

FIND OF MARLIN SPEAR FROM THE ANTARCTIC MINKE WHALES

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A spear-like snout of a marlin was found in the middle of upper jaw of an Antarctic minke whale, *Balaenoptera bonaerensis* Burmeister, when it was flensed on deck of a factory ship on 20 January, 1972. This whale (Serial No. J-1, 965) was caught from the waters of 64°06'S, 87°14'E by a catcher boat which was accompanied with Jinyo-maru Whaling Expedition. It was male, 8.0 m in body length and sexually mature.

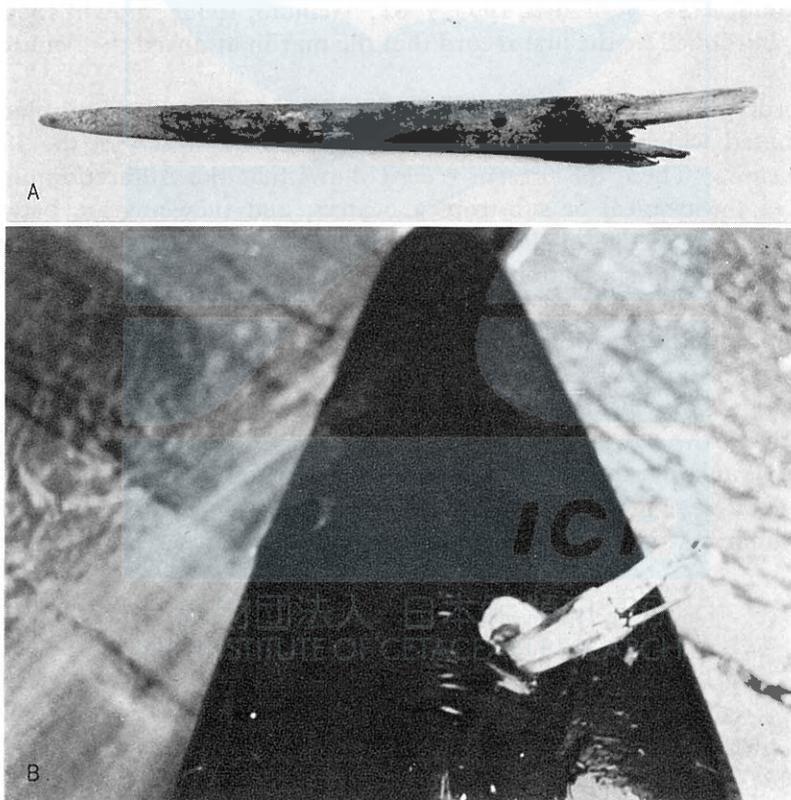


Fig. 1. A spear of marlin found from an Antarctic minke whale (Ser. No. J-1, 965).

A: Ventral view of the spear ($\times 1/6$).

B: Dorsal view of rostrum of the Antarctic minke which was attacked by the marlin. Inserted spear is seen on the right side of the rostrum.

The snout was 49.5 cm long, broken at the root as is shown in Fig. 1A. It was inserted into right anterior upper jaw (Fig. 1B) through to left palate of the whale. The upper jaw was holed with the snout, and the hole had not yet healed completely. Furthermore, some pieces of connective tissue of the fish were still remained on inner part of the snout. The snout was attached with three individuals of a *Conchoderma* (species unidentified) on a part. These facts leads us to estimate that this whale was attacked by a marlin not more than several months before.

It is difficult to identify the fish species only from a snout externally. However, Dr. Shoji Ueyanagi of the Far Seas Fisheries Research Laboratory kindly examined this snout, and concluded that this fish must be referred to Genus *Makaira*, namely, either blue marlin, *M. mazara* (Jordan & Snyder), or black marlin, *M. indica* (Cuvier). On the bases of the estimation of snout length and the relation between body length and snout length of the marlin by Ueyanagi (1957), the body length of the marlin is estimated to be about 220 cm in total length.

There are several reports on finding of snout of swordfishes from some baleen whales (Ruud, 1952; Jonsgard, 1959, 1962; Nemoto, 1959; Brown, 1960; Machida, 1970), but it will be the first record that the marlin attacked the Antarctic minke whale.

According to Nakamura, Iwai and Matsubara (1968), blue and black marlins are distributed widely in the tropical and sub-tropical waters of the Indian and Pacific Oceans. Then, the present record shows that the Antarctic minke whales live even in the tropical or sub-tropical waters, and they migrate between these waters and pack-ice edge of the Antarctic.

Mr. Tadao Ishii, a national whaling inspector, observed also a round hole which was estimated to be caused with the attack of a marlin on the left upper jaw of another Antarctic minke whale (Serial No. J-2,923) on board of the same factory ship on 16 February, 1972. This whale was caught from the waters of 64°52'S, 91°18'E. It was 8.3 m long male and sexually mature. To my regret, the spear had already thrown away by that time.

Many thanks are due to Dr. Shoji Ueyanagi, who kindly identified the snout of the marlin and gave me much information on billfishes. I am also indebted to Mr. Tadao Ishii for his kindness to report me a record of his observation.

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