

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

A. PROPOSAL: Listing in Appendix I of the Bonn Convention (CMS) of *Pontoporia blainvillei* (Gervais and d'Orbigny 1844)

B. PROPONENT: Government of the Eastern Republic of Uruguay

C. SUPPORTING STATEMENT

1. Taxonomy

1.1 Class: Mammalia

1.2 Order: Cetacea

1.3 Family: Pontoporiidae

1.4 Genus and species: *Pontoporia blainvillei*

1.5 Common names:

Spanish: Franciscana

Portuguese: Cachimbo

English: La Plata dolphin

2. Biological data

2.1 Distribution

Coastal waters of the southwest Atlantic Ocean, from Brazil to Argentina, with northernmost limit at Itaúnas (18°25'S), on the coast of the State of Espírito Santo, Brazil (Moreira and Siciliano 1991), and, in the south, at the entrance of Golfo Nuevo (c. 43°S), Chubut province, Argentina (Crespo 1994).

The hypothesis has been put forward that there are two gaps in the distribution of the La Plata dolphin in Brazilian waters: in the south, between Macaé and Ubatuba; in the north, between the mouth of Río Doce and Atafona (Siciliano and Olivera 1994), its distribution being directly dependent on highly turbid waters.

2.2 Population

To date no studies have been carried out of population density, so that nothing at all is known about its abundance or the total extent of its geographical range. Statistical analyses of osteological measurements have shown the existence of two geographical forms: small, at between 22° and 27°S, and bigger, at between 32° and 38°S (Pinedo 1991).

Although no data are available concerning its abundance, a high number of individuals killed accidentally by fisheries have been recorded in the three countries, particularly Uruguay and Brazil.

In the IUCN Red Data Book the species is listed as "insufficiently known" (Klinowska 1991); however, it has been recommended for listing as a "vulnerable" species (Perrin *et al* 1989).

2.3 Habitat

The La Plata dolphin is a coastal species, inhabiting waters up to 30 miles from the coast at depths of up to about 30 metres (Praderi *et al* 1989). Concerning its food diet, analyses of the stomach content of dolphins captured in the three countries show that it preys on demersal fish, shrimps and squid. In both Uruguay and Brazil, it feeds on 24 species of fish. In Uruguay the most important in its diet are *Cynoscion striatus* in winter, spring and summer, and *Trichiurus lepturus* in autumn. Its diet is

supplemented by squid (*Loligo sanpaulensis*) and three species of shrimp (*Artemecia longinaris*, *Plecticus muelleri* and *Penaeus paulensis*) (Pinedo et al 1989).

When the *Pontoporia* enters the waters of Río de la Plata it changes the food spectrum since it preys on some of the most common amphibiotic species, mostly *Clupeidae* (Praderi 1986).

In Uruguay individuals belonging to the species are frequently seen with wounds caused by sharks. In particular, *Sphyrna*. spp. and *Notorhynchus cepedianus* prey on juveniles of the species (Praderi 1985).

2.4 Migrations

P. blainvillei is a dophin whose habits are rather unknown, so that it has not been possible to verify the hypothesis of winter migration to northern waters. The period of the year when the species is most plentiful in the waters of Uruguay and Buenos Aires province is spring and summer, which is also the breeding season. The highest numbers of accidental deaths are also recorded between November and February, in both Uruguayan and Argentine waters.

3. Threat data

3.1 Direct threats to the population

Cases of direct capture of the species are not known.

3.2 Habitat destruction

Small-scale shark fisheries on the Atlantic coast of Uruguay started up in 1940, chiefly to obtain whale-liver oil (a substitute for cod-liver oil during the Second World War). From that time to the present, there have been considerable fluctuations in small-scale fishing using trammel nets. The fragile and constantly changing nature of small-scale fishing operations is rooted in countless factors, the most important of which is economic, with the entire situation being liable to be altered radically in a short space of time, leading to the by-catching of *Pontoporia* and the gradual degradation of the habitat. Needless to say, more than 50 years' activity in the same fishing grounds resulted in drastic changes in the habitat. There was a decrease in the fishing of various species of shark 15 years ago, as the sharks had withdrawn to deeper waters, making it less cost-effective to capture them. This phenomenon has had a real impact on the fishing of *Galaorhinus galeus*, a shark of high economic importance on account of the quality of its meat and the value of its fins, since the number captured in recent years has dropped to less than half of pre-1980 figures. The frequency of trawler operations by large-scale pirate fishing fleets has caused the destruction of the sea floor up to 30 miles from the coast, with a resulting deterioration of the fish populations that normally form the diet of *Pontoporia*. Analysis of the tissues of eight specimens of La Plata dolphin captured at Punta del Diablo in 1974 revealed the presence of dieldrin, PCB, DDT and its metabolites in the fatty tissue of each one. This was the only location among several studied for this purpose where DDT residues exceeding those of DDE were found in the fatty tissues of the specimens analysed (O'Shea et al 1980). The situation has changed with the passing of the years, and so much so that absolute levels of organochlorines in specimens from Argentina and Brazil have been shown to be much lower in the most recent samples (Junín et al 1994). Organochlorine concentrations in the fatty tissues of 45 La Plata dolphins captured in Necochea were evaluated and it was established that their overall levels are relatively low (Borrell et al 1994). Although there has recently been a decrease in pollution, the damage caused twenty years ago might well have been irreversible in the ecological conditions of the area.

3.3 Indirect threats

There are by-catches of the La Plata dolphin in the waters of Brazil, Uruguay and Argentina by small-scale fisheries using passive gill nets. Three types of net are used in Uruguay. Teleostean fish are caught

with a 10-12 cm mesh net; *Galeorhinus galeus*, which is fished in August-September, is captured in 20-22 cm trammel nets; and lastly, for the fishing of big sharks, a 32-34 cm wide-mesh trammel net is used. The last-mentioned type of net is the one mainly responsible for *Pontoporia* by-catches in the five fishing areas on the Atlantic coast of Uruguay (Praderi 1984).

In Uruguay 3,683 specimens of La Plata dolphin died in nets between 1974 and 1994, with very high annual variations, ranging from a maximum of 418 in 1974 to a minimum of 66 individuals in 1994 (Praderi 1994).

P. blainvillei is a species that, in the area of Valizas, Cabo Polonio and La Coronilla at least, occurs in waters close to the coast, causing the highest mortality rate to be recorded in that area at between two and five miles from the coast. In recent years, the casting locations for every type of net have been a short distance from the coast, thus making for an appreciable increase in the mortality risk for the species. This accounts for the high number of deaths of La Plata dolphins in 1992 and 1993, essentially in the aforementioned places. However this high mortality rate levelled out almost completely in that area from 1993 as most of the boats operating almost exclusively with wide-mesh trammel nets ceased to be in service.

As regards the fishing effort, huge variations are noted, not only in the type of net used but also in the area covered by each type of trammel net in particular. The total nets used decreased gradually from 1981 to 1989, which was the year when the historical minimum was recorded for nets in use. Subsequently, in 1993, the surface area of the nets of every type in use reached the maximum ever recorded. Although, however, the nets cast in 1993 rose to their maximum, representing a total length of 740, 000 metres, only 20 per cent of that total consisted of wide-mesh nets. It follows that increased use of small-mesh nets reduces the risk of by-catches of the La Plata dolphin. The risk of the by-catching of one specimen of the species in each type of net has decreased considerably over the years. In 1982, 885 metres of 32/34 mesh net were required to cause the death of one dolphin; in 1994, the figure was 1,674 metres. This change is even more apparent in the figures for small-mesh nets, since in 1981, 3,630 metres were needed to cause the death of one individual, whereas in 1994, 11,172 metres were required.

The implications of by-catching for the La Plata dolphin population merit further study, with special reference to the statistics on captures, in order to be able to arrive at conclusions regarding the future of the species.

3.4 Threats specially related to migrations

There is a need for thorough knowledge of all the ecological modifications of each region throughout the range of the species, particularly of changes in and the impact of fishing activity in the area, so as to ascertain how the population may be affected.

3.5 National and international utilisation

4. Protection status and needs

4.1 National protection status

P. blainvillei is implicitly protected under national legislation by Act 9.481 of 20.06.1935, and by Decrees 261/78 of 10.03.1978; 586/79 of 10.10.1979; and 565/981 of 06.11.1981.

4.2 International protection status

P. blainvillei is currently listed in Appendix II of CMS and is proposed for listing in Appendix I, taking into account that it is an endangered species.

4.3 Additional protection needs

5. Range States

Brazil, Uruguay and Argentina.

6. Comments by Range States

7. Additional remarks

The first Workshop for the Co-ordination of Research and Conservation Efforts concerning the La Plata Dolphin in the Southwest Atlantic took place in Buenos Aires, Argentina, on 25 and 26 September 1992, and was followed by a second workshop in Florianópolis, Brazil, on 22 and 23 October 1994. At both workshops research and conservation programmes were drawn up, with special emphasis on a pilot plan for the observation and counting of individuals, aimed at shedding light on the present population of this species.

8. References

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