

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

PATHOLOGY REPORT

Status: Pending
Date: 14/02/2012
Type: Mortality

Submitter	Submission Details
Craig Alexander Department of Conservation Christchurch	Lab. Case/Spec ID: 47147 Submitter's Ref: Date Submitted: Date Received: 07/02/2012 Previous Case ID: WMD Case/Spec ID: 6564/1
Animal Details	Epidemiology
Animal ID: Animal Name: W12-02Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Male Age Class: Adult 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		.015 m	08/02/2012	Adult
Dorsal Blubber Depth		8 mm	08/02/2012	Adult
Eye to Blowhole Length		.115 m	08/02/2012	Adult
Eye to Corner of Mouth Length		.035 m	08/02/2012	Adult
Girth at Anus		490 m	08/02/2012	Adult
Girth at Eye		495 m	08/02/2012	Adult
Girth at Flippers		695 m	08/02/2012	Adult
Girth at Navel		735 m	08/02/2012	Adult
Height of Dorsal Fin		.098 m	08/02/2012	Adult
Lateral Blubber Depth		6 mm	08/02/2012	Adult
Length of Base of Dorsal Fin		.19 m	08/02/2012	Adult
Length of Flipper		.188 m	08/02/2012	Adult
Length of Flukes		.11 m	08/02/2012	Adult
Snout to Anus Length		.93 m	08/02/2012	Adult
Snout to Corner of Mouth Length		.163 m	08/02/2012	Adult
Snout to Genital Slit Length		.81 m	08/02/2012	Adult
Snout to Origin of Dorsal Fin Length		.6 m	08/02/2012	Adult

Snout to Origin of Flipper Length	.3 m	08/02/2012	Adult
Total Length	1.27 m	08/02/2012	Adult
Ventral Blubber Depth	8 mm	08/02/2012	Adult
Width of Flipper	.08 m	08/02/2012	Adult
Width of Flukes	.39 m	08/02/2012	Adult
Weight	30.5 kg	08/02/2012	Adult

DIAGNOSIS

Likely pneumonia (unknown cause)

COMMENTS

Histological interpretation in this case was difficult due to the extent of autolysis, but there appeared to be a fairly severe pneumonia, which is the likely cause of this dolphin's poor body condition. The nodules in the abdominal lymph node were caused by a fluke infection. The shape of the fluke eggs is consistent with *Campula*, *Pholeter* or *Nasitrema*, although other changes usually seen with these parasites (infestation of the pterygoid or paranasal sinuses for *Nasitrema*; stomach nodules for *Pholeter*, and liver or pancreatic fibrosis for *Campula*) were not present. Several fluke eggs were also present in the lungs, and aspiration of *Nasitrema* from within the sinuses has been associated with pneumonia in other dolphin species.

ANIMAL HISTORY

Found on high tide line at the mouth of the Waimakariri River

GROSS PATHOLOGY

This adult male dolphin was in very poor body condition, with marked atrophy of the epaxial muscles, a prominent neck and a thin blubber layer. Both eyes had been scavenged, as had the rostral half of the tongue. There was extensive sloughing and cracking of the skin.

The body was moderately autolysed, with friable liver and kidneys, although all organs were identifiable. No bruising was evident. The lungs were heavy and dark red, but no froth or fluid was present in airways. The stomach contained hard diet remnants only; this was tied off and saved unopened for dietary analysis. The cranial aspect of the mesenteric lymph node was nodular, with multiple dark red protruding nodules amongst paler nodules of lymphoid tissue. Testes were large (sexually mature and active).

HISTOPATHOLOGY

Summary:

Parasitic lymphadenitis (trematodes) with inflammation and haemorrhage, mesenteric lymph node
Probable pneumonia, with intralesional trematode eggs

Pathologist:

Copy To: