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WHALES AND SEALS MARKED IN THE NORTHEAST ATLANTIC IN 1974

By

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Whales

Two chartered small-whale catchers, "Ann Brita" and "Båragutt", were used on a whale marking cruise to the Barents Sea and Svalbard from 10 July to 20 August 1974. The tracks of the ships and sighted and marked whales are plotted in Fig. 1. The distance between the ships usually was kept at 2-4 nautical miles during the cruise, and the total distance steamed in open sea was about 3700 n. miles. However, the weather was unfavourable with fog, wind and low visibility during the greater part of the cruise. Therefore the observations cannot be used to estimate the density of whales in the searched area.

Sighted whales include 259 minke whales (Balaenoptera acuto-rostrata), 20 humpbacks (Megaptera novaeangliae), one fin whale (Balaenoptera physalus), 1500-2000 white-beaked dolphins (Lagenorhynchus albirostris) and 17 common porpoises (Phocoena phocoena). Observations of dolphins and porpoises

are not included in Fig. 1. A total of 63 whales, 51 minke whales and 12 humpbacks were marked.

An additional seven minke whales were sighted and two of these were marked north of Shetland on a cruise to tag basking sharks (Cetorhinus maximus) in the northern North Sea from 12 to 30 May 1974. Observations of beaked whales (Mesoplodon bidens) made during this cruise will be reported elsewhere (Per Øynes, pers. comm.).

The geographical distribution of the effectively marked whales was as follows:

Southern Barents Sea (Østbanken)	1	minke	
Eastern Barents Sea (Gåsbanken)	3	"	
Hopen Island	15	"	7 humpbacks
Bear Island	20	"	5 "
Bear Island-Spitsbergen (Storfjordrenna)	11	"	
West coast of Spitsbergen	1	"	
North of Shetland	2	"	
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Total	53	minke	12 humpbacks

All whales were marked with numbered 'Discovery' type marks (Mitchell, 1970). The 12-gauge streamer mark was used on humpbacks and the smaller .410-bore mark on minke whales. Upon advise from Arctic Biological Station, Fisheries Research Board of Canada, spun string streamers had been attached also to the .410-bore marks. In several cases the streamers helped to decide whether the mark had hit or not.

The larger marks all bear the following engraved legend: "REWARD FOR RETURN TO DISCOVERY BRITISH MUSEUM (NAT. HISTORY) LONDON". The small marks are engraved with either "STATENS INSTITUTT FOR HVALFORSKNING. OSLO" or "SENDES TIL HAVFORSKNING BERGEN".

A series of observations made during the whale marking cruise suggest that minke whales breathe and are exposed to the air for 3-4 seconds only and that dives may last for any period between 12 seconds and 10 minutes or more when they are followed (not chased) by ships.

Seals

In June-July 1974 a total of 101 subadult and adult hooded seals (Cystophora cristata) were tagged in the East Greenland pack-ice in the Denmark Strait. The taggings were made during an expedition with the chartered sealing vessel 'Fortuna' to collect material for age analysis of moulting hoods. These are the first hooded seals known to have been tagged in the moulting area in the Denmark Strait.

It is believed that hooded seals breeding in both the Northwest and in the Northeast Atlantic meet and mix in the Denmark Strait pack-ice during the moulting season (Sergeant, 1974). So far only two recaptures of hoods tagged at Newfoundland have indicated a movement from the Northwest Atlantic towards the Denmark Strait: One five-year-old was recaptured near Kap Farvel in 1956 (Rasmussen and Øritsland, 1964) and another, a two-year-old, was recaptured in the Angmagssalik Fiord close to the Denmark Strait moulting area in 1972 (Benjaminsen et al., 1973). No recapture has yet been made in the Denmark Strait of hooded seals from the Jan Mayen area. Therefore any recovery from the Denmark Strait taggings in 1974 may give significant new information on the movements of hooded seals in the North Atlantic.

All seals were tagged with 'Jumbo Roto tags' (Dalton Supplies Ltd., Nettlebed, Henley-on-Thames, England), attached to the web on either side of the middle digit of the left hind flipper. The female part of each tag has an individual number in the series D0001-D0101 and the male part bears the legend "HAVFORSKNING BERGEN NORW".

In the West Ice (the Jan Mayen area of the Greenland Sea) seven harp seal pups and three hooded seal pups were tagged from the relief vessel "Harmoni" during the sealing season from 28 March to 29 April 1974. 'Jumbo Rototag' numbers were C402-C411. Also one juvenile harp seal and five pups were tagged from the sealer "Polarulv" in the East Ice (the pack-ice in the southeastern Barents Sea) in late April 1974 with 'Jumbo Rototags' numbered from D1001 to D1007.

Recaptures

The recapture in the Lofoten area of two out of 15 minke whales marked in the same area in 1964-1965 was reported by Jonsgård (1967). A fin whale marked off Southeast Greenland in 1968 was recaptured after seven days, having travelled about 280 nautical miles towards Iceland (Jonsgård and Christensen, 1968). No further recoveries are known to us from previous Norwegian whale marking programs in the Northeast Atlantic.

So far the recapture of 10 seals, all tagged as pups, have been reported in 1974: Three harp seals tagged off Newfoundland-Labrador were recaptured in the same area after two, two and three years; two more harp seals from Newfoundland were recaptured at West Greenland after two and three years; four hooded seals tagged in the Jan Mayen area were recaptured in the same general area after five, six, six and eight years; and one harp seal tagged in southeastern Barents Sea was recaptured in the same area after two years.

One animal which had been tagged in the Jan Mayen area both with a 'Jumbo Rototag' and an oldfashioned tail tag (Rasmussen and Øritsland, 1964) was recaptured with the rototag only. This suggest that rototags are the most effective. The recovery of an eight year old rototag also is encouraging. Lower jaws from four recaptured seals have supplied us with additional material for age determination of known-age animals.

Reports of future recoveries

It is proposed to pay a reward of 200 Norwegian kroner for the report of a recovered whale mark. Rewards of N.kr. 30,- is presently being paid for recovered seal tags. An additional reward of N.kr. 20,- is paid for each seal tag when the lower jaw of the seal is collected and sent in with the tag.

Recaptures should be reported to

Sea Mammal Section,
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with information on date and location of the catch and on the sex and length of the animal.

Whale recaptures could also be reported to

Whale Research Unit,
Institute of Oceanographic Sciences,
c/o British Museum (Natural History),
Cromwell Road,
London SW 7 5 BD,
England.

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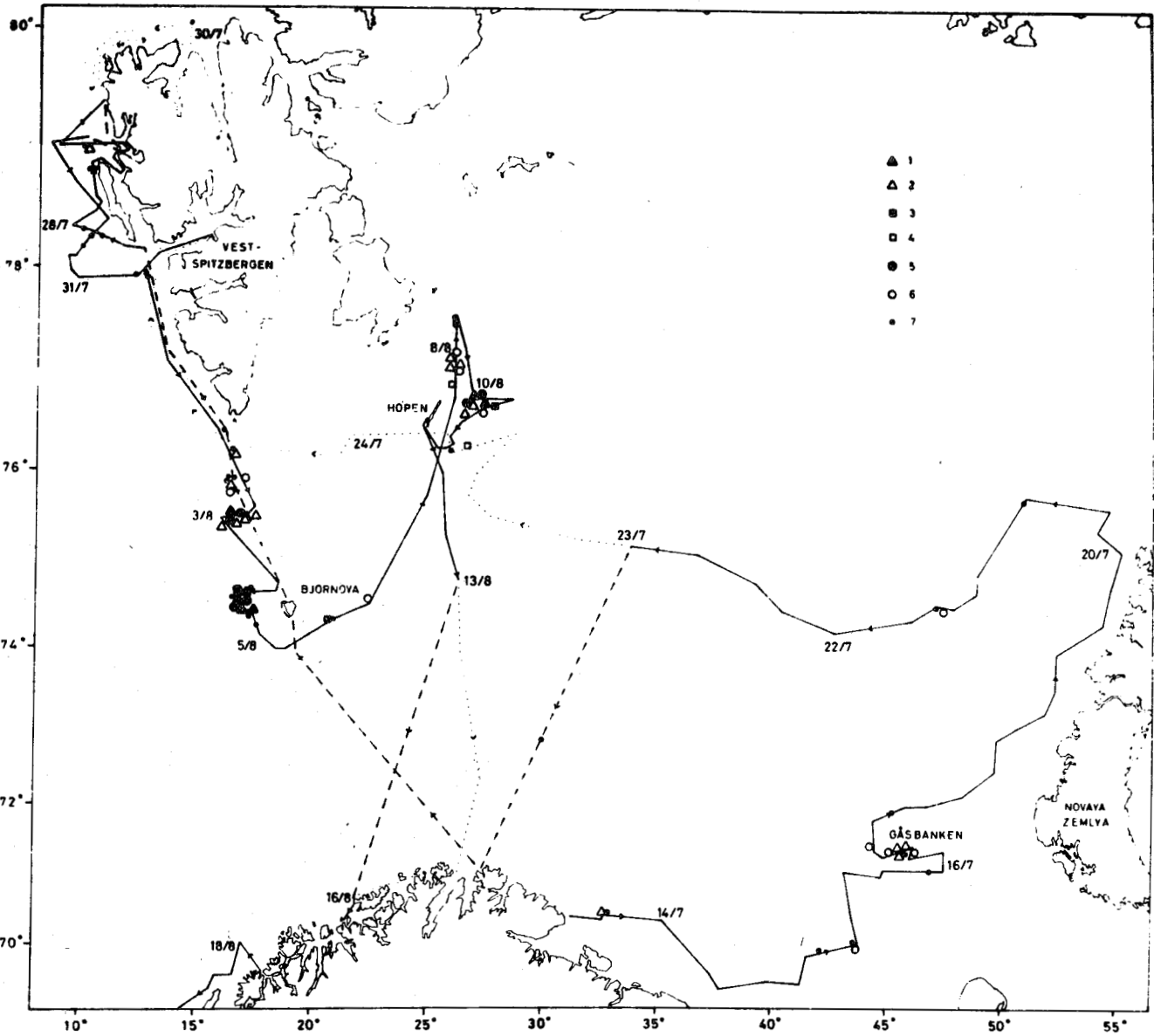


Figure 1. Cruise tracks and observed and marked whales during the whale marking cruise with "Ann Brita" and "Båragutt" 10 July - 20 August 1974. Full lines represent tracks by both ships together, broken lines represent the tracks of one ship alone. 1) 5 minke whales marked, 2) 1 minke whale marked, 3) 5 humpbacks marked, 4) 1 humpback marked, 5) 25 minke whales sighted, 6) 5 minke whales sighted, 7) 1 minke whale observed.