

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

**PATHOLOGY REPORT**

**Status:** Pending

**Date:**

**Type:** Mortality

<p><b>Submitter</b></p> <p style="text-align: center;">Department of Conservation</p>	<p><b>Submission Details</b></p> <p>Lab. Case/Spec ID: <b>49350</b></p> <p>Submitter's Ref:</p> <p>Date Submitted:</p> <p>Date Received: 15/03/2013</p> <p>Previous Case ID:</p> <p>WMD Case/Spec ID: 6725/1</p>
<p><b>Animal Details</b></p> <p><b>Animal ID:</b></p> <p><b>Animal Name:</b> W13-09Ch</p> <p><b>Species:</b> <i>Cephalorhynchus hectori hectori</i></p> <p><b>Common Name:</b> Hector's Dolphin</p> <p><b>Sex Class:</b> Male</p> <p><b>Age Class:</b> Adult</p> <p><b>Date Died:</b></p>	<p><b>Epidemiology</b></p> <p>Number Dead:</p> <p>Number at Risk:</p> <p>Number Sick:</p> <p>Number Submitted: 1</p>

**Growth and Development**

Parameter	Result Description	Value	Date Measured	Age Group
Depth of Tail Notch		.018 m	18/03/2013	Adult
Dorsal Blubber Depth		8 mm	18/03/2013	Adult
Eye to Blowhole Length		.138 m	18/03/2013	Adult
Eye to Corner of Mouth Length		.03 m	18/03/2013	Adult
Girth at Anus		.592 m	18/03/2013	Adult
Girth at Eye		.515 m	18/03/2013	Adult
Girth at Flippers		.705 m	18/03/2013	Adult
Girth at Navel		.78 m	18/03/2013	Adult
Height of Dorsal Fin		.104 m	18/03/2013	Adult
Lateral Blubber Depth		8 mm	18/03/2013	Adult
Length of Base of Dorsal Fin		.215 m	18/03/2013	Adult
Length of Flipper		.2 m	18/03/2013	Adult
Length of Flukes		.112 m	18/03/2013	Adult
Snout to Anus Length		.9 m	18/03/2013	Adult
Snout to Corner of Mouth Length		.162 m	18/03/2013	Adult
Snout to Genital Slit Length		.775 m	18/03/2013	Adult
Snout to Origin of Dorsal Fin Length		.58 m	18/03/2013	Adult

Snout to Origin of Flipper Length	.32 m	18/03/2013	Adult
Total Length	1.22 m	18/03/2013	Adult
Ventral Blubber Depth	8 mm	18/03/2013	Adult
Width of Flipper	.08 m	18/03/2013	Adult
Width of Flukes	.375 m	18/03/2013	Adult
Weight	29.9 kg	18/03/2013	Adult

#### DIAGNOSIS

1. Hydroureter
2. Moderate parasitism
3. Open cause of death

#### COMMENTS

The actual cause of death for this animal is not clear. There was no indication of trauma or entanglement, and the very poor body condition suggests that this dolphin was either ill or unable to forage effectively. The relevance of the dilated ureter to the dolphin's illness is uncertain, but it is possible that this could have been associated with upper or lower urinary tract disease. There was an incredibly large number of blubber cestodes present, along with a reasonable number of lungworms, which is common in animals that are sick from other causes. Tissues have been saved for histology but this may not be diagnostic due to freezing artefact.

I have estimated that this was an adult animal based on the standard length and the base of the dorsal fin, but the values for these are borderline, so it is possible that this is actually an older juvenile.

#### ANIMAL HISTORY

Found beachcast in freshwater basin on 8 March after repeated sightings of a live Hector's in Milford throughout the week prior. No commercial fishing in Milford but a large tourism fleet is present

#### GROSS PATHOLOGY

This male dolphin had been frozen and thawed prior to necropsy, and the body tissues were correspondingly moderately autolysed. The skin was easily separated from underlying connective tissue (post mortem degeneration), and there was some minor scavenging damage around the eyes and anogenital area. The general body condition was poor, with a concave neck area, prominent vertebral spinous processes and a thin blubber layer. Groups of teeth, particularly on the right, were worn or missing. There were no obvious net impressions or other skin markings suggestive of entanglement. No bruising was evident. Extremely large numbers of blubber cestodes were present throughout the body. The lungs were moderately congested and contained scattered gritty foci (lungworm granulomas) and moderate numbers of pulmonary nematodes.

The stomach was empty, and there were no ulcers present. Low numbers of nematodes were present in the squamous and glandular compartments. The proximal duodenum contained abundant slightly turbid brown/grey fluid. The right ureter was dilated approximately 5 x normal, although no obstruction was detected.

#### HISTOPATHOLOGY

pending

Pathologist: