

GERMANY, PROGRESS REPORT ON CETACEAN RESEARCH,

June 2001 To March 2002

compiled by

Karl-Hermann Kock¹⁾, Ursula Siebert²⁾ & Harald Benke³⁾

¹⁾ Institut für Seefischerei, Bundesforschungsanstalt für Fischerei, Palmaille 9, D-22767 Hamburg,

²⁾ Forschungs- und Technologiezentrum Westküste, Werftstraße 6, D-25761 Büsum

³⁾ Deutsches Meeresmuseum, Katharinenberg 14-20, D-18439 Stralsund

This report summarizes information on various fields of cetacean research, historical aspects of whaling and effects of whale watching operations on cetaceans.

1. Species and Stocks Studied

| Common name | Scientific name | Area/stock | Items referred to |
|------------------|--------------------------|------------|------------------------------------|
| Harbour porpoise | <i>Phocoena phocoena</i> | Baltic Sea | 2., 4.2, 4.3, 4.4, 5., 7.1, 8., 9. |
| Harbour porpoise | <i>Phocoena phocoena</i> | North Sea | 2., 4.2, 4.3, 4.4, 5., 7., 8., 9. |
| Various species | | worldwide | 9. |

2. Sightings data

Sighting surveys (from shore) on harbour porpoise are being conducted on the island of Sylt (German Wadden Sea) at regular time intervals throughout the year.

3. Marking data

3.1 Field Work

3. 1.1 + 2 NATURAL AND ARTIFICIAL MARKING DATA

No marking using artificial marks was conducted. As a result, no photographs of whales of one of the IWC management area/stocks are currently held which can be utilized in photo ID studies.

3. 1. 3 TELEMETRY DATA

No new developments were available

4. Tissue/biological samples collected

4.1 Biopsy samples

No biopsy samples were collected

4.2 Samples from by-catches

| Species | Area/stock | 2001: total no. of individuals | Archived | Tissue Types(s) | Contact person |
|------------------|----------------------------------|--------------------------------|----------|--|----------------|
| Harbour porpoise | Baltic Sea Schleswig-Holstein | 5 | 5 | all organs, central nervous system, skeletal system | U. Siebert |
| Harbour porpoise | Baltic Sea Meckl.-Prepom. | 3 | 3 | All organs, central nervous system, skeletal system? | H. Benke |

4.3 Samples from stranded animals

| Species | Area/stock | 2001: total no. of individuals | Archived | Tissue Type(s) | Contact person |
|------------------|----------------------------------|--------------------------------|----------|--|----------------|
| Harbour porpoise | North Sea Schleswig-Holstein | 102 | 22 | Different tissues for histopathology, toxicology, genetics | U. Siebert |
| | Lower Saxony | 9 | 9 | Lung, liver, different tissues | M. Stede |
| | Baltic Sea Schleswig-Holstein | 14 | 7 | Different tissues for histopathology, toxicology, genetics | U. Siebert |
| | Baltic Sea Meckl.-Prepom. | 8 | 8 | Skeleton, various tissues | H. Benke |

4.4 Analyses carried out

Revealed heavy parasite loads of the respiratory tract with associated pneumonia in some cases and multiple abscesses in lung, vertebral column and articulations in single individuals.

Examinations conducted on harbour porpoise stranded along the North Sea coast of Lower Saxony showed similar results as in previous years. Severe pathological changes of the lung caused by heavy loads of parasites were evident.

5. Pollution studies

An analysis of organo-chlorine compounds (chlorinated biphenyls, 51 congeners, and chlorinated pesticides, p,p'-DDT, p,p'-DDE, p,p'-DDD, HCB, α -HCH and γ -HCH) in various tissues and organs of stranded and by-caught harbour porpoise started in 1998 was continued. Germany is contributing to the IWC initiated and sponsored study 'Pollution 2000+'.

Post-mortem examinations on harbour porpoises which were washed ashore at the North Sea and the Baltic coasts or were incidentally taken in fisheries along the Baltic coast, in the Norwegian Sea and around Iceland were analyzed with respect to PCB's, DDT and metabolites, toxophene and polybrominated diphenylethers.

6. Statistics for large cetaceans

6.1 Direct catches

Germany was not engaged in any whaling activity neither commercial, nor aboriginal nor on scientific permits

6.2 Other non-natural mortality for the year 2001/2002

None

6.3 Earlier years' statistics (historical)

All information on historical catch data available to us have already been reviewed and have been provided to the International Whaling Commission in previous years. No further data are stored to our knowledge in Germany.

7. Statistics for small cetaceans

7.1 For the calendar year 2001

No small cetaceans were taken in a directed fishery in Germany. The few removals were incidental takes in gill net fisheries in the Baltic.

| Incidental Mortality | | | | | |
|----------------------|----------------------------------|----------|--------------|----------|--------------|
| Species | Area/stock | Reported | Estim. total | Source | Live capture |
| Harbour porpoise | North Sea | 0 | unknown | | none |
| Harbour porpoise | Baltic Sea Schleswig-Holstein | 5 | 5 | gill net | none |
| Harbour porpoise | Baltic Sea | 3 | 3 | gill net | 1 doubtful |

| | | | | | |
|--|---------------------------|--|--|--|--|
| | Mecklenburg-Prepommerania | | | | |
|--|---------------------------|--|--|--|--|

7.2 Earlier years' statistics

There were no corrections to statistics presented in earlier years

8. Strandings in 2001

| Species | Total | North Sea Lower Saxony | North Sea Schl.-Holstein | Baltic Schl.- Holstein | Baltic Mec.-Prepomm. |
|----------------------|-------|---------------------------|-----------------------------|---------------------------|-------------------------|
| Harbour porpoise | 163 | 23 | 102 | 15 | 23 |
| Fin whale | 1 | 0 | 1 | 0 | 0 |
| Pilot whale | 1 | 0 | 1 | 0 | 0 |
| White-beaked dolphin | 2 | 2 | 0 | 0 | 0 |
| Common dolphin | 1 | 0 | 0 | 0 | 1 |
| Minke whale | 1 | 1 | 0 | 0 | 1 |

9. Other studies and analyses

| Species | Area/stock | Type of investigation | Contact address *) |
|---------------------------|--|---|--|
| Harbour porpoise | North Sea/Baltic Sea/North Atlantic | Stock structure, genetics | R. Tiedemann |
| Harbour porpoise | North Sea, Belts, Baltic Sea | stock discrimination, skull morphometrics | H. Benke |
| Harbour porpoise | North Sea/Baltic | Pathology, life history, age determination | U. Siebert |
| Harbour porpoise | North Sea | Histological, anatomical investigation of the nasal diverticula | S. Prahl |
| Harbour porpoise | North Sea/Baltic | Impact of sounds | K. Lucke |
| Harbour porpoise | North Sea | Acoustic surveys, porpoise detectors (PODs) | U. Verfuss |
| Cetaceans general | worldwide | Morphology, Histology | M. Haas-Rioth |
| Narwhale | Arctic | Morphology, sonar communication | P. Comtesse |
| Dolphins | worldwide | Structure cervical region | N. Kappesser |
| Toothed whales | worldwide | Sound emission | S. Huggenberger |
| Marine mammals general | worldwide | Brain, embryonal development | H. Oelschläger |
| Cetaceans general | worldwide | Ear | L.S. Kossatz |
| Toothed whales | worldwide | neocortex | O. Güntürkün, M. Haas – Rioth, H. Oelschläger |

*) contact addresses see section 12

History of Whaling

Studies on the history of whaling were continued under the auspices of the 'Deutsches Schiffahrtsmuseum' and associated researchers and groups and dealt primarily with medieval whaling in northern Europe.

Contact address: U. Schnall, K. Barthelmess, Deutsches Schiffahrtsmuseum, Hans Scharoun Platz 1, D-27568 Bremerhaven.

10. Literature cited

none

11. Publications (excluding IWC volumes)

Beinecke, A., Siebert, U., Wünschmann, A., Stott, J.L., Baumgärtner, W. 2001. Investigation on the cross reactivity of selected leucocyte arkers from various species for the characterization of lymphoid cella in harbour porpoise (*Phocoena phocoena*). *J. Comp. Pathol.* 125: 311 – 317

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Wünschmann, A., Siebert, U., Frese, K., Lockyer, C., Heide-Jørgensen, M.P., Weiss, R., Müller, G., Baumgärtner, W. 2001. Pathologic findings in harbour porpoises (*Phocoena phocoena*) hunted in the waters of Greenland and by-caught in the German North and Baltic Sea with respect to infectious diseases. *Vet. Rec.* 148: 715 - 772

12. Contact addresses

Benke, H., Director, Deutsches Meeresmuseum, Katharinenberg 14-20, D-18439 Stralsund, e-mail Harald.Benke@meeresmuseum.de

Czech, Richard, Nationalparkverwaltung Nds Wattenmeer, Virchowstrasse, D-26382 Wilhelmshaven

Kock, K.-H., Institut für Seefischerei, Bundesforschungsanstalt für Fischerei, Palmaille 9, D-22767 Hamburg, e-mail kock.ish@bfa-fisch.de

Lucke, K., Forschungs – und Technologiezentrum Westküste der Christian Albrechts Universität Kiel, Werftstrasse 10, D-25760 Büsum, e-mail lucke@ftz-west.uni-kiel.de

Oelschläger, H. H.A., Universität Frankfurt, e-mail ohlschlaeger@em.uni-frankfurt.de

Prahl, S., Forschungs – und Technologiezentrum Westküste der Christian Albrechts Universität Kiel, Werftstrasse 10, D-25760 Büsum, e-mail prahl@ftz-west.uni-kiel.de

Scheidat, M., Forschungs – und Technologiezentrum Westküste der Christian Albrechts Universität Kiel, Werftstrasse 10, D-25760 Büsum, e-mail scheidat@ftz-west.uni-kiel.de

Siebert, U., Forschungs- und Technologiezentrum Westküste der Christian-Albrecht-Universität Kiel, Werftstraße 10, D-25761 Büsum, e-mail usiebert@ftz-west.uni-kiel.de

Tiedemann, R. Universität Potsdam, Institut für Biochemie und Biologie, Evolutionsbiologie/Spezielle Zoologie, Karl-Liebknecht-Strasse 24 – 25, Haus 25, D-14 476 Golm. e-mail tiedemann@rz.uni-potsdam.de

Verfuss, U. Deutsches Meeresmuseum, Katharinenberg 14-20, D-18439 Stralsund, e-mail ursula.verfuss@t-online.de