

Longman's Beaked Whale (*Indopacetus pacificus*) in Fiji

Sam R. Fisher,¹ Steve Anstey,² Isikeli Nasaunivalu,³ and Robert N. Fisher⁴

¹Department of Biology, La Sierra University, Riverside, CA, USA

²Ahura Resorts Conservation Foundation, Nadi, Fiji

³Likuliku Lagoon Resort, Malolo Levu, Fiji

⁴Western Ecological Research Center, U.S. Geological Survey, San Diego, CA, USA

E-mail: rfisher@usgs.gov

Beaked whales (Ziphiidae) are the second largest family of cetaceans with 24 currently recognized species, and the Longman's beaked whale (*Indopacetus pacificus*) is one of the least known globally (Reeves et al., 2003; Yamada et al., 2019). Longman's beaked whales occur in tropical waters from the western Indian Ocean to the eastern Pacific (Jefferson et al., 2015), with strandings in the Pacific reported from Hawaii, the Philippines,

Taiwan, Japan, and New Caledonia (West et al., 2013; Garrigue et al., 2016; Acebes et al., 2019; Kobayashi et al., 2021; see Figure 1). Herein, we report the first record of this species in Fiji.

A dead whale was found stranded on 8 April 2020 on the island of Malolo Levu at Likuliku Resort, Ahura Resorts, on the lagoon beach (17.7392 S, 177.1512 E; Figure 1). It was photographed by resort staff before being disposed of

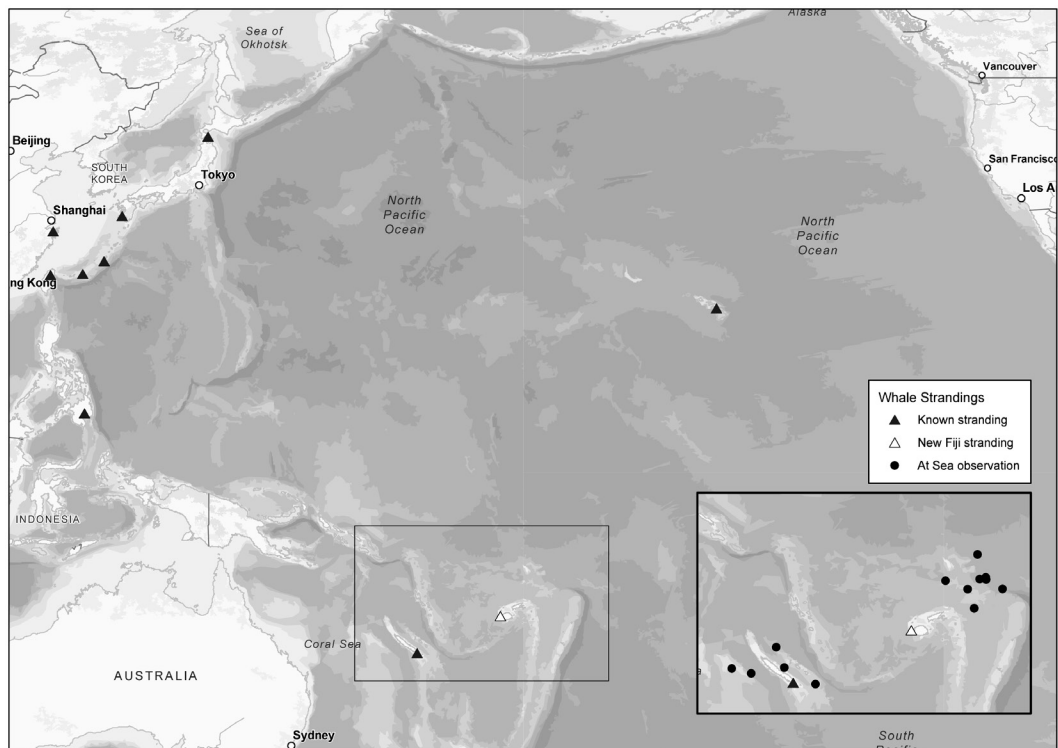


Figure 1. Published Longman's beaked whale (*Indopacetus pacificus*) stranding events (black triangles) within the Pacific Ocean with the newest stranding from Fiji shown as a white triangle. At-sea observations (black circles) are only shown for the Fiji region (see cutout area in the lower right corner of the figure).

offshore (Figure 2). The beak and tail showed large amounts of damage, mostly abrasions, perhaps caused from Cyclone Harold on 7 April 2020, that might have caused the whale to wash across the reef. Aside from this damage, there was no obvious trauma to the carcass, and the whale appeared to be in good condition based on direct observation. The whale's age could not be determined, but because of its apparently large size (Figure 2b) and numerous, healed cookiecutter shark (e.g., *Isistius* spp.) bite wounds (Figure 2a), it appeared to be an adult. The whale was possibly a female because there were no visible teeth protruding from the tip of the lower jaw (Figure 2).

We identified the whale as *Indopacetus pacificus* based on several diagnostic features present in the photos (Figure 2). These features include black marking around and behind the eye, which extends as a band to the insertion of the flipper; pale flanks behind the flipper band; another dark band, which extends up from the eye to just behind the blowhole that forms a posterior boundary to the pale melon; a large and conspicuous crease at the base of the well-developed melon; separation of the pale sides of the melon by a dark, longitudinal, dorsal band; a small, pale “ear spot” behind the eye; and a lower jaw that extends beyond the upper jaw (Pitman et al., 1999; Jefferson et al., 2015).



Figure 2. (a) *Indopacetus pacificus* that stranded on 8 April 2020 on the island of Malolo Levu, Fiji: (a) the distinct crease between melon and beak (black arrow) is somewhat distorted by ripples on water; several healed cookiecutter shark bite scars are evident on the body; and (b) man is shown for scale; the whale was not measured.

At-sea sightings of *Indopacetus pacificus* have been recorded at least 200 km northeast of Fiji, toward Wallis and Futuna (15.84° S, 177.37° W; found using the OBIS Seamap, accessed on 10 January 2022. Search term: *Indopacetus pacificus*; Halpin et al., 2009; Van Canneyt, 2022). Although Fiji is usually included within the suspected at-sea range of this species (e.g., Jefferson et al., 2015; Carwardine, 2020), to date there has been no direct evidence that it occurs there (Miller et al., 2016; Vertnet (vertnet.org) database checked April 2020). Blainville's beaked whale (*Mesoplodon densirostris*) was the only other beaked whale species previously recorded from Fiji (Leslie et al., 2005). This is the second stranding of a previously unrecorded cetacean species—and the fourth marine mammal—reported from Fiji within recent years (Hill-Lewenilovo et al., 2019; Chute, 2021; Dehm et al., 2021). Social media has helped to increase the number of stranding events recorded globally, but outreach and education can ensure important specimens are not lost to science so that they can be properly documented and preserved, if necessary (Dehm et al., 2021).

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