

**Translocation Proposal
for the Western Ringtail Possum *Pseudocheirus occidentalis*.**

APPROVED

**Translocation of displaced ringtail possums and rehabilitated derelict ringtail
possums held by wildlife carers in Busselton and Bunbury
to the Lane Poole Reserve, Dwellingup.**

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May 1996

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Translocation Proposal for the Western Ringtail Possum, *Pseudocheirus occidentalis*.

1. Summary

Translocation of the western ringtail possum (*Pseudocheirus occidentalis*) is proposed for ringtails displaced as a result of clearing or habitat modification and for rehabilitated, derelict ringtails held by wildlife carers in Busselton and Bunbury to the Lane Poole Reserve, Dwellingup.

The translocation to Lane Poole Reserve provides the opportunity to achieve positive conservation benefits by extending the geographic range of ringtails and determining whether the species can be translocated into habitat from which it has disappeared in recent times.

The project will use existing baiting areas of Operation Foxglove within the Lane Poole Reserve.

It will result in a threatened species re-establishing in a high use recreation area and will be visible evidence of a positive conservation achievement.

The resulting translocation and monitoring protocols will assist in the long term conservation of the species and assist in the immediate and long term management of derelict possums particularly in the Busselton area.

The project will also enable wildlife carers to be involved in a project which achieves positive conservation benefits.

The proposal complements current western ringtail possum management and research and is consistent with CALM's Western Shield.

2. Proponent

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3. General Overview

3.1 Taxonomy, Distribution and Conservation Status

The taxonomy, distribution and conservation status of the western ringtail possum is addressed in the (draft) Interim Wildlife Management Guidelines (IWMG) and the (draft) Interim Recovery Plan (IRP).

In summary, the distribution of *P. occidentalis* has contracted from what appears to have been a patchy distribution covering the south west of Western Australia from 120km south east of Geraldton to the Nullarbor with the most inland recording from Tutanning Nature Reserve (Shortridge 1909; Sampson 1971; Christensen *et al.* 1985; How *et al.* 1987; Baynes 1987; A. Baynes pers. comm.; A. Main pers. comm.). The records of *P. occidentalis* from the extremes of this former distribution (Geraldton and the Nullarbor) are from surface cave deposits.

Its distribution encompassed a variety of vegetation types from coastal peppermint (*Agonis flexuosa*) to eucalypt associations of jarrah/marri/wandoo (*Eucalyptus marginata*/*E. calophylla*/*E. wandoo*).

P. occidentalis is now almost exclusively restricted to coastal peppermint woodland and coastal peppermint/tuart associations from the Australind/Eaton area to Two Peoples Bay. The only known extant inland populations are in the lower Collie River valley, Perup Nature Reserve and Kingston Forest Block near Manjimup. Perup and Kingston are the only known sites where *P. occidentalis* occurs in the absence of peppermint. It is thought to have become locally extinct at all other former inland locations.

Pseudocheirus occidentalis was included on the W.A. list of declared threatened fauna in 1983 (Section 14(2)(ba) Western Australian Wildlife Conservation Act). It is listed as an

endangered sub-species (*P. peregrinus occidentalis*) in Schedule 1 of the Federal Endangered Species Protection Act 1992 and is included on the ANZECC list of threatened sub species. It is listed as vulnerable in the Action Plan for Australian Marsupials and Monotremes (Maxwell *et al.* 1996).

The known existing populations reflect a significant contraction of the former, wider, patchy distribution of *P. occidentalis*. Continued contraction of range and further fragmentation of existing populations should be seen as a significant threat to the long term conservation of the species.

Very few populations exist within conservation estate. The value of individual, isolated populations (in terms of their importance to the long term conservation of the species) is unclear.

3.2 Background to Management: Management of rehabilitated "derelict" ringtails

The term "derelict" has been used to describe injured, orphaned and nuisance *P. occidentalis* in the Busselton and Albany areas of Western Australia where the species is locally common. Derelict possums within these areas have usually been passed on to wildlife carers for rehabilitation and release.

The background detailing management of derelict rehabilitated ringtails is detailed in the (draft) IWMG and the approved TP for translocation to Yalgorup National Park, Leschenault Peninsula Conservation Park and Karakamia Sanctuary.

In summary, rehabilitated derelict ringtails have been successfully released at Leschenault Peninsula Conservation Park. The recent translocations of ringtail possums to Yalgorup National Park and Karakamia Sanctuary indicate that rehabilitated ringtails may also be successfully released in non-peppermint dominated habitat.

4. The Translocation

4.1 Specific Aims

The translocation has the following aims:

- (i) to determine whether, in the presence of fox control, displaced and rehabilitated derelict ringtail possums can be successfully translocated to non-peppermint habitat within the northern jarrah forest; and
- (ii) to establish a population of a threatened species in secure conservation estate and in doing so, in a high use recreation area, enhance community awareness and understanding of native fauna; and
- (iii) involve wildlife carers in a project that will achieve positive conservation results.

4.2 The Source Population, Numbers Involved

The source of the ringtails is from possums displaced as a result of clearing or habitat modification and/or rehabilitated, derelict possums held by wildlife carers in Busselton and Bunbury.

The number of animals will be determined by the availability from wildlife carers. An initial population of 10-15 is envisaged with the possibility of later releases.

4.3 The Release Sites

The exact location of the release site is subject to further intensive site investigation by SID and Dwellingup District staff.

Criteria for site selection include ensuring that the site:

- is within the current 6 baitings per area of Operation Foxglove;
- is within high use recreation areas of Lane Poole Reserve;
- is low in the landform; and
- provides suitable tree-hollow/nest sites.

4.4 Conservation Genetics

If translocation of ringtails is adopted as a management and/or recovery strategy, it will be essential to determine the suitability of different source populations for translocation, particularly to inland, wheatbelt sites from which ringtails have become locally extinct.

DNA techniques are currently being trialled for their suitability for determining genetic variability within and between populations.

4.5 Release and Monitoring Schedule

The first release is proposed for late July 1996. For the period mid 1996 to mid 1997 monitoring (through use of mortality radio telemetry), will be undertaken by an honours student (Curtin University).

Subject to the fate of the translocated population and refinement of monitoring protocols, spotlight monitoring will be undertaken from mid 1997 onwards by District staff in accordance with District monitoring programs.

5. Funding

The TP is subject to a funding submitted to the Director, Nature conservation for the period 1996-97 and to Dwellingup District fauna conservation program funding beyond June 1997.

Baiting costs are met by Operation Foxglove.

Additional funding may be sought for information brochures.

6. Endorsement/Approval

Approved by:

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Head of Group, Bio Conservation Group,

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Date

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Director, WATSCU

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Date

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Director, Nature Conservation

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Date

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