

PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE CONVENTION ON
THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

A. PROPOSAL: Listing of *Cephalorhynchus eutropia* (Gray 1846) in Appendix II of the CMS

B. PROPOSED BY: Government of the Republic of Chile

C. JUSTIFICATION

1. Taxonomy

- 1.1 Class: Mammalia
1.2 Order: Cetacea
1.3 Family: Delphinidae
1.4 Genus/species: *Cephalorhynchus eutropia* (Gray 1846)
1.4 Common name
 Spanish: Delfin chileno
 English: Chilean dolphin
 French: Dauphin du Chili

2. Biological data

2.1 Range

According to the literature, it is a species endemic on the Chilean coasts between around 33°S and 60°S (Aguayo 1975, Sielfeld and Venegas 1978, Sielfeld 1983, Goodall et al 1988, Cárdenas et al 1986, Oporto 1996). However, with increasing efforts being made to observe marine mammals in the Southern Cone, the presence of individuals belonging to the species has been reported in Argentine territorial waters, in the Beagle Channel area (Schiavini, pers. com.).

2.2 Population

Although it is considered to be one of the least-known cetaceans (Oporto 1988, Jefferson et al 1993, Reeves and Leatherwood 1994), in recent years there has been an increase in knowledge of its biology (Oporto and Torres 1989, Brieva and Oporto 1991, Molina and Oporto 1993). The species is usually observed in small groups of between 3 and 7 individuals, although groupings of between 20 and 50 individuals are also common (Cárdenas et al 1986, Oporto 1986, 1988). Occasionally, larger groupings of about 400 animals are also reported (Goodall et al 1988, Jefferson et al 1994). Apparently the size of the groups increases in the breeding season. No estimate has been made of the population density of the species. However, it is relatively abundant in the central part of its range (Oporto 1986, 1996).

2.3 Habitat

Coastal. The species is found along the open coast and in the inner seas of archipelagos and channels, characterized by a high range of fast tidal currents (Goodall et al 1988), with variations of about 8 to 10 m between high and low tides (Oporto 1988). It prefers dark waters and is normally to be found in water masses only a few metres deep (2 to 15 m). It can commonly be seen in estuaries and it occasionally finds its way into the big rivers in southern Chile (Río Valdivia), as far as 12 km inland from the coast, where the waters are clearly fluvial (Oporto 1988).

2.4 Migration

Individuals have recently been sighted in the Argentine waters of the Beagle Channel, pointing to the movement of members of the species between Chile and Argentina (Schiavini, pers. com.).

3. Threats

3.1 Direct threats to the population

Deaths occur through by-catching in fishing nets for meagre (*Cilus monti*) and ratfish (*Callorhynchus callorhynchus*) in the southern part of central Chile. The estimated mortality rate resulting from such fishing in the area of Queule is close on 60 individuals a year (Oporto 1994, Rayes and Oporto 1994). It should be borne in mind, however, that there are some 60 fishing coves within the range of the species, with the result that the number of deaths through by-catching is much higher. In addition, individuals occasionally get caught in anti-seal nets used in salmonid breeding centres in southern Chile (Oporto *et al* 1991).

3.2 Habitat destruction

Habitat availability is being reduced through the development of marine farming, particularly in the form of salmon, mussel and seaweeds breeding centres (Oporto 1996). In addition, the increase in coastal maritime traffic and the establishment of new ports for the handling of wood chips within the range of the species are causing individuals to move away to other more remote areas (pers. obs.). Moreover, the "clear-cutting" method used by forestry companies during reafforestation activities is affecting water quality in estuaries and rivers (e.g. Río Valdivia) owing to the increase in suspended sediment. This might have been one of the causes of the decrease in the number of sightings of individuals of this species in the river and estuary of Río Valdivia (pers. obs.).

3.3 Indirect threats

Greater use of the seaboard for the development of activities relating to tourism, sports and transport, and over-exploitation of fish resources, (Aquanoticias 1996, Sernapesca 1995) such as sardines (*Strangomera bentinckii*), anchovies (*Engraulis ringens*) and crustaceans (*Munida subrugosa*), which form the staple of its diet (Escare and Oporto 1991)..

3.4 Threats specifically linked to migrations

There is no information available, but it is likely that the over-catching of certain species (sardine and anchovy) affects possible migrations.

3.5 National and international use

In the past ten years Chilean dolphins have been used as bait for the fishing of king crabs (*Lithodes antarctica* and *Paralithodes granulosa*) in the southernmost part of Chile (Cárdenas *et al* 1986, IWC 1989, Torres *et al* 1990). There is currently a risk of these illegal practices being resumed owing to a shortage in the supply of bait. Moreover those that at present die accidentally through being caught in the nets used to fish meagre and ratfish, in the southern part of central Chile, are used as bait for the fishing of eel (*Genypterus* sp.). Internationally, the species is not used.

4. Protection status and needs

4.1 National protection status

Protected by General Fisheries and Aquaculture Act (D.S. No. 430 of 21 January 1992) of the State of Chile. In addition, a thirty-year national prohibition on the taking of all higher marine vertebrates has been established as from 1995. Moreover, Article 37 of General Environment Act No 19.000 of 1994 classifies species of wild flora and fauna as: extinct, in danger of extinction, vulnerable, rare, insufficiently known and out of danger. Studies with a view to the preparation of a species management plan are to be undertaken only in cases where the species is classified as being out of danger. Regulations

placing sea mammals in any one of the aforementioned categories remain to be issued under this Act. However, *Cephalorhynchus eutropia* was recently classified as "vulnerable", which carries the requirement that environmental impact studies be undertaken of all activities to be developed within the range of the species in the future.

4.2 International protection status

IUCN considers it to be "insufficiently known" and it is listed in Appendix II of CITES (Klinowska).

4.3 Additional protection needs

Habitat protection and measures to reduce by-catching of the species.

5. **Range states:** Chile and Argentina.

6. **Comments from Range states**

Studies should be undertaken to confirm the presence of this species in Argentine territorial waters and its possible use as bait in the fishing of king crabs in Chile and Argentina. It should be determined whether breeding areas exist and whether migrations occur between such areas and other areas within its range.

7. **Additional remarks**

There is an urgent need to estimate the population of the species, to ascertain the mortality rate through by-catching throughout its range and to gain greater knowledge of the biological characteristics and habitat of the Chilean dolphin.

Measures should be taken to co-ordinate the proposals formulated in the "Action Plan for the Conservation of Aquatic Mammals of the Southeast Pacific", drawing on the information contained therein.

8. **References**

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