

A MALFORMED FOETUS OF A SOUTHERN SEI WHALE

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During the Antarctic whaling season of 1967/68, a badly malformed 230 cm long female foetus was found on the F/F Nisshin Maru. It was from a sei whale (*Balaenoptera borealis*) (No. 1545) caught at 57° 35' S, 84° 54' E on 26 February 1968. The mother was 15.4 m long and 11-years old, with seven ovarian corpora including the corpus luteum of this pregnancy. The total length of the foetus was measured from the most anteriorly protruding part of the premaxilla to the notch between the flukes. It was recorded in the catch log as 218 cm long. The foetus showed a harelip-like malformation due to grotesque development of the head region. The premaxilla was greatly deformed, resulting in a downward curve. A deep depression was evident on the lower mandible (Fig. 1). Although the animal was not dissected, the entire head appeared poorly developed as far as the region of the maxillae. This region appeared shorter than the premaxillae region. The tail flukes sloped considerably, causing the entire fluke spread to be very narrow. Essentially the same characteristic was reported by Ohsumi (1959) for a deformed fin whale (*B. physalus*) foetus. Measurements for the right flipper: 1) Tip to axilla, 2) anterior end of lower border to tip of flipper, and 3) greatest width of flipper, were 27.0, 38.0, and 8.3 cm, respectively. These measurements are the same as those of a 244-245 cm long, normally developed foetus. The foetus was placed in formalin solution and transferred from the Whales Research Institute to the Institute of Cetacean Research in Tokyo.

The upper jaw of the present foetus was clearly deformed. Although one instance of an upwardly bent upper jaw has been reported in *Stenella coeruleoalba* (Tobayama and Uchida, 1964), Nakamura (1968) stated, after surveying the occurrence of deformed lower jaws in postnatal sperm whales (*Physeter catodon*), that malformation of the upper jaw rarely occurs in cetaceans. Two examples similar to the present case have been reported for fin whale foetuses (Nishiwaki, 1957; Ohsumi, 1959), and siamese twins of the humpback whale (*Megaptera novaeangliae*) had upper jaw deformation to some extent (Zemsky and Budylenko, 1970, Figs 3 and 4). However, deformation appears to occur only rarely in postnatal baleen whales. Extensive head and mouth region malformation in whale neonates probably causes difficulty in sucking or later feeding, thus greatly lessening the chances of survival.

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Fig. 1. A 230 cm malformed female foetus of a southern sei whale found on 26 February 1968. Whale number indicated as 1545 in the catch log of the Nisshin Maru fleet in 1967/68 season.

- ① Entire body of the foetus.
- ② Head of the foetus showing the blowholes in an extremely forward position, malformed development of the maxillae and premaxillae regions, and upwardly curved tip of the lower jaw. The eye is shown by the arrow.
- ③ Opened mouth showing oral cavity, palatal ridge, tongue and extremely depressed lower jaw.

