

A second record of the Pygmy sperm whale *Kogia breviceps*  
(de Blainville, 1838) (Cetacea, Physeteridae) from the Peruvian  
coast

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On 4 December 1984 the remains of a pygmy sperm whale *Kogia breviceps* (de Blainville, 1838) were discovered in one of the several dumps of Pucusana, a small fishing town situated 57 km south of Lima, Peru, at 12° 30' S latitude. The specimen was discovered during an overall effort to document the distribution and the biology of the small cetacean fauna of Peru and the extent and species composition of the Peruvian small cetacean fishery. To that end markets, wharves and dumps of several fishing towns, such as Chimbote, Huacho, Ancón, Callao, Chorrillos, Pucusana, Cerro Azul, San Andrés and Arica (Chile) were explored more or less regularly between June 1983 and October 1986. In addition, many tens of kilometers of beaches, primarily in the department of Lima, but also in Ancash and Ica, were inspected for stranded cetacean material. In spite of this considerable search effort, the record of the pygmy sperm whale described here remained unique.

The *Kogia breviceps* specimen was found in what we called Pucusana's dump B, amidst mainly fish offal. Remains included several species of sharks and rays, tons of scallop shells (*Argopecten purpuratus*), carapaces of leatherbacks (*Dermochelys coriacea*) and skeletal material in decreasing order of importance of dusky dolphins (*Lagenorhynchus obscurus*), bottlenose dolphins (*Tursiops truncatus*), Burmeister's porpoises (*Phocoena spinipinnis*) and common dolphins (*Delphinus delphis*). These cetaceans were commonly observed being landed at the "Terminal Pesquero Zonal", the local fish market of Pucusana, and were sold for human consumption (READ et al. 1985; REYES and VAN WAEREBEEK, unpubl. data).

Our pygmy sperm whale specimen, a subadult of unknown sex and total length and in an advanced state of decomposition, consisted of a nearly undamaged skull, an incomplete backbone of 47 vertebrae and the mummified tail. The carcass could not have been older than six months as one of us (LUSCOMBE) had checked the dump within that period. The fact that ribs and flippers were missing suggested that the pygmy sperm whale had been butchered by fishermen in the regular way. The tail showed some peculiarity in that the right fluke was missing, instead a thickened and sclerotized base without any apparent cut face could be observed. The senior author suggested a healed scar or a deformation, others however, because of the weathered condition of the tail, remained unconvinced.

Cranial measurements (in millimeters, with percentages of condylobasal length in parentheses), as proposed by SCHNELL et al. (1982) are: condylobasal length, 294 (100); length rostrum from base, 150 (51.0); length rostrum from pterygoid, 171 (58.2); width rostrum at base, 109 (37.1); width rostrum at 1/4 length, 141 (48.0); width rostrum at 1/2 length, 108 (36.7); width premaxillaries at 1/2 length, 56 (19.0); width rostrum at 3/4 length, 60 (20.4); preorbital width, 244 (83.0); postorbital width, 258 (87.8); skull width at parietals, 178 (60.5); height braincase from basisphenoid to summit of supraoccipital, excluding crest, 122 (41.5); internal length braincase, including occipital condyles, 123 (41.8); maximum width premaxillaries, 70 (23.8); greatest width external nares, 44 (15.0);

maximum width left premaxillary, 41 (13.9); maximum width right premaxillary, 28 (9.5); greatest length of left temporal fossa, 29 (9.9); greatest width of left temporal fossa, 60 (20.4); orbital length, 73 (24.8); length of left antorbital process, 80 (27.2); maximum separation of pterygoids, 6 (20); greatest width internal nares, 53 (18.0); length left tympanic cavity, 74 (25.2); length right tympanic cavity, 71 (24.1); greatest distance between left and right pterygobasioccipital sutures, 108 (36.7); length left upper tooth furrow, 81 (27.6); number of teeth upper left, 0; number of teeth upper right, 0; number of teeth lower left, 15; number of teeth lower right, 15; length left lower toothrow, 105 (35.7); height left ramus, 66 (22.4); tooth width, 3.3 (1.1); length left ramus, 259 (88.1).

The skull and postcranial elements of this animal are provisionally kept at the authors' cetacean collection (No. JCR-037) in Lima.

Although in general *Kogia breviceps* has only very rarely been sighted at sea and distributional data are based mainly on stranded animals, it is considered to be a cosmopolitan species occurring in offshore waters of nearly all tropical, subtropical and temperate seas (HUBBS 1951; LEATHERWOOD and REEVES 1983).

To the best of our knowledge, the only other record for the peruvian coast is a skull from Bahía de la Independencia, 55 km south of Pisco (Ica) at 14° 20' S as reported by HIRASAKA (1937, p. 122) on information received from G. M. ALLEN. Later, ALLEN specified (1941, p. 19) that Dr. ROBERT CUSHMAN MURPHY piked up the skull in several parts on the beach at Independencia Bay in November 1919, and described it as "evidently not fully adult". The skull (No. 18489) is preserved at the Museum of Comparative Zoology, Cambridge, Massachusetts. The specified identity of this skull has apparently yet to be confirmed as *K. breviceps* rather than the closely related dwarf sperm whale *Kogia simus* (Owen, 1866). Recognition of two living species in *Kogia* and the clear distinction between them was not established until the mid-1960s (SCHEFFER and RICE 1963; HANDLEY 1966).

The only published record of *K. simus* for the eastern South Pacific is a young female captured off the Bay of Valparaíso (33° S), Chile, in 1965 (CROVETTO and TORO 1983; NAGORSEN 1985).

Two *K. breviceps* specimens from Chile, a skeleton from Arica (18° 25' S) and a partial skeleton from Caleta Caravahel, Juan Fernández Islands, are kept at the Smithsonian Institution under Nos. 00395734 and 00395634 respectively (J. MEAD, unpubl. data) bringing the total number of pygmy sperm whales known from the eastern South Pacific to four.

HUBBS (1951), assuming for *Kogia* a wide distribution in both temperate and tropical waters, rejected ALLEN's explanation (1941) on the latter's *K. breviceps* finding that "while the skull occurred in the region of the cool Humboldt Current, it might have washed in from a warmer area of the adjacent seas." However a certain warm water preference can be demonstrated in published information (see HANDLEY 1966; NAGORSEN 1985).

As indicated earlier, despite much searching we encountered only one *K. breviceps* specimen on the Peruvian coast. Probably it is a casual visitor, perhaps coming in with temporal warm water intrusions such as occur during El Niño events.

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