

UNUSUAL MINKE WHALE WITH DEFORMED JAW

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An unusual minke whale (*Balaenoptera acutorostrata*) was captured by the Japanese whaling fleet on 27 January 1979 in Area IV of the Antarctic (serial no. 1645). The rostrum of this whale was abbreviated and bent towards the lower jaw which was rather wide compared with a normal animal (Fig. 1). There are several

TABLE 1. BODY MEASUREMENTS AND OTHER DATA OF UNUSUAL MINKE WHALE COMPARED WITH TWENTY NORMAL WHALES

	Unusual whale	Twenty normal whales	
		Range	Mean
Serial no.	1645	1569-2061	
Date of catch	27/Jan./1979	24/Jan.-9/Feb./1979	
Position of catch	67°09'S, 71°48'E	Antarctic	
Sex	Female	Females	
Age (yrs.) (number of layers in ear plug)	40+		
Thickness of blubber (cm)	4.5	3.5-6.0	4.7
Body proportion (cm)			
Total length, tip of snout to notch of flukes	870	860-890	873.5
Tip of snout to center of blowhole	100	125-144	134.9
Tip of snout to center of eye	144	158-185	171.9
Tip of snout to ear	181	198-230	215.2
Tip of snout to tip of lower jaw	28	—	—
Length of ventral grooves (max.)	461	436-492	466.5
Umbilicus to end of ventral grooves	49	15-53	28.8
Notch of tail flukes to center of anus	261	217-248	235.0
Notch of tail flukes to tip of dorsal fin	280	238-273	252.4
Half of the girth, at umbilicus	186	191-245	223.8
Half of the girth, at anus	131	130-156	139.7
Dorsal fin, vertical height	33	28-40	34.8
Flipper, tip to anterior insertion	140	121-151	136.4
Flipper, tip to axilla	105	92-110	100.8
Flipper, greatest width	34	30-35	32.9
Tail flukes, tip to tip	219	223-270	243.6
Tail flukes, notch to the nearest part of the anterior margin of the tail flukes	60	55-65	60.0
Half number of ventral grooves, at anterior insertion of each flipper (no.)	24	20-28	25.0
Skull (cm)			
Length, codyles to tip of premaxilla, straight	180	196-223	211.8
Breadth, frontal	116	106-120	112.4
Reproductive organs			
Mammary gland (length, width, depth; cm)	129, 22, 2.9	—	—
Number of corpora lutea and albicantia (no.)	1-12, 0-10	—	—

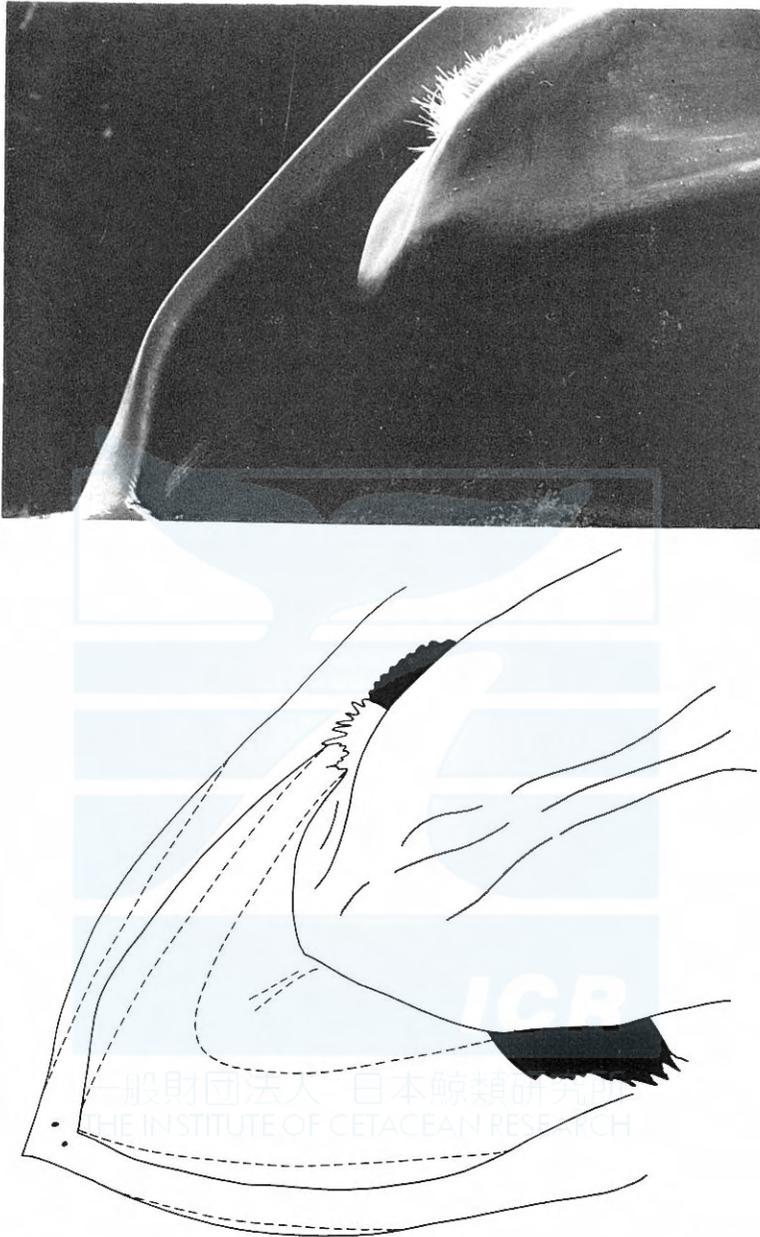


Fig. 1. Upper: Photograph of deformed rostrum and lower jaw. Lower: Tracing illustration of above photograph, dotted lines show contours of normal whale's rostrum and lower jaw.

reports and review of deformed jaws in sperm whales (Nasu, 1958; Spaul, 1964; Nakamura, 1968 etc.) and fin whale fetus (Ohsumi, 1959), but it is a rare occurrence in adult baleen whales.

This whale was an old female of 8.7 m in length and pregnant with one fetus (female, 30.3 cm long). The viscera and fetus of this whale were completely normal. A comparison of its proportions and other data with those for twenty normal whales (all females, 8.6–8.9 m in length) is given in Table 1.

In all three measurements of the head region, namely, the length from tip of the snout to center of blowhole, to center of eye and to ear, whale no. 1645 was shorter than normal. There also seemed to be a significant difference in the length from the tip of the snout to the tip of the lower jaw, but no data were recorded on this measurement for normal whales.

As shown in Table 1, whale no. 1645 has longer tail than normal. This may be indicated that actual body length of this whale is longer than 8.7 m if it had normal jaw. The skull of this individual was shorter than normal, but its breadth fell within the range for whales of the same body length.

Furthermore, although the girth (half, at umbilicus) of whale no. 1645 was less than normal whales, the thickness of the blubber was within the range for normal whales. This indicate that it could feed with little difficulty by such an abnormal mouth.

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