

ON A MASSIVE STRANDING OF SHORT-FINNED PILOT
WHALE, *GLOBICEPHALA MACRORHYNCHUS* GRAY, 1846,
ON MARGARITA ISLAND (VENEZUELA)

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On October 1971 a school of short-finned pilot whales stranded on a large bay from the south of Margarita (El Guamache), a sandy beach with mangrove trees. Altogether, they were 22 animals, measuring between 4 and 6 m. Some specimens were drawn along the coast to the west by the streams as far as a distance of 20 km from El Guamache (Fig. 1).

This species does not seem scarce in the neighbouring area of the Caribbean Sea. Van Bree (1975) in a checklist of Cetaceans from this region quoted strandings on Nevis, Barbados and Guadeloupe and catchings—in St. Lucia, Dominica and St. Vincent. Dr Hernández-Camacho, from Inderena (Bogotá, Colombia) reported to A.C. (oral communication) strandings in the west of the zone: San Andrés island (40 specimens in July 1966) and several ones on Guajira peninsula. Nevertheless, after Dr Fernando Cervigón (Universidad de Oriente, Núcleo de Nueva Esparta) the short-finned pilot whale seems uncommon in Margarita. It arrives as far as 60 miles to the north (Isla Blanca), in oceanic waters. But Margarita is a zone of neritic shelf waters. Always according Dr Cervigón, the best period for permitting to approach pilot whales would be between June and September, when the waters are warmer and there is a depletion of fish and zooplank-

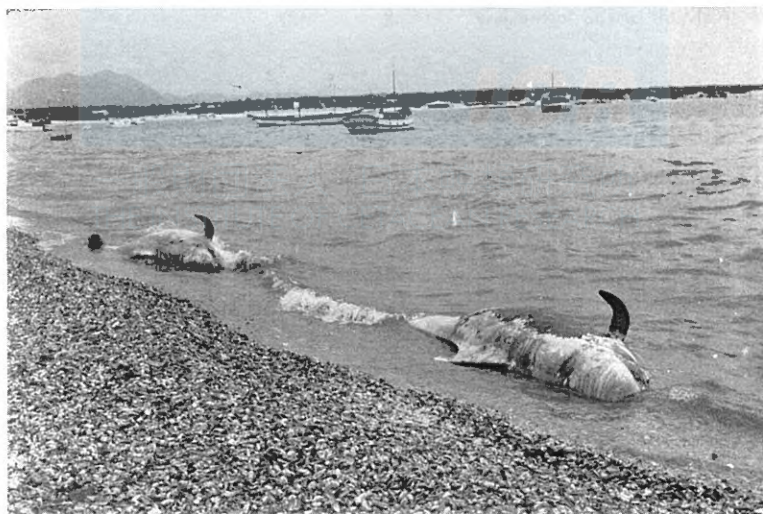


Fig. 1. Two of the stranded specimens.

TABLE 1. SKULL MEASUREMENTS OF THE STUDIED SPECIMENS

Measurements	Universidad de Oriente (Margarita)			Fundación "La Salle" (Margarita)	
	1	2	3	1	2
1 Total (condylobasal) length	600 mm	550 mm	601 mm	550 mm	567 mm
2 Rostrum length	330 "	298 "	291 "	285 "	301 "
3 Rostrum basal width	242 "	218 "	258 "	231 "	240 "
4 Rostrum width 60 mm anterior to base	244 "	198 "	247 "	210 "	—
5 Rostrum width at middle	210 "	156 "	218 "	171 "	—
6 Rostrum width at 3/4 of the length	158 "	92 "	161 "	134 "	—
7 Maximum premaxillae width	220 "	217 "	180 "	194 "	204 "
8 Preorbital width	413 "	363 "	414 "	380 "	836 "
9 Postorbital width	433 "	384 "	440 "	400 "	406 "
10 Zygomatic width	439 "	384 "	448 "	408 "	419 "
11 Width of braincase across squamosals	285 "	255 "	274 "	268 "	265 "
12 Length temporal fossa	123 "	104 "	126 "	104 "	126 "
13 Height temporal fossa	135 "	100 "	104 "	111 "	111 "
14 Tip rostrum to the nares	412 "	385 "	397 "	382 "	389 "
15 Tip rostrum to the pterygoid bone	350 "	—	351 "	335 "	331 "
16 Length of upper toothrow (right)	120 "	—	122 "	117 "	154 "
17 Length of upper toothrow (left)	133 "	122 "	119 "	111 "	154 "
18 Number of alveoli of the upper jaw (right)	8	9	7	7	8
19 Number of alveoli of the upper jaw (left)	7	9	7	6	8
20 Lower jaw length (left side)	497 mm	444 mm	—	—	—
21 Coronoid length	147 "	136 "	—	—	—
22 Length of the lower jaw symphysis	55 "	59 "	—	—	—
23 Length of the lower toothrow (right)	131 "	113 "	—	—	—
24 Length of the lower toothrow (left)	130 "	105 "	—	—	—
25 Number of alveoli of the lower jaw (right)	8	7	—	—	—
26 Number of alveoli of the lower jaw (left)	8	7	—	—	—

ton. During those months faunistic elements from the Caribbean coral-ine islands arrive as far as Margarita. But the present stranding is the only sure reference.

In July 1977, during a trip to Venezuela, one of us (A. C.) had the possibility of studying osteological remains of the 1971 massive stranding, distributed between the "Centro de Investigaciones Cientificas de la Universidad de Oriente (Núcleo de Nueva Esparta)" and the "Fundacion La Salle", both of them in Margarita. Altogether there were remains from five specimens. Measurements of the skulls are given in Table 1.

In the former center, there is a complete mounted skeleton (number 1). Its vertebral formula is: seven cervical vertebrae (joined), ten dorsal vertebrae, fifteen lumbar vertebrae and twenty three caudal vertebrae. Besides there are two skulls, one of them (number 3) without lower jaw. In "Fundación La Salle" two skulls are kept, both of them without lower jaw, as well.

Skull measurements from Margarita's material have been compared with those

IN MM AND PERCENTAGES AGAINST SKULL LENGTH.

L.A.C. (M.N.H.N.) (Paris)		Universidad de Oriente (Margarita)			Fundación "La Salle" (Margarita)		L.A.C. (M.N.H.N.) (Paris)	
A-3215	A-3216	1	2	3	1	2	A-3215	A-3216
537 mm	560 mm	100%	100%	100%	100%	100%	100%	100%
271 "	294 "	55	54.1	48.4	51.8	53	50.4	52.5
222 "	206 "	40.3	39.6	42.9	42	42.3	41.3	36.7
227 "	193 "	40.6	36	41.1	38.1	—	42.2	34.4
198 "	—	35	28.3	36.2	31	—	36.8	—
138 "	114 "	26.3	16.7	26.8	24.3	—	25.7	20.3
195 "	—	36.6	39.4	29.9	35.27	34.21	36.3	—
368 "	349 "	68.8	66	68.8	69	68	68.5	62.3
—	386 "	72.1	69.8	73.2	72.7	71.6	—	68.9
395 "	389 "	73.1	69.8	74.5	74.1	73.9	73.5	69.4
247 "	260 "	47.5	46.3	45.6	48.7	46.7	46	46.4
125 "	115 "	20.5	18.9	21	18.9	22.2	23.2	20.5
94 "	88 "	22.5	18.1	17.3	20.1	19.5	17.5	15.7
371 "	370 "	68.6	70	66.0	69.4	68.6	69	66
320 "	335 "	58.3	—	58.4	60.9	58.3	59.6	59.8
136 "	142 "	20	—	20.3	21.2	27.1	25.3	25.3
147 "	137 "	22.1	22.1	19.8	20.1	27.1	27.3	24.4
7	8	—	—	—	—	—	—	—
8	8	—	—	—	—	—	—	—
—	483 mm	82.8	80.7	—	—	—	—	86.2
—	144 "	24.5	24.7	—	—	—	—	25.7
—	54 "	9.1	10.7	—	—	—	—	9.6
—	137 "	21.8	20.5	—	—	—	—	24.4
—	149 "	21.6	19	—	—	—	—	26.6
—	10	—	—	—	—	—	—	—
—	9	—	—	—	—	—	—	—

of two skulls coming from Muséum Guadeloupe belonging to the collection of the "Laboratoire d'Anatomie comparée, Muséum National d'Histoire Naturelle" (Paris). True (1889, page 141) says about this that: "a skull in the Paris Museum from Guadeloupe Island, and which is the basis of *Globicephalus guadaloupensis* Gray". The skull figures in van Beneden and Gervais (1880) under the name of *Globicephalus intermedius*. Gray took it as the type of his species *G. guadaloupensis*. Unfortunately, we do not have more details on the skull and it is not possible to say which of the two Paris' skulls is the type of the Gray's species.

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