## **School of Veterinary Science**

# **Pathology Report**

| Submitter Ref.: H289      | bmitter Ref.: H289 Date Sent: |                        | Accession No.: 58985    |  |
|---------------------------|-------------------------------|------------------------|-------------------------|--|
| To:<br>Westport<br>Email: |                               | Report Ser<br>Copy To: | nt:                     |  |
| Species: Cetacean         |                               | Breed: Hecto           | Breed: Hector's Dolphin |  |
| Age: Subadult             |                               | Sex: Female            | Sex: Female             |  |
| Owner:                    |                               | ·                      | Type: Post Mortem       |  |
| ID: H289                  |                               |                        | Prev. Accn.:            |  |
| Submitted:                | At Risk:                      | Affected:              | Dead:                   |  |

### History

Found beachcast at Karamea

#### **Gross Findings**

This dolphin was presented frozen and was thawed for necropsy. The dolphin was in moderate to good body condition, and in a moderate state of post mortem preservation, with full thickness loss of skin around the eyes, blowhole, axilla and anogenital orifice, and dessication of remaining skin. There were no external lesions that would be consistent with entanglement. Flensing of the head revealed focally extensive subcutaneous bruising of the left parietal region, extending into the underlying fragmented muscle and containing several clots. The left parietal bone contained a depressed oval fracture ("pond" type fracture) with multiple fracture fragments. The underlying cerebrum was discoloured dark red, although accurate interpretation of this (i.e. contusion vs artefactual staining) is not possible due to freeze-thaw artefact. The fracture defect measured 45mm from rostral to caudal margin, and 45mm across.

The stomach was empty other than a moderate amount of tan mucoid material and a few nematodes. The small intestine contained gas, and there was no faecal material in the distal colon. The lungs were moderately well inflated and dark red with occasional small gritty foci (likely calcified lungworm lesions).

#### Histopathology

Lung - multifocal mixed inflammatory infiltrate; several areas of inflammation surround possible lungworm larvae remnants. Others poorly circumscribed, with eosinophils and neutrophils.

Kidney - Focal granulomas with central necrosis; several multinucleate giant cells admixed.

#### Diagnosis

Blunt head trauma with skull fracture

#### Comments

The bruising and fractured skull in this dolphin are consistent with an impact injury. The type of fracture (oval depressed fracture) suggests impact with a fairly small object rather than a wide surface such as a boat. It isn't possible to determine whether the injury was human-inflicted, but nor can this be ruled out. The inflammatory lesions in the lung and kidney could be associated with internal parasitism, which is fairly common in young dolphins.

| Date: 15/09/2020 | Pathologists: |
|------------------|---------------|
| Students:        |               |