School of Veterinary Science

Pathology Report

Submitter Ref.: H342 Date Sent: Accession No.: 64525 To: Report Sent: 13/03/2025 Department of Conservation Copy To: Christchurch

Email:

Species: Cetacean		Breed: Hector's Dolphin	
Age: Neonate		Sex: Male	
Owner:			Type: Post Mortem
ID: H342		Prev. Accn.:	
Submitted:	At Risk:	Affected:	Dead:

History

Live stranded several times after attempts to refloat. Extremely weak; euthanised on humane grounds.

Gross Findings

This newborn calf presented frozen and was thawed for necropsy. The body was in an excellent state of post mortem preservation and moderate body condition, with a slight concavity at the neck. The dorsal fin was folded and there were clear fetal folds present. The umbilicus was fresh, with no indication of healing.

There were 2 penetrating wounds, joined by a probe-patent tract that passed through the caudal part of the right cerebral hemisphere. The smaller wound (interpreted as the ballistic entrance wound) was approx. 2cm caudal and lateral to the blowhole on the right. This wound was small (<1cm diameter) with torn skin at the margins. The second wound was below the left eye approx. 1cm ventral to the border of the black/white skin markings. This wound, interpreted as the exit wound, was slightly larger and more irregular than the first and had small fragments of skin everted from the centre. There was extensive soft tissue haemorrhage under both wounds, and comminuted fractures of the underlying bony structures on both sides.

Blubber depths were 14mm dorsal; 14mm lateral; and 12mm ventral. The dolphin measured 723mm in length. The lungs were hyperinflated with occasional focally extensive dark red irregular patches, some of which extended into the parenchyma (congestion and possible serosal ecchymotic haemorrhage).

The stomach was completely empty. The colon contained abundant meconium. The adrenals appeared larger than normal.

Diagnosis

- 1. Euthanised (gunshot)
- 2. Maternal separation

Comments

This calf was very young - probably a day or so old at most. There was no evidence that it had ever suckled, as indicated by the empty stomach and the presence of a large amount of meconium (fetal feces) in the colon. This suggests that it had been separated from its mother soon after birth. There are multiple reasons for separation like this, including that the calf was born weak or ill and was unable to suckle; the mother was ill or died during or soon after birth; or severe weather events caused physical separation of the two. There was no evidence on gross post mortem to suggest that this calf was ill, but we will process his tissues for examination under the microscope to evaluate this further.

The degree of tissue disruption in the brain as a result of the euthanasia procedure confirms that death would have been very guick.

Date: 13/03/2025	Pathologists:	
Students:		