

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

PATHOLOGY REPORT

Status: Final

Date:

Type: Mortality

<p>Submitter</p> <p style="text-align: center;">Department of Conservation</p>	<p>Submission Details</p> <p>Lab. Case/Spec ID: 43945</p> <p>Date Submitted: 31/08/2009 Date Received: 31/08/2009 Previous Case ID: WMD Case/Spec ID: 4903/1</p>
<p>Animal Details</p> <p>Animal Name: W09-12Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Male Age Class: Subadult Date Died:</p>	<p>Epidemiology</p> <p>Number Dead: 1 Number at Risk: Number Sick: Number Submitted: 1</p>

Growth and Development

Parameter	Result Description	Value	Date Measured	Age Group
Depth of Tail Notch		.028 m	31/08/2008	Subadult
Dorsal Blubber Depth		12 mm	31/08/2008	Subadult
Eye to Blowhole Length		.114 m	31/08/2008	Subadult
Eye to Corner of Mouth Length		.029 m	31/08/2008	Subadult
Girth at Anus		.407 m	31/08/2008	Subadult
Girth at Eye		.457 m	31/08/2008	Subadult
Girth at Flippers		.715 m	31/08/2008	Subadult
Girth at Navel		.764 m	31/08/2008	Subadult
Height of Dorsal Fin		.093 m	31/08/2008	Subadult
Lateral Blubber Depth		7 mm	31/08/2008	Subadult
Length of Base of Dorsal Fin		.194 m	31/08/2008	Subadult
Length of Flipper		.195 m	31/08/2008	Subadult
Length of Flukes		.207 m	31/08/2008	Subadult
Snout to Anus Length		.94 m	31/08/2008	Subadult
Snout to Corner of Mouth Length		.065 m	31/08/2008	Subadult
Snout to Genital Slit Length		.78 m	31/08/2008	Subadult
Snout to Origin of Dorsal Fin Length		.602 m	31/08/2008	Subadult

Snout to Origin of Flipper Length	.28 m	31/08/2008	Subadult
Total Length	1.28 m	31/08/2008	Subadult
Ventral Blubber Depth	9 mm	31/08/2008	Subadult
Width of Flipper	.08 m	31/08/2008	Subadult
Width of Flukes	.37 m	31/08/2008	Subadult
Weight	29 kg	31/08/2008	Subadult

DIAGNOSIS

Open

COMMENTS

This dolphin had no evidence of having been entangled: there were no net marks, the lungs were not congested or oedematous, and the stomach did not contain any recently-ingested prey items. The marks on the skin surface are all likely to have been inflicted naturally (eg rake marks from other dolphins). The animal's low body condition suggests the possibility of disease or starvation: no gross lesions of disease were present, but further testing would be required to rule this out as a possibility.

ANIMAL HISTORY

Beachcast dolphin reported to DoC hotline, found at Taylor's Mistake, Christchurch. Retrieved, washed and chilled in ice overnight. Flown to Massey on 31/8/09. Weather fine, strong northerlies. Taylor's Mistake is in Banks Peninsula Marine Sanctuary.

GROSS PATHOLOGY

The dolphin was received on 31/8/09. The body was in a good state of preservation, with very little skin slippage. Body condition was assessed as moderate: there was a slight neck, moderate wasting of the lumbar muscles and reduced blubber depth. The entire body was covered in deep rake marks, along with multiple linear 50 - 100 mm long lacerations and occasional clusters of partial or full thickness skin loss. Many of these wounds showed haemorrhage at the margins (ie were sustained before death). The skin surface along the margins of the lacerations was rounded (not likely to have been inflicted by a knife). There was no bruising of the blubber or musculature.

The stomach did not contain any recently ingested food items, and there were no ulcerations or erosions of the mucosa. The contents were very fluid and turbid and brownish-grey in colour. A moderate burden of nematodes was present, along with numerous small (3-4 mm diameter) white spherical structures. The intestinal contents and mucosal surfaces appeared normal.

The lungs were well inflated, with no evidence of congestion or pulmonary fluid. There was a small amount of foam in the lower airways.

There were no other significant findings.