

On a specimen of pygmy sperm whale *Kogia breviceps* (Blainville, 1838) from New-Caledonia

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On 14 September 1985, a specimen of *Kogia* sp. was found stranded on the beach of Plum in the extreme south-west of New-Caledonia, near Nouméa, probably wounded by the propeller of a boat. The *Kogia* sp. attracted some people in the vicinity. An article was published in the newspaper 'Les Nouvelles Calédoniennes' on 16 September, with three pictures that Dr B. Richer de Forges from ORSTOM Center of Nouméa sent me.

This animal was described in the newspaper as being a 'baby sperm whale', however, seeing the pictures, I identified it as a species belonging to the genus *Kogia* Gray, 1846. There are two species in the genus: the pygmy sperm whale *Kogia breviceps* (Blainville, 1838) and the dwarf sperm whale *K. simus* (Owen, 1866).

First, I thought it was the second species and I asked the New-Caledonian newspaper (office) to send me more pictures to help my identification of the species. The newspaper published my note (Sylvestre, 1985) and sent me the black and white pictures of this stranded specimen. To identify it, I had only the pictures and had no information concerning the different parts of the body which could have been kept in a New-Caledonian laboratory. Examining the photographs, I could identify the sex of the animal: a male. Two of the pictures showed the whole body (one for the ventral side and the other for the dorsal side). Some people standing beside the *Kogia* give a scale for estimating the size of the specimen. According to the newspaper, the animal was a little more than 2 m long but comparing it with the height of people, I thought this specimen being about 3 m long or a little more. Handley (1966) reported that the longest length for *K. simus* is 2.7 m and from the twenty-one *K. simus* studied by Ross (1979) in South Africa, the longest specimen was 2.6 m long. For Handley, the longest length of *K. breviceps* is 3.4 m long and from sixteen specimens studied by Ross on the South African coast, the longest specimen is 3.2 m. As far as length is concerned, the specimen of the beach of Plum might be a *K. breviceps*. But from the position of the specimen on the pictures, it seems impossible to evaluate the percentage of measurements between the different parts

of the body of the cetacean. It would be interesting to have the length of the New-Caledonian specimen and the three different measurements of the head (tip of snout to centre of eye, tip of snout to blowhole and tip of snout to anterior insertion of flipper), the head of *K. simus* being shorter than the head of *K. breviceps* (Ross, 1979). However, by comparing the few pictures showing the head of the New-Caledonian specimen to pictures of *K. simus* from my file, I noticed that the head of the New-Caledonian specimen was longer. Without support of data, I could not assert a specific name.

On the pictures of the dorsal site, I could approximately calculate the position of the dorsal fin. I found that the dorsal fin is situated at about 50% of the total length of the specimen. The position of that dorsal fin (from tip of snout to anterior insertion of the dorsal fin) is more than 50% for *K. breviceps* and less than 50% for *K. simus*. However, on the pictures, I had a good sight on the dorsal fin (being bent at an angle of 90°) permitting me to know the proportion of that fin compared with the total length of the body and more precisely, to the height of the dorsal fin. For the base of the dorsal fin (from the anterior insertion to posterior insertion), I found 10-11% of total body length and for the height, I found 4.5% of total body length for the New-Caledonian specimen. On fourteen *K. breviceps* studied by Ross in South Africa, the average of the length of dorsal fin compared with total body length is 10%. On nineteen *K. simus* also studied by the same author, the average is 14.7%. The height of the dorsal fin is less than 5% of total body length for *K. breviceps* and more than 5% for *K. simus*.

Therefore, knowing the length of the total body, the height of the dorsal fin and its position on the back, I could identify the specimen of the beach of Plum as a pygmy sperm whale *K. breviceps*.

It is interesting to note that though we only had a few pictures of cetacean belonging to genus *Kogia*, we could identify the species by the place and mainly by the height of the dorsal fin. In June or July 1972, another *Kogia* was stranded on a New-Caledonian beach near Poum in the north-west of New-Caledonia and was identified as a *K. simus* owing to the height of

the dorsal fin (Robineau & Rancurel, 1981). The same authors reported at the same time, the stranding of a *K. breviceps* in December 1974 at Port-Boisé in the south-west of New-Caledonia, not far away from Plum. It seems interesting to point out that the strandings of *Kogia* sp. in New-Caledonia tend to concentrate from June to December, suggesting probably a seasonal movement of the genus *Kogia* near the west coasts of New-Caledonia.

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Bibliography

- Handley, C. D. (1966). A synopsis of the genus *Kogia* (pygmy sperm whale). In: K. S. Norris (Ed.) Whales, dolphins and porpoises. Berkeley, Los Angeles: Univ. Calif. Press. pp. 62-69.
- Robineau, D. & Rancurel, P. (1981). Sur deux spécimens du genre *Kogia* (Cetacea, Physeteridae) en Nouvelle-Calédonie. *Z. Säugetierkunde*, **46**, 56-58.
- Ross, G. J. B. (1979). Records of pygmy and dwarf sperm whales, genus *Kogia*, from southern Africa, with biological notes and some comparisons. *Ann. Cape Prov. Mus. (Nat. Hist.)*, **11**, 259-327.
- Sylvestre, J. P. (1985). Le bébé cachalot était un pygmée adulte. *Les Nouvelles Calédoniennes*, 4344 du 08/11/1985.
- Yamada, M. (1954). Some remarks on the pygmy sperm whale, *Kogia*. *Sci. Rep. Whales Res. Inst.* **9**, 37-58.