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

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

1.1. Classis Mammalia
1.2. Ordo CETACEA
7 inhiida

1.3. Familia Ziphiidae

1.4. Genus/Species/Subspecies

Berardius bairdii
Stejneger, 1883

1.5. Common name(s)

English: Baird's beaked whale Spanish: ballena picuda de Baird French: baleine de Baird

Japanese: tsuchi kujira Russian: severnyi plavun

## 2. Biological data

### 2.1. Distribution (current and historical)

Baird's beaked whale is found exclusively in the North Pacific Ocean and adjacent seas, including the Bering Sea and the Okhotsk Sea. The normal range of the species includes the waters north of  $35^{\,\mathrm{O}}$ N, but there is a recent record of a mass stranding of seven animals in the Sea of Cortez near La Paz (24 $^{\,\mathrm{O}}$ N), Baja California (Balcomb, 1989; Aurioles, 1987). The species has not been recorded from Chinese waters (Kasuya and Miyashita, 1988).

#### 2.2. Population (estimates and trends)

There may be at least three stocks of Baird's beaked whales in the western North Pacific: a Sea of Japan stock that summers in the Sea of Japan and possibly remains isolated there year round; a Okhotsk Sea stock distributed in waters near ice floes in that sea, and a Pacific coastal stock that probably inhabits continental slope waters between the fronts of the Kuroshio and Oyashio Currents, north of about 34°N (Kasuya and Miyashita, 1988). The whales belonging to each of these putative stocks are present concurrently during summer and autumn months and move out of the area in winter to yet unknown wintering grounds (IWC, 1989a). Population estimates exist only for the Pacific coast stock, with approximately 4,200 animals (Miyashita, 1986). Other possible stocks are found in the Bering Sea and the eastern North Pacific, in the latter ranging from Alaska

and Vancouver Island to possibly the Sea of Cortez (IWC, 1989a).

## 2.3. Habitat (short description and trends)

Baird's beaked whales are found in pelagic, temperate waters waters over 1,000 to 3,000 m deep, on the continental slope. Off the Pacific coast of Japan these whales have been recorded in waters ranging between 23°C and 29°C, with a southern limit lying at the 15°C isotherm at a depth of 100 m (Kasuya, 1986). In the northern Okhotsk Sea the species has been recorded in waters less than 500 m deep, which could be explained by the availability of prey species in shallower waters at higher latitudes (Kasuya, 1986; Fedosev, 1985). Baird's beaked whales feed mainly on bottom organisms, principally deep sea fish and benthic squids. Pelagic fish such as mackerel, sardines and saury may also be eaten (Kasuya, 1986; Balcomb, 1989).

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

Baird's beaked whale is present over the continental slope in summer and autumn months, when the water temperatures are the highest. The whales move out from these areas in winter. In the case of the Okhotsk Sea stock, there are indications that a winter migration to the east of the Kuril Islands may occur, when ice covers most of the Okhotsk Sea, but some whales may still remain in the northwestern part of that sea (Kasuya and Miyashita, 1988; Fedosev, 1985; IWC, 1989a). A north-south migration has been proposed for the coastal Pacific stock, based on catch and sighting information. Whales of this stock move north around July, reaching the waters off Hokkaido in October and November, probably reaching the Pacific coast of the Kuril Islands. Similar latitudinal movements are proposed for the Sea of Japan stock (Kasuya, 1986). Segregation by sex and age has been proposed but not confirmed (Kasuya, 1986; Kasuya et al., 1988).

#### 3. Threat data

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

Hunting of Baird's beaked whales has been conducted by the Japanese since at least the 17th century, although probably no more than five were taken every year. The whales were taken with hand-held harpoons in a traditional whaling that continued until 1869. The commercial fishery for Baird's beaked whales began early in this century and expanded after World War II (Mitchell, 1975b, Ohsumi, 1983). By the 1950s catches of some hundreds were reported, with a peak of 322 in 1952. Since 1972 the annual catches have been less than a hundred.

Small numbers of Baird's beaked whales were also taken by Soviet vessels at Kamchatka and the Kuril Islands. From 1934 to 1964, 143 whales were reported. A total of 135 was caught off the coast of British Columbia between 1950 and 1966, while 14 were taken in a fishery that operated off California from 1959 to 1966 (Mitchell, 1975b; IWC, 1983). There are no reports of incidental catches.

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

Boat traffic is a source of threat (see 3.4.)

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

Although PCBs and DDE have been found in specimens from the western North Pacific, the values of PCB/DDE ratios were found to be relatively lower than in offshore cetaceans from the same area (Subramanian et al., 1988). There are no studies on the effects of these pollutants in Baird's beaked whale.

3.4. Threats connected especially with migrations

Heavy boat traffic to and from Tokyo Bay is said to disturb the migration of Baird's beaked whales off the Pacific coast of Japan (Nishiwaki and Sasao, 1977).

3.5. National and international utilization

The overall catch in Japanese waters is for human consumption. The species is not subject to international trade.

- 4. Protection status and needs
- 4.1. National protection status

National legislation protects the species in the U.S., Canada and the USSR, and fisheries no longer exist in these countries (Klinowska, in press). Japan set up an annual quota of 40 whales to be taken by the small-type fishery, quota that was increased to 60 for the 1988 season (Anonymous, 1990).

4.2. International protection status

Berardius bairdii is listed in Appendix I of CITES. Japan, the USSR and Austria expressed reservations against this listing, and for them the previous Appendix II listing applies. No other international agreement includes this species (Klinowska, in press).

Although the IUCN categorizes the species as "Not Threatened" the western North Pacific population is considered "At Risk" because of lack of information on the exploited population

(Perrin, 1989). There has been no agreement in the IWC on whether or not it has the competence to classify or set catch limits for this species, even though it is included in the IWC definition of "bottlenose whale" (the only species so regulated is the northern bottlenose whale, Hyperoodon ampullatus). Although the IWC does not control the annual quota of Baird's beaked whales, it is assumed that the present catch levels over a short period would not seriously affect the population, but research is needed to obtain information that will allow a fully assessment of its status (IWC, 1983).

## 4.3. Additional protection needs

Further studies on stock identity, distribution, abundance, school structure and behaviour are needed to resolve some aspects of life history and migrations.

## 5. Range States

Canada, Japan, the USSR and the USA.

- 6. Comments from Range States
- 7. Additional remarks
- 8. References

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