## **School of Veterinary Science**

# **Pathology Report**

Submitter Ref.: H283 Date Sent: 19/02/2019 Accession No.: 56973

To: Department of Conservation

Report Sent: 16/04/2019

Christchurch

Copy To:

Email:

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

### History

Known bycaught animal.

## **Gross Findings**

This dolphin presented chilled, in good body condition and a good state of post mortem preservation. There was blood over most of the body, particularly over the face and throat. Individual fish scales were adherent to the body surface in several places. There were large numbers of recent, long lacerations 1-2mm deep over the body. The most severe lacerations were on the white patch of the left side of the face and throat, consisting of 3 parallel incisions beginning at the left lower lip and extending distally 15 (ventral most incision) to 18 (dorsal most) cm. The lower incision is discontinuous, and is 10mm below the middle incision, which in turn is 2-3mm from the upper incision. Similar but less shorter lacerations are present elsewhere (images on file) including the left flank immediately behind the pectoral flipper; the right flank/lateral tail below the dorsal fin (intersecting and irregular rather than parallel). Shallower irregular 'scratches' are present on the ventrum, and the mandible has numerous 1-2cm patches of short, parallel marks resembling abrasions. There are two 'crack'-like lacerations, approximately 10mm long and 16mm apart, on the leading edge of the right fluke.

There is a moderate amount of clear fluid in the thoracic and pericardial cavities. The left lung is hyperinflated. The lymphatics on the pleural surface are prominent and gas-filled, and the pleura is covered with irregular red patches, frequently with tiny (1mm diameter) central white firm foci (likely parasite granulomas). Red/pale mottling extends through the cut surfaces of the lungs. There is a small amount of fluid in the bronchi and bronchioles.

The stomach contains a small amount of pink/cream fluid with no prey items or remains. There are large numbers of cestodes attached to the mucosa, and a low number of nematodes. The mucosal surface is focally thickened and reddened (likely parasite damage).

The ovaries are small and smooth, and the uterus is immature in appearance. The connective tissue of the kidneys is emphysematous.

## Histopathology

Histo summary.

Lung - bronchointerstitial inflammation, predominantly eosinophils, plasma cells and macrophages. Focal granulomatous inflammation with intra-bronchiolar nematodes. Alveoli contain large numbers macrophages, frequently with intracytoplasmic vacuoles.

#### Diagnosis

Known bycatch

#### Comments

This dolphin is a known bycaught animal. She also had moderate inflammation of the lungs (pneumonia), which could be solely due to lungworm infection, a common subclinical condition in young cetaceans. It is possible that there are other contributing causes to the lung inflammation, but extensive additional diagnostic testing would be required to investigate this further.

| Date: 21/02/2019 | Pathologists: |  |
|------------------|---------------|--|
| Students:        |               |  |