

Pathology Report

Submitter Ref.:	Date Sent: 27/06/2025	Accession No.: 64904
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To: [REDACTED]
Department of Conservation- Mahanui
Canterbury

Report Sent: 30/06/2025

Copy To:

Email: [REDACTED]

Species: Cetacean	Breed: Orca	
Age: Adult	Sex: Female	
Owner:		Type: Post Mortem
ID: Takutai Moana		Prev. Accn.:
Submitted: 1	At Risk:	Affected: 1
		Dead: 1

History

Observed deceased in the surf on an incoming tide, Waimairi Beach, 26/06/2025.

Gross Findings

Total length (tip of upper jaw to deepest part of fluke notch): 640 cm

Tip of upper jaw to tip of dorsal fin: 365 cm

Tip of upper jaw to start of anus: 434 cm

Tip of upper jaw to start of genital slit: 390 cm

Tip of upper jaw to front of flipper: 140 cm

Tip of upper jaw to blowhole: 80 cm

Length of flipper (external): 107 cm

Length of flipper (internal): 75 cm

Greatest width of flipper: 57 cm

Greatest width of tail flukes: ~65 cm

Length of rostrum: 30 cm

Length of gape: 74 cm

Height of dorsal fin: 81 cm

Length of genital slit: 71 cm

The orca was in left lateral recumbency and roughly perpendicular to the shoreline.

This was an adult female in fairly poor body condition, with reduced epaxial muscle mass and reduced blubber thickness; blubber depth averaged 50-60 mm just caudal to the dorsal fin.

Large areas of the skin over the right caudal half of the body had a finely corrugated appearance or larger vague diamond-shaped indentations.

Many of the both the upper and lower teeth, were slightly rounded. This became much more pronounced rostrally, where multiple teeth were flattened and only projected just above the gumline; dental pulp however was not exposed. One of the teeth was missing from the rostral aspect of the lower left jaw. The last tooth of the right lower jaw was loose and could be extracted manually; although the tooth socket was smooth, there were fragments of gritty material loosely adhered to the tooth root. Multiple other teeth were slightly loose but could not be manually extracted.

The thick white lining of the forestomach had completely sloughed and was partly located in the main stomach. This lining contained numerous (>20) smooth, firm, white ovoid raised and fairly discrete foci, up to ~20 x 30 mm; central craters/ulcers were as not present. The main stomach contained a small amount of clear fluid and multiple prey items, possibly pieces of non-hooked squid tentacles; the stomach was certainly not full.

The intra-abdominal organs were in a fairly advanced state of decomposition, most organs were soft and contained large amounts of post mortem gas bubbles; intra-thoracic organs also contained post mortem gas bubbles.

Diagnosis

Reduced body condition

Comments

This was an adult female orca in fairly poor body condition. There was no convincing evidence of any major trauma. No convincing next marks were found, including over the snout, edges of the dorsal, flippers, fluke or tail stock. The

corrugated appearance of the skin may well be the result of lying on the sand and being moved around in the surf. The stomach contained prey material (possibly squid remains?) but these were in relatively low volume (i.e. her stomach was not full). Part of the lining of the stomach contained multiple small raised nodules, which could represent healed parasitic (e.g. Anasakid nematodes) infections; these appeared superficial and are likely incidental or at least did not contribute significantly to her declining body condition. Due to advanced decomposition of the internal organs, no tissues were collected for microscopic examination. There was some fairly significant wearing of the teeth, especially of the teeth toward the front of the jaw. Multiple teeth were also loose. Without aging the teeth it is difficult to be certain, but my feeling is she was possibly an elderly orca who had hopefully lived a long and productive life.

Date: 30/06/2025	Pathologists: 
Students:	