

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Apteryx* spp. in Appendix I.

B. PROPONENT

New Zealand.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Aves
12. Order: Opterigiformes
13. Family: Apterigiidae
14. Genus: *Apteryx*
- Species: *A. australis*
A. haastii
A. owenii
15. Common Names: English: brown kiwi
great spotted kiwi
little spotted kiwi
French:
Spanish:
16. Code Numbers:

2. Biological Data

21. Distribution: The genus currently comprises three species. The brown kiwi is in the North, South and Stewart Islands as well as some offshore islands, the great spotted kiwi is confined to the North-west South Island, and the little spotted kiwi confined to a small number of predator-free offshore islands (Butler & McLennan 1990, Ornithological Society of New Zealand 1990). Currently, three subspecies of brown kiwi are recognized (OSNZ 1990): *A. australis mantelli* in the North Island, *A. australis australis* in the South Island and *A. australis lawryi* on Stewart Island. Recent and as yet unpublished genetic research (Baker *et al.* in prep.) indicates that the brown kiwi should be split into two distinct species: "brown kiwi", with distinct varieties (maybe even species) in the North Island and near Okarito, South Island; and, "tokoeka" (Maori name for southern populations of brown kiwi), with two distinct varieties, one near Haast and one in Fiordland and Stewart Island (Heather & Robertson in prep.).

Subfossil and Maori midden remains, and historical records indicate that all three species of kiwi were far more widely spread than their current distribution. This century, the range of all species has contracted markedly and many populations have become fragmented and isolated and others have become locally extinct (Heather & Robertson in prep.). The little spotted kiwi is now believed to be extinct on the mainland of New Zealand, but survives only because populations were established on predator-free offshore islands.

22. Population: All three species have become considerably rarer this century, largely due to habitat modifications and destruction early this century, and more especially through the continued severe impact of introduced predators. The little spotted kiwi now has a stable population of about 1100 individuals, about 1000 of which are on Kapiti Island. Transfers of birds from Kapiti Island to other predator-free islands within the past 15 years means that the total population may be increasing slowly (e.g. Robertson *et al.* 1993), but the species will remain vulnerable to the arrival of predators or serious fire on Kapiti Island. Great spotted kiwi number less than 10,000 birds (Heather & Robertson in prep), but their distribution and abundance is patchy, numbers are apparently stable in some parts of their range, but declining on the edges of their range where they are more vulnerable to predation (McLennan & McCann 1992). Brown Kiwi are still common and widespread (Heather & Robertson in prep.), but many populations are in serious decline (McLennan & Butler 1990), even in their stronghold in Northland (Miller & Pierce in prep.), and some of the distinct varieties identified by recent genetic research are in a precarious state; for example the population at Okarito numbers 60-100 birds, and of five pairs monitored over the last two breeding seasons, no young have been raised because of predation by introduced mammals (Lyall & Read 1994).
23. Habitat: The main impact of habitat changes was between 1840 and 1960, when about 80% of lowland (<300 m asl) forest was cleared in New Zealand. The fragmentation and isolation of kiwi populations has contributed to the decline of kiwi (McLennan & Butler 1990), but the main impact today is from introduced predators, especially dogs, stoats, ferrets, possums, pigs and perhaps feral cats (McLennan & Butler 1990, Miller & Pierce in prep.).

3. Trade Data

31. National Utilization: All kiwi are strictly protected and specimens may only be held and bred under licence. Brown kiwi are held in 16 zoos and wildlife centres in New Zealand. There is a demand for display and breeding birds and a total of 17 birds were transferred between centres during 1993. There is a co-ordinated approach to captive management and birds are moved between centres in order to maximize breeding potential and to ensure the genetic purity of the species and subspecies. Currently, however, the death rate in captivity exceeds the birth rate, though this situation is reversed in some years. Twenty six eggs were hatched in captivity during 1993 (Johnson 1994).
32. Legal International Trade: Twelve institutions outside New Zealand are recorded as legitimately holding brown kiwi, though trade between overseas institutions is not well documented in New Zealand (Johnson 1994).
33. Illegal Trade: There is no documented illegal trade. However, kiwi can be held in captivity and transported relatively easily. The continuing reduction in population and the likely re-description of subspecies or species means that rarity value will increase markedly. Additionally, kiwi occur in remote areas from which it would be relatively easy to uplift them undetected.

34. Potential Trade Threats

341. Live Specimens: This is the most likely trade threat.

342. Parts and Derivatives: There is unlikely to be a high risk of this. However, kiwi feather cloaks (Kahukiwi) are garments which denote great mana and prestige for the owners and wearers, and are used in ceremonial occasions by Maori. The ownership and movement out of New Zealand of such items are regulated under law (Wildlife Act 1953).

4. Protection Status

41. National: All species of kiwi are protected under the Wildlife Act 1953.

42. International: No specific protection applies, though all species protected under the Wildlife Act are prohibited from export except by permit for specific purposes.

43. Additional Protection Needs: All kiwi species are the subject of a comprehensive, nationally co-ordinated recovery programme which involves securing protected habitat, predator eradication and control, population assessment, genetic assessment, the establishment of new island populations, captive management and public awareness programmes (Butler and McLennan 1990).

5. Information on Similar Species

The different kiwi species, particularly the great and little spotted kiwis, and the to be described species and subspecies of brown kiwi, are morphologically very similar and only reliably separable by detailed measurements and genetic techniques. Therefore it is necessary to list all kiwi taxa in Appendix I, even though some of the subspecies are not critically endangered at this time.

6. Comments from Countries of Origin

NA.

7. Additional Remarks

As the national emblem of New Zealand, kiwi have a particular significance for both Maori and non-Maori components of society. In general they are clearly becoming significantly rarer and are the subject of a comprehensive recovery programme aimed at securing populations of each species and subspecies. While trade is not significant at this stage, the NZ Government is sufficiently concerned about the potential for illegal trade to believe that listing in Appendix I is warranted.

8. References

Baker, A.J., Daugherty, C.H., Colbourne, R. In prep. Mammal-like Population Structure and Cryptic Species in the Flightless Brown Kiwis of New Zealand. Submitted to Proceedings of the National Academy of Sciences.

Butler, D. and McLennan, J. 1990. Kiwi Recovery Plan. Threatened Species Recovery Plan 2. NZ Department of Conservation. Wellington.

Heather, B.D. and Robertson, H.A. In prep. Field Guide to the Birds of New Zealand.

- Johnson, T. 1994. Species Co-ordinator's Report. Kiwi Captive Breeding Group. Unpublished Report to NZ Department of Conservation. Wellington.
- McLennan, J.A. and McCann, A.J. 1992. Ecology of Great Spotted Kiwi. DSIR Land Resources Contract Report 91/48 to NZ Department of Conservation. Wellington.
- Miller, P. and Pierce, R.J. In prep. Distribution and Abundance of North Island Brown Kiwi in Northland.
- Ornithological Society of New Zealand. 1990. Checklist of the Birds of New Zealand and the Ross Dependency, Antarctica. 3rd Edition. Random Century in association with OSNZ Inc. Auckland.
- Robertson, H.A., Colbourne, R.M. and Nieuwland, F. 1993. Survival of Little Spotted Kiwi and Other Forest Birds Exposed to Brodifacoum Rat Poison on Red Mercury Island. Notornis. 40: 253-262.