

A. PROPOSAL

Inclusion of *Hippocamelus bisulcus* in Appendix I

B. PROPONENT

Federal Republic of Germany

C. SUPPORTING STATEMENT

1. Taxonomy

1.1 Mammalia

1.2 Artiodactyla

1.3 Cervidae

1.4 *Hippocamelus bisulcus* (Molina, 1782)

1.5 Common names: South Andean huemul (English)  
 Südandenhirsch oder Huemul (German)  
*Hippocamelus* (French)  
 Jusnoandijskij guemal (Russian)

2. Biological data

2.1 Distribution: Chile and Argentina where it inhabits the southern part of the Andes chain. Chile: known to occur with certainty only in the Nevados de Chillan area of Nuble Province (approx. 37°S). In Magallanes, a 1973 report mentions it also occurring on some of the large mountainous islands, such as Wellington and Riesco. While field confirmation is lacking, small groups may persist at other sites along the 1,800 km stretch of the Andes between approx. 34° and 52°S, particularly in the Provinces of Colchagua, Linares and continental Chiloe. Argentina: in 1980 definitely recorded only from Santa Cruz and Chubut Provinces. In the former known from the region of Los Glaciares National Park (approx. 49°15'-50°S, 73°W) - in the Pampa del Desierto just north of the park and near Glacier Viedma within the park boundaries. In Chubut there have been recent sightings in the Rio Grande and Lago Menendes areas of Los Alerces N.P. (42°10'-42°20'S, 71°35'-72°10'W). Formerly found from about 35°S through Santa Cruz to the Atlantic Coast. In addition, there are small local populations which live farther away from the border area (i.e. they do not migrate across the national border).

- 2.2 Population: In 1980 the population was estimated at about 2,000 animals or less, subdivided into several small partial populations; most of these are not in contact with each other. Variations in numbers were established for some partial populations; in general, however, a slowly declining trend can be observed.
- 2.3 Habitat: Principally at higher elevations in temperate forests, shrubland and open areas above and below timberline. Although reported from relatively level areas along valleys and in the alpine zone, evidence suggests it has always inhabited areas in proximity to rugged steppe topography.
- 2.4 Migrations: Regular migrations between winter quarters in valleys and summer quarters in the mountains; only part of these migration routes regularly lead across the national boundary. The animals mostly move in groups.
3. Threat data
- 3.1 Direct threat to the population: Quantitative losses are caused by poachers and wild-running dogs. The latter in particular affect newborn animals.
- 3.2 Habitat destruction: Habitat changes caused by fire, often to improve accessibility for domestic stock, pose a serious threat. Native vegetation (especially lenga) is destroyed leading to soil erosion and a more arid environment (11,12). In Aysen Province extensive areas of forest were burnt in the 1930s during initial colonization and natural reforestation has been severely retarded because of widespread soil erosion.
- 3.3 Indirect threat: The threat from livestock (principally free-ranging cows, goats, sheep and horses) includes competition for forage and alteration of vegetation and soils (in post-burn areas, domestic stock may retard the recovery of vegetation and accelerate soil erosion) as well as actual displacement of Huemuls from preferred localities. Huemuls are susceptible to food-and-mouth

disease, coccidiosis, nematodes of strongyloida, and tapeworm (Moniezia), all of which are transmitted by domestic bovids. Food-and-mouth is said to be present on the Argentinian side of the border with Nuble and could easily re-enter Chile. Many other domestic livestock diseases (such as anthrax, foot rot and contagious ecthyma) may infect them, and at Aysen autopsied Huemuls had the bladderworm Cysticerous tenuicollis which can weaken or kill and is spread by faecal contamination of the environment by dogs.

3.4 Threat especially connected with migrations: It is in particular the diseases mentioned under 3.3 which can be spread by migrations to other (still healthy) populations of the species.

#### 4. Protection status and needs

4.1 National protection status: Legally protected in both countries but enforcement generally inadequate. A conservation programme was begun in Chile in 1975, and in 1980 the Argentine National Parks Service was said to be seriously considering initiating one.

4.2 International protection status: Listed in Appendix I of the Washington Convention.

4.3 Additional protection needs: Effective enforcement of the laws already passed in the two countries. Furthermore, a proposal developed by Chile for carrying out research into, and conserving the species should be realized: 1) Identification of surviving Huemul populations of significant size, evaluation of their habitat requirements (as was done at Nevados de Chillan), and development of administrative programmes to protect them. 2) Establishment of Huemul/Ecosystem reserves along northern, central and southern portions of the deer's former range. 3) Creation of national and regional Huemul conservation teams and local public involvement groups.

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5. Range states

Argentina, Chile

6. Comments of range states

None

7. Additional remarks

The species is listed in the IUCN Red Data Book (1982) as being "endangered".

8. References

Grzimek, B. et al. (1969): Grzimek's Tierleben, Vol. 13.  
- Zürich (Kindler) - see pages 232-234

Jungius, H. (1976): Deer - International Programme for  
Conservation of threatened species (Project 960).  
- In: WWF-Yearbook 1975-76: 201-217

Thornback, J. & M. Jenkins (1982): The IUCN Mammal Red  
Data Book, Part 1. - Gland, Cambridge (IUCN, WWF &  
UNEP) - see pages 477-481