

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

PATHOLOGY REPORT

Status: Pending
Date: 04/10/2012
Type: Mortality

| Submitter | Submission Details |
|---|---|
| Department of Conservation Hokitika | Lab. Case/Spec ID: 48846 Submitter's Ref: H226 Date Submitted: Date Received: 27/09/2012 Previous Case ID: WMD Case/Spec ID: 6698/1 |
| Animal Details | Epidemiology |
| Animal ID: H226 Animal Name: W12-12Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Male Age Class: Adult Date Died: | Number Dead: 1 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 | 04/10/2012 | Adult |
| Dorsal Blubber Depth | | 11 mm | 04/10/2012 | Adult |
| Eye to Blowhole Length | | .125 m | 04/10/2012 | Adult |
| Eye to Corner of Mouth Length | | .035 m | 04/10/2012 | Adult |
| Girth at Anus | | .41 m | 04/10/2012 | Adult |
| Girth at Eye | | .48 m | 04/10/2012 | Adult |
| Girth at Flippers | | .75 m | 04/10/2012 | Adult |
| Girth at Navel | | .655 m | 04/10/2012 | Adult |
| Height of Dorsal Fin | | .095 m | 04/10/2012 | Adult |
| Lateral Blubber Depth | | 8 mm | 04/10/2012 | Adult |
| Length of Base of Dorsal Fin | | .19 m | 04/10/2012 | Adult |
| Length of Flipper | | .165 m | 04/10/2012 | Adult |
| Length of Flukes | | .1 m | 04/10/2012 | Adult |
| Snout to Anus Length | | .91 m | 04/10/2012 | Adult |
| Snout to Corner of Mouth Length | | .145 m | 04/10/2012 | Adult |
| Snout to Genital Slit Length | | .79 m | 04/10/2012 | Adult |
| Snout to Origin of Dorsal Fin Length | | .615 m | 04/10/2012 | Adult |

| | | | |
|-----------------------------------|---------|------------|-------|
| Snout to Origin of Flipper Length | .257 m | 04/10/2012 | Adult |
| Total Length | 1.24 m | 04/10/2012 | Adult |
| Ventral Blubber Depth | 7 mm | 04/10/2012 | Adult |
| Width of Flipper | .07 m | 04/10/2012 | Adult |
| Width of Flukes | m | 04/10/2012 | Adult |
| Weight | 25.8 kg | 04/10/2012 | Adult |

DIAGNOSIS

Open - unable to diagnose definitive cause of death

COMMENTS

This male dolphin was extremely thin, but unfortunately the cause of this was not apparent at post mortem due to decomposition of the body, compounded by tissue damage due to freezing and thawing. There was no evidence of entanglement, and the histology was not consistent with toxoplasmosis. The stomach contained more parasites than I have ever seen in a Hector's dolphin, and this could have contributed to the poor body condition, but it isn't possible to tell whether there was some other underlying process going on that allowed the parasite burden to become so heavy.

ANIMAL HISTORY

Found at high tide mark by staff after report called through from Westport. Frozen before transport to Massey.

GROSS PATHOLOGY

The body was moderately autolysed, with extensive skin sloughing and marked discolouration of the blubber. Both eyes had been scavenged. There were no discernible net marks or knife marks, and no obvious bruising. The dolphin was in very poor body condition, with a pronounced neck, wasting of the epaxial muscles, and a thin blubber layer.

The stomach contained extremely large numbers of nematodes, but no prey items. The glandular mucosa was thickened and reddened, and there were several ulcers, including one large deep ulcer (almost full mucosal thickness). Several ulcers were also present in the squamous mucosa. The small intestinal contents were tan and watery, and the gastric lymph node was discoloured green.

The lungs contained a small amount of red-tinged fluid (likely freeze-thaw artefact), as did the abdominal and thoracic cavities.

There were no other gross abnormalities.

HISTOPATHOLOGY

Histo summary - interpretation is compromised by autolysis and by freeze-thaw artefact. The liver contains multiple clusters of cells within the sinusoids; identification of these cells is not possible. The kidneys show moderate to marked glomerular changes with areas of interstitial fibrosis.

Pathologist:

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