

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

**PATHOLOGY REPORT**

Status: Pending  
Date: 06/09/2012  
Type: Mortality

Submitter	Submission Details
Department of Conservation	Lab. Case/Spec ID: <b>48721</b>  Submitter's Ref: H225 Date Submitted: 27/08/2012 Date Received: 29/08/2012 Previous Case ID: WMD Case/Spec ID: 6696/1
Animal Details	Epidemiology
Animal ID: H225 Animal Name: W12-11Ch 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		.03 m	29/08/2012	Adult
Dorsal Blubber Depth		17 mm	29/08/2012	Adult
Eye to Blowhole Length		.145 m	29/08/2012	Adult
Eye to Corner of Mouth Length		.04 m	29/08/2012	Adult
Girth at Anus		.462 m	29/08/2012	Adult
Girth at Eye		.575 m	29/08/2012	Adult
Girth at Flippers		.865 m	29/08/2012	Adult
Girth at Navel		.87 m	29/08/2012	Adult
Height of Dorsal Fin		.115 m	29/08/2012	Adult
Lateral Blubber Depth		14 mm	29/08/2012	Adult
Length of Base of Dorsal Fin		.225 m	29/08/2012	Adult
Length of Flipper		.205 m	29/08/2012	Adult
Length of Flukes		.49 m	29/08/2012	Adult
Snout to Anus Length		1.105 m	29/08/2012	Adult
Snout to Corner of Mouth Length		.165 m	29/08/2012	Adult
Snout to Genital Slit Length		.955 m	29/08/2012	Adult
Snout to Origin of Dorsal Fin Length		.685 m	29/08/2012	Adult

Snout to Origin of Flipper Length	.33 m	29/08/2012	Adult
Total Length	1.41 m	29/08/2012	Adult
Ventral Blubber Depth	14 mm	29/08/2012	Adult
Width of Flipper	.09 m	29/08/2012	Adult
Width of Flukes	.49 m	29/08/2012	Adult
Weight	43.8 kg	29/08/2012	Adult

#### COMMENTS

This animal seemed to be quite old, based on the condition of the teeth. She had several chronic disease conditions that may have contributed to her poor body condition, including a fairly severe parasitic infection of the gastrointestinal tract and some evidence of poor kidney function. The changes in her liver are likely to have been due to chronic blood loss, which could have been from the stomach ulcers.

It is difficult to work out how clinically relevant the bruising on the head was. It appeared to be recent, and may have occurred very close to the death of the animal, but whether or not it contributed to the death is impossible to determine. There were no overlying skin lesions that would suggest what might have caused the bruising.

The uterine mass was a benign tumour originating from the muscle of the wall.

#### ANIMAL HISTORY

No data sheet provided

#### GROSS PATHOLOGY

This female dolphin was in a good state of preservation, with only minimal skin sloughing and slight autolytic changes of internal organs. Her body condition was moderate, with a slightly pronounced neck and some loss of lumbar muscle mass. There were several healed wounds, one on the right of the snout and one on the flank. There were no linear impressions or other indications of accidental entanglement.

Numerous teeth were missing, and the remaining teeth were well worn.

There was a focally extensive area of bruising over the dorsum of the skull. Moderate numbers of cestodes were present in the inguinal blubber.

The uterus contained a firm, pale, smooth nodule in one horn. The uterine body had linear striations (evidence of previous pregnancies). No CLs were present, and there was no milk in the mammary gland, which was involuted.

The stomach contained moderate numbers of nematodes, and there were multiple ulcers in the squamous mucosa. The glandular mucosa was severely thickened and reddened, with multiple gray/green friable foci (necrosis and ulceration).

The lungs were well inflated, with no intra-airway foam or fluid. There were parasitic granulomas scattered throughout the lung, and the cartilage of the terminal airways was calcified. The AV valve leaflets were slightly thickened.

#### HISTOPATHOLOGY

Histological summary:

Lungs: multiple parasitic granulomas

Stomach: severe eosinophilic gastritis with proliferation, ulceration and necrosis (parasitic gastritis)

Intestines: severe eosinophilic and lymphoplasmacytic enteritis

Uterus: leiomyoma

Kidneys: moderate chronic interstitial nephritis

Liver: moderate diffuse extramedullary haematopoiesis

Heart: intra-myocyte inclusions

Spleen: follicular hyalinosis

Pathologist:

Assistant(s):