Greenland more than 50% of the minke whales examined had fed upon sand-eel.

All species of whales seen during the cruises were recorded by the observers. Altogether 2 blue whales, 218 fin whales, 16 sei whales, 45 humpbacks, 1 012 minke whales, 15 sperm whales, 149 killer whales, 1 160 pilot whales, more than 1 000 dolphins and 23 common porpoises were counted.

# Seals (T. Øritsland)

Field work on harp and hooded seals was continued in 1973 by the Institute of Marine Research, Bergen and sampling was carried out during the hunting season on commercial sealing vessels at Newfoundland-Labrador and in the West Ice (the Jan Mayen area of the Greenland Sea). Information from the East Ice (the southeastern part of the Barents Sea) was collected through hunting journals. Bearded seals were studied and sampled on a summer expedition in Svalbard waters.

At Newfoundland material and data were collected from 10 March to 17 April. Ice edges and patches of seals were plotted and samples for age analyses were collected from 817 harps and 285 hoods. Additional age samples were collected from 1 455 seals by crew members of other sealing vessels. Some long-term special studies of pups and adult seals were continued. No seals were tagged, but three harp seals tagged at Newfoundland in past seasons were recaptured in West Greenland in 1973.

Age samples and female reproductive organs of hooded seals collected at Newfoundland from 1964 to 1972 have been processed and analysed. Females are fully recruited to the breeding stock in that area at an age of 6, and males at an age of 10 years. The total annual mortality rate was found to be 0.16 for six year old and older females and 0.23 for 10 year old and older males. It was also found that female hooded seals reach sexual maturity at ages from 2 to 6 years and that fertility is high with up to 98% of the older females producing one pup per year.

Sampling in the West Ice was carried out from 19 March to 20 April. The distributions of ice and seals were plotted, partly from observations made by a spotting plane flying from northern Norway. A sample for age analysis was collected from 268 hooded seals and additional material from 144 hoods was collected by the crews of other vessels.

Special studies of reproduction, growth and physical condition of adults, and of the growth and development of pups were continued. No seals were tagged and no recoveries were reported from earlier taggings.

Hunting journals kept by all six vessels participating in the East Ice hunt have yielded information on the distribution of seals and changes in the composition of the catches through the season from 26 March to 5 May. The results are promising enough to warrant a revision of the journals for computer analysis of future data. It is intended to issue the revised journals to all Norwegian sealing vessels in all areas in the 1975 sealing season.

At Svalbard a total of 222 bearded seals were studied and sampled during the period from 8 July to 15 August on an expedition with a chartered sealing vessel. The crew of another sealer collected a sexed age sample from 490 bearded seals. More than 350 walruses were observed by the expedition in northeastern Svalbard waters. This figure is higher than the total number of walruses recorded at Svalbard in all years since 1945. A local Svalbard population of common seals was sampled for identification.

Physiological research on seals has been continued at the Institute of Aviation Medicine, Oslo, (A.S. Blix) and the Institute of Zoophysiology, University of Oslo (J. Krog), in collaboration with other institutes.

#### Poland

(K. Wolk)

The work on the occurrence of marine mammals in Poland was continued in 1973. The investigations will probably have to be continued a few more years before any results can be published.

#### Portugal

(J.E.E. Cabido de Ataíde)

No research on marine mammals was carried out in 1973.

## Spain

(C.García Cabrera and H. Quiroga)

During the year 1973, the Oceanographic Laboratory of the Spanish Institute in the Canary Islands has studied the biology of the Canarian seal (Monachus monachus). This species was very abundant in these Islands in the past century. Today it is only found 100 km north of Cape Blanc. The biology and ecology have been studied and the results will be published later on. Furthermore, a check list will be published concerning marine mammals which frequently arrive in these waters.

#### Sweden

(S.J. Sjøgren)

The Swedish Museum of Natural History, Stockholm, has continued the research on age and feeding habits of grey, ringed and common seals in the Baltic. A special study has been made on the fish-eating seal population along the Swedish coast. 103 samples of seal blubber have been analysed for DDT and PCB's. The results show no connection between the values found and the age of the seals. No obvious difference in levels was observed between the sexes. The levels are clearly higher in the Baltic proper than along the west coast, the Åland Sea and the Bothnian Bay.

# United Kingdom

(B.B. Parrish and W.N. Bonner)

#### Seals (W.N. Bonner)

The Seals Research Dvision, Institute for Marine Environmental Research (a component body of the Natural Environment Research Council) continued its research on British seals.

### Common Seals, (Phoca vitulina)

Tagging operations and collection of data from the annual hunt of Common seal pups in the Wash were continued. The total production of pups in the Wash was estimated to be 1 965 in 1973 (1972 - 1 175). A survey of Common seals in Shetland was made in July 1973 and after a complete coverage of the coastline the population was estimated at 1 750 seals (excluding young of the year). This compares well with an estimate of 1 800 made during a September survey in 1971. This population is now protected by Order