

7

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 Phocoena phocoena (western North Atlantic population) in Appendix II.

B. Proponent:

C. Supporting Statement

1. Taxon

1.1. Classis	Mammalia
1.2. Ordo	CETACEA
1.3. Familia	Phocoenidae
1.4. Genus/Species/Subspecies	<u>Phocoena phocoena</u> (Linnaeus, 1758)
1.5. Common name(s):	
English:	harbour porpoise
Spanish:	marsopa comun
French:	marsouin
Greenlandic:	nisa

2. Biological data

2.1. Distribution (current and historical)

The harbour porpoise is found only in the northern hemisphere, with a circumpolar distribution in temperate waters of the North Atlantic, North Pacific and adjacent seas (Tomilin, 1967; Gaskin, 1984). Based on comparison of skull measurements, Yurick and Gaskin (1987) have suggested the existence of four major populations: North Pacific population, eastern North Atlantic population, western North Atlantic population and a Black Sea-Sea of Azov population. Several sub-populations were proposed for the North Pacific and North Atlantic populations (Gaskin 1984), but at present their limits can not be fully established (Yurick and Gaskin, 1987).

2.2. Population (estimates and trends)

Population estimates exist for the Bay of Fundy approaches, with approximately 7,000-8,000 porpoises, although a total of 15,000 could inhabit the east coast of North America between the Gulf of Maine and South Carolina (Gaskin, 1984; Gaskin et al., 1985).

2.3. Habitat (short description and trends)

The harbour porpoise is primarily a coastal species, although in certain areas it shows preference for waters between 10 and 200 m deep (Watts and Gaskin, 1985; Kinze, 1988). Occasionally

the species may travel considerable distances up rivers (Tomilin, 1967). In the North Atlantic, harbour porpoises feed primarily on clupeoid and gadoid fishes. Squids and benthic invertebrates have also been recorded, the latter considered as secondarily introduced (Gaskin et al., 1974; Gaskin, 1982; Recchia and Read, 1989).

2.4. Migrations

Harbour porpoises arrive in the Bay of Fundy area in July, staying there until approximately late September. There is little evidence that the region may be significant either as a mating area or a calving ground. The arrival of females with calves timed with the arrival of juvenile herring is more suggestive of a feeding ground. Observations gathered from surveys off New Hampshire suggest this may be part of the wintering areas for the Bay of Fundy population, which may have a north-south (and inshore-offshore) seasonal migration limited to the continental shelf in the eastern seaboard (Gaskin, 1984; Gaskin and Watson, 1985; Gaskin et al., 1985).

3. Threat Data

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

At present the species is hunted in large numbers only in West Greenland, where around 1,000 porpoises are taken annually using rifles and hand-thrown harpoons (Kapel, 1983; Kapel and Larsen, 1984; Gaskin, 1984; IWC 1989a).

In the western Bay of Fundy approximately 70 harbour porpoises are trapped every year in herring weirs from which an average 27 die (Smith et al., 1983). A small number of porpoises may die as a result of entanglement in the mackerel gill net fishery in Cape Cod Bay (Read and Gaskin, 1990). Larger incidental catches occur in the groundfish gillnet fisheries in the Bay of Fundy and Gulf of Maine. An estimate of 100 porpoises die every summer in the western Bay of Fundy, while the number of porpoises that get entangled in the Gulf of Maine may be much higher (Gaskin, 1984; Read and Gaskin, 1988; Read, 1989).

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

The large rivers of New Brunswick Province empty into the waters of the Bay of Fundy, transporting, among other pollutants, DDT heavily used in the forest in the past (Gaskin, et al., 1982).

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

There are reports of DDT, PCBs and heavy metals in the species. The levels of DDT, although relatively higher in this population than in porpoises from adjacent areas, are lower

than those reported for other small odontocetes (Gaskin, 1982; Gaskin et al, 1982). No studies on the effects of pollutants in the population have been performed.

3.4. Threats connected especially with migrations

Harbour porpoises migrating to the western Bay of Fundy in summer months are affected by the groundfish gillnet fishery. It has been suggested that the area maybe a feeding ground for most of the Bay of Fundy-Gulf of Maine population (see 2.4 and 3.1).

3.5. National and international utilization

Some local people in northern Canada may hunt the species for food, while others may eat the meat of animals trapped in herring weirs (Gaskin, 1984).

4. Protection status and needs

4.1. National protection status

The species is protected in both the USA and Canada. There is no legislation concerning this species in Greenland (Klinowska, in press).

4.2. International protection status

Phocoena phocoena is listed in Appendix II of CITES, and Appendix II of the Convention on the Conservation of European Wildlife and Natural Habitats (Klinowska, in press). No specific international agreement includes the western North Atlantic population.

The species is categorized as "Insufficiently Known" by the IUCN (Perrin, 1989).

4.3. Additional protection needs

Incidental catches represent the most serious threat in the area, mostly because of the difficulty of reducing their occurrence. Information on biology, population dynamics and level of by-catches are urgently needed.

5. Range States

Canada, France (St Pierre-et-Miquelon), Greenland and the USA.

6. Comments from Range States

7. Additional remarks

8. References

- Gaskin, D.E. 1982. The Ecology of Whales and Dolphins. Heinemann Educational Books, London. 459 pp.
- Gaskin, D.E. 1984. The harbour porpoise Phocoena phocoena (L.): Regional populations, status, and information on direct and indirect catches. Rep. Int. Whal. Commn 34:569-586.
- Gaskin, D.E. and A.P. Watson, 1985. The harbor porpoise, Phocoena phocoena, in Fish Harbour, New Brunswick, Canada: occupancy, distributon, and movements. Fish. Bull. 83:427-442.
- Gaskin, D.E., M. Holdrinet and R. Frank. 1982. DDT residues in blubber of harbour porpoise, Phocoena phocoena (L.) from eastern Canadian waters during the five-year period 1969-1973. Mammals in the Seas. FAO Fish. Ser. 5, 3:135-143.
- Gaskin, D.E., A.J. Read, P.F. Watts and J.D. Smith. 1985. Population dispersal, size, and interactions of harbour porpoises in the Bay of Fundy and Gulf of Maine. Can. Tech. Rep. Fish. Aquat. Sci. 1291:28 pp.
- Gaskin, D.E., G.J.D. Smith, P.W. Arnold, M.V. Louisy, R. Frank, M. Holdrinet and J.W. McWade. 1974. Mercury, DDT, Dieldrin, and PCB in two species of Odontoceti (Cetacea) from St. Lucia, Lesser Antilles. J. Fish. Res. Bd. Canada 31:1235-1239.
- IWC. 1984. Report of the Scientific Committee, Annex H. Report of the sub-committee on small cetaceans. Rep. int. Whal. Commn 34:144-160.
- IWC. 1989a. Report of the Scientific Committee, Annex H. Report of the sub-committee on small cetaceans. Rep. Int. Whal. Commn 39:117-129.
- Kapel, F.O. 1983. Denmark (Greenland) Progress Report on cetacean research. Rep. Int. Whal. Commn 33:203-208.
- Kapel, F.O. and F. Larsen. 1984. Denmark (Greenland) Progress Report on cetacean research June 1982 to May 1983. Rep. int. Whal. Commn 34:191-193.
- Kinze, C.C. 1988. Studies on behaviour and ecology of the harbour porpoise (Phocoena phocoena): preliminary results from a series of sighting cruises in Danish waters, April-August 1987. Sec. Ann. Conf. European Cet. Soc., Troia, 5-7 February. Proceedings: 91-97.
- Klinowska, M. (In press). Whales, Dolphins and Porpoises of the World. The IUCN Cetacean Red Data Book. IUCN, Gland, Switzerland.

Perrin, W.F. 1989. Dolphins, Porpoises, and Whales. An Action Plan for the Conservation of Biological Diversity:1988-1992. IUCN, Gland. 27 pp.

Read, A.J. 1989. Temporal changes in reproduction and growth of harbour porpoises from the Bay of Fundy. 8th Bienn. Conf. Biol. Mar. Mamm. Pacific Grove, 7-11 December 1989. Abstracts:52.

Read, A.J. and D.E. Gaskin, 1988. Incidental catch of harbour porpoises by gill nets. J. Wildl. Manage., 52(3):517-523.

Read, A.J. and D.E. Gaskin. 1990. The effects of incidental catches on harbour porpoises (Phocoena phocoena) in the Bay of Fundy and Gulf of Maine. IWC SC/42/SM21. 18 pp. (unpublished).

Recchia, C.A. and A.J. Read. 1989. Stomach contents of harbour porpoises, Phocoena phocoena (L.) from the Bay of Fundy. Can. J. Zool. 67:2140-2146.

Smith, G.J.D., A.J. Read and D.E. Gaskin. 1983. Incidental catch of harbor porpoise, Phocoena phocoena (L.), in herring weirs in Charlotte County, New Brunswick, Canada. Fish. Bull. 81:660-662.

Tomilin, A.G. 1967. Mammals of the USSR and Adjacent Countries, Vol. IX Cetacea. Israel Program for Scientific Translations, 717 pp.

Watts, P. and D.E. Gaskin. 1985. Habitat index analysis of the harbour porpoise (Phocoena phocoena) in the southern coastal Bay of Fundy, Canada. J. Mamm. 66(4): 733-744.

Yurick, D.B. and D.E. Gaskin. 1987. Morphometric and meristic comparisons of skulls of harbour porpoise Phocoena phocoena (L.) from the North Atlantic and North Pacific. Ophelia 27(1):53-75.