Proposal for Inclusion of Species on the Appendices of the Convention on the Conservation of Migratory Species of Wild Animals

A. Proposal: Inclusion of Delphinus delphis (eastern tropical Pacific population) in Appendix II.

B. Proponent:

C. Supporting Statement

1. Taxon

1.1. Classis	Mammalia
1.2. Ordo	CETACEA
1.3. Familia	Delphinidae
1.4. Genus/Species/Subspecies	Delphinus delphis (Linnaeus, 1758)

1.5. Common Name(s)

English:	common dolphin
Spanish:	delfin comun
French:	dauphin comun
Dutch:	gewone dolfijn

2. Biological data

2.1. Distribution (current and historical)

The common dolphin is widely distributed, occurring in all oceans to the limits of tropical and warm temperate waters. There are several distinctive forms that probably deserve racial or subspecific status; some scientists recognize more than one species. There are various recognized local forms in the eastern North Pacific, the Mediterranean Sea, the Black Sea, along the European and African Atlantic coasts, in the Indian Ocean, and off Japan (Leatherwood and Reeves, 1983).

2.2. Population (estimates and trends)

Four stocks have been proposed in the eastern tropical Pacific: Baja neritic, northern, central, and southern stocks. The proposal of a fifth division ("Guerrero stock") is considered provisional, pending further study (Perrin et al. 1985) Population estimates exist for some of these stocks. Anganuzzi and Buckland (1989) provided estimates of abundance for the northern, central and southern stocks for the period 1975-1986. Little evidence of changes in relative abundance of the northern stock was observed. With the exception of the 1975 estimate, no significant differences were found throughout the period, and this stock was considered stable during the period 1975-1986. On the other hand, estimates for the central stock for the same period suggest a reduction of the stock for the period 1970-1980.

Further evidence of depletion is observed for the period 1981-1987. Despite some differences in effort during the last decade the authors concluded that the the central stock of common dolphins has decreased. Although estimates for the southern stock do not seem to fluctuate over the years, they are based on relatively fewer data, and analyses of trends were considered premature (Anganuzzi and Buckland, 1989).

2.3. Habitat (short description and trends)

Throughout most of their range, common dolphins are pelagic, most likely to be found along or seaward of the 100-fathom contour. In some areas (eg. southern California) a neritic and and offshore form have been identified. The offshore form is associated with conspicuous features of the bottom relief such as sea mounts and escarpments, preying at night on organisms associated with the deep-scattering layer (Evans, 1982). In the eastern tropical Pacific common dolphins prefer equatorial and subtropical waters with a deep thermocline, relatively large seasonal changes in surface temperature and seasonal upwelling. They can be found in waters ranging between 10°C and 28°C (Evans, 1982; Leatherwood and Reeves, 1983; Au and Perryman, 1985).

2.4. Migrations (kinds of movement, distance, proportion of the population migrating)

Clear seasonal shifts in distribution are observed off southern California, where peaks of abundance are recorded in June, September through October, and in January (Leatherwood and Reeves, 1983). Sighting data also suggest seasonal movements of common dolphins in the eastern tropical Pacific (Au and Perryman, 1985). Off Peru, catch data suggest that common dolphins may move closer to the shore during the austral winter months.

3. Threat data

3.1. Direct threats to the population (factors, intensity)

Common dolphins may associate with schools of tuna in the ETP, and because of this association the dolphins are used to find the tuna. Both are captured in the purse seines used by the international fleet that operates in these waters (Perrin, 1968). Estimates of the total dolphin mortality in this fishery for the period 1979-1988 show a peak of about 130,000 in 1986, including nearly 25,000 common dolphins (Hall and Boyer, 1988; IATTC, 1989). Mortality of common dolphins in previous years of that period were never greater than 8,000 animals per year. The mortality rates for common dolphins (either per net set or per ton of tuna caught) is much higher than for the other species involved in the fishery. Fishing effort has concentrated in areas where the species is more abundant, mainly as a result of enlargement of the Mexican fleet (IWC, 1988; IATTC, 1989). A

large part of the sets on common dolphin schools occurs in coastal waters, where stock structure and movements are poorly understood and three or more populations may be involved (Perrin 1987).

Incidental catches are reported off Peru, where an unknown number of common dolphins die every year in gillnets or are taken in purse-seines. Further, a direct catch with hand-held harpoons also occurs (Read et al., 1988; Van Waerebeek and Reyes, 1990).

3.2. Habitat destruction (quality of changes, quantity of loss)

Relatively high concentrations of DDT and PCBs have been found in some dolphin species in the eastern tropical Pacific and the western North Pacific. For example O'Shea et al. (1980) reported that DDT and PCBs concentrations were higher in striped dolphins from the ETP than in those from Japanese waters. The source of contamination in these tropical waters is unknown.

3.3. Indirect threat (e.g. reduction of breeding success by pesticide contamination)

No information

3.4. Threats connected especially with migrations

The apparent onshore movement of common dolphins off Peru make the animals vulnerable to fishing nets and direct catch.

3.5. National and international utilization

Together with other small cetaceans, common dolphins are used for human consumption in Peru. Dolphins caught in tuna sets are discarded.

4. Protection status and needs

4.1. National protection status

Protected by law in the USA, Ecuador, Colombia, El Salvador, France and Mexico (Klinowska, in press). No information is available from other countries.

4.2. International protection status

Delphinus delphis is listed in Appendix II of CITES. Populations of dolphin species involved in the tuna fishery in the eastern tropical Pacific extend from exclusive fishery zones to international waters. Specific research programs have been launched by the U.S. Government and the Inter-American Tropical Tuna Commission (IATTC).

The species is categorized as "Not Threatened" by IUCN, but populations in the Black Sea, Western Mediterranean and eastern tropical Pacific are considered "At Risk" (Perrin, 1989).

4.3. Additional protection needs

Cooperative research is needed in order to study stock discreteness and distribution, reduce the direct and incidental catches and identify potential sources of habitat degradation such as pollution.

5. Range States

Colombia, Costa Rica, Ecuador, El Salvador, France (Clipperton Islands), Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Spain*, the Netherlands*, Vanuatu* and the U.S..

6. Comments from Range States

7. Additional remarks

8. References

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