

**CASE REPORT ON TWO LARGE WHALES
(MEGAPTERA NOVAEANGLIAE AND PHYSETER
MACROCEPHALUS IN THE GERMAN PART OF THE NORTH SEA**

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INTRODUCTION As part of a German government funded project, a humpback whale *Megaptera novaeangliae* and a sperm whale *Physeter macrocephalus* found dead in the German part of the North Sea, were investigated. Both species occur very rarely in German waters. Humpback whales have been recorded in three cases on the German coast and sperm whales in nine cases (Table. 1; Schultz, 1970; Goethe, 1983; Meyer, 1994).

RESULTS AND DISCUSSION The dead humpback whale was found drifting almost 50 km west of the island of Helgoland on 12th October 1994, and was dissected on board of the oil defence ship "SCHAHÖRN". The female whale was subadult and measured about 10 m in length. The upper jaw, cranium and the fluke were missing. The blubber thickness ranged between 2.0 cm and 7.5 cm, indicating the poor nutrient condition of the animal. The stomach was empty. Because of advanced decomposition of the carcass, no detailed post-mortem examination was possible. Ectoparasites were determined as *Cyamus boopis*, *Conchoderma auritum* and *Coronula diadema*. No endoparasites were found. The skeleton was transferred to the Marine Museum of Stralsund.

The sperm whale was first observed still alive, by fishermen near the island of Baltrum in Lower Saxony on 3rd November, 1994. The animal stranded on a sand bank in front of this island, where it died the next day. The male sperm whale measured 13.8 m in length and weighed 39 t. The animal was in a good nutritive condition, with a blubber thickness of 10 - 27 cm. According to the length-age relationship, the animal was aged at about 10-15 years. However, a more accurate age determination by reading dental growth layers is necessary and still in progress.

In the stomach and intestine, cephalopod beaks were found and analysed. Three species of cephalopods were identified. Counting the lower beaks, 186 *Gonatus fabricii*, one *Histioteuthis bonnellii* and five *Alloposus mollis* were found. Measurements of the lower beaks revealed a mantle length for *G. fabricii* of 17.4-27.5 cm (mean 22.1 cm) and a weight of 116 to 413 g (mean 228 g). The weight of *A. mollis* ranged between 334 and 703 g (mean 574 g). The total weight of the stomach contents calculated by the beaks was 42.3 kg for *Gonatus fabricii* and 2.9 kg for *Alliposus mollis* (total 45.2 kg). The length of the intestine measured 160 m and contained cephalopod beaks and small pieces of faeces. Ambergris was not present.

Parasitological examination revealed a few whale lice (*Cyamus catodontis*) on the body surface and tape worm larvae (*Phyllobothrium* sp.) in the blubber layer.

The skeleton was collected for the Nationalparkzentrum Wilhelmshaven.

To our knowledge, 21 sperm whales were recorded on European coasts in the period of November 1994 to February 1995 (Belgium 4, Denmark 1, Germany 1, Netherlands 4, Scotland 11). This unusually high number indicates a disorientation or disorder of the animals.

Squid beaks in the stomach of the examined sperm whale show an unusually high percentage of Gonatidae in the food composition. Usually, Histioteutidae represent about 70% of found squid individuals and about 30% of food by wet weight in the waters of Iceland and Spain (Clarke, 1974, 1976). *Gonatus fabricii* is an arctic deep sea species which extends south in the eastern North Atlantic to about 60°N. Cephalopod beaks may remain for up to five days in the stomach (Clarke, 1974). This indicates that the sperm whale had not fed in the North Sea and had come from the north probably on its southward migration.

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Table 1 Coastal records of *Megaptera novaeangliae* and *Physeter macrocephalus* in the German part of the North Sea (after Schultz, 1970; Goethe 1983; Meyer, 1994).

Year	Place	Number of Individuals	Body Length (m)	Weight (t)
<i>Physeter macrocephalus</i>				
1575	Tondern	1	-	-
1604	Pellworm	2	-	-
1721	Wischhafen/Elbe	1	18-21	-
1723	Neuwerk	5	11.2-15.3	36.4
1738	St. Peter	-	14.6	-
1751	Minser Oog	1	16.3	-
1762	Borkum	1	-	-
1762	Neuwerk	2	-	-
1984	Weser Aestuary	1	17.5	65
1994	Baltrum	1	13.8	39
<i>Megaptera novaeangliae</i>				
-	Großvogelsand/Elbe	-	-	-
1824	Elbe Aesturay	-	-	-
1991	Jade/Tonne 46	1	6.9	-
1994	50 km west of Helgoland	1	ca. 10	-