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

- A. Proposal: Inclusion of Sotalia fluviatilis in Appendix II.
- B. Proponent:
- C. Supporting Statement
- 1. Taxon

1.1. Classis

Mammalia CETACEA

1.2. Ordo

1.3. Familia

Delphinidae

1.4. Genus/Species/Subspecies

Sotalia fluviatilis (Gervais, 1853)

1.5. Common Name(s)

English:

tucuxi

Spanish:

bufeo negro

French:

sotalia, dauphin de'l Amazon

Portuguese: Suriname:

boto preto profossoe

2. Biological data

2.1. Distribution (current and historical)

The tucuxi is found in tropical and subtropical waters of the Atlantic coast of South and Central America, from Santa Catarina (27°S) northward to Lake Maracaibo in northwestern Venezuela and up the Caribbean coast to Panama (Leatherwood and Reves, 1983; Simoes-Lopes, 1987). It is also found in the Amazon river drainage and in the lower reaches of the Orinoco River up to Ciudad Bolivar (Leatherwood and Reeves, 1983; da Silva and Best, in press). In the Amazon river drainage, the species is distributed from

Belem through the main tributaries in Brazil, eastward to the Ucayali River near the base of the Andes in Peru and as far north as Ecuador through the Napo and Tigre Rivers (sa Silva and Best, in press).

2.2. Population (estimates and trends)

Tucuxis are said to be common off the coast of Suriname, along the coast between Rio de Janeiro and Santos and in the area of Santa Catarina (Leatherwood and Reeves, 1983; Simoes-Lopes, 1988). However, there is little information on abundance. In the Baia Guanabara (Brazil) tucuxis were referred to as very common from the 1870s through 1933. Because no numbers were given, it is difficult to compare the apparent "abundance" of these dolphins in the past with recent surveys that indicate a population ranging between 100 to 400 individuals (da Silva and Best, in press). In the Amazon drainage these dolphins are common. A survey conducted in a stretch of nearly 500 km between Manaus and Tefe recorded a density of about 1.1 +/- 0.4 dolphins per kilometer. Another survey between Manaus and Leticia showed a density of 102 dolphins per kilometer, with 768 +/- 104.7 tucuxis observed on each trip (da Silva and Best, in press).

2.3. Habitat (short description and trends)

Coastal tucuxis are found in shallow, protected waters in estuaries and bays. In areas such as Baia Guanabara these dolphins show a preference for waters about 25 m deep, rarely wandering into waters between 1 and 3 m deep (Andrade et al., 1987; da Silva and Best, in press). Further south in Baia Norte, tucuxis are frequently observed in depths of approximately 4-5 m (Simoes-Lopes, 1988). In areas where large rivers are present, these dolphins are known to penetrate long distances upstream (da Silva and Best, in press). There are records of tucuxi near Ciudad Bolivar, in the Orinoco River, about 250 km upstream. Dolphins of the riverine population are found in the main channels of the tributaries of the Amazon River, where they may be sympatric with the Amazon river dolphin (Inia geoffrensis). Tucuxis have a particular preference for the junctions of rivers and channels. Large lakes with relatively deep access channels are also frequented. The distribution of these dolphins may be restricted by the presence of rapids and fast moving turbulent waters, and they do not seem to penetrate the flooded forest as Amazon river dolphins do (Best and da Silva, 1989b; da Silva and Best, in press). In coastal waters sciaenid and clupeid fishes, as well as squids are the main prey item. The riverine form preys on fishes, primarily of the families Curimatidae, Sciaenidae and Siluridae. In this habitat there seems to be little competition with Amazon river dolphins (da Silva, 1986; da Silva and Best, in press).

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

Seasonal movements may occur, although they do not seem to be very extensive. It is possible that riverine tucuxis have a limited home range, but the area of such a range is unknown. One marked animal was reportedly resighted after a year, at 5 km from the point of release (da Silva and Best, in press). Home range of the coastal form may be larger, because of the distance between one protected bay and another, or the population in each bay may be relatively isolated (Leatherwood and Reeves, 1983; da Silva and Best, in press).

3. Threat data

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

There are reports of estuarine tucuxis being captured with nets and dispatched with harpoons, in particular in the area of Para, near Belem. Harpooning of these dolphins is also reported from Espiritu Santo, farther south (Anon., 1985; Geise and Borobia, 1987; Perrin, 1989). Incidental catches in gillnets occur throughout the range along the coast and in the rivers. In Suriname they are taken in drift nets at the mouths of rivers, and they are possibly also taken off French Guiana (Mitchell, 1975; Van Waerebeek, in press). Net entanglements are commonly reported along the Brazilian coast (Anon., 1985; Lodi and Capistrano, 1988; Perrin, 1989). In the Amazon River, drift nets and set gillnets account for the highest mortality of tucuxis. Of less importance is the lampara seine, associated with high mortality of Amazon river dolphins (Inia geoffrensis) (IWC, 1982; da Silva and Best, 1985, and in press).

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

In rivers, tucuxis are exposed to severe habitat encroachment. The main threats are a consequence of the extensive development in the Amazon region: deforestation, damming of rivers for hydroelectric purposes, increasing fishing effort with increasing incidental mortality, and a high level of pollutants (in particular large loads of pesticides from agricultural development) (Best and da Silva, 1989; da Silva and Best, in press). Coastal areas frequented by tucuxis are also reported to have high levels of pollutants from domestic and industrial wastes (Andrade et al., 1987).

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

Studies of feeding habits have demonstrated that both Amazon river dolphins and tucuxis prey on fish species of little commercial value, so competition with fisheries, if any, should be considered minimal (da Silva, 1986; da Silva and Best, 1985; Best and da Silva, 1989). There are no studies on the possible effects of pollutants on the species.

3.4. Threats connected especially with migrations

No information.

3.5. National and international utilization

In some parts of Brazil, the meat of tucuxis is used as bait in a shark longline fishery. In addition, some organs may be used as love charms (Geise and Borobia, 1987; Perrin, 1989; Best and da Silva, 1989). Some tucuxis are kept in captivity in Colombia (M. Prieto, pers. comm.) but several have been exported for live display, mainly to Europe (Klinowska, in press).

4. Protection status and needs

4.1. National protection status

National legislation specifically protects the tucuxi in Brazil, Peru, and Colombia. The species is indirectly protected in Ecuador, Venezuela, Guyana, and French Guiana; specific information on the matter is missing in Suriname. However in the latter, as in the majority of countries within the range, nature reserves may protect the habitat (Atkins, 1989; Klinowska, in press).

4.2. International protection status

Sotalia fluviatilis is listed under Appendix I of CITES. The Ramsar and World Heritage Conventions are applicable to protect habitat of this species, as the Pacto Amazonico and other regional agreements (Atkins, 1989). The species is listed as "Not Threatened" by the IUCN, but riverine populations in Brazil are considered "At Risk" (Perrin, 1989).

4.3. Additional protection needs

Efforts should be made to address the stock identity and discreteness of both the riverine and coastal forms, and to minimize the potential threats to this species resulting from the increasing development in the region.

5. Range States

Brazil, Colombia, Ecuador, French Guiana, Guyana, <u>Panama</u>, Peru, Suriname and Venezuela.

6. Comments from Range States

7. Additional remarks

8. References

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