Institute of Veterinary, Animal and Biomedical Sciences
Massey University

PATHOLOGY REPORT

Status: Pending
Date: 28/10/2011
Type: Mortality

Submitter

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Department of Conservation

Submission Details

Lab. Case/Spec ID:

Submitter's Ref:
Date Submitted: 27/10/2011
Date Received: 27/10/2011
Previous Case ID:
WMD Case/Spec ID:

Animal Details

Animal ID:
Animal Name:
Species: *Cephalorhynchus hectori maui*
Common Name: Maui's Dolphin
Sex Class:
Age Class:
Date Died:

Epidemiology

Number Dead:
Number at Risk:
Number Sick:
Number Submitted: 1

Growth and Development

Parameter	Result Description	Value	Date Measured	Age Group
Depth of Tail Notch		.02 m	28/10/2011	
Dorsal Blubber Depth		mm	28/10/2011	
Eye to Blowhole Length		.125 m	28/10/2011	
Eye to Corner of Mouth Length		.04 m	28/10/2011	
Girth at Anus		m	28/10/2011	
Girth at Eye		m	28/10/2011	
Girth at Flippers		m	28/10/2011	
Girth at Navel		m	28/10/2011	
Height of Dorsal Fin		.095 m	28/10/2011	
Lateral Blubber Depth		mm	28/10/2011	
Length of Base of Dorsal Fin		.21 m	28/10/2011	
Length of Flipper		.18 m	28/10/2011	
Length of Flukes		.195 m	28/10/2011	
Snout to Anus Length		.948 m	28/10/2011	
Snout to Corner of Mouth Length		.16 m	28/10/2011	
Snout to Genital Slit Length		m	28/10/2011	
Snout to Origin of Dorsal Fin Length		.695 m	28/10/2011	

Snout to Origin of Flipper Length	.355 m	28/10/2011
Total Length	1.345 m	28/10/2011
Ventral Blubber Depth	mm	28/10/2011
Width of Flipper	.08 m	28/10/2011
Width of Flukes	.37 m	28/10/2011
Weight	34.8 kg	28/10/2011

COMMENTS
No specific cause of death is evident on gross examination. While there are no indicators of drowning/bycatch, this can be impossible to determine in an autolysed carcass. The laceration in the midline of the animal could have been human-inflicted, but it is not possible to determine this for sure. Tissue from this wound and from the damanged ano-genital area has been collected for microscopic examination, which should be able to determine whether the dolphin was alive or dead at the time of injury, although it is unlikely to determine whether the injury was natural or not.
Tissues will be processed for histological examination which may clarify the cause of death, although again autolysis often prevents accurate interpretation of microscopic changes in tissues.

ANIMAL HISTORY
Reported and recovered at tlow tide from highwater mark in Manukau harbour. Laying on mixture of sand and shells. Chilled and air freighted to Massey for PM.

GROSS PATHOLOGY
The body is extremely bloated. Abundant gas escapes from the abdominal cavity on puncture. The tongue is blackened and distended, and the right eye is protruding from the socket. The skin is dessicated and difficult to cut. The left uterine horn and distal large intestine are protruding from the ano-genital area which has split to form a single orifice. Along the ventral midline at the level of the umbilicus is a linear laceration which extends through the full thickness of the skin and the superficial few millimetres of blubber. The state of decay of the carcass make assessment for haemorrhage and bruising unreliable. The majority of the blubber is liquefied, hence blubber depth measurements would be misleading. Muscle is distended by gas (post mortem putrefaction), making assessment of body condition difficult.
Putrefactive gas formation has resulted in pale, light lungs full of gas bubbles. There is scant fluid within airways. No nematodes are present, although these would be difficult to identify due to autolysis. There is approximately 100ml of foul-smelling red/brown fluid in the thoracic cavity, and a similar amount in the abdominal cavity.
The stomach is apparently empty; this is tied off and saved frozen pending diet analysis. The proximal duodenum contains bile-stained fluid and black grit/sand, and there are several black-pigmented patches on the mucosal surface. Accurate interpretation of abdominal organs is severely inhibited by autolytic changes, but sections of all major organs are saved for histology. The uterus appears mature, and there are numerous ovarian follicles.

Pathologist: