

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

**PATHOLOGY REPORT**

**Status:** Final  
**Date:** 28/09/2015  
**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>52590</b></p> <p>Submitter's Ref: H256 Date Submitted: 11/09/2015 Date Received: 15/09/2015 Previous Case ID: WMD Case/Spec ID: 7543/1</p>
<p><b>Animal Details</b></p> <p><b>Animal ID:</b> H256 <b>Animal Name:</b> W15-08Ch <b>Species:</b> <i>Cephalorhynchus hectori hectori</i> <b>Common Name:</b> Hector's Dolphin <b>Sex Class:</b> Female <b>Age Class:</b> Adult <b>Date Died:</b></p>	<p><b>Epidemiology</b></p> <p>Number Dead: Number at Risk: Number Sick: Number Submitted: 1</p>

**Growth and Development**

Parameter	Result Description	Value	Date Measured	Age Group
Depth of Tail Notch		.02 m	28/09/2015	Adult
Dorsal Blubber Depth		22 mm	28/09/2015	Adult
Eye to Blowhole Length		.155 m	28/09/2015	Adult
Eye to Corner of Mouth Length		.03 m	28/09/2015	Adult
Girth at Anus		.47 m	28/09/2015	Adult
Girth at Eye		.535 m	28/09/2015	Adult
Girth at Flippers		.78 m	28/09/2015	Adult
Girth at Navel		.87 m	28/09/2015	Adult
Height of Dorsal Fin		.109 m	28/09/2015	Adult
Lateral Blubber Depth		23 mm	28/09/2015	Adult
Length of Base of Dorsal Fin		.22 m	28/09/2015	Adult
Length of Flipper		.23 m	28/09/2015	Adult
Length of Flukes		.12 m	28/09/2015	Adult
Snout to Anus Length		1 m	28/09/2015	Adult
Snout to Corner of Mouth Length		.153 m	28/09/2015	Adult
Snout to Genital Slit Length		.95 m	28/09/2015	Adult
Snout to Origin of Dorsal Fin Length		.635 m	28/09/2015	Adult

Snout to Origin of Flipper Length	.315 m	28/09/2015	Adult
Total Length	1.41 m	28/09/2015	Adult
Ventral Blubber Depth	20 mm	28/09/2015	Adult
Width of Flipper	.08 m	28/09/2015	Adult
Width of Flukes	.43 m	28/09/2015	Adult
Weight	40.7 kg	28/09/2015	Adult

#### DIAGNOSIS

Disseminated toxoplasmosis

#### COMMENTS

The microscopic changes present in tissues from this dolphin are consistent with toxoplasmosis, but definitive diagnosis of this disease requires molecular testing and immunohistochemistry. These tests will be carried out and the results notified in due course.

#### ANIMAL HISTORY

Found at Beach Rd, South of Oamaru

#### GROSS PATHOLOGY

This adult female Hector's dolphin was in moderate body condition with a slightly pronounced neck. The teeth were worn. The left eye was missing (scavenger damage) and the right eye sunken (post mortem decomposition). There was mild scavenging damage with tissue loss around the eyes and anogenital orifice. There was no milk in the mammary gland. The uterus had linear striations along the body (evidence of a past pregnancy) and there was a single corpus luteum on one ovary. The stomach was empty. There was a moderately increased amount of red-tinged fluid in the abdominal cavity.

The lungs contained a moderate amount of fluid and numerous lungworm were present in the lower airways. Lungworm granulomas were scattered throughout the lung lobes.

#### HISTOPATHOLOGY

Histology summary:

There are multifocal areas of fibrin and necrosis in the lungs, thoracic lymph nodes, spleen, liver and adrenal. Some of these areas contain structures resembling *Toxoplasma* tachyzoites.

Ancillary tests:

Tissues from this dolphin were positive for *Toxoplasma* on PCR and IHC