NETHERLANDS PROGRESS REPORT ON CETACEAN RESEARCH, MAY 2002 TO MAY 2003, WITH STATISTICAL DATA FOR THE CALENDAR YEAR 2002

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This report summarises information obtained from: Alterra-Marine & Coastal Research (Alterra), the Leiden Center for Environmental Sciences (CML), the Netherlands Institute for Sea Research/Nederlandse Zeevogelgroep/Camphuysen Seabird Research Consultancy (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
Balaenoptera acutorostrata	Minke whale	SE Atlantic, N Atlantic	2.1.1
Balaena borealis	Sei whale	SE Atlantic	2.1.1
Balaena glacialis	Southern right whale	SE Atlantic	2.1.1
Balaenoptera musculus	Blue whale	N Atlantic	2.1.1
Balaenoptera physalus	Fin whale	SE Atlantic, N Atlantic	2.1.1
Delphinus delphis	Common dolphin	North Sea	2.1.1
Hyperoodon ampullatus	N-Atlantic bottlenose whale	N Atlantic	2.1.2
Hyperoodon planifrons	SE-Atlantic bottlenose whale	SE Atlantic	2.1.1
Lagenorhynchus acutus	White-sided dolphin	North Sea	2.1.1, 9
Lagenorhynchus albirostris	White-beaked dolphin	North Sea, N Atlantic	2.1.1, 8, 9
Lagenorhynchus australis	Peale's dolphin	SE Atlantic	2.1.1
Megaptera novaeangliae	Humpback whale	SE Atlantic, N Atlantic	2.1.1, 2.1.2
Mesoplodon bidens	Sowerby's beaked whale	N Atlantic	8, 9
Mesoplodon spec.	Beaked whale	SE Atlantic	2.1.1
Orcinus orca	Killer whale	SE Atlantic	2.1.1
Phocoena phocoena	Harbour porpoise	North Sea	2.1.1, 8, 9
Physeter macrocephalus	Sperm whale	SE Atlantic	2.1.1
Tursiops truncatus	Bottlenose dolphin	SE Atlantic, North Sea	2.1.1

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

Ship-based surveys between Uruguay, South Georgia, and Falkland Islands, as guest surveyor of the British Antarctic Survey on the RV *James Clark Ross* (CSR).

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

Top-predator observations (seabirds and marine mammals) in connection to acoustic herring surveys in June-July 2002, sailing a network grid off the Scottish east coast, $53-59^{\circ}N$, $coast - 2^{\circ}E$. (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

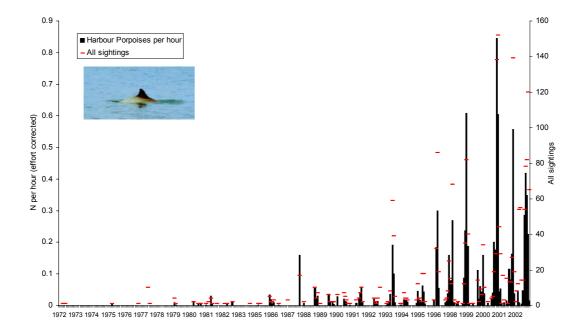
and lists of recent sightings and images of marine mammals:

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

Total number of records in the database 1960-2002 (51-60°N, 4°W-12°E): 9862 records, 33,839 individuals. Total number of records in the database 2002: 673 (1,492 individuals.

Total number of records in the database 2002 in Dutch coastal waters (51-56°N, 2°E-7°E): 271 records, 6 species, 533 individuals. Species observed: *Balaenoptera acutorostrata, Delphinus delphis, Lagenorhynchus albirostris, Orcinus orca, Phocoena phocoena, Tursiops truncatus (CSR).*

Recent trends in harbour porpoise sightings in Dutch coastal waters (monthly numbers per hour during systematic seawatches (bars) and total number of recorded cases (dots) show a gradual increase in spring sightings (CSR).



2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

Participation in whale watching safaris around Iceland and towards Jan Mayen and Svalbard in the northern North Atlantic (CSR).

7. Statistics for small cetaceans

7.1 For the calendar year 2001 No data received

8. Strandings

Registration of dead stranded cetaceans was continued (NMNH).

9. Other studies and analyses

Bycatch assessment and bycatch prevention

Studies to mitigate bycatch of small cetaceans in fisheries: 1) target detection in noise by harbour porpoises, and 2) the effect of ultrasonic pingers on harbour porpoises, were continued (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 being prepared (NMNH).

Pollution

The co-ordination of the IWC-Research Programme to Investigate Pollutant Cause-effect Relationships in Cetaceans- POLLUTION 2000+, has been continued. Analytical results on biopsy-dart as well as capture release sampling carried out on bottlenose dolphins from Sarasota Bay (Florida) have been processed. The harbour porpoise post-mortem calibration project has progressed. Samples from freshly dead animals 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) is in its third year at the NMNH and 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 will be analysed during the second half of 2003, with the final report to appear in December 2003. 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).

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 and one Sowerby's beaked 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 second 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. During the first year 12,000 photo's have been scanned and archived. Europhlukes now has 33 institutional partners and contributors (co-ordination CML).

11. Publications

11.1 published

- Jauniaux, T., M. García Hartmann, J. Haelters, J. Tavernier & F. Coignoul 2002. Echouage de mammifères marins: guide d'intervention et procedures d'autopsie. Ann. Méd. Vét. 146: 261-276.
- Reijnders, P.J.H. 2003. Reproductive and developmental effects of environmental organochlorines on marine mammals. In: J.G. Vos, G.D. Bossart, M. Fournier & T. O'Shea (eds), Toxicology of Marine Mammals. Taylor & Francis, London, 55-66.
- Reijnders, P.J.H. & M.P. Simmonds 2003. Global temporal trends of organochlorines and heavy metals in pinnipeds. In: J.G. Vos, G.D. Bossart, M. Fournier & T. O'Shea (eds), Toxicology of Marine
- Santos, M.B., G.J. Pierce, M. García Hartmann, C. Smeenk, M.J. Addink, T. Kuiken, R.J. Reid, I.A.P. Patterson, C. Lordan, E. Rogan & E. Mente 2002. Additional notes on stomach contents of sperm whales *Physeter macrocephalus* stranded in the north-east Atlantic. J. Mar. Biol. Ass. (UK) 82: 501-507.

11.2 not published

- Camphuysen, C.J. 2002. Seabirds and marine mammals off South Georgia. CSR Consultancy Report 2002.01, CSR Consultancy, Oosterend, Texel, 46pp.
- Camphuysen, C.J. 2002. Häufigkeit und räumliche Verteilung der Seevögel nach Planbeobachtungen im und um Windparkplanungsgebiet "Nördlicher Grund" (östliche Nordsee) [Abundance and spatial

- distribution of seabirds in windfarm planning area Nördlicher Grund, German Bight; includes marine mammals]. CSR Consultancy Report 2002.02, CSR Consultancy, Oosterend, Texel, 22pp.
- Camphuysen, C.J. 2002. Häufigkeit und räumliche Verteilung der Seevögel und Meeressäuger im und um ein Windparkplanungsgebiet nordlich von Juist (südöstliche Nordsee). [Abundance and spatial distribution of seabirds and marine mammals in windfarm planning area north of Juist, German Bight]. CSR Consultancy Report 2002.03, CSR Consultancy, Oosterend, Texel, 22pp.
- Camphuysen, C.J. 2002. Häufigkeit und räumliche Verteilung von Vögeln und Meeressäugern nach Planbeobachtungen auf dem "Borkumriffgrund" (Südliche Nordsee). [Abundance and spatial distribution of seabirds and marine mammals in windfarm planning area Borkumriffgrund, German Bight] CSR Consultancy Report 2002.07, CSR Consultancy, Oosterend, Texel, 24pp.
- Camphuysen, C.J. 2002. Häufigkeit und räumliche Verteilung der Seevögel und Meeressäuger im und um Windparkplanungsgebiet "Borkum Riffgatt" Nordwestlich von Borkum (südöstliche Nordsee). [Abundance and spatial distribution of seabirds and marine mammals in windfarm planning area Borkumriffgatt, German Bight] CSR Consultancy Report 2002.09, CSR Consultancy, Oosterend, Texel, 25pp.