School of Veterinary Science

Pathology Report

Submitter Ref.: H317 Date Sent: 07/06/2023 Accession No.: 62201

To: Report Sent: 29/06/2023

Copy To:

Species: Cetacean		Breed: Hector's Dolphin	
Age: Subadult		Sex: Female	
Owner: Department of Conservation			Type: Post Mortem
ID: H317			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

See incident report form

Gross Findings

This dolphin was submitted chilled for necropsy. The dolphin was in good body condition and a good state of post mortem preservation, with minimal superficial skin sloughing and no other autolytic changes.

Weight = 31.0kg. Standard length = 1.225m. Blubber depths = 15mm dorsal; 14mm lateral; 13mm ventral.

There were very large numbers of short (1 - 5cm long), shallow to medium depth, randomly oriented, predominantly straight lacerations over the surface of the dolphin. These were most numerous on the head and throat, and more widely spaced over the rest of the body. There were no encircling impressions or nicks on leading edges of fins or flippers.

The teeth were in very good condition, with no wear. The tongue had numerous lateral papillae.

There was a small amount (<10mL) of watery blood-tinged fluid in the thoracic and abdominal cavities.

There was watery tan fluid in the oesophagus, extending into the trachea and to the smaller airways of both lungs. Numerous bronchioles contained tan, gelatinous 'clots' of what appeared to be aspirated stomach contents. The lungs were dark red and mottled, with numerous 2-3mm diameter pale foci scattered throughout. The serosal surface had prominent rib impressions.

The stomach contained a small amount of partially digested prey material, including very small fish skeletal remnants and muscle. The bladder contained a small amount of normal-coloured urine. Bilaterally, there were numerous gas bubbles in the renal capsules. No bubbles were evident elsewhere in the body. The intestinal lacteals were empty.

The uterine horns were small, and the ovaries were smooth and inactive (immature).

Diagnosis

Known bycatch

Comments

This dolphin had extensive but superficial damage to the skin, consistent with what we have seen in other known bycaught animals from trawl fisheries. Also consistent with most (but not all) bycaught Hector's necropsies, this one had recently ingested prey in the stomach, albeit a small amount in this particular case.

Two features in this necropsy were notable compared with other recent known bycaught dolphins. Firstly, this animal had regurgitated some stomach contents and aspirated this into the deep airways. Secondly, there were numerous gas bubbles in the capsule (lining) of the kidneys. Gas bubbles have been reported in other cetacean species, attributed to rapid ascent from depth, similar to 'the bends' in people. In cetaceans these bubbles are most commonly in the blood vessels of the intestines, heart and fat pads: this was not observed in the current case. The

net in this capture had been deployed at 32-34m, which is fairly shallow in comparison with gas bubble cases in the cetacean literature.

The findings in this dolphin add extremely useful information to our growing body of knowledge on the lesions that are present in bycaught dolphins, and will contribute to our ability to diagnose bycatch in beachcast animals.

Date: 29/06/2023	Pathologists:
Students:	