## 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 Statement
- 1. Taxonomy
- 1.1Class Aves
- 1.20rder Gruiformes (although the inclusion of the Pedionomidae within Gruiformes is challenged by Olsen & Steadman (1981), who argue that the family is more closely aligned with the Order Charadriiformes).
- 1.3FamilyPedionomidae
- 1.4Genus and species Pedionomus torquatus Gould (1840)
- 1.5Scientific synonyms*P. microurus* Gould (1842)
- 1.6Common namesPlains wanderer
- 1.7Code numbers
- 2. Biological Parameters
- 2.1Distribution

Endemic to Australia.

- *Pedionomus torquatus* occurs only in eastern Australia, and mainly in the south-east. Areas where the species was formerly common and is now rare include south-western Victoria, south-eastern South Australia and eastern New South Wales. Thee current stronghold for the species is the Riverina district of south-western New South Wales. Other areas of importance include north-central Victoria and south-western Queensland. Viable populations of plains-wanderers are not known to occur in any reserve (Baker-Gabb, 1993).
- An indicatative distribution map, based on records of occurrence of *P. torquatus* (derived from data held by ERIN) is at Attachment A.
- 2.2Habitat availability
- Areas preferred by *P. torquatus* are usually where the top-soil has been eroded to expose a red clay subsoil which does not support dense pasture growth under any seasonal conditions. Such areas contain about 50 percent bare ground with fallen litter making up a further ten per cent. The bulk (94%) of the standing vegetation is below 5 cm in height (Baker-Gabb, 1993). In captivity and in the wild, *P. torquatus* avoids bare or overgrazed areas. Sparse vegetation is essential if plains-wanderers

are to see and avoid ground predators and to forage for fallen seeds and ground-dwelling insects (Baker-Gabb *et al*, 1990).

- Areas of habitat suitable for *P. torquatus* can be indicated by the presence of more conspicuous shorebirds such as banded lapwings *Vanellus tricolor* in the Riverina and inland dotterels *Peltohyas australis* in south-west Queensland. However, when overgrazing temporarily eliminates *P. torquatus* from an area, these other two species may remain. Such overgrazing is widespread during droughts. On the other hand, in higher rainfall coastal areas or unusually wet seasons inland, sparse native pastures may become dominated by introduced grasses and weeds which grow tall and dense, thereby rendering them unsuitable for *P. torquatus* and other shorebirds (Baker-Gabb, 1993).
- In New South Wales, suitable habitat covers one to three percent of 50,000 sq. km of grassland surveyed in the Riverina, the most important area for the species (Baker-Gabb, 1993). The grassland community of the northern plains, together with that of the western plains in the south, were formerly the stronghold of *P. torquatus* in Victoria, and have been recorded as two of the three remaining strongholds of the species in Australia. Both of these grassland communities have been so seriously degraded that they are now listed under the Victorian *Flora and Fauna Guarantee Act* 1988 (Maher & Baker-Gabb, 1993).
- 2.3Population status

Vulnerable (IUCN, 1996). Also listed as Vulnerable under the Endangered Species Protection Act 1992.

- An accurate total estimate of population abundance for the species is difficult to obtain, but on the basis of records of *P. torquatus* in the Riverina and elsewhere over 25 years (1962-87), there are possibly fewer than 11,000 birds in Australia. In drought years when overgrazing of habitat occurs, the population may be halved. In the Riverina there could be up to 5,500 *P. torquatus*; there are probably fewer than 1,000 birds left in Victoria (Baker-Gabb, 1993).
- A survey of plains-wanderers on the Northern Plains of Victoria was conducted from January to May 1992. The area surveyed extended from Echuca in the east to beyond Horsham in the west, and from Swan Hill south to the foothills of the great Dividing Range. Only one large (c. 1400 ha) property and a handful of scattered paddocks now remain with native grassland suitable for Plains-wanderers on the Northern Plains. Of the 30 sites surveyed, 23 revealed a total of 60 Plains-wanderers. The sites were situated in five districts with one of those districts, Mitiamo, containing 63% of sites and 72% of Plains-wanderers recorded. One property, comprising four sites near Terrick Terrick in the Mitiamo district contained 28% of the total Plains-wanderers recorded and the only confirmed breeding records (Maher & Baker-Gabb, 1993).

Comparable information is not available for the other States in which *P. torquatus* occurs.

- 2.4Population trends
- Plains-wanderers were formerly widespread in the lowland native grasslands of south-eastern Australia. The species has declined greatly in numbers and distribution since European settlement. As early as 1886, overgrazing by sheep had temporarily eliminated *P. torquatus* from part of the northern Riverina, New South Wales. Soon afterwards, it was noted in southern Victoria that *P. torquatus* were seen when seasonal conditions were good, but disappeared when overgrazing occurred during droughts. Cultivation and conversion of native grasslands to introduced dense pastures resulted in permanent local extinctions in several parts of coastal and subcoastal south-west Victoria earlier this century. This trend has continued to the point where the species is now listed as vulnerable Australia-wide (Baker-Gabb, 1993).
- 2.5Geographic trends
- *P. torquatus* has undergone a marked contraction in distribution since European settlement. Areas where it was formerly common and now seems rare include the Keilor-Werribee district and western plains of southern Victoria; the Adelaide plains, Yorke and Eyre Peninsulas of South Australia; and the slopes and tablelands of eastern New South Wales (Baker-Gabb et al, 1990).

- 2.6Role of the species in its ecosystem
- *P. torquatus* is a low order omnivore of open native grassland communities. It is diurnal and crepuscular, feeding on seeds, leaves, insects and spiders (Marchant & Higgins, 1993).

#### 2.7Threats

- Harrington *et al* (cited by Baker Gabb et al, 1990) found no good evidence for the opinion that introduced predators have a major impact on *P. torquatus* even though their remains have been found in the faeces of the European fox. However, there are probably fewer introduced predators in the Riverina now due to heavy annual culling of foxes and cats and the decline of their major prey, the rabbit. There is also no direct evidence to indicate that quail shooters or pesticides are limiting Plains-wanderer numbers and distribution, despite the fact that several specimens of Plains-wanderers in museums were accidentally shot by hunters and the pesticide fenitrothion is applied by the Australian Plague Locust Commission at rates that may kill birds. The effects of this pesticide on the avifauna of grasslands warrant further investigation (Baker-Gabb et al, 1990).
- Cultivation and the improvement of pasture are the primary threats to *P. torquatus*. Overgrazing, particularly during times of drought, also has a significant impact (Garnett, 1992).
- The native grasslands upon which the species appears dependent mostly exist on private and leasehold pastoral land, where there appears to be a conflict between the habitat requirements of the species and current land management practices required to derive an optimal financial return (Maher & Baker-Gabb, 1993).
- If native grasslands containing Plains-wanderers are cultivated and resown to 'improved' dense pasture, then Plains-wanderers can become locally extinct, as was found in several instances in south-western Victoria earlier this century. Overgrazing seemed to have eliminated Plains-wanderers from part of the northern Riverina by 1886. It is possible that the incursion of introduced, densely-growing pasture grasses into sparse native grasslands has also reduced areas suitable for Plains-wanderers. However, this cannot be proven given that the structure of the original vegetation of areas such as the Riverina is largely unknown (Baker-Gabb et al, 1990).
- Similarly, in southern Victoria, Plains-wanderers were seen when seasonal conditions were good but disappeared when the area was overgrazed during droughts. Displacement of Plains-wanderers from overgrazed native grasslands can be widespread during droughts or local and dependent on stocking rates during prolonged dry spells. Rabbits and domestic stock can overgraze grasslands favoured by plains-wanderers (Baker-Gabb et al, 1990).
- It is likely that in Victoria and south-eastern South Australia, most of the remaining tracts of native grassland will be converted to dense introduced pasture unless an appropriate rural nature conservation program is implemented (Baker-Gabb, 1993).
- Several factors are favourable for the conservation of the species: *P. torquatus* has a diverse diet of seeds and insects; an ability to recover quickly from drought; can breed in its first year; regularly raise broods of 2-4 chicks to independence in spring and breed again if summer rains fall; and it lives for eight or more years in captivity (Baker-Gabb et al, 1990).
- 3. Utilization and Trade
- 3.1National utilization
- No commercial use.
- Adelaide zoo has a small colony of *P. torquatus*, consisting of 4 birds (1.1.2) as of 1 January 1995 (ARAZPA, 1995).

3.2Legal international trade

- One permit was issued in 1995 for the export from Australia of two blood samples of *P. torquatus*. The samples were used in a study of genetic variability in shorebird populations. No other specimen has entered international trade in the last ten years (WCMC data).
- 3.3Illegal trade
- No illegal trade known or likely.
- 3.4Actual or potential trade impacts

None known or likely.

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

None.

- 4. Conservation and Management
- 4.1Legal status
- 4.1.1National
- This species is listed as Vulnerable under the Commonwealth *Endangered Species Protection Act 1992* and is also listed under Schedule 2 of the *Wildlife Protection (Regulation of Imports and Exports) Act* 1982.
- The *Endangered Species Protection Act 1992*, contains lists of species considered endangered or vulnerable or those that are presumed extinct. Once a species is listed under this act, the Commonwealth must prepare and implement a recovery plan for that species. The lists are based on those agreed by the Australian and New Zealand Environment and Conservation Council (ANZECC) through its Networks on Endangered Fauna and Flora.
- The Wildlife Protection (Regulation of Imports and Exports) Act 1982 is the legislative basis for conservation-oriented controls on the export and import of wildlife and wildlife products. The Act controls the export of Australian native animals and plants and fulfils Australian legislative requirements as a Party to CITES.
- 4.1.2International
- P. torquatus is currently listed on Appendix II to CITES.
- 4.2Species management
- 4.2.1Population monitoring

There is no ongoing monitoring program for this species.

4.2.2Habitat conservation

The Northern Plains area contains numerous small public reserves of varying status and condition but the current reserves fall a long way short of being able to conserve the Plains-wanderer in Victoria. Victorian Department of Conservation and Natural Resources (CNR) staff responsible for these reserves consider that, while they may not at present contain habitat suitable for the Plains-wanderer, appropriate management may see their suitability enhanced, to become useful refuges. They might also be used to test a variety of management techniques for enhancement of habitat value, or for seed collection (Maher & Baker-Gabb, 1993).

Comparable information is not available for the other States in which *P. torquatus* occurs.

- 4.2.3Management measures
- If managed appropriately, Plains-wanderers are sedentary, obtaining all of their feeding and breeding requirements from small patches of sparse native grassland. Recent surveys have shown a strong positive correlation between areas with the highest numbers of Plains-wanderers and threatened grassland plants. The whole of Victoria's northern plains have been surveyed for Plains-wanderers and a rural nature conservation program is being implemented by Department of Conservation and Natural Resources extension officers, thereby providing a model for other range States to adopt (Baker-Gabb, 1993).
- Inland populations, including the Riverina and South-west Queensland, should remain relatively stable under present management practices, punctuated with declines in population numbers coinciding with droughts when severe overgrazing is widespread and few refuges are available to them. In this situation, the designation of carefully chosen refuge areas or reserves is part of an appropriate management strategy (Baker-Gabb, 1993).
- 4.3Control measures
- 4.3.1 International trade
- As indicated above, export of the species, or products derived from it, is subject to the provisions of the *Wildlife Protection (Regulation of Imports and Exports) Act 1982.* This Act is enforced by the Australian Customs Service in collaboration with the Australian Federal Police and the Australian Nature Conservation Agency.
- 4.3.2Domestic measures
- The organisations with principal responsibility for the management of this species are the nature conservation agencies of each of the four States in which it occurs. In each jurisdiction, the species is protected by legislation and may only be collected under permit.

### 5. Information on Similar Species

The adult female is unmistakable - it can be distinguished from quail and button-quail by the diagnostic pied collar and rufous gorget. Adult males and juveniles can be confused with little button-quails (*Turnix velox*) and red-chested button-quails (*T. pyrrothorax*), but can be distinguished by: stout greyish bills; much shorter fleshy or pinkish legs, without hindtoe; longer, bolder stripes on upperparts, arranged in long parallel lines; and more restricted markings on upperparts (Marchant & Higgins, 1993).

## 6. Other Comments

Consultation with other range States is not applicable as the species is endemic to Australia.

#### 7. Additional Remarks

As trade is not a threat to *P. torquatus*, the maintenance of this species on Appendix II of CITES does not benefit the species over current national protection and conservation measures.

#### 8.References

- ARAZPA (1995) Australasian Species Management Program Regional Census and Plan. 5th Edition. Australasian Regional Association of Zoological Parks & Aquaria.
- Baker-Gabb, D. (1993) *Managing Native Grasslands to Maintain Biodiversity and Conserve the Plains-wanderer* (RAOU Conservation Statement No. 8), Supplement to *Wingspan* (10)
- Baker-Gabb, D.J., J.S. Benshemesh, & P.N. Maher (1990) A Revision of the Distribution, Status and Management of the Plains-wanderer *Pedionomus torquatus*. *Emu* **90**, 161-168.
- Baker-Gabb, D.J., and Maher, P.N. (1993) *Surveys and conservation of the Plains-wanderer in northern Victoria.* Technical Report Series No. 131, Arthur Rylah Institute for Environmental Research.
- Garnett, S. (1992) *Threatened and Extinct Birds of Australia*. RAOU & Australian National Parks and Wildlife Service. RAOU report No. 82.
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- IUCN (1996) 1996 IUCN Red List of Threatened Animals. IUCN, Gland, Switzerland.
- Marchant, S & P.J. Higgins (Eds) (1993) Handbook of Australian, New Zealand and Antarctic Birds. Vol. 2: Raptors to Lapwings. Oxford University Press, Melbourne.
- Olsen, S.L. & D.W. Steadman (1981) The relationships of the Pedionomidae (Aves: Charadriiformes). *Smithsonian Contr. Zool.* **337**: 1-25.



Map of the occurrence of Pedionomus torquatus

# Locations of Pedionomus torquatus in Australia





Red points mark the occurrences of queried species. The base map is based on spatial data available from the Australian Surveying and Land Information Group (<u>AUSLIG</u>).