

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

PATHOLOGY REPORT

Status: Pending

Date:

Type: Mortality

Submitter	Submission Details
Department of Conservation	Lab. Case/Spec ID: 42366 Date Submitted: 08/10/2008 Date Received: 08/10/2008 Previous Case ID: WMD Case/Spec ID: 4626/
Animal Details	Epidemiology
. Animal Name: W08-18Ch Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Female Age Class: Adult Date Died:	Number Dead: 1 Number at Risk: Number Sick: Number Submitted: 1

Growth and Development

Parameter	Result Description	Value	Date Measured	Age Group
Depth of Tail Notch		.02 m	08/10/2008	Adult
Dorsal Blubber Depth		15 mm	08/10/2008	Adult
Eye to Blowhole Length		.15 m	08/10/2008	Adult
Eye to Corner of Mouth Length		.034 m	08/10/2008	Adult
Girth at Anus		.47 m	08/10/2008	Adult
Girth at Eye		.545 m	08/10/2008	Adult
Girth at Flippers		.78 m	08/10/2008	Adult
Girth at Navel		.815 m	08/10/2008	Adult
Height of Dorsal Fin		.09 m	08/10/2008	Adult
Lateral Blubber Depth		15 mm	08/10/2008	Adult
Length of Base of Dorsal Fin		.2 m	08/10/2008	Adult
Length of Flipper		.215 m	08/10/2008	Adult
Length of Flukes		.12 m	08/10/2008	Adult
Length of Longest Baleen Plate		m	08/10/2008	Adult
Length of Snout		m	08/10/2008	Adult
Projection of Mandible		m	08/10/2008	Adult
Snout to Anus Length		m	08/10/2008	Adult

Snout to Blowhole Length	m	08/10/2008	Adult
Snout to Corner of Mouth Length	.065 m	08/10/2008	Adult
Snout to Ear Length	m	08/10/2008	Adult
Snout to Eye Length	m	08/10/2008	Adult
Snout to Genital Slit Length	.955 m	08/10/2008	Adult
Snout to Origin of Dorsal Fin Length	.68 m	08/10/2008	Adult
Snout to Origin of Flipper Length	.35 m	08/10/2008	Adult
Snout to Tip of Dorsal Fin Length	m	08/10/2008	Adult
Total Length	1.415 m	08/10/2008	Adult
Ventral Blubber Depth	16 mm	08/10/2008	Adult
Width of Flipper	.085 m	08/10/2008	Adult
Width of Flukes	.41 m	08/10/2008	Adult
Width of Longest Baleen Plate	m	08/10/2008	Adult
Weight	40 kg	08/10/2008	Adult

DIAGNOSIS

Fungal pneumonia and encephalitis

COMMENTS

The cause of death in this animal was a systemic fungal infection involving the brain and lungs. There was no evidence of human intervention of any kind. This female was adult, and was producing milk at the time of her death.

ANIMAL HISTORY

Received call from public via phone message left on staff person's phone 4pm 7th Oct. Caller left no ID no. but we will try to chase this. Located GPS first page "Waipara Rocks" northern end of Pegasus Bay, Canterbury. Washed up on small-gravelled beach. Picked up from beach 4pm 7th October - sorry on delay. Packed chilled and flown to Massey. Arrived morning of 8th Oct. Necropsy completed same day.

GROSS PATHOLOGY

This animal was received chilled rather than frozen.

EXTERNAL FINDINGS

Approximately 5% of the skin on the left side was slipping; otherwise the body was very fresh. No net marks were seen. The dolphin was in moderate body condition, with some wasting of epaxial muscles (muscles along the back).

INTERNAL EXAMINATION

No bruising was evident. There were few cestode blubber cysts in the inguinal area. Milk was present within the mammary gland.

Abdominal organs

The stomach contained only fish bones and otoliths in scant amounts. No nematodes were seen. There were several small areas of granulation tissue (scars) and mucosal hyperplasia in the glandular stomach, and a single ulcer (3mm diameter) in the squamous compartment. The intestines contained a scant amount of yellow/green tacky digesta (normal).

There was a small amount of clear mucus in the uterus. Cytological examination of this showed macrophages in a mucinous background (no infection). The uterus had striations consistent with a previous pregnancy. The left ovary had one corpus luteum and one corpus albicans. No corporal bodies were evident on the right ovary.

Thoracic organs.

There were large numbers of small pebbles in the blowhole and mouth (similar to those described and shown in images of the beachcast location). The cranial 1/3 of the left lung lobe was pale and consolidated, with no normal aerated lung. This area blended gradually toward more normal lung parenchyma caudally,

although there were several discrete firm pale nodules (10 - 30mm diameter) in the less affected lung tissue. There was scant foam in the terminal bronchioles. The right lung was dark red and heavier than the left (consistent with pooling of blood while lying right side down during terminal stages). Both lung lobes had a few yellow/white gritty foci 2-5mm diameter (parasite granulomas), although no nematodes were found.

Brain.

The skull was bisected and the brain removed and fixed. There were no gross abnormalities.

HISTOPATHOLOGY

Histo: fungal and parasitic pneumonia, and fungal encephalitis