

Agenda Item 5.4: Post-mortem research and stranding schemes

Information submitted by Parties in response to cetacean stranding schemes questionnaire

Submitted by: The Secretariat



ASCOBANS

NOTE:
**IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING
THEIR OWN COPIES OF THESE DOCUMENTS TO THE MEETING**

**Information submitted by Parties in response to
cetacean stranding schemes questionnaire**

	Belgium
Institution	University of Liège (Dept. of Oceanology, Dept. of Pathology) Free University of Brussels (Laboratory for Ecotoxicology) Management Unit of the North Sea Mathematical Models (MUMM)
Respondent	Dr. V. Debacker, Dr. T. Jauniaux Prof. C.R. Joiris/L. Holsbeek Jan Haelters (compiler)
Which data are recorded routinely?	Concentrations of Cu, Zn, Cd, Fe, Cr, Ni and Pb (liver, muscle, kidney), Se (liver, kidney). Lipid content of liver and muscle; total tissue content of mercury, methylmercury, PCB and organochlorine pesticides.
Methods and units used	Heavy metals: atomic absorption spectrophotometry (ICPS ARL 3510), µg/g dw Se: fluorometric technique following acid digestion of tissues (µg/g dw) Lipids: colorimetric technique. Sulphosphovanillin method for total lipids (Barnes & Blackstock, 1973), µg/g dw Total mercury: atomic absorption spectrometry. Methylmercury, PCBs and organochlorine pesticides: GC-ECD. Units: ng/g and µg/g fresh/dry/lipid weight.
What tissue samples are taken?	See Kuiken & Hartmann (1991). Liver, kidney, blubber, adipose and muscle tissue, and sometimes brain and milk.
How are these preserved?	Samples frozen at -18° C to -35° C after necropsy and kept frozen until analysis. Dried samples (lyophilisation) stored in containers at room temperature.
Carcass disposal	Carcass disposal plant, sample debris through university waste disposal system. Skeleton is occasionally preserved.
Computer database	Necropsy data in Word or Excel files. Toxicological data stored in databases and entered in IDOD (Integrated and Dynamical Oceanographic Data Management) managed by MUMM (not yet fully operational).
Number of data sets	<i>Phocoena phocoena</i> : > 16 Other species: 18
Software used	University of Liège: Excel 7.0, Lotus 1-2-3 Free University of Brussels: XL 4.0 (Mac) MUMM (strandings): Microsoft Access 97
Problems with common database?	Published data accessible and may be used with reference to publication. Other data can be used with authorisation. Some general data (numbers of strandings, preliminary observations) available via MUMM.
Advantage of common database?	

	Germany
Institution	Deutsches Meeresmuseum Stralsund FTZ, University of Kiel
Respondent	Dr. Ursula Siebert/Dr. Harald Benke
Which data are recorded routinely?	Species, location and date found, length, weight, sex, estimated age, condition, net marks, lesions, 11 measurements (incl. blubber), weight of main organs
Methods and units used	According to Kuiken and Hartmann (1993), Proceedings of the ECS Workshop on Cetacean Pathology in 1991 (SI units)
What tissue samples are taken?	According to Kuiken and Hartmann (1993), Proceedings of the ECS Workshop on Cetacean Pathology in 1991, depending on condition of carcass
How are these preserved?	According to Kuiken and Hartmann (1993), Proceedings of the ECS Workshop on Cetacean Pathology in 1991
Carcass disposal	Skeletons usually collected, carcasses to incineration
Computer database	Database established according to final report of the BMBF Project 03F0139A
Number of data sets	1221
Software used	Microsoft Excel and Ingres
Problems with common database?	Only after publication of own data
Advantage of common database?	Prefer direct contact to other scientific groups; easier interpretation of data

	Netherlands
Institution	Dolfinarium Harderwijk
Respondent	Dr. Ron. A. Kastelein,
Which data are recorded routinely?	About 40 standard cetacean body measurements, body weight, blubber thickness, weight and size of organs, stomach capacity of suckling young
Methods and units used	SI units
What tissue samples are taken?	Blubber/skin, muscle, kidney and liver for PCB and heavy metals, reproductive organs, eyes, larynx, tongue, dorsal fin, skull
How are these preserved?	Samples frozen at -14°C Organs usually in 4% formalin Skull is usually cleaned and preserved
Carcass disposal	Remains go to animal food industry
Computer database	Only data required specifically for research projects are entered
Number of data sets	approx. 20 harbour porpoises and 6 whitebeaked dolphins
Software used	-
Problems with common database?	Time problem in making data sets available
Advantage of common database?	Access to additional data is not required at present.

	United Kingdom	
Institution	The Natural History Museum Department of Zoology, London	Institute of Zoology The Zoological Society of London
Respondent	A.I. Muir, Cetacean Strandings Coordinator	Dr. Peter Bennett
Which data are recorded routinely?	Species, location and date found, length (possibly other measurements), sex, condition of carcass	Species, location and date found, sex, age, probable cause of death, body measurements, condition of carcass, toxicology, diagnosis of diseases
Methods and units used	Tape measure, metric units	
What tissue samples are taken?	Stomach contents Parasites Teeth/baleen samples	The Institute of Zoology also keeps a marine mammal tissue archive
How are these preserved?	Teeth frozen, then in alcohol Stomach contents frozen, then formalin and alcohol Parasites in alcohol	
Carcass disposal	By local authority (burying on beach, waste dump or burning)	
Computer database	Natural History Museum Strandings Database	POSEIDON, includes results on stranded cetaceans in England and Wales
Number of data sets	approx. 6000	6700 strandings (incl. seals) 800 post-mortem examinations
Software used	Informix Smart 3.1	FoxPro 2.5 (Windows)
Problems with common database?	Prefer to publish findings themselves first	Release of data only after permission from DETR and by the researcher who submitted the data
Advantage of common database?	Would appreciate comparable information from other countries to improve knowledge of distribution etc.	