## School of Veterinary Science

# **Pathology Report**

Christchurch

Submitter Ref.: H319 Date Sent: 21/09/2023 Accession No.: **62691** 

To: Craig Alexander Report Sent: 27/09/2023

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Species: Cetacean		Breed: Hector's Dolphin	
Age: Adult		Sex: Male	
Owner: Department of Conservation			Type: Post Mortem
ID: H319		Prev. Accn.:	
Submitted:	At Risk:	Affected:	Dead:

#### **History**

Caught at sea. Returned to Timaru Port and shipped (chilled) to Massey.

### **Gross Findings**

This dolphin presented chilled, in good body condition and a good state of post mortem preservation. There was minimal skin slippage and minor dark red discolouration of the intermandibular skin, with few other autolytic changes (code 2).

Standard length = 1.200m

Weight = 32.0kg

Blubber depths = 17 dorsal; 18 lateral; 17 ventral.

Summed testicular weight (with epididymis) = 166g.

There were several sets of rake marks on the skin surface, along with numerous individual or sets of recent, parallel skin-depth wavy lacerations spaced 91-13mm apart. These lesions were present over the entire body, being more common on the ventrum and lateral thorax. Fresh blood oozed from many of these lacerations There was abrasion of the snout with full thickness skin loss from the tips of both the upper and lower jaws. There were no encircling impressions, and no lacerations to leading edges of fins or the fluke.

There was a small amount of red-tinged translucent fluid in the thorax. The left lung was markedly congested. The right lung showed rib impressions, with an alternating pattern of pale and congested 'stripes'. The pharynx, distal trachea and left mainstem bronchus contained flecks of pale cream mucoid material (interpreted as ingesta) and small amounts of clear fluid. There was no appreciable fluid in the right lung, and no froth in the airways. Both lungs had myriad 1-2mm pale, often gritty flecks throughout the parenchyma (lungworm granulomas).

The stomach was full of recently ingested prey, with a large piece of fish muscle tissue in the mid oesophagus. The bladder contained a small amount of normal urine.

#### Diagnosis

Known bycatch

### Comments

The post mortem findings in this dolphin are consistent with what we have been seeing in bycaught dolphins from commercial trawl vessels. These findings have been extremely useful in beginning to clarify the 'typical' lesions for bycatch in New Zealand, since these lesions can vary between countries, dolphin species and fishing method. At this stage the most consistent lesions we see are numerous recent lacerations all over the body and recently ingested prey in the stomach. In a number of overseas studies, abundant fluid or foam in the airways are reported as being common indicators of bycatch, but we do not see that here. In this particular dolphin there was a small amount of fluid and mucoid material in the airways of one side of the lung, and in the trachea, indicating that he had recently regurgitated and then inhaled some of his stomach contents, which can occur during drowning. Histological examination will be undertaken on these tissues, and a further report will be sent if there are any significant or unexpected findings.

Date: 27/09/2023	Pathologists:
Students:	