

Notes on cetacea observed in the Polish Baltic Sea: 1979-1990

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Abstract

Of the nominal ten cetacean species previously reported from Polish Baltic waters, four (humpback whale *Megaptera novaeangliae*, white whale *Delphinapterus leucas*, white-beaked dolphin *Lagenorhynchus albirostris* and harbour porpoise *Phocoena phocoena*) have been noted between 1979 and 1990. Only the harbour porpoise is regarded as a native species in this area, the rest appear to be vagrants. Except for the white whale, the recent reports relate to entanglements in various types of gill net. A survey revealed that only 13% of young people sampled were aware that harbour porpoises live in Polish waters. It therefore seems likely that many observations of 'something' in the water are not reported, and it is hoped that our wide public information and education programme will improve this situation.

Introduction

Observations of cetaceans in the Baltic Sea have been recorded for centuries: particularly in church records, in the records of Baltic towns and in private documents. Japha (1908) published an extensive review of this material, going back to 1291. He found over 200 records relating to 19 nominal species. The harbour porpoise (*Phocoena phocoena*) is the only species which appears to be native to the Baltic, and is recognized as part of the Polish mammalian fauna (Pucek and Raczynski, 1983; Kowalski and Pucek, 1984; Ropelewski, 1952; 1957; Skóra *et al.*, 1988). However, other cetacean species are observed in the Baltic from time to time, and the more recent records given by Ropelewski (1952), Schultz (1970), Pucek and Raczynski (1983) and Kowalski and Pucek (1984).

Materials and Methods

Information on cetaceans in the Polish Baltic Sea is currently collected by the Hel Marine Laboratory, University of Gdansk. The material comes partly from questionnaire surveys and partly from our wide public information and education programme. This paper summarises our records from 1 January 1979 to 1 March 1990.

Results

Four species have been reported during this period: humpback whale (*Megaptera novaeangliae*), white whale (*Delphinapterus leucas*), white-beaked dolphin (*Lagenorhynchus albirostris*) and harbour porpoise.

Humpback whale

A live humpback whale was reported on 6 February 1979, near Gdansk, about 400 m from the shore where the water was about 9 m deep (54°21.5'N, 18°52.5'E—see Fig. 1). The whale was entangled in 40 bottom-set gill nets. The nets were removed and the whale towed out to deeper water with the help of the Coastguard vessel *Kontroler I* (release position: depth 20 m, 54°24.2'N, 18°52.8'E). The released whale was last seen swimming northwards. The length of the animal, measured in the water, was about 8.3 m, indicating that it was a juvenile. (Humpback whales are 4.5-5 m long at birth and both sexes reach sexual maturity when they are 11-12 m in length.)

White whale

Three observations of white whales were made (Fig. 1). In May 1979 a specimen was seen near Puck, and another observation (probably of the same animal) was made a day later a few kilometres further south near Osłonino (P. Legiezynski and M. Szymelfenig—personal communication). In December 1986 a specimen was observed (and photographed) near Hel, swimming among anchored fishing boats in the outer roads of the harbour.

White-beaked dolphin

Between 10 and 13 June 1989 the fishing boat *DAR-21* from Kolobrzeg caught two white-beaked dolphins (54°36'N, 15°03'E) (Fig. 2). The male measured 196 cm and weighed 114 kg; the female was larger, at 214 cm and 146 kg. The whole specimens have been preserved, and are being investigated further at Hel Marine Laboratory.

Harbour porpoise

All observations during this period come from Puck Bay (Table 1; Fig. 1). Five of these (Nos. 4, 5, 6, 7 and

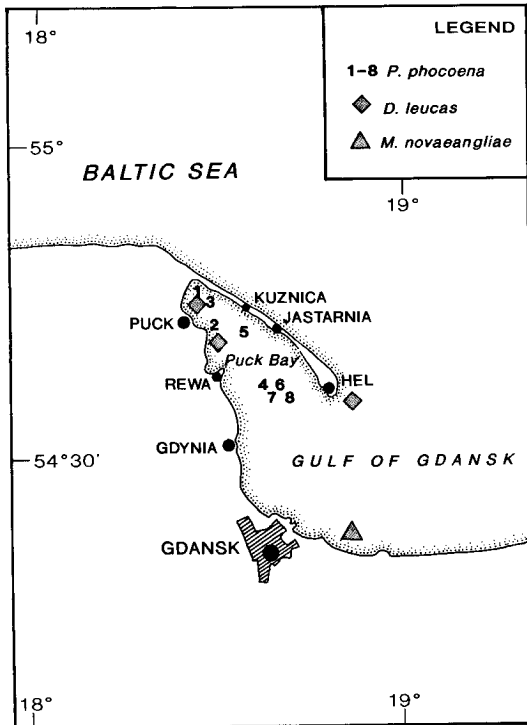


Figure 1. Map showing positions of records of humpback whale, white whale and harbour porpoise in the Gulf of Gdansk, 1979–1990.

8) were caught in salmon gill nets, set at the surface, three (Nos. 1, 2 and 3) were caught in another similar type of gill net, set at the bottom. Only two sightings were made (No. 2).

Discussion

The Atlas of Polish Mammals (Pucek and Raczyński, 1983) says (without listing them) that nine species of cetacean are sporadically reported on Polish coasts, while Kowalski and Pucek (1984) refer to 12 species. Only the harbour porpoise is regarded as a native species. However, Schultz's (1970) list of 10 species seems to be the most accurate:

- Delphinus delphis* common dolphin
- Tursiops truncatus* bottlenose dolphin
- Lagenorhynchus albirostris* white-beaked dolphin
- Phocoena phocoena* harbour porpoise
- Delphinapterus leucas* white whale
- Physeter macrocephalus* sperm whale
- Mesoplodon bidens* Sowerby's beaked whale
- Balaenoptera physalus* fin whale
- Balaenoptera borealis* sei whale
- Megaptera novaeangliae* humpback whale

In addition, the skull of a bottlenose whale (*Hyperoodon ampullatus*) was brought up by a bottom trawl in the Gulf of Gdansk (Kowalski and Pucek, 1984). As mentioned above, between 1979 and 1990 four of these species were recorded.

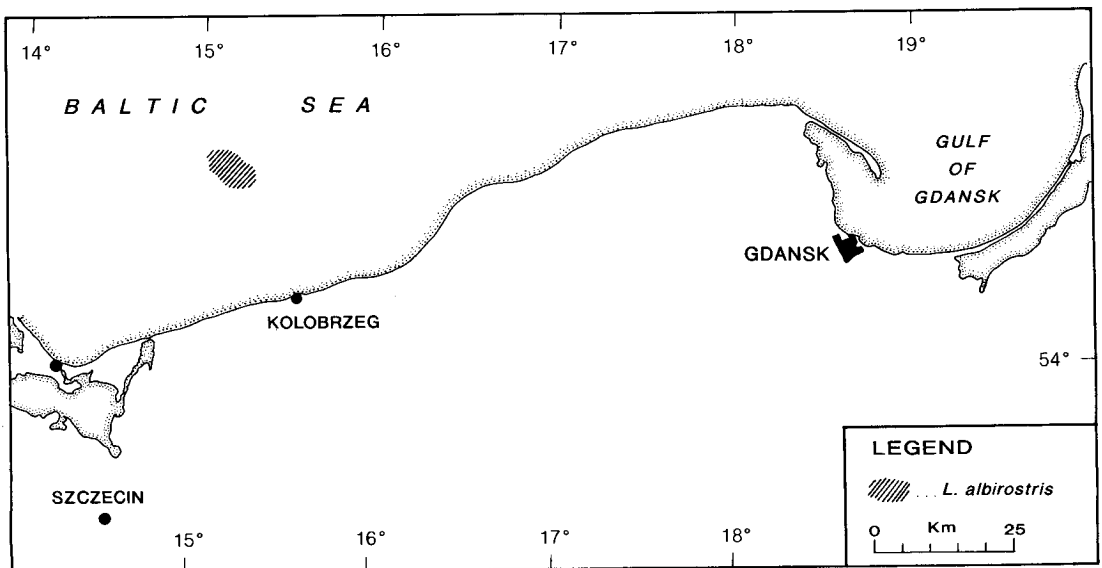


Figure 2. Map showing the area where two white-beaked dolphins were caught in 1989.

Table 1. Observations of harbour porpoises on the Polish Baltic coast 1979–1990.*

Case Number	Date	Specimens	Place	Notes
1	18.04.1979	1	Puck Bay, near Puck	Caught in bottom set gill net at 2.5 m depth, released, 144 cm
2	??.08.1985	1+2	Puck Bay, near Rzucewo	One caught in bottom set gill net and released, two others seen
3	???.1986	1	Puck Bay, near Puck	Caught in bottom set gill net and released
4	08.04.1986	1	Puck Bay, near Jastarnia	Female, 126 cm, caught in salmon gill net
5	24.12.1987	1	Puck Bay, near Kuznica	Male, 158 cm, caught in salmon gill net
6	15.03.1989	1	Puck Bay, near Jastarnia	Female, 112 cm, caught in salmon gill net
7	06.05.1989	1	Puck Bay, near Jastarnia	Female, 137 cm, caught in salmon gill net
8	27.01.1990	1	Puck Bay, near Jastarnia	Female, 128 cm, caught in salmon gill net

*Details of harbour porpoise records from 1922 to 1987 are given by Skóra *et al.*, 1988.

Humpback whales have been recorded in the Baltic on 10 or 11 occasions (Schultz, 1970), but only once before in Polish waters. This appears to have been on 12 May 1620, on the island of Wolin in the Szczecin area (Japha, 1908; Kowalski and Pucek, 1984). The last observation, of an animal caught and released in 1979, is given by Kowalski and Pucek (1984) as an observation of an unidentified species and dated a year earlier.

According to Aguayo (1978), white whales have been reported about 25 times in the Baltic, but only once in Polish waters. This was on 19 September 1576 in the Gdansk region (Japha, 1908), near where the recent entanglement of the humpback whale occurred. It is interesting that the two (or three) most recent observations of white whales were also made in the Gulf of Gdansk, and that these animals avoided entanglement in nets.

The white-beaked dolphin is known from some 43 records in the Baltic, relating to about 70 individuals (Aguayo, 1978). Only one of these, from 1862 (Japha, 1908), came from Polish waters, near Kolobrzeg. Our new records, of two specimens caught in nets, are also from the same area as Japha's record.

All our recent records of harbour porpoises come from the part of the Gulf of Gdansk known as Puck Bay. It is difficult to explain this concentration of records. Perhaps it is because there is a concentration of fishing effort in this area, which is in turn related to the concentration of fish resources here. Or it may be that this is an area where Baltic porpoises concentrate (again perhaps related to the available fish resources), and there is thus a greater chance that any nets will catch some animals.

These few recent records also reflect the lack of knowledge among Polish people about these mammals in the Baltic. Most people, even when they

see 'something' in the water, do not believe that it could be a 'dolphin' or 'porpoise'. We have recently investigated the level of general ecological knowledge among young people (M. Gulda and K. E. Skóra—unpublished), and found that only 13% of our sample were aware that harbour porpoises live in Polish waters. If this is true of the general population, then our records may underestimate the real level of observations by at least five or six times.

Acknowledgements

The author thanks: Dr M. Klinowska, Physiological Laboratory, University of Cambridge, for encouragement and for assistance in translating and editing, and Mrs D. Hughes, of the same Department, for preparing the maps. An earlier version of this paper was presented to the 1990 meeting of the Scientific Committee of the International Whaling Commission, with the identification number SC/42/02.

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