

**Institute of Veterinary, Animal and Biomedical Sciences
Massey University**

PATHOLOGY REPORT

Status: Final

Date:

Type: Mortality

| Submitter | Submission Details |
|---|--|
| Department of Conservation Otago | Lab. Case/Spec ID: 49092 Submitter's Ref: Date Submitted: Date Received: 19/12/2012 Previous Case ID: WMD Case/Spec ID: 6705/1 |
| Animal Details | Epidemiology |
| Animal ID: Animal Name: W12-18Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Female Age Class: Adult Date Died: | 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 | 20/12/2012 | Adult |
| Dorsal Blubber Depth | | 20 mm | 20/12/2012 | Adult |
| Eye to Blowhole Length | | .16 m | 20/12/2012 | Adult |
| Eye to Corner of Mouth Length | | .22 m | 20/12/2012 | Adult |
| Girth at Anus | | .6 m | 20/12/2012 | Adult |
| Girth at Eye | | .59 m | 20/12/2012 | Adult |
| Girth at Flippers | | .93 m | 20/12/2012 | Adult |
| Girth at Navel | | 1.01 m | 20/12/2012 | Adult |
| Height of Dorsal Fin | | .1 m | 20/12/2012 | Adult |
| Lateral Blubber Depth | | 18 mm | 20/12/2012 | Adult |
| Length of Base of Dorsal Fin | | .22 m | 20/12/2012 | Adult |
| Length of Flipper | | .35 m | 20/12/2012 | Adult |
| Length of Flukes | | .13 m | 20/12/2012 | Adult |
| Snout to Anus Length | | 1.08 m | 20/12/2012 | Adult |
| Snout to Corner of Mouth Length | | .18 m | 20/12/2012 | Adult |
| Snout to Genital Slit Length | | 1 m | 20/12/2012 | Adult |
| Snout to Origin of Dorsal Fin Length | | .75 m | 20/12/2012 | Adult |

| | | | |
|-----------------------------------|--------|------------|-------|
| Snout to Origin of Flipper Length | .34 m | 20/12/2012 | Adult |
| Total Length | 1.52 m | 20/12/2012 | Adult |
| Ventral Blubber Depth | 15 mm | 20/12/2012 | Adult |
| Width of Flipper | .085 m | 20/12/2012 | Adult |
| Width of Flukes | .43 m | 20/12/2012 | Adult |
| Weight | 57 kg | 20/12/2012 | Adult |

DIAGNOSIS

Open

COMMENTS

Gross and histological investigations were unable to determine a definitive diagnosis for the cause of death of this dolphin. There was no obvious infectious disease present, and no clear evidence of trauma or human interaction. It is not possible to rule out accidental capture in fishing gear in this case, but conversely, there is no clear evidence that this was a factor in the death.

GROSS PATHOLOGY

This was an adult female (non-pregnant, non-lactating), in good body condition (good expaxial/hypaxial muscle mass and blubber depth etc) and in a mild state of decomposition. Apart from sloughing of ~20% of the epidermis and multiple post mortem excoriations, no obvious external abnormalities were noted.

A small amount of red-stained frothy fluid was present in the small (distal) bronchi of the caudal lung fields. The stomach contained a small amount of light brown turbid fluid and several small squid beaks, while both the small and large intestine were largely devoid of material.

Both uterine horns were of equal size (26mm in diameter when layed flat); left ovary weighed 3 grams (32 x 18 x 8mm) while the right ovary weighed 2 grams (29 x 16 x 6mm). There was no obvious follicular activity. No other abnormalities were noted on gross post mortem.

HISTOPATHOLOGY

Histology summary:

Diaphragm: one sarcocyst present

Lung: some proteinaceous pulmonary oedema with a few alveolar macrophages

Lymph nodes: a few parasitic granulomas

Mammary gland: acini are well developed but do not contain secretion. Ducts contain abundant mononuclear cells (possibly sloughed epithelial cells plus macrophages). Rarely there are small purple aggregates of secretory material

Small intestine: large numbers of polymorphs in lamina propria but no epithelial cell degeneration or necrosis

Pathologist:

Assistant(s):