



Management Unit of the North Sea Mathematical Models  
**MUMM | BMM | UGMM**



University of Liège  
**ULg**

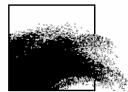
**IMDIS 2010**  
29-31 March,  
Paris, France

# Biobank

An integrated system to collect and publish marine  
mammal information

Management Unit of the North Sea Mathematical Models –  
Belgian Marine Data Centre & Marine Ecosystems Management  
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Jauniaux T.

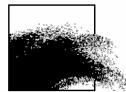


## Aims of Biobank

- Centralize information on marine mammals
- Facilitate exchange in scientific tissue material
- Public interface

Increase the understanding of population trends and evaluating threats based on life history and health parameters

-> Conservation measures

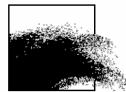


## The Belgian marine mammal tissue collection

Tissue collection of >25.000

- Since 1990
- Belgium, Netherlands and North of France
- Available for pathology, toxicology, microbiology, life history
- Stored at:
  - the Royal Institute of Natural History
  - the Department of Morphology and Pathology, University of Liege

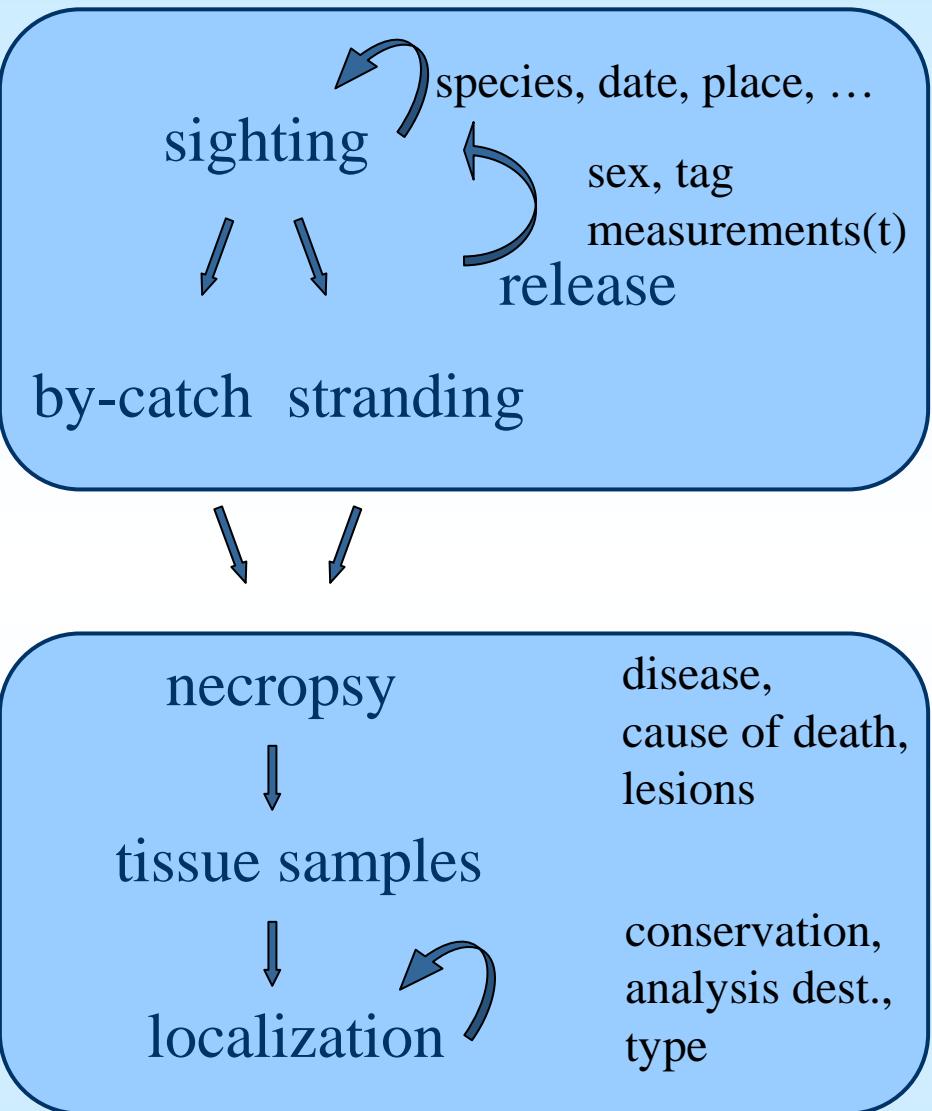
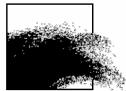


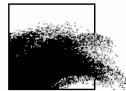


## Available species

- pinnipeds: harbour seal, grey seal, hooded seal
- small cetaceans: harbour porpoise, white beaked dolphin, white sided dolphin, bottlenose dolphin, striped dolphin
- large cetaceans: sperm whale, humpback whale, minke whale, fin whale

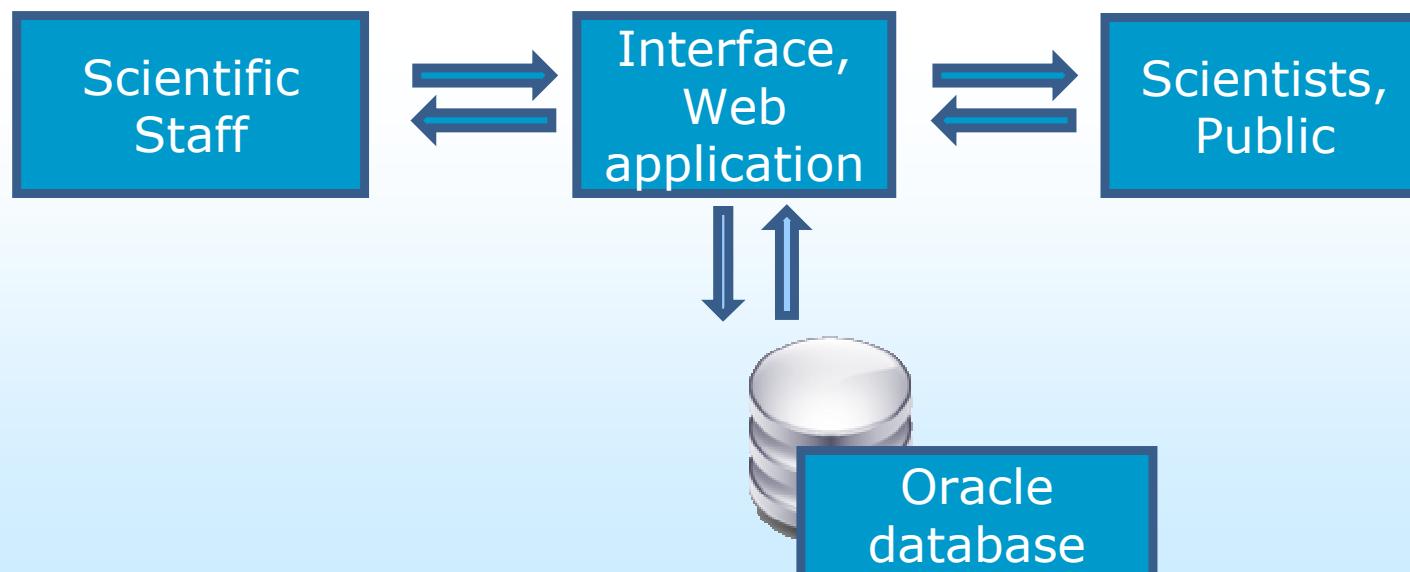






## System architecture

- User management
- Tissue order management
- Sample storage management
- Import observations & necropsies
- Search engine for observations & samples
- Requests for tissues after registration
- -> menus, actions, data depending on users access rights





# Marine Mammal

OBSERVATION, STRANDING & SAMPLE LIBRARY

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[HOME](#)[OBSERVATIONS](#)[AUTOPSIES](#)[BIOBANK](#)[USER](#)[IMPORT](#)[ADMIN](#)[MANAGE ORDERS](#)[MANAGE USERS](#)[MANAGE INSTITUTES](#)[CONTAINERS](#)[MANAGE SAMPLES](#)Availability: Conservation Mode: Ethanol fixed Analyze Dest: Alimentary Sample Type: nematode \*Container Localization: 

▶ ROOT

▶ RBINS

▶ A1

▶ A10

▶ A2

▶ A3

▶ A6

▶ A7

▶ A8

Segno	Availability	Conservation Mode	Analyze Dest	Sample Type	Container Localization	Organs
8743	●●●	Ethanol fixed	Genetic	Organ	▶ ULG	Skin
11496	●●●	Ethanol fixed	Genetic	Organ	▶ ULG	Skin
11990	●●●	Ethanol fixed	Genetic	Organ	▶ ULG	Skin
11938	●●●	Ethanol fixed	Genetic	Organ	▶ ULG	Skin
11936	●●●	Ethanol fixed	Genetic	Organ	▶ ULG	Skin

| page 1 | 3813 pages | 19062 records | 5  rows per page |PREV   NEXT



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▼ Observations

IMPORTATION TOOL

MANAGE TAXAS

MANAGE STATIONS

► Autopsy

Specimens

\*Species

\*Species flag

Sex

Number

Length(m)

Weight(kg)

Blubber thick.(mm)

Rbins Tag

Mumm Tag

Mumm Tag Serie

Cause of Death

[+ Add Specimen](#) [✓ Confirm Edit](#)

‡ 1 Phocoena phocoena UNK Length: 1.6 m Cause of Death : N

Previously Observed

ID	Number	Sex	Rbins tag	Specie flag	Specie	Mumm Tag	Mumm Tag Serie
1324	1			good value	Cetacean sp.		
3603	8	UNK		good value	Cetacean sp.		
1513	1			good value	Cetacean sp.		
1574	1			good value	Cetacean sp.		
1685	12			good value	Cetacean sp.		

| page 1 | 723 pages | 3613 records | 5 rows per page |

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mumm.ac.be/datacentre/



# Marine Mammal

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DESCRIPTION

SEARCH FOR SAMPLES

Conservation Mode	Analyze Dest	Taxa	Organs
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Colon
Parafine	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Colon
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Diaphragm
Parafine	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Diaphragm
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Ileum
Parafine	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Ileum
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Intestin
Parafine	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Intestin
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Kidney
Microslides	Histopathology	<i>Physeter macrocephalus</i> (Linnaeus 1758)	Kidney

Show Filter

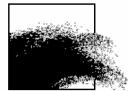
| page 0 | 50 pages | 498 records | 10 rows per page |

PREV 1 NEXT

Filter	Token	Field	X
specie	like	Physeter	X
Filter	Token	Field	X
organ	like		X
Conservation Mode			
organ			
specie			
Sample Type			
Analyze Dest.			

+ Add Filter

Search



- Tissues available for research
- Online search & orders
- Information on specimen (observations) and necropsy
- Easily expandable to similar collections



soon on: [www.marinemammals.be](http://www.mumm.ac.be/datacentre/)