

Pathology Report

Submitter Ref.: H324	Date Sent: 27/03/2024	Accession No.: 63194
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To: [Redacted]
Geraldine

Report Sent: 27/03/2024

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Species: Cetacean	Breed: Hector's Dolphin		
Age: Adult	Sex: Male		
Owner:			Type: Post Mortem
ID: H324			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

Caught in trawl net. Frozen pending shipping to Massey for necropsy.

Gross Findings

This dolphin was received frozen, and was thawed for necropsy. The dolphin was in good body condition, with a rounded dorsal lumbar profile and a flat neck. Blubber depths were 14mm dorsal; 11mm lateral and 14mm ventral. The dolphin measured 1.26m in length and weighed 32.9kg.

The status of post mortem preservation was assessed as mild decomposition when received, progressing to moderate after thawing. This deterioration included marked dark red discolouration of ventral white patches, particularly the throat, with pseudobruising of underlying blubber; these changes were not present on arrival. The flanks and dorsum were covered in tattoo pox lesions. These lesions were significantly more numerous than we have seen in previous Hector's dolphins. Multiple straight to slightly curved, randomly oriented lacerations were present over the body. Several extended full skin thickness. Three to four roughly parallel lacerations were present on each side of the dorsal fin, but did not involve the leading edge. Three impressions were present on the midline of the caudal part of the body.

There was no ingesta in the oropharynx or airways. The lungs were dark red and poorly aerated, with the left lung being darker. Rib impressions were present on both sides. There was a moderate amount of dark red fluid in the airways, consistent with freezing and thawing of the carcass. No foam was present. There were no gas bubbles in or around the kidneys. The stomach was empty aside from tan watery fluid and moderate numbers of nematodes. The glandular and squamous mucosa were thickened and proliferative, with several focal ulcerations. The intestinal lymphatics contained discontinuous threads of white material (chyle).

Summed testicular mass (with epididymis) was 596g.

Diagnosis

Known bycatch

Comments

This dolphin adds to our body of knowledge of bycatch diagnosis in Hector's dolphins. There is no simple or reliable way of definitively diagnosing bycatch as a cause of death in beachcast dolphins, but by carrying out necropsy examinations of known bycaught animals we hope to build a clearer picture of the range of lesions present in bycaught Hector's dolphins. The optimum outcome of this work would be to find one or more changes that: (1) only occur in bycaught dolphins; and (2) are present in all bycaught dolphins. Unfortunately, based on international studies and on our own results so far, this outcome is highly unlikely, and ultimately diagnosis is likely to rely on a series of pieces of evidence of varying strength. Our findings to date demonstrate that most (but not all) trawler-caught Hector's have moderate to large numbers of recent lacerations to the main body surfaces, show evidence of recent feeding and are in good body condition. Encircling net impressions, nicks to the leading edges of fins and flippers and airway fluid and froth, which are commonly cited in overseas studies, have been infrequent or absent from our known bycatch cases to date.

Date: 27/03/2024	Pathologists: [Redacted]
Students:	