Other Comments

The Department of Environment of Papua New Guinea has been advised of Australia's intention to remove *D. bennettianus* and *D. lumholtzi* from Appendix II to CITES - the Department did not indicate any objection to the proposal, but advised that it wished *D. inustus* and *D. ursinus*, which occur in Papua New Guinea, to be retained in the Appendix II.

7. Additional Remarks

As trade is not recognised as a threat to these species, and insignificant levels of trade have been reported, the continued listing of these species on Appendix II to CITES will contribute little to current efforts in place within Australia to conserve the species and their habitat.

8. References

Anon. (1986) *Tropical Rainforests of North Queensland: Their Conservation Significance*. A Report to the Australian Heritage Commission by the Rainforest Conservation Society of Queensland. Australian Heritage Commission. Special Australian Heritage Publication Series No.3. AGPS, Canberra.

Collet, R. (1884) On some apparently new marsupials from Queensland. *Proc. Zool. Soc. Lond.* **1884**: 381-389.

Davidson, C. (1991) *Recovery Plan (Research Phase) for Bennett's Tree-Kangaroo (Dendrolagus bennettianus)*. Department of Environment and Heritage, Brisbane.

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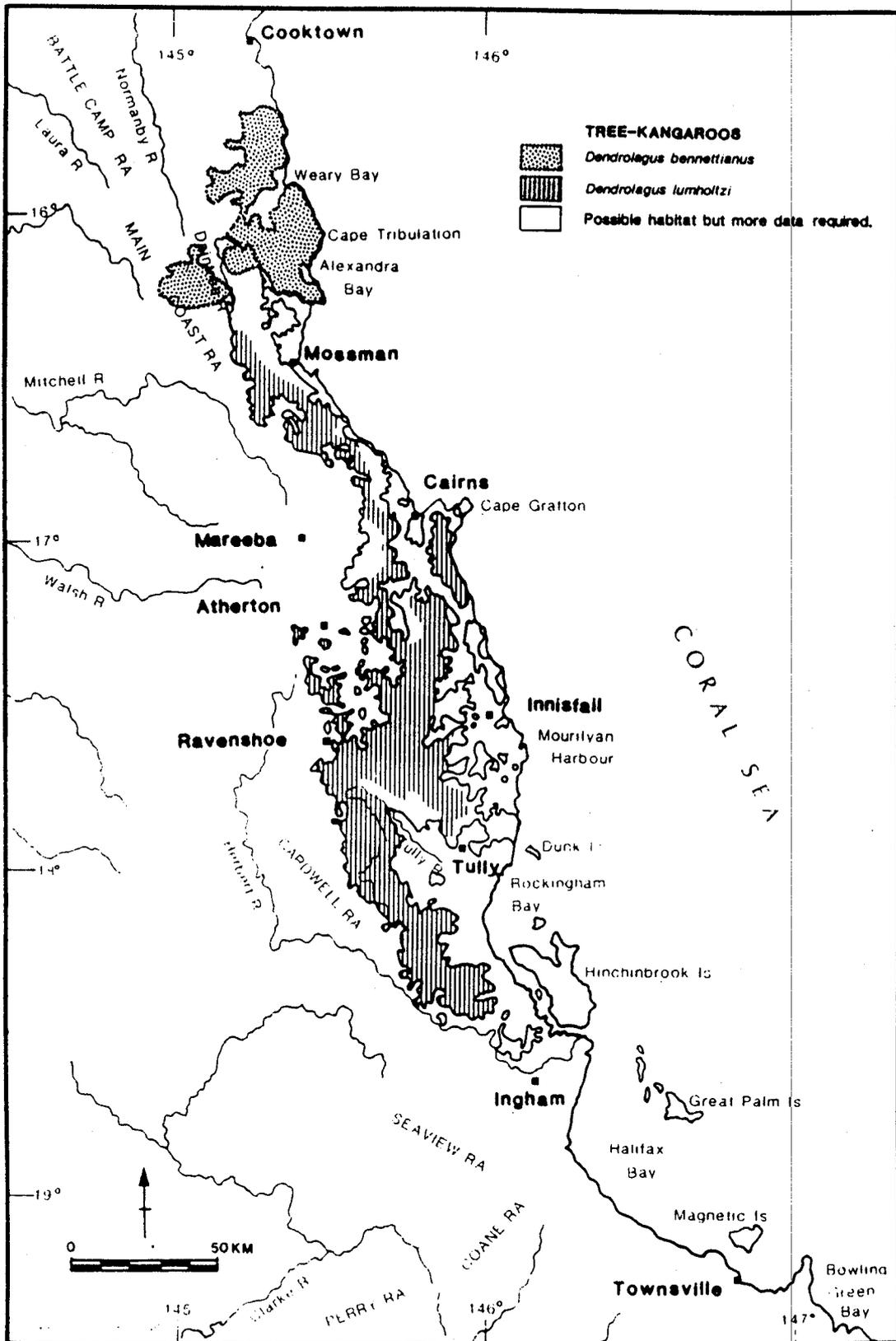
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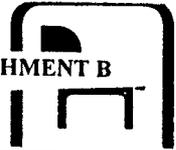
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Prepared by: Australian Heritage Commission 1985, after J.W. Winter *et al* 1984.



Dendrolagus

Species:	<i>Dendrolagus bennettianus</i> de Vis, 1887 (A-102.012.006.001)	<i>Dendrolagus lumholtzi</i> Collet, 1884 (A-102.012.006.004)
Common names:	engl.: Bennett's Tree-Kangaroo Dusky Tree-Kangaroo Tcharibeena	Lumholtz's Tree-Kangaroo Boongary
	esp.: Canguro arboricola de Bennett	Canguro arboricola de Lumholtz
	fr.: Kangourou arboricole de Bennett, dendrolague de Bennett	Kangourou arboricole de Lumholtz, dendrolague de Lumholtz
	de.: Bennett-Baumkänguruh	Lumholtz-Baumkänguruh
	ital.: Dendrolago di Bennett	Dendrolago di Lumholtz
Species:	<i>Dendrolagus inustus</i> Müller, 1840 (A-102.012.006.005)	<i>Dendrolagus ursinus</i> Temminck, 1836 (A-102.012.006.007)
Common names:	engl.: Grizzled Tree-Kangaroo	Black Tree-Kangaroo White-throated Tree-Kangaroo
	esp.: Canguro arboricola gris	Canguro arboricola negro
	fr.: Kangourou arboricole gris, dendrolague gris	Kangourou arboricole noir, dendrolague noir
	de.: Braunes Baumkänguruh	Bärenbaumkänguruh
	ital.: Dendrolago grigio	Dendrolago orsino

Scientific synonyms: none

Characteristics:

Dendrolagus bennettianus

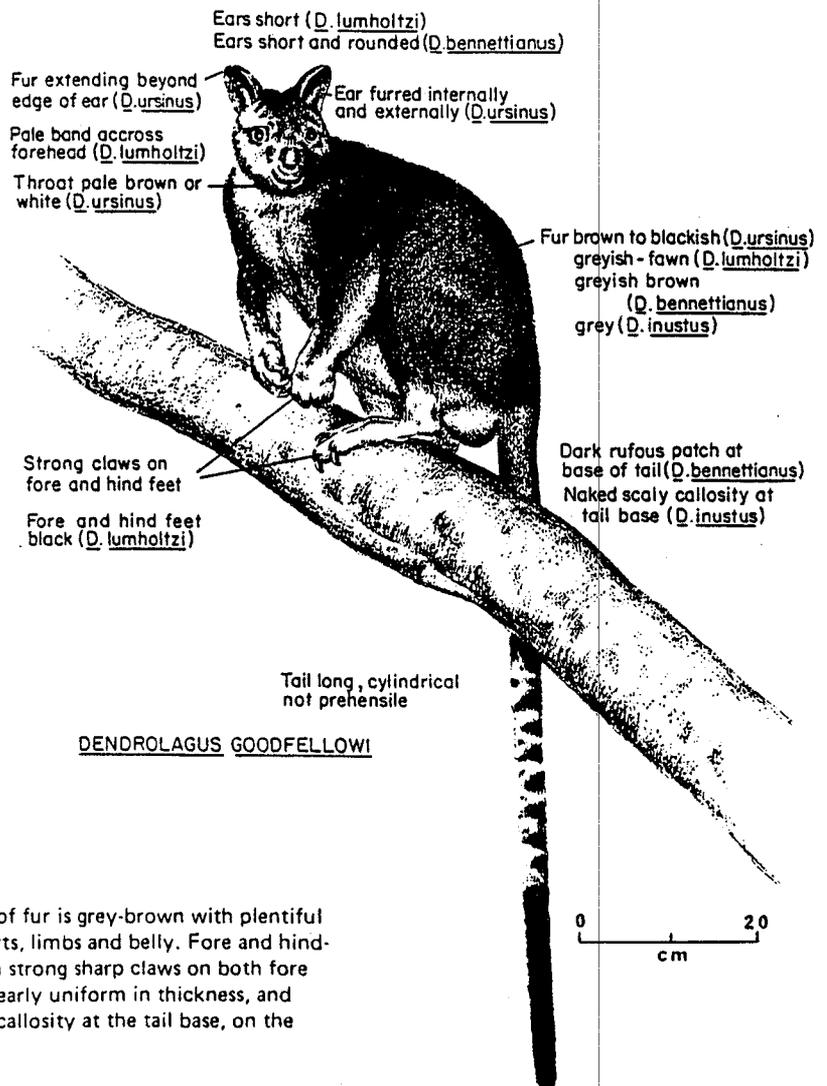
Adult:
Head and body 60–70 cm. Tail 60–70 cm. Ears are short and rounded, and the general colour of the head and body is grey brown. The tail is long and cylindrical, not prehensile, with a rufous patch at its base. Hind feet are broad but short. Forearms powerful. Strong sharp claws on both fore and hind feet.

Dendrolagus lumholtzi

Adult:
Head and body 65 cm. Tail 65 cm. Large stocky build. Snout partly naked, ear short. Face dark, a pale band across forehead above eyes. Back grey-fawn, belly pale yellow-white. Tail long, of uniform diameter throughout and not prehensile. Forefoot black with 5 toes, each with a sharp, strong claw. Hindfoot very short, black and with 4 toes.

Dendrolagus inustus

Adult:
Ears naked internally. General colour of fur is grey-brown with plentiful white tipping on the fur of the foreparts, limbs and belly. Fore and hindlimbs of nearly equal proportions with strong sharp claws on both fore and hind feet. Tail long, well furred, nearly uniform in thickness, and not prehensile. There is a naked scaly callosity at the tail base, on the dorsal surface.



DENDROLAGUS GOODFELLOWI

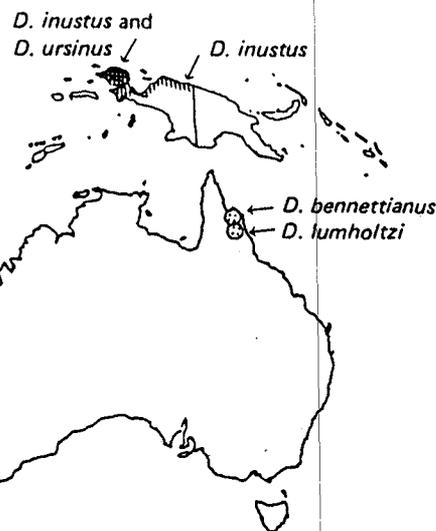
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Dendrolagus ursinus

Adult:

Ears clothed internally with long fur extending beyond the edge of the ear pinna. Internally ear pinna well furred. Pelage dark brown to blackish, with a contrasting pale brown or whitish throat. Fore and hind limbs of nearly equal proportions, with strong sharp claws on both fore and hind feet. Tail long, well furred, nearly uniform in thickness, and not prehensile.

Juveniles: General appearance as for adult.



Distribution: *D. bennettianus* and *lumholtzi*:
Australia, North Queensland
D. inustus and *ursinus*:
Indonesia, Irian Jaya

Population:

Wild populations: *D. bennettianus* and *lumholtzi*: Plentiful, well provided for in reserves, and should be secure.
D. inustus and *ursinus*: Numbers unknown.

Captive populations: *D. bennettianus* and *lumholtzi*: 1 specimen of each species held by the Queensland National Parks and Wildlife Service at Townsville, Qld. No captive breeding.
D. inustus and *ursinus*: 50 to 100 resp. 10 to 20 specimens held in zoos throughout the world. Captive breeding successful.

Trade: None in *D. bennettianus* and *lumholtzi*, no information regarding *D. inustus* and *ursinus*.

Intraspecific variation: none

Similar species: *D. dorianus*. grey-brown, paler on head with dark ears and feet. Ears short and densely furred internally.
D. goodfellowi. Body coloured red, with brown face and mottled brown and yellow tail.

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Text: Australian National Parks and Wildlife Service
Drawings: Drawing by Ella Fry from W.D.L. Ride:
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