## **School of Veterinary Science**

# **Pathology Report**

Submitter Ref.: H322 Date Sent: 13/12/2023 Accession No.: 62916

To: Department of Conservation

Report Sent: 15/12/2023

. Christchurch Copy To:

Email:

Species: Cetacean		Breed: Hector's Dolphin	
Age: Adult		Sex: Female	
Owner:			Type: Post Mortem
ID: H322		Prev. Accn.:	
Submitted:	At Risk:	Affected:	Dead:

### History

Caught at sea.

#### **Gross Findings**

This dolphin was chilled and submitted to Massey by airfreight.

The dolphin was in a good state of post mortem preservation, and in good body condition. Many teeth were missing, affecting almost all maxillary teeth and the rostral mandibular teeth. Remaining teeth were worn. There were extremely large numbers of variably deep lacerations covering all body surfaces. Many of these lacerations had ragged or finely wavy margins. Most were 1-3mm deep, but several were 3-5mm deep, including a roughly triangular tear on the left lower lip margin. While most lacerations were roughly linear, there were also several arc-shaped lesions. In many areas the lacerations were arranged in parallel sets of up to 9.

Upon flensing there was extensive bruising of the blubber overlying the dorsum of the skull and around the throat. The mammary gland was well developed but did not contain milk on incision.

The trachea and mainstem bronchi contained turbid tan fluid and fish bones (regurgitant). This material extended down into small airways. The lungs were moderately well inflated, and faint rib impressions were apparent on the pleural surface.

Within the abdominal cavity, the liver had myriad tiny pale flecks throughout the parenchyma and was mildly emphysematous (pseudonecrosis). There were small numbers of air bubbles in the mesenteric vessels, and the intestinal lymphatics contained chyle. The stomach contained abundant tan fluid with a large amount of fish flesh and bones. There were numerous air bubbles in the renal capsule and perirenal tissue. The uterus was mature, with linear striations (evidence of previous pregnancy), and both ovaries had multiple corpora.

#### Diagnosis

Known bycatch.

#### Comments

The cause of this dolphin was drowning due to entanglement in fishing gear. Some of the lesions that were present in this dolphin are common to most of the known bycaught Hector's that we have received in the past few years, namely, good body condition, numerous skin lacerations (although this was one of the most severe cases we have seen), a full stomach with recently ingested prey, and well inflated lungs. Two other lesions have only been present in a few bycaught cases: regurgitated stomach contents in the airways, and bubbles in the kidney tissues. Finding these lesions adds valuable information to our database on bycatch diagnosis. The bruising to the head was quite severe, and isn't something I have previously seen in a known bycaught dolphin. This was most likely due to trauma in the period immediately preceding death, for example impact of the head against a flat surface (possibly part of the boat or fishing gear).

Tissues from this dolphin have been collected for histological examination and for routine disease surveillance work. Any significant findings will be reported in due course, although they won't change the diagnosed cause of

death.

Date: 15/12/2023	Pathologists:
Students:	