

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

PATHOLOGY REPORT

Status: Final

Date:

Type: Mortality

Submitter	Submission Details
	Lab. Case/Spec ID: 51888 Submitter's Ref: H255 Date Submitted: 07/04/2015 Date Received: 07/04/2015 Previous Case ID: WMD Case/Spec ID: 7542/1
Animal Details	Epidemiology
Animal ID: H255 Animal Name: W15-04Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Male Age Class: Subadult 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		.027 m	08/04/2015	Subadult
Dorsal Blubber Depth		20 mm	08/04/2015	Subadult
Eye to Blowhole Length		.14 m	08/04/2015	Subadult
Eye to Corner of Mouth Length		.035 m	08/04/2015	Subadult
Girth at Anus		.45 m	08/04/2015	Subadult
Girth at Eye		.55 m	08/04/2015	Subadult
Girth at Flippers		.83 m	08/04/2015	Subadult
Girth at Navel		.85 m	08/04/2015	Subadult
Height of Dorsal Fin		.92 m	08/04/2015	Subadult
Lateral Blubber Depth		16 mm	08/04/2015	Subadult
Length of Base of Dorsal Fin		.185 m	08/04/2015	Subadult
Length of Flipper		.175 m	08/04/2015	Subadult
Length of Flukes		.11 m	08/04/2015	Subadult
Snout to Anus Length		.8 m	08/04/2015	Subadult
Snout to Corner of Mouth Length		.159 m	08/04/2015	Subadult
Snout to Genital Slit Length		.75 m	08/04/2015	Subadult
Snout to Origin of Dorsal Fin Length		.6 m	08/04/2015	Subadult
Snout to Origin of Flipper Length		.29 m	08/04/2015	Subadult

Total Length	1.21 m	08/04/2015	Subadult
Ventral Blubber Depth	14 mm	08/04/2015	Subadult
Width of Flipper	.078 m	08/04/2015	Subadult
Width of Flukes	.6 m	08/04/2015	Subadult
Weight	33 kg	08/04/2015	Subadult

DIAGNOSIS

Bycatch

COMMENTS

There were markings over the snout, flipper and fluke that are consistent with net marks, and the cause of death is by-catch.

This was a young male dolphin, in good body condition with no obvious indication of any underlying disease process.

ANIMAL HISTORY

The male Hector's dolphin was found dead in Akaroa Harbour in Petit Carenage Bay about 11 kilometres from the harbour entrance. The dolphin was estimated to be 4-5 years old and in good body condition.

GROSS PATHOLOGY

The dolphin weighed 33kg and was in good body condition, with good epaxial muscle mass and blubber reserves. The animal was in a moderate state of decomposition. Approximately 20% of the skin was sloughing, particularly around the snout, dorsal fin, flippers and tail. There were multiple 1-5cm oval, full thickness skin defects on the right lateral side and an 8x6cm full thickness skin defect surrounding the right eye consistent with scavenging. There were also several 2-5mm cream coloured erosions with a crusted margin on the right side of the dolphin.

The carcass was mildly bloated and the genitalia expelled.

There were several well-demarcated dark grey lines on the rostral surface of the snout and on the fluke consistent with net marks. The flippers, dorsal fin and fluke also had several full thickness sharply demarcated skin lesions. Along the dorsum there were multiple small partial thickness lacerations consistent with rake marks. A single cestode consistent with *Phyllobothrium delphini* was observed in the blubber.

The lungs were elastic and spongy on palpation and the right lung lobe had a 5mm circular, crater lesion on the dorsal surface, possibly due to scar formation from larval migration or previous abscess. At least five nematodes, up to 5mm in length (white with a black stripe longitudinally) were also observed in the bronchioles of the lung.

The glandular stomach contained a small amount of partly digested fish flesh and bones.

No other abnormalities were noted on gross post mortem.

HISTOPATHOLOGY

Histology.

Sections of lung, stomach, reproductive tract, skin, kidney, skeletal muscle, mediastinal lymph node, brain, diaphragm, heart, intestine, spleen and adrenal were examined. There were several small parasite granulomas in the lung, kidney and lymph node, and several sarcocysts in the skeletal muscle. No clinically significant histological abnormalities were detected in any organs.