#### AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

A. PROPOSAL

Inclusion of Bhutanitis spp. in Appendix II.

B. PROPONENT

The United Kingdom of Great Britain and Northern Ireland.

- C. SUPPORTING STATEMENT
  - 1. Taxonomy -

11.	Class:	Insecta			
12.	Order:	Lepidoptera	1		
13.	Family:	Papilionidae			
14.	Species:	Bhutanitis	<u>lidderdalii</u> <u>ludlowi</u> mansfieldi		

15. Common Names: English: Bhutan glory (<u>B. lidderdalii</u>) French: Spanish:

Bhutanitis thaidina

- 16. Code Numbers: None available
- 2. Biological Data
  - 21. Distribution:
    - 211. <u>Bhutanitis lidderdalii</u>: Bhutan, northern India (Assam, Sikkim, Manipur and Nagaland), northern Burma, Thailand and China (Sichuan and Yunnan Provinces) (7). The Thailand population is apparently restricted to northern areas around Chiang Mai (16).
    - 212. <u>Bhutanitis ludlowi</u>: Bhutan, only known from Trashiyangsi Valley (2).
    - 213. <u>Bhutanitis</u> <u>mansfieldi</u>: China (Sichuan and Yunnan Provinces) (2, 24).
    - 214. Bhutanitis thaidina: China (Sichuan, Yunnan and Shaanxi Provinces, and Tibet) (2, 7, 6, 23).
  - 22. <u>Population</u>: Few details known. The IUCN Red Data Book on Threatened Swallowtail Butterflies of the World lists <u>Bhutanitis</u> <u>mansfieldi</u> and <u>B. thaidina</u> as rare and <u>B. ludlowi</u> as insufficiently known (10).

#### 23. Habitat:

- 231. Bhutanitis lidderdalii: Little is known about the habitat of this species. It is reported as occurring at elevations from 1,550 to 2,750 m in Bhutan and from 2,290 to 2,750 m in Manipur (4). The larval foodplant is not known.
- 232. Bhutanitis ludlowi: Very little is known about the habitat of this species. Those specimens which have been obtained were collected at an altitude of 2,300-2,500 m in areas which generally comprise broad-leaved evergreen forest (12, 13). Bhutan is well forested but the resource is being eroded by unregulated grazing, forest fires and utilization of wood and timber (12). The larval foodplant is not known.
- 233. <u>Bhutanitis mansfieldi</u>: Little is known for certain about the habitat of this species which has been collected at an altitude of 2,200 m (24). The terrain of such areas in Yunnan and Sichuan is rugged and mountainous with fertile valleys. The larval foodplant is not known.
- 224. <u>Bhutanitis thaidina</u>: Little is known about the habitat of this species. Its range covers mainly high altitude plateaux over 2,000 m which have a rugged and dissected terrain (10). The larval foodplant is not known.

### 3. Trade Data

- 31. National Utilization: No information.
- 32. Legal International Trade:
  - 321. <u>General</u>: The trade in butterflies worldwide is very considerable, running into tens of millions of dollars annually, although the precise figure is disputed (17, 18, 22). The number of commercial dealers has risen dramatically over the last 30 years (21). 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 their general state.
  - 322. Specific:Although specimens of the genus <u>Bhutanitis</u> rarely appear on the market the fact that their habitat is generally inaccessible tends to result in a high price. For example a pair of <u>B</u>. thaidina from China was advertised in western Europe in 1983 for the equivalent of US\$ 225 (10). It is believed that in China local people collect specimens of <u>B</u>. thaidina which are delivered to Japan in large numbers.

Recently a male specimen was advertised in France for the equivalent of US\$ 50 (8). During the 1980s Japanese entomologists travelled in Yunnan and Sichuan provinces and collected 14 specimens of <u>B. mansfieldii</u> (24). In 1983 a party of Chinese collectors sponsored by Japanese entomologists captured 30 specimens of this species (10). <u>B. lidderdalii</u> is quite commonly traded, the following specimens being advertised in recent years:

Female	US\$	30(15)	(1984)	Male	US\$	23(9)	(1982)
Male?	US\$	9(14)	(1982/3)	Female	US\$	39(9)	(1982)
Male?	US\$	28(19)	(1984)	Male	US\$	15(1)	(1983)
Male?	US\$	22-26(5)	)(1980s?)	Female	US\$	20(1)	(1983)
Male?	US\$	25(3)	(1984)			•	

- 33. <u>Illegal Trade</u>: The nominate subspecies of <u>Bhutanitis</u> <u>lidderdalii</u> is protected in India (20) but little is known about illegal trade.
- 34. Potential Trade Threats: Bhutanitis spp. are too poorly known for environmental threats to be properly documented. The species of this genus are beautiful and the general inaccessibility of the terrain, which limits the availability of specimens, increases their value. The genus includes rare and insufficiently known species, and collecting needs to be monitored in order to ensure that it is undertaken on a sustainable basis.

# 4. Protection Status

- 41. <u>National</u>: The nominate subspecies of <u>Bhutanitis</u> <u>lidderdalii</u> is protected in India (20).
- 42. International: None known.
- 43. Additional Protection Needs: Difficulty in gaining access to the remote areas in which the species of this genus occurs has inhibited survey and conservation is hampered by lack of information. Further survey on range and habitat requirements is needed, and trade needs to be monitored. The establishment of reserve areas would be a desirable habitat protection measure.

## 5. Information on Similar Species

The multiple tails and chequered wing patterns of <u>Bhutanitis</u> species are very distinctive and no confusion with species of other genera should arise. A female <u>B</u>. <u>mansfieldi</u> and a male <u>B</u>. <u>ludlowi</u> are illustrated in Collins and Morris (1985) (10).

6. Comments from Countries of Origin

None at present.

7. Additional Remarks

None.

- 8. References
  - Adam Cotton, 1983. Sale catalogue. 38/1 Soi Saeng Chan, Sukhumvit 40, Bangkok 10110 Thailand.
  - (2) Ackery, P.R., 1975. A guide to the genera and species of Parnassiinae (Lepidoptera: Papilionidae). Bulletin of the British Museum (Natural History). Entomology 31:71-105.

(3) Australasian Butterfly Co., 1984. Sale catalogue. P.O. Box 330, Lane Cove, NSW 2066, Australia. ŋ

- (4) Bain, J.R. and S.R. Humphrey, 1982. A profile of the endangered species of Thailand. Vol 1. Through Birds. Report No 4. Office of Ecological Services. Florida State Museum, Gainsville. 344 pp.
- (5) Berjaya Butterflies, 1980s. Sale catalogue. 4 The Pinfold, Bingham, Notts, NG13 8ER.
- (6) Bouchard, M.E., 1871. Remarques sur la faune de la Principauté thibétaine du Mou-pin. Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences, Paris 72:807-813.
- Bryk, F., 1935. Lepidoptera Parnassiidae pars II (Subfam. Parnassiinae). Tierreich 65:Li + 790 pp, 698 figs.
- (8) Chaminade, A., March 1985 and suppl. March 1986. Sale catalogue. Chemin de la Baou, 83110 Sanary s/Mer, France.
- (9) Chu-Yu News, 1982. Japan.
- (10) Collins, N.M. & M.G. Morris, 1985. Threatened Swallowtail Butterflies of the World. The IUCN Red Data Book. IUCN, Gland, Switzerland and Cambridge, UK. 401 pp, 8 pl.
- (11) Evans, W.H., 1932. The identification of Indian butterflies. Bombay Natural History Society. 2nd ed. revised 454 pp.
- (12) FAO/UNEP, 1981. Tropical Forest Resources Assessment Project. Forest Resources of Tropical Asia. FAO, Rome, 475 pp.
- (13) Gabriel, A.G., 1942. A new species of <u>Bhutanitis</u> (Lep. Papilionidae). Entomologist. 75:189.
- (14) Heinkel, Naturwissensch., 1982/83. Sale catalogue. Lehrmittel Urbanstr. 20, 7410 Reutlingen, FRG.
- (15) Heitzmann, Thierry, 1984, Sale catalogue. 40 rue des Petits Champs, 68120 Pfastatt, France.
- (16) Igarashi, S., 1979. Papilionidae and their early stages. Vol. 1:219 pp, Vol. 2: 102 pp of plates. Kodansha, Tokyo (in Japanese).
- (17) Inskipp, T. and S. Wells, 1979. International Trade in Wildlife. Earthscan, London. 104 pp.
- (18) Jackman, B., 1976. Bye-bye birdwing. Sunday Times, 12 September.
- (19) Leicester Entomological Fair, 1984. Prices communicated to N.M. Collins.
- (20) Ministry of Law and Justice, India, 1972. The Wildlife (Protection) Act, 1972, and Revised List of Schedules to the Wildlife Protection Act, 1972, coming into force from 2 October 1980.

- (21) Nagano, C.D., 1984. The International trade in butterflies. Unpublished manuscript. 27 pp.
- (22) National Research Council, 1983. Butterfly farming in Papua New Guinea. Managing Tropical Animal Resources Series. Academy Press, Washington DC.
- (23) Pen, D., 1936. The Papilionidae of south-western Szechwan. Journal of the West China Border Research Society. 8:153-165.
- (24) Saigusa, T. and C. Lee, 1982. A rare papilionid butterfly <u>Bhutanitis mansfieldi</u> (Riley), its rediscovery, new subspecies and phylogenetic position. Tyo To Ga (Transactions of the Lepidopterists' Society of Japan) 33: 1-24.

Doc. 0737c

đ