CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

A. PROPOSAL

To include Delphinus delphis in Appendix II of the Convention; only the populations of the Baltic Sea and the North Sea.

B. PROPONENT

Kingdom of The Netherlands

C. SUPPORTING STATEMENT

1. Taxon

1.1 Classis Mammalia

1.4 Genus and species Delphinus delphis Linnaeus 1758

1.5 Common names
English Common dolphin

French Dauphin commun Spanish Delfin commun

Dutch Dolfijn

2. Biological data

2.1 Distribution (current and historical) - see also 5

The common dolphin has been recorded in all temperate and warm waters of the globe, in coastal waters and offshore, approximately within the water temperature range of 10°-20°C. It is a rare visitor to the Baltic (Aguayo 1978), but known from other European coasts, from the Mediterranean and the Black Sea, but not the Sea of Azov (Tomilin 1957). A marked reduction in strandings over the past 40 years has been noted in the Netherlands and UK stranding records, particularly in the past 20 years (Fraser 1974, Van Bree 1977, Bakker & Smeenk 1987). Fraser attributes this mainly to changes in abundance of food species particularly the squid, Todarodes saggittatus. Van Deinse (1946), however, relates it to changes in the temperature of the North Sea, which has cooled slightly over the past few decades. Van Bree (1977) although prepared to accept temperature change as one factor puts more emphasis on pollution and disturbance. Bakker & Smeenk (1987) conclude that no simple correlation with temperature exists. No other major range changes are reported, although a few other areas have comparable records.

2.2 Population

Although described in most general reports as the most common or widespread delphinid there are very few numerical estimates of populations, either present or past. Evans (1976) gives indices of

abundance for an area off southern California - northern Mexico ranging from 2.68 animals per square mile in January to 0.54 animals in April. This may not be the best description of the abundance since distribution is non-random. Herds appear to move freely throughout the area, locating feeding areas, exploiting them and moving on.

Populations of common dolphin involved in the eastern tropical Pacific yellow-fin tuna purse-seine fishery are estimated at 400 000 (northern), 230 000 (central) and 800 000 (southern) (IWC 1978).

No other information on population size was located.

2.3 Habitat

The diet of the common dolphin varies with stock and season. In the Black Sea pelagic fish are the main food and Tomilin (1957) summarises information gathered from tens of thousands of dolphins.

In Californian waters Evans (1976) found fish, particularly Engraulis mordax in autumn and winter and Leuroglossus stilbius in spring and summer, and cephalopods, particularly Loligo opalescens in autumn and winter and Onychoteuthidae in spring and summer were taken. In autumn and winter 63% of the stomach contents were fish and in spring and summer 70%.

In Californian waters discontinuities in distribution may indicate competitive exclusions with <u>Stenella</u> species although they can equally be explained by water temperature preferences (Evans 1976).

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

Seasonal movements following water temperature changes or food species migrations are reported in almost all areas (Tomilin 1957; Gaskin 1972 and Evans 1976).

3. Threat data

3.1. Direct threat of the population (factors, intensity)

The only information located on recent takes in European waters were for the French coasts between 1971 and 1976 when one was taken by net, one by trawl, one shot and one harpooned (Duguy 1977), although Clarke (1980) gives some interesting details, mainly historical, of the Azores fishery.

3.2 Habitat destruction (quality of changes; quantity of loss)

Changes in distribution in the North Sea have been mentioned in section 2.1. Pollution may cause skin disease in parts of the Mediterrean (Mitchell, 1975a). It seems likely that all local coastal populations in areas of high human habitation are subject to pollution and habitat enchroachment, although the effects of natural environmental changes also need to be considered.

In general the North Sea habitat changes through disturbance, such as by ships and mineral surveys, pollution, and food limitation through

overfishing (Evans 1987).

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

No information.

3.4 Threat connected especially with migrations

None known.

3.5 National and international utilization

The main direct fishery until recently was probably that in the Black Sea by Turkey and is described in detail by Berkes (1977). The main products were oil and meal. Small numbers are taken, perhaps for human consumption or animal food in many areas. Mitchell (1975b) mentions the Azores, Venezuela and possibly Israel. Common dolphins are taken in the Japanese small cetacean fishery (Mitchell 1975b).

The main present taking is through the tuna fishing industry. In the Pacific the USA kill for common dolphin was estimated at 889 in 1978 and at 4,505 in the first five months of 1979 (Perrin, Lo & Whalen 1979). This latter figure makes a change in the ration of species killed in this fishery. In previous years the bulk of the kill was of Stenella spp., but in the preliminary 1979 figures the Stenella spp. kill and the common dolphin kill were almost equal. This is said to be because fishing operations increased in areas, mainly south of the Gulf of California, where common dolphins are most frequent.

No comparable information is available for catch by other countries or in other areas, notably the tropical Atlantic, where similar operations are known to take place, although the IWC have called on members to collect statistics on many occasions over the past few years. In 1979 France, Mexico, Panama, New Zealand, Korea and USSR were again urged to produce data (IWC 1979).

Common dolphins have been kept in oceanaria in many parts of the word, but are said not to be as readily trainable or hardy as <u>Tursiops</u>, <u>Lagenorhynchus</u>, <u>Sousa</u> and others (Mitchell 1975a). Gaskin (1972) reports better success, however, with the species in New Zealand oceanaria. In view of the adverse reports, there would seem to be no very great potential for increasing trade in live specimens.

4. Protection status

4.1 National protection status (North Sea, Baltic Sea)

Belgium:

Denmark: Federal Republic of Germany Protected

Finland:

France:

Protected

German Democratic Republic:

Norway:

Poland: Sweden: The Netherlands: Union of Socialist Soviet Republics: United Kingdom:

Protected Not protected

Protected

4.2 International protection status

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4.3 Additional protection needs

More information on life parameters, population and distribution is needed before any real assessment of the status of this species, particularly in European waters, can be made. Indeed, despite its wide distribution and frequency and the large numbers that have been taken, basic information on this species is particularly poor.

Reporting of by-catches and direct catches should be improved - if necessary by specific national legislation - to enable countries to assess the state of stocks in their waters and in waters fished by their far seas fleets.

5. Range states (North Sea, Baltic Sea)

Belgium, Denmark, France, The Netherlands, Union of Socialist Soviet Republics, United Kingdom, international waters.

6. Comments from Range States

None received.

Additional remarks

None.

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