

BRYDE'S WHALE OCCURS ON THE COAST OF BRAZIL

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Mr. S. Watase of "Taiyo Gyogyo K. K.", who had been working for some years at the landstation of "Sociedade de Pesca Taiyo Ltda" at Cabo Frio, Brazil, presented us two baleen plates from so-called sei whales taken there for identification of the species. It was clear that one baleen had been taken from a sei whale, *Balaenoptera borealis*, having very fine and white colored bristles. Another baleen, however, is quite different from the other and shows typical features of Bryde's whale, *Balaenoptera edeni* (Fig. 1). Bristles of this plate are coarse and greyish in color, though the plate itself is black. The length of the plate along outer curve measures 51 cm and the width 19 cm. The ratio baleen width to baleen length is 37.3 per cent. The measured length is shorter than the length to gum line, because the baleen has

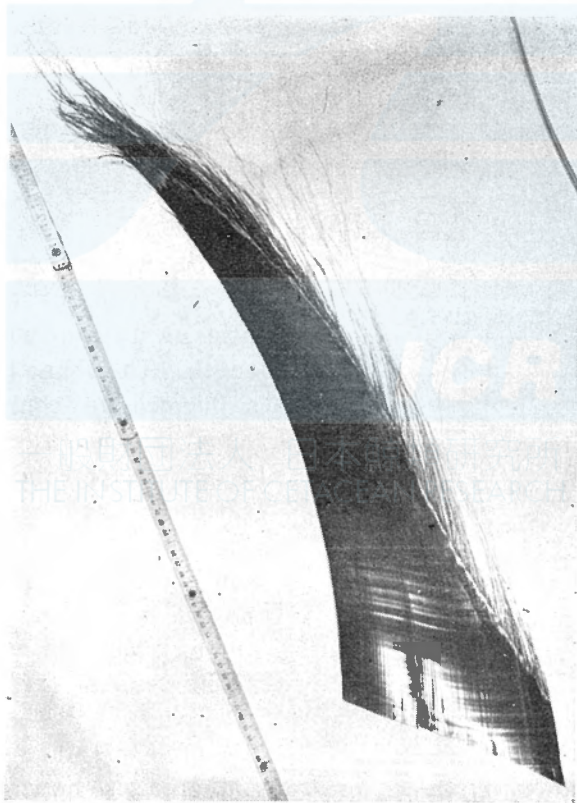


Fig. 1. Baleen plate of a Bryde's whale from the coast of Brazil.

TABLE 1. PARTICULARS OF THE BALEEN PLATE SHOWN IN FIG. 1

Date killed	Sept. 27, 1960
Position	22°56'S, 41°52'W
Sex	Male
Body length	41 feet
Baleen length (along outer curve and excludes bristles)	51 cm
Width (inner side broken)	19 cm

been cut above this line. Since the inner side of the baleen was damaged, the width is also shorter than the correct figure. There is a ground, however, to think that the measured length is not differ greatly from the length to gum line and the difference between these two lengths might be within 1 cm and the width should be added 2-3 cm. If we take into account of this correction the ratio baleen width to baleen length will become over 40 per cent and approach to 45 per cent, a mean figure found by Olsen (1913) for this value (four individuals) for the Bryde's whale from the coast of South Africa. Chittleborough (1959) found that the three Bryde's whales taken on the west coast of Australia differ in this respect, having a mean of 73 per cent. The Bryde's whales from the coast of Australia, however, agree quite well in this character to those from the coast of Japan as reported by Omura and Fujino (1954).

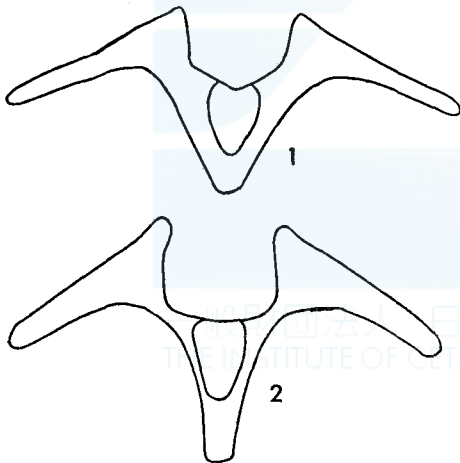


Fig. 2. Cross section of beak, just cranial to blow-holes.

1. *Balaenoptera edeni*
2. *B. borealis*

(Material obtained at Ayukawa, Japan by T. ICHIHARA)

Above will lead to a conclusion that the Bryde's whales from the South Atlantic may differ in this respect from those from other oceans, having longer baleen plates or wide range of variation in the ratio of baleen width to baleen length. The shape of baleen plates is deemed to connect with the shape of the skull, in particular to that of rostrum. One striking feature of the skull of the Bryde's whale is the flat and straight pointing shape of the rostrum than the sei whale (Lönnberg, 1931; Junge, 1950; Omura, 1959). The flat rostrum of the Bryde's whale is clearly shown compared with that of sei whale in Fig. 2. Junge (1950) states, however, that "In *brydei* there is some variation. Lönnberg (1931, p. 2) points to the fact that the rostrum of Bryde's whale

(from the coast of South Africa) is flat and straight as compared with skulls of *borealis*. This feature is well shown in the side view of this skull (l. c., plate 1 fig. 1). In the specimen in the British Museum, however, the rostrum is more curved to the rostral side". It is anticipated, therefore, that there is rather a wide range of variation in the ratio of baleen width to baleen length among Bryde's whales from the South Atlantic, whereas such evidence has never been shown so far from those from the other oceans.

Further evidences that the Bryde's whale occurs on the Brazilian coast were supplied by Mr. E. Tanaka of "Taiyo Gyogyo K. K.", who has been working at the landstation at Cabo Frio. He sent us some photographs of the Bryde's whale taken there as well as some informations. These photographs show the characters of the Bryde's whale, i. e. broader palate between rows of baleen plates (Fig. 3), ventral grooves

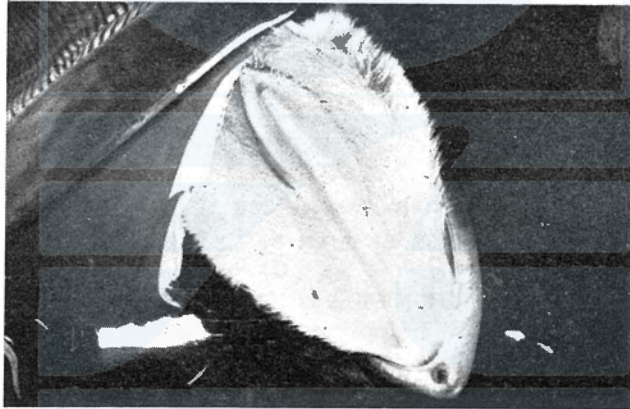


Fig. 3. Brydes's whale from the coast of Brazil—1.
(Cabo Frio, 1961. Photo. E. TANAKA)

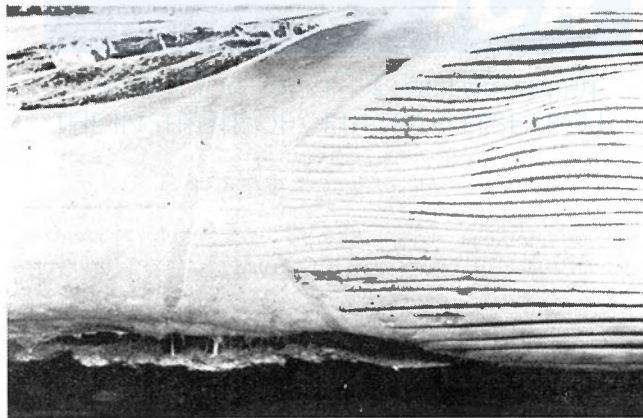


Fig. 4. Bryde's whale from the coast of Brazil—2.
(Cabo Frio, 1961. Photo. E. TANAKA)

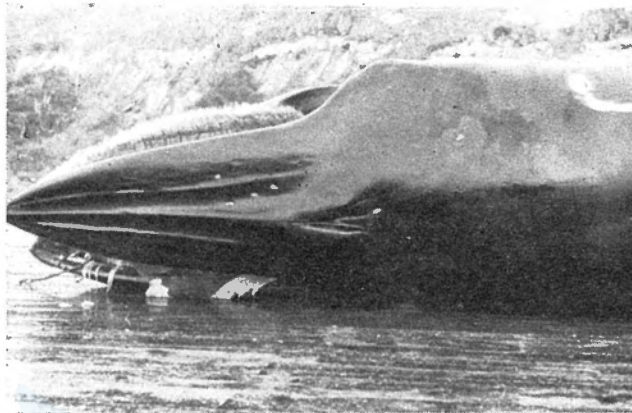


Fig. 5. Bryde's whale from the coast of Brazil—3.
(Cabo Frio, 1961. Photo. E. TANAKA)

extend posteriorly beyond umbilicus (Fig. 4), and ridges on the head (Fig. 5, see also Omura 1962).

According to the information a total of 12 Bryde's whales were taken there in 1961 as of 14th September (May 2, June 8, September 2). These include 7 males and 5 females and their body lengths range from 39 feet to 43 feet in both sexes, except one female of 47 feet in length. These whales were taken in an area of Lat. 23° – 24° S and Long. 41° –

TABLE 2. BODY PROPORTION OF A BRYDE'S WHALE FROM THE COAST OF BRAZIL (Measured by Mr. E. TANAKA)

Date killed	Sept. 14, 1961		
Position	Lat. $23^{\circ}13'S$, Long. $41^{\circ}53'W$		
Sex	Male		
	Measurements	Length in cm	% of length
	Total length of body	1,300	100
	Lower jaw, projection beyond tip of snout	35	2.7
	Tip of snout to angle of gape	250	19.2
	Tip of snout to centre of eye	258	19.8
	Tip of snout to anterior insertion of flipper	395	30.4
	Centre of eye to centre of ear	72	5.5
	Notch of flukes to posterior emargination of dorsal fin	365	28.1
	Notch of flukes to centre of anus	338	26.0
	Notch of flukes to umbilicus	608	46.8
	Centre of anus to centre of reproductive aperture	103	7.9
	Vertical height of dorsal fin	40	3.1
	Length of base of dorsal fin	50	3.8
	Flipper, tip to axilla	125	9.6
	Flipper, tip to anterior end of lower border	177	13.6
	Flipper, greatest width	34	2.6
	Greatest girth (at a point 110 cm anterior to umbilicus)	600	46.2
	Tail flukes, tip to tip (estimated)	290	22.3

42°W.

Mr. E. Tanaka measured body proportions of a Bryde's whale which is shown in Table 2 for reference.

Sincere thanks are due to Messrs. S. Watase and E. Tanaka who presented us valuable material on which this note is based.

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