

Institute of Veterinary, Animal and Biomedical Sciences

PATHOLOGY REPORT

Submitter's Ref.:	Date Sent:	Accession No.: 54343
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TO:

Department of Conservation- Golden Bay
Takaka

Species: Cetacean (4)	Sex: Female	Age: Adult	Breed: Long-finned Pilot
ID: None	At Risk: multiple	Affected: >600	Dead: >200
Owner:		Prev. Accn.:	Type: Post Mortem

HISTORY

Mass stranding event that began on the evening of 9th February 2017. Over 200 dead whales seen on the high tide mark the following morning. Multiple attempts at refloating stranded live whales occurred over the next several days and multiple smaller strandings (possibly restrandings) also occurred in this period. Around 40 pilot whales were euthanased on the afternoon of Saturday the 12th of February. Both male and females animals of all age-classes were involved including many calves.

GROSS FINDINGS

Four necropsies were performed, two on the afternoon of the 12th and two on the afternoon of the 13th. All four pilot whales were females, three of them adult (two pregnant) and one subadult. All four animals were in a moderate state of decomposition.

All four animals were in good body condition, with good hypaxial and epaxial muscle mass and adequate blubber thickness.

Two of the whales (both adult females) had a solitary bullet entry wound to the head region (no exit wounds noted) and apart from skin abrasions around the ventral aspect of the mandibles and the usual epidermal scars seen in cetaceans no other external abnormalities were noted. All four animals had small numbers of larval cestodes cysts within the blubber layer.

No fresh prey items were present in the stomachs, but small numbers of squid beaks were present. One or two ulcers were present in the mucosa of the glandular portion of the stomach in all four whales; these were 20-30mm in diameter and had smooth raised and firm margins indicating a degree of chronicity. Small numbers of nematodes were also present in the glandular portion of the stomach of all four animals.

Variable amounts of white frothy fluid (pulmonary oedema) were present in the trachea and smaller airways of the lungs of all four animals and the parenchyma of the lungs was deep red and also oozed a small amount of white frothy fluid.

The lower jaw was removed from all four animals and no obvious gross abnormalities were noted in the acoustic fat on the medial aspect of the mandibles or around the middle ears. The pterygoid sinuses of all four animals had a moderate burden of nematodes.

The brains of these animals were not examined as the method of euthanasia obliterates possible underlying lesions.

No other obvious abnormalities were noted on gross post mortem.

DIAGNOSIS

No obvious cause of stranding

COMMENTS

Due to personnel and time restraints only four necropsies were performed out of the several hundred dead pilot whales. Post mortem findings were similar to those seen in necropsies performed on six individuals in

a mass stranding of Pilot Whales in Farewell Spit in the January of 2014.

The lesions seen were all either normal for healthy cetaceans (e.g. stomach ulcers, mild to moderate parasite burdens) or were a consequence, rather than a cause, of stranding (e.g. pulmonary oedema and congestion).

All four animals had external and internal parasite burdens similar to those seen in many wild cetaceans and were unlikely to be adversely affecting these animals given they were all in good body condition.

The stomachs of all four animals contained only a small number of squid beaks and no fresh prey items. All four animals had a degree of fluid build-up in the lungs consistent with other cetaceans that have live stranded; this is likely due to blood pooling within the lung as these animals go into shock and cardiovascular collapse.

No gross abnormalities were noted in the acoustic structures of the head. There was no indication of any obvious underlying disease on histological evaluation of two of these whales.

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