

Pathology Report

Submitter Ref.: H326	Date Sent: 23/01/2024	Accession No.: 63000
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To: [REDACTED]
Department of Conservation
Geraldine

Report Sent: 26/01/2024

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Email:

Species: Cetacean	Breed: Hector's Dolphin		
Age: Adult	Sex: Male		
Owner:			Type: Post Mortem
ID: H326			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

Caught in port. No details of fishing vessel type. Collected on 23/1/24 and held in freezer overnight. Retrieved from freezer next morning and held chilled on ice pending airfreight to Palmerston North on 24/1/24.

Gross Findings

Standard length = 1.285m; weight = 34.8kg; blubber depths = 14mm dorsal; 13mm lateral; 10mm ventral.

Summed testicular mass (with epididymis) = 494g

This dolphin was in moderate to good body condition with mild signs of autolysis, more marked on the right side (superficial/mid skin sloughing). The intermandibular skin and blubber was discoloured dark red/purple (autolysis). Similar discolouration was present around the genital slit. No bruising or haemorrhage was evident after flensing. There were multiple short, straight to curved lacerations on the body, predominantly on the left side, with a few on the ventrum and several on the right. These lacerations were considerably fewer than what we have seen in previous trawl vessel captures. A few short shallow lacerations and abrasions were present on the 'lips', but there were none on leading edges of flippers or fins, and no encircling or other net impressions.

There was a recently ingested fish within the oesophagus. The lungs were well inflated, without rib impressions.

Several small gritty foci (likely lungworm granulomas) were present throughout the lung fields. The airways contained a moderate amount of blood-tinged fluid but no foam. Ingesta was not found in the airways.

There was a single fluid-filled spherical cyst in one renule of the left kidney. There were no retroperitoneal gas bubbles. The liver had a few dry, gritty, pale foci, 2-3mm diameter within the parenchyma and a singular similar lesion on the capsular surface. The stomach contained a small amount of fish bones, partially digested fish flesh, lenses and possible octopus/squid eyes. There were multiple soft, black/red sessile to protuberant nodules on the mesenteric lymph node (likely parasite lesions). The large intestine contained muddy digesta with occasional clumps of compressible, partially compacted mud/sand.

Diagnosis

Known bycatch

Comments

The gross necropsy findings in this dolphin are consistent with bycatch, although there are some differences in terms of scale compared with what we have seen in recent cases from commercial trawl vessels. In those previous cases we have found much more marked skin laceration, large amounts of recently-ingested fish in the stomach, overinflated lungs with rib impressions (not seen in this case), and, in several, large 'bubbles' in the membranes surrounding the kidney (also not seen in this case).

The information we have been able to get from this dolphin is invaluable in our ongoing work to better characterise lesions of dolphin bycatch in NZ fisheries, which in turn will hopefully help us assess beachcast dolphins for evidence of bycatch. This is particularly important since bycatch lesions can vary with species and with fishery types, so that we can't rely on findings from overseas - we need solid evidence from the NZ context.

Date: 26/01/2024	Pathologists:
Students:	