

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

PATHOLOGY REPORT

Status: Final
Date: 26/01/2011
Type: Mortality

Submitter	Submission Details
Jim Fyfe Department of Conservation Otago	Lab. Case/Spec ID: Submitter's Ref: Date Submitted: 25/01/2011 Date Received: 26/01/2011 Previous Case ID: WMD Case/Spec ID:
Animal Details	Epidemiology
Animal ID: Animal Name: Species: <i>Cephalorhynchus hectori hectori</i> Common Name: Hector's Dolphin Sex Class: Female Age Class: Neonate 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		.013 m	26/01/2011	Neonate
Dorsal Blubber Depth		16 mm	26/01/2011	Neonate
Eye to Blowhole Length		.01 m	26/01/2011	Neonate
Eye to Corner of Mouth Length		.015 m	26/01/2011	Neonate
Girth at Anus		.3 m	26/01/2011	Neonate
Girth at Eye		.39 m	26/01/2011	Neonate
Girth at Flippers		.47 m	26/01/2011	Neonate
Girth at Navel		.5 m	26/01/2011	Neonate
Height of Dorsal Fin		.06 m	26/01/2011	Neonate
Lateral Blubber Depth		14 mm	26/01/2011	Neonate
Length of Base of Dorsal Fin		.145 m	26/01/2011	Neonate
Length of Flipper		.14 m	26/01/2011	Neonate
Length of Flukes		.09 m	26/01/2011	Neonate
Snout to Anus Length		.585 m	26/01/2011	Neonate
Snout to Corner of Mouth Length		.11 m	26/01/2011	Neonate
Snout to Genital Slit Length		.53 m	26/01/2011	Neonate
Snout to Origin of Dorsal Fin Length		.4 m	26/01/2011	Neonate

Snout to Origin of Flipper Length	.195 m	26/01/2011	Neonate
Total Length	.81 m	26/01/2011	Neonate
Ventral Blubber Depth	12 mm	26/01/2011	Neonate
Width of Flipper	.063 m	26/01/2011	Neonate
Width of Flukes	.22 m	26/01/2011	Neonate
Weight	9.7 kg	26/01/2011	Neonate

DIAGNOSIS

Probable maternal separation

COMMENTS

There was no indication that this calf had any infectious disease or traumatic cause of death. The poor body condition and empty stomach, in conjunction with the presence of meconium (foetal faeces) in the large intestine indicates that the calf was separated from its mother (possibly during a storm) early after birth. Death would have been due to a combination of starvation, and hypothermia (lack of food impairs the ability to maintain body heat).

Tissue samples will be examined microscopically to rule out underlying disease.

ANIMAL HISTORY

Found beachcast after heavy seas.

GROSS PATHOLOGY

This neonatal dolphin was in moderate nutritional condition, with a prominent neck, and a good state of preservation. Foetal folds were present, and the dorsal fin had minimal folding. The umbilical cord remnant was clean, consisting of a healing layer of membrane only. There was extensive 'nibble' scavenging over the dorsum and around the ano-genital orifices. No subcutaneous bruising was evident, and no ante-mortem wounds were found. Three teeth on the right mandible had partially erupted. The lungs were moderately well inflated, but dark red and heavy (congested). The stomach was empty, and the distal intestines contained abundant meconium. This indicates that the calf had been born alive, breathed, probably survived for several days, but had not eaten. There were no other significant findings.

Pathologist: