

**Agenda Item 5.4: Post Mortem Research and Strandings Schemes**

**Information submitted by Parties and Range States in response to post mortem research 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 and Range States in response to  
post-mortem research questionnaire**

	<b>Belgium</b>
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?	

	<b>Denmark</b>
Name and address of reporting institution	Danish Institute for Fisheries Research, Charlottenlund Slot, DK 2920 Charlottenlund, Denmark.
Name of respondent	Christina Lockyer
What data are recorded routinely?	Please see the files I sent: "dissektionsskemær" and "marsvin_pic_2000" for details. However, in general if the carcass is in good condition, we take total length, some other specific lengths (see pic file), girths, blubber thicknesses, total body weight, organ and tissue weights (see scheme file), etc.!!
Description of methods and units of measurement used	Methods as per dissection scheme file. Metric scheme: m, cm, mm; kg, g
List of tissue samples usually taken	Comprehensive collections – see scheme file. However, we have different sample collections – e.g. ASCOBANS tissue bank (all frozen at –25°C), genetics (mainly frozen or in special preservatives), etc. Note that some tissue samples e.g. blubber or muscle routinely come from specific body sites! Also we keep stomach contents for analysis of diet, and ovaries if from mature females, in alcohol.
How are the samples preserved?	Mainly frozen at –25°C, but ovaries may be in alcohol. Some blubber samples are wrapped in foil before storage.
How are carcasses disposed of?	Usually destroyed. However, between 1996 and 1997, complete skeletons were collated, but thereafter only skulls and pelvic bones. The Zoological Museum (Copenhagen) do not currently tend to encourage further collation because of storage problems, but would like to continue if possible!
Are data recorded in a computer database? Please describe	Yes – a nested comprehensive database of all biological information and measurements (currently in Access format), which also contains position (ICES ref.), date, origin (bycatch and net-type, stranding, etc.) and other basic features.
How many data sets (by species) do you have?	DIFRES only holds porpoises
Which computer software is used?	Microsoft Access
Do you foresee any problems (e.g. regarding intellectual property rights etc.) related to a central database?	Not especially. However, we would need assurances that persons accessing the database have been vetted and authorised. Also, certain very specialised data would not necessarily be allowed to be included in the common database. We need to discuss this!
What advantages would you expect from a central database?	We would like at least reciprocal access. However, there are some specialised data that we might require, but this would normally be asked for through individual researchers or institutions.

	<b>Finland</b>
Name and address of reporting institution	National Veterinary and Food Research Institute Hämeentie 57, 00580 Helsinki, Finland
Name of respondent	Hanna Tenhu
What data are recorded routinely?	History lamnnesis, standard diagnostic information , species and geographic location
Description of methods and units of measure-ment used	Post mortem, histology, parasitology, bacterial, fungal and virological examination
List of tissue samples usually taken	Post mortem, histology, parasitology, bacterial, fungal and virological examination
How are the samples preserved?	Frozen, in alcohol, 10 % formalin etc.
How are carcasses disposed of?	burned
Are data recorded in a computer database? Please describe	LIMS (Laboratory information system) implemented in 1998.
How many data sets (by species) do you have?	Depend on species
Which computer software is used?	Windows NT 4,0
Do you foresee any problems (e.g. regarding intellectual property rights etc.) related to a central database?	_____
What advantages would you expect from a central database?	_____

	<b>France</b>
Institution	Marine Mammal Research Centre (CRMM) – La Rochelle
Respondent	V. Ridoux – O. Van Canneyt
Which data are recorded routinely?	Species, location, date found, condition of carcass, probable cause of death, by catch sign or not, body measurements. All coasts of France : English channel, Atlantic and Mediterranean
Methods and units used	Stranding Network - S.I units (metric units)
What tissue samples are taken?	Teeth, blubber, muscle, kidney, liver, gonads, stomach, spleen, parasites.
How are these preserved?	Teeth (alcohol), blubber (frozen), kidney (frozen/alcohol) liver (frozen), gonads (formalin), stomach (frozen), spleen (frozen), parasites (alcohol).
Carcass disposal	Squaring, national disposal to take it in by charge by the knaker's
Computer database	CRMM database on Personal Computer
Number of data sets	9000 records
Software used	Microsoft Access (Windows)
Problem with common database?	Problems of use of data not published, and data homogeneity
Advantage of common database?	Better description for the distribution, relation and comparison to show trends or accidents

	<b>Germany</b>
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

	<b>Netherlands</b>
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.

	<b>Norway*</b>
Institution	Institute of Marine Research, Bergen
Respondent	Dr. A. Björge, K. Tolley
Which data are recorded routinely?	<ul style="list-style-type: none"> <li>- By-catch information (date, position, gear type, target species)</li> <li>- Life history parameters</li> <li>- Population structure data (morphometric, genetic)</li> <li>- Diet composition</li> </ul>
Methods and units used	See Kuiken and Hartmann (1991). All measurements in SI units
What tissue samples are taken?	Muscle, liver, blubber, kidney (other samples on request)
How are these preserved?	Frozen at $\div 20^{\circ}$ C
Carcass disposal	High temperature burning by local authority
Computer database	Excel files
Number of data sets	ca. 135 from 1988 - 1990 ca. 200 from 1998 - 2000
Software used	-
Problems with common database?	Relevant data available to collaborating projects
Advantage of common database?	

\* No stranding scheme is introduced or planned. Post-mortem research is based on by-caught animals.

	<b>Poland</b>
Institution	Hel Marine Station, Institute of Oceanography, University of Gdansk PL - 84-150 Hel, Morska 2
Respondent	Iwona Kuklik, Krzysztof E. Skóra
Which data are recorded routinely?	Species, location and data found, length, weight, sex, estimated age, net marks, lesions, weight of organs, stomach contents
Methods and units used	SI
What tissue samples are taken?	Depending on body condition. Blubber/skin, muscle, kidney, liver (for heavy metals and PCB/DDT concentration), skull, parasites
How are these preserved?	Samples frozen at approx. -17° C, parasites in alcohol
Carcass disposal	Remains go to waste utilization plant, skeletons are preserved
Computer database	Hel Marine Station, Collections Data Base: WALENIE
Number of data sets	Harbour porpoise: 5 Whitebeak dolphin: 1 Striped dolphin: 1
Software used	Microsoft Access 97
Problems with common database?	Prefer to publish data themselves first but as joint project and publication also available.
Advantage of common database?	---

	<b>United Kingdom</b>	
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.	

