

NETHERLANDS PROGRESS REPORT ON CETACEAN RESEARCH, MAY 2003 TO MAY 2004, WITH STATISTICAL DATA FOR THE CALENDAR YEAR 2003

Compiled by Peter J.H. Reijnders

ALTERRA-Marine & Coastal Zone Research

P.O. Box 167, 1790 AD Den Burg, The Netherlands

The information contained in this report has been obtained from: Alterra-Marine & Coastal Research (Alterra), the Leiden Center for Environmental Sciences (CML), the Royal Netherlands Institute for Sea Research/Nederlandse Zeevogelgroep/Camphuysen Seabird Research *Consultancy* (Royal NIOZ/NZG/CSR), the National Museum of Natural History (Naturalis: NMNH), Sea Mammal Research Company (SEAMARCO).

1. Species and stocks studied

Scientific name	Common name	Area/stock(s)	Items referred to
<i>Balaenoptera acutorostrata</i>	Minke whale	SE Atlantic, N Atlantic	2.1.1
<i>Balaena borealis</i>	Sei whale	SE Atlantic	2.1.1
<i>Delphinus delphis</i>	Common dolphin	N Sea, SE and tropical Atlantic	2.1.1,8,9
<i>Globicephala melas</i>	Long-finned pilot whale	North Sea	8,9
<i>Grampus griseus</i>	Risso's dolphin	Tropical Atlantic	2.1.1
<i>Lagenorhynchus acutus</i>	White-sided dolphin	North Sea	2.1.1, 9
<i>Lagenorhynchus albirostris</i>	White-beaked dolphin	North Sea, N Atlantic	2.1.1, 8, 9
<i>Megaptera novaeangliae</i>	Humpback whale	North Sea	8,9
<i>Phocoena phocoena</i>	Harbour porpoise	North Sea, N Atlantic	2.1.1, 8, 9
<i>Stenella clymene</i>	Clymene dolphin	Tropical Atlantic	2.1.1
<i>Stenella coeruleoalba</i>	Striped dolphin	SE Atlantic, tropical Atlantic	2.1.1,8,9
<i>Stenella longirostris</i>	Long-snouted spinner dolphin	Tropical Atlantic	2.1.1
<i>Tursiops truncatus</i>	Bottlenose dolphin	SE Atlantic, North Sea	2.1.1

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

Ship-based seabird and marine mammal surveys off Nouakchott, Mauritania, 12-20 March 2003 (CSR).

Ship-based seabird and marine mammal surveys in the NW North Sea and off the Scottish east coast, June-July 2003,: top-predator observations in connection to acoustic herring surveys in June-July 2003, sailing a network grid off the Scottish east coast, 53-59°N, coast – 2°E. (Royal NIOZ) and dedicated surveys in the Wee Bankie area, off the Firth of Forth, 7-18 June 2003 (Royal NIOZ and University of Aberdeen; IMPRESS project).

Ship-based seabird and marine mammal surveys off the Dutch coast, April, May, August and November 2003 (Alterra, CSR).

Ship-based seabird and marine mammal surveys NW Norway, Tysfjorden, Vestfjorden (Tromsø → Bødø, 17-23 September 2003 (CSR).

The monitoring programme "coastal seawatches" to register the occurrence of harbour porpoises and other cetaceans in Dutch coastal waters was continued (NZG/CSR).

Continuation of the Marine Mammal Database (database of sighting records in the North Sea) including the establishment of web pages with features to be used for the identification of cetaceans

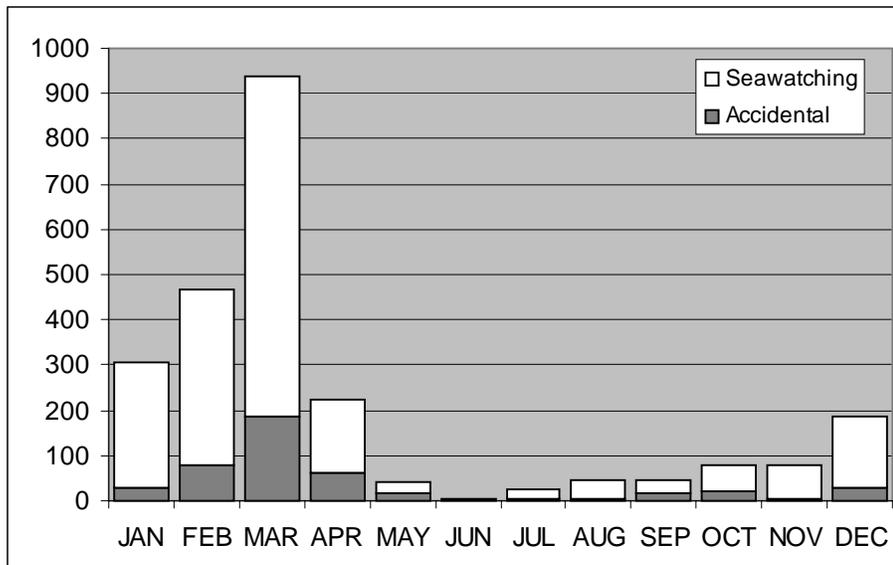
and lists of recent sightings and images of marine mammals:

<http://home.planet.nl/~camphuys/Cetacea.html>.

Total number of records in the database 1960-2002 (51-60°N, 4°W-12°E): 10,198 records, 23,965 individuals. Total number of records in the database 2002: 1307 (2,889 individuals). Species recorded: *Balaenoptera acutorostrata* Minke Whale, *Megaptera novaeangliae* Humpback Whale, *Physeter macrocephalus* Sperm Whale, *Tursiops truncatus* Bottlenose Dolphin, *Delphinus delphis* Common Dolphin, *Lagenorhynchus albirostris* White-beaked Dolphin, *Lagenorhynchus acutus* White-sided Dolphin, and *Phocoena phocoena* Harbour Porpoise (CSR).

Total number of records in the database 2003 in Dutch coastal waters (51-56°N, 2°E-7°E): 271 records, 6 species, 533 individuals. Species observed: *Megaptera novaeangliae*, Humpback Whale; *Physeter macrocephalus*, Sperm Whale; *Delphinus delphis*, Common Dolphin; *Lagenorhynchus albirostris*, White-beaked Dolphin; and *Phocoena phocoena*, Harbour Porpoise (CSR).

Seasonal pattern in harbour porpoise sightings in Dutch coastal waters (monthly records during systematic seawatches and reported accidental sightings show peak occurrence in January-March (CSR).



2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

A study on the possible influence of a planned windfarm on harbour porpoises off the Dutch coast has started in June 2003 and will continue until June 2004. T-PODs moored to buoys are deployed in and around the planned windfarm area. The objective is to obtain year-around information on relative density of harbour porpoises in and around this area. Ship-based surveys are carried out bi-monthly to obtain complementary data (Alterra).

7. Statistics for small cetaceans

7.1 For the calendar year 2003

No data received

8. Strandings

Registration of dead stranded cetaceans was continued (NMNH).

9. Other studies and analyses

Bycatch assessment and bycatch prevention

A study has been started to investigate effects of commercially available acoustic alarms designed to reduce small cetacean bycatch, on the behaviour of North Sea fish species (SEAMARCO).

The study of formalin-preserved lung tissues of harbour porpoise stranded on the Dutch coast in order to identify bycatches, has been concluded. The final report is to appear in 2004 (NMNH).

Pollution

The implementation of the IWC-Research Programme to Investigate Pollutant Cause-effect Relationships in Cetaceans- POLLUTION 2000+, has been continued. Results of the analyses of biopsy-dart as well as capture release sampling carried out on bottlenose dolphins from Sarasota Bay (Florida) will be presented at the 2004-SCtee meeting.

The harbour porpoise post-mortem calibration project has progressed. Additional samples have been partly analysed and the remaining samples have been shipped to different laboratories for further analyses (co-ordination Alterra).

The EC-funded research project, BIOCET (BIOaccumulation of persistent organic pollutants in small CETaceans in European waters: transport pathways and impact on reproduction) concluded its third year at the NMNH and Royal NIOZ. Aim is to study the relation between pollutant burden, reproductive success and pathology in *Phocoena phocoena* and *Delphinus delphis* (main species), *Tursiops truncatus* and *Stenella coeruleoalba* (additional species). All accumulated data have been analysed during the second half of 2003, with the final report to appear in 2004. The countries involved in the project are Scotland, France, Ireland, The Netherlands and Spain. The Netherlands' part of the BIOCET project is focused on the harbour porpoise (NMNH and Royal NIOZ).

Pathology, life history

Studies of the pathology, bacteriology, virology, life history and stomach contents of stranded and a few bycaught animals were continued (NMNH). The species studied are harbour porpoise, white-beaked dolphin, long-finned pilot whale and humpback whale. The animals were dissected and sampled for future research. Suitable harbour porpoises were included in the afore-mentioned BIOCET programme (NMNH).

Photo-id catalogue

Europhlukes, a three year project funded by the European Commission under its Fifth Framework Programme, is in its third and final year. The first objective is to bring together European photo material of cetaceans and to develop a photo-ID system, allowing retrieval by visual characteristics of an individual cetacean. The second objective is to initiate a European network of providers and end-users of the European Cetacean Photo-ID system, to ensure continued addition and use of the material and continued maintenance of the (meta-) databases. After two years, some 25,000 photo's have been scanned and archived. Software has been developed to retrieve photos from the database by identifying feature. Europhlukes now has 33 institutional partners and contributors (co-ordination CML, Leiden University).

11. Publications

11.1 published

Kastelein, R.A., Hagedoorn, M., Au, W.W.L., and de Haan, D. 2003. Audiogram of a striped dolphin (*Stenella coeruleoalba*). J. Acoust. Soc. Am. 113: 1130-1137.

Kastelein, R.A., Kershaw, J., Berghout, E., and Wiepkema, P.R. 2003. Food consumption and suckling of Killer whales *Orcinus orca* at Marineland, Antibes. Intern. Zoo Yearbook 38: 204-218.

Kastelein, R.A., Staal, C. and Wiepkema, P.R. 2003. Food consumption, food passage time, and body measurements of captive bottlenose dolphins (*Tursiops truncatus*). Aq. Mamm. 29: 53-66.

Smeenk, C. 2003. Strandingen van Cetacea op de Nederlandse kust in 1993-1997. Lutra 46: 45-64.

Smeenk, C., M. Addink & K. Camphuysen 2003. De eerste bultrug voor Nederland. Zoogdier 14 : 3-4.

11.2 not published

Camphuysen C.J. 2003. Seabirds and marine mammals off West Africa. Responses 2000 cruise report, Netherlands Institute for Sea Research, 6 January 2003, Texel.

Camphuysen C.J. (ed.) 2004. Seabirds and sandeels: Studies of interactions between the marine environment, (avian) predators and sandeels off the east coast of Scotland, 2002-2003. Third Interim report, IMPRESS Report 2004-001, Royal Netherlands Institute for Sea Research, Texel

Camphuysen C.J. & B. Scott (eds). 2003. IMPRESS Pelagia cruise 7-19 June 2003 Wee Bankie Area (North Sea). Cruise report 64 PE 212. IMPRESS Report 2003.001, Royal Netherlands Institute for Sea Research and Aberdeen University, Texel.

Camphuysen C.J., S.C.V Geelhoed & M.H. Laks 2003. Feeding behaviour and foraging interactions of seabirds and marine mammals in the NW North Sea, summer 2003. Trip report Herring Acoustic Survey RV Tridens 23 June 17 July 2003. IMPRESS Report 2003.002, Royal Netherlands Institute for Sea Research, Texel.