AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

A. PROPOSAL

Transfer of Ornithoptera alexandrae from Appendix II to Appendix I.

B. PROPONENT

The United Kingdom of Great Britain and Northern Ireland.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class:

Insecta

12. Order:

Lepidoptera

13. Family:

Papilionidae

14. Species:

Ornithoptera alexandrae

15. Common Names:

English: Queen Alexandra's Birdwing

French: Spanish:

16. Code Numbers:

None available

2. Biological Data

- 21. Distribution: Queen Alexandra's birdwing is a species endemic to Papua New Guinea. Its centre of distribution is in the Popondetta Plain in Northern Province, Papua New Guinea where it has been recorded from only nine 10 km grid squares, but it is also known from one other locality in the same general area where it occurs as a separate population at a higher altitude (3, 14). The distribution of the species is believed to be very patchy as a result of fragmentation of the habitat caused by clearances for food gardens, tropical agricultural products [particularly cocoa, rubber and oil palm (1)], war-time airstrips, and an eruption of Mt Lamington which devastated a large area of habitat in 1951 (3).
- 22. <u>Population:</u> No details known. The species is listed as endangered in the IUCN Red Data Book on Threatened Butterflies of the World (3).
- Habitat: The species occurs in primary and secondary rain forest developed on the volcanic ash soils of the Popondetta Plain up to an altitude of 400 m. At its other locality it occurs in secondary hill forest developed on clay soils at an altitude of between 550-800 m (7, 12, 13). The fecundity of the females is low; it has been calculated that a female may only produce about 240 eggs in her lifetime (12). The unusually large eggs are laid on a species of vine Aristolochia dielsiana, the larval food plant, often in the upper canopy. The adult butterflies are strong fliers but appear to confine themselves to their home ranges and this inhibits colonisation of other available habitat (3).

3. Trade Data

31. <u>National Utilization</u>: None. The species is protected from collection in Papua New Guinea, its only country of origin (6).

32. Legal International Trade:

- 321. General: The trade in butterflies worldwide is very considerable, running into tens of millions of dollars annually, although the precise figure is disputed (8, 9, 11). The number of commercial dealers has risen dramatically over the last 30 years (10). The bulk of this trade is in the use of butterflies for ornamental purposes but there is also a substantial low volume trade supplying high value dead specimens to scientists, museums and collectors. The price of these specimens tends to reflect their rarity, size, beauty, the difficulty of capture and general state.
- 322. Specific: Queen Alexandra's birdwing is the largest butterfly in the world and also an attractive species. It is greatly prized by collectors and is one of the world's most valuable species of butterflies. In 1979 it was estimated that fine specimens were worth up to US\$ 2,000 (2, 16) each and recently a male specimen was advertised for US\$ 2,850 (15). Trade is in papered and mounted specimens. Because the species is protected in Papua New Guinea only trade in old specimens is legal. CITES records for 1981-84 record 4 specimens in international trade.
- 33. Illegal Trade: Some illegal trade has undoubtedly occurred since Queen Alexandra's birdwing received protection in 1968. Until recently a smuggler was reputed to be receiving as much as US\$ 800 per specimen (8). The law is being enforced by the Papua New Guinea authorities, with the result that nationals have been fined and expatriates deported on several occasions (8).
- Potential Trade Threats: Queen Alexandra's birdwing is the largest and one of the rarest species of butterflies in the world and, additionally, is an attractive species. It is highly regarded by collectors and is in great demand by them throughout the world. In the wild it is now regarded as being an endangered species (3), primarily as a result of habitat destruction, but illegal trade is known to have occurred and any losses through collection and trade are potentially serious for the survival of the species in the wild (3).

4. Protection Status

41. National: Queen Alexandra's birdwing received protection from collecting in 1986 by an addition to the Fauna Protection Ordinance of Papua New Guinea, of 1966 (6). This law has been enforced and convictions obtained. In addition, the Papua New Guinea authorities have established a Wildlife Management Area, comprising some 11,000 ha of grassland and forest, to the North of Popondetta, although it is unclear how effective this will be in the conservation of Queen Alexandra's birdwing. Survey work with a view to further elaborating records of the distribution of this species, and management trials, are also in progress (3).

- 42. International: Queen Alexandra's birdwing has been listed in Appendix II of CITES since 1976.
- 43. Additional Protection Needs: There is a need for further reserve areas to be established within which management will be undertaken specifically for the conservation of this species. It is understood that such measures have already been put in hand by the Papua New Guinea authorities.

5. Information on Similar Species

Elongation of male's wings and double hind band on upper forewing makes it unmistakable. Female resembles female <u>O. priamus</u> but is bigger and with elongated wings (5). The female is the world's largest butterfly (4). Both sexes are illustrated in Collins and Morris (1985) (3), and in D'Abrera (1975) (4).

6. Comments from Countries of Origin

Sought but not yet received.

7. Additional Remarks

None.

8. References

- (1) Anon. 1976. Appraisal of the Popondetta Smallholder Oil Palm Development. Report No 1160, 25 September. Department of Primary Industry, Papua New Guinea.
- (2) Cherfas, J., 1979. How to raise protection money. New Scientist, 6 December.
- (3) Collins, N.M. & M.G. Morris, 1985. Threatened Swallowtail Butterflies of the World. The IUCN Red Data Book. IUCN, Gland, Switzerland and Cambridge, UK. 375 pp, 8 pl.
- (4) D'Abrera, B., 1975. Birdwing Butterflies of the World. Lansdowne Press. Melbourne.
- (5) Dollinger, P. (Ed), 1985. CITES Identification Manual. Vol. 3.

 Secretariat of the Convention on International Trade in
 Endangered Species of Wild Fauna and Flora. Lausanne.

 Switzerland.
- (6) Fauna Protection Ordinance. 1966. No. 19. Independent State of Papua New Guinea.
- (7) Haatjens, H.A. (Ed) 1964. General report on the lands of the Buna-Kokoda Area, Territory of Papua and New Guinea. CSIRO Land Resources. Series No 10, 113 pp.
- (8) Inskipp, T. and S. Wells, 1979. International Trade in Wildlife. Earthscan, London 104 pp.
- (9) Jackman, B., 1976. Bye-bye birdwing. Sunday Times, 12 September.
- (10) Nagano, C.D., 1984. The International Trade in Butterflies. Unpublished manuscript. 27 pp.

- (11) National Research Council, 1983. Butterfly Farming in Papua New Guinea. Managing Tropical Animal Resources Series. National Academy Press, Washington DC.
- (12) Parsons, M.J., 1980. A conservation study of <u>Ornithoptera</u> alexandrae Rothschild (Lepidoptera: Papilionidae). First Report, Wildlife Division, Papua New Guinea. 89pp.
- (13) Parsons, M.J., 1980. A conservation study of Ornithoptera alexandrae Rothschild (Lepidoptera: Papilionidae). Second Report, Wildlife Division, Papua New Guinea. 16pp.
- (14) Parsons, M.J., 1980. A conservation study of Ornithoptera alexandrae Rothschild (Lepidoptera: Papilionidae). Third Report, Wildlife Division, Papua New Guinea. 15pp.
- (15) Richfield, W.B., 1983. Sale Catalogue. P.O. Box 1066. Goleta, California 93116, U.S.A.
- (16) Vietmeyer, N.D., 1979. Butterfly ranching is taking wing in Papua New Guinea. Smithsonian 10(2):119-135.