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## CETACEA OF THE FALKLAND ISLANDS

BY

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I should like here to record my sense of the honour I have received in being invited to contribute to the volume dedicate to the memory of our lamented friend Ergasto H. Cordero. This is not the place in which to write at any length of his character. It is perhaps enough to say that by reason of his sincerity, his geniality and his enthusiastic welcome of foreign scientists it is impossible for Uruguay or indeed any other country to produce a citizen who could more really advance the task in which we must all labour that of international brotherhood.

Note. It has not been considered necessary to append the name of the nomenclator to the Latin names of species except in the case of the Humpback Whale of which the current specific name may still be unfamiliar to some workers. It is the third which I have known to be announced as correct.

Where I have collected specimens it is signified by "coll. J. E. H." and their transmission to the British Museum by "B. M."

The following list of the cetacea of the Falkland Islands is based on stranded specimens and on observations during journeys round the islands; the imperfect record of the former commercial whaling company has also been used but it is not as detailed as one would desire.

It is largely a matter of chance if one is able to find or visit a stranded cetacean. The coast line of the Falklands is of great length on account of its being so much indented; there are many large bays and the smaller bays are innumerable. The population of the islands is thinly distributed and their business does not

usually take them on to the beaches. It follows that the chances of any cetacean being found are slight and especially so with regard to the smaller species. Even if they are found the possibility of specimens being reported are not good since few people take an interest in such things and a dead cetacean rapidly becomes repellent to the layman. Considering the great rarity of some of our species this state of affairs is regretable.

Two of the largest bays are remarkable for the strandings which have taken place on them. They are (a) Foul Bay in East Falkland where there is sand beach perhaps 2 miles (3 km.) long. It is open to the ocean and on it drives at times a heavy surf. A few hundred metres from the shore there is an extensive bed of "kelp" (Macrocystis) in which there are numerous rocks. It can be realised that with a strong wind blowing on shore and raising a heavy sea cetacea might get into difficulties in the kelp, be injured on the rocks and then be cast ashore. On this beach are numerous remains of Globicephala leucosagmaphora, bones of Balaenopterids, of one possibly two large Sperm Whales (Physeter catodon) and of one Berardius arnuxii.

(b) The other bay is Byron Sound in West Falkland. It has an entirely different character, the head of it being about 30 miles (42 km.) from open water and there are neither rocks nor kelp beds to obstruct free movement. Globicephala, Physeter, Orcinus, Balaenoptera and Neobalaena have all been stranded here. It seems possible that panic at finding themselves in narrow and shoaling waters may have resulted in the stranding of these whales; in fact that the Sound acts as a sort of trap.

About a hundred years ago, or more, the Falklands were resorted to by American whalers and sealers but very little is known of their activities or whether their principal prey was seals or whales, but most likely the former. It is probable that there was at the time a considerable population of Elephant Seals since relics of their being boiled down are still to be found and there are several place-names embodying the word "Elephant". There were in addition Fur Seals and Sea Lions, of the latter a substantial herd survives.

Apart from land journeys on horseback traveling is usually done by sea. During coastal passages large cetacea are commonly to be seen, at any rate during the first six months of the year, a seasonal occurence which may be connected with the swarming of the "grimothea" stage of *Munida*, which is abundant in the Falkland seas.

The Sei Whale (Balaenoptera borealis) is the commonest, but the fin Whale (B. physalus) is tolerably frequent, the Humpback (Megaptera novaeangliae (Borowski)) is occasionally seen and the Blue Whale (Balaenoptera musculus) has been reported. The records of the former commercial station are, as I have said not satisfactory since of the 1474 killed in the period of operation, 1909-1915, the species of only 266 are given, that is for the two seasons 1912-13 and 1913-14. They were Right Whale, 1; Humpbacks, 15; Fin Whales, 99; Blue Whales, 3; and Sei Whales, 148. (Figures irom S. Risting Av Hvalfangstens Historie, Kristiania, 1922). The figures well support the direct observators.

In addition to the five species named above the Pigmy Right Whale (Neobalaena marginata) is to be recorded. One specimen stranded in Byron Sound and found in an advanced stage of decomposition but conclusively identified by a plate of baleen which I was able to cut out. In all six species of Mystacoceti.

The list of Odontocetes is longer, ten species, but the number of animals is much less. It is curious to observe that there are no examples of the Sperm Whale (Physeter catodon) in the detailed part of the commercial catch although there are several stranded animals, namely one or perhaps two large animals in Foul Bay and three, immature males or females, in Byron Sound, decomposed when found. Southern Bottlenose (Hyperoodon planifrons).

1. Major part of the skull of a large animal, West Falkland, coll. J. E. H., B. M. 2. Part of mandible of a small animal identified by the late W. P. Pyecraft. coll. J. E. H., B. M. 3. Skeleton of a female from East Falkland, this example was sent to England this year and the identification has been confirmed at the British Museum. Length 20 feet (6. 1m.) coll. J. E. H., B. M. Hector's Beaked Whale (Mesoplodon hectori).

A specimen of this exceedingly rare whale was stranded in Falkland Sound a few years ago and the skull, which came into my possession, has been described by Dr. F. C. Fraser of the British Museum in the Proceedings of the Linnean Society (Session 162, Pt. 1, p. 50, October 1950). This is the third recorded example; the others are a skull, the type, also in the British Museum and a skeleton in the United States. Of the last no description has been published, so far as I know. The estimated length of the Falkland animal was 12 feet. coll. J. E. H. B. M. (No English name) Berardius arnuxii. Mandibular ramus from a large animal (?adult male). Foul Bay East Falkland. coll. J. E. H. B. M.

On one occasion I observed two Ziphiids in a small bay in West Falkland. They were stationary in a bed of Macrocystis quite near the beach. The colour appeared to be brown: it is not possible to say more than that they were not *Huperoodon*.

Southern Pilot Whale or Southern Blackfish (Globicephala leucosagmaphora), occurs from time to time in schools and is the most numerously stranded cetacean. The schools, like those of G. melaena, include examples of both sexes and all ages. The most notable stranding of late years happened near the settlement of Chartres at the head of King George Bay, West Falkland. I was able to send a fair series of the skulls to the British Museum.

Killer Whale (Orcinus orca). I identified a mandibular ramus on Cape Dolphin which is to the North of Foul Bay. It was that of a large, if not fully grown male. Two much smaller and rather decomposed specimens were seen in Byron Sound; they were whole carcasses.

Spectacled Porpoise (*Phocoena dioptrica*). The skull and a large part of the skeleton were collected on West Falkland and described by the present writer in "Discovery" Reports vol. xxi, p. 227, 1941.

Length 185. 5 cm, i. e. adult. B. M.

Another specimen was accurately described to me by a man who had seen it soon after it was stranded. The species has been taken off South Georgia.

Peale's Dolphin (Lagenorhynchus australis). This species is at times referred to as "Peale's Porpoise" since Peale incorrectly placed the animal in the genus *Phocoena* in his original description (U. S. Expl. Exped. 33. t. 6. f. 2.)

In the Falklands, like any other small cetacean it called "porpoise", a "sailor's name for such creatures, but it is distinguished from C. commersoni (v. sub.)

This is the commonest cetacean and is to be met with all round the coast, usually in small parties of perhaps a dozen. It is a powerful and active swimmer and has the fondness usual in its kind of playing round ships in motion; it can without effort overtake and pass the coasting steamer which has a speed of about 9 knots. The pale markings on the back and sides and the white belly are conspicuous in life. The colouration resembles that of L. obliquidens as shown in the illustrations in Scheffer, V. B., The Striped Dolphin —— on the Coast of North America (American Midland Naturalist, vol. 44, no. 3, Nov. 1950, Notre Dame, Ind.) It may be remarked here that the specific identity of members of the genus Lagenorhynchus is not clear as yet. Gray (B. Mus. Cat. 1866) gives fitzroyi, cruciger, and superciliosus as syn-

onyms of obscurus and considers that australis may be "perhaps the same species".

Bierman and Slijper (— genus Lagenorhynchus, P. Sect. Sci., Kon. Ned. Akad. van Wetensch. Amsterdam vols. 50 and 51 1947-1948) consider it "highly probable" that these five and wilsoni are all one species-cruciger.

I have had two specimens of australis, both in the Falklands and two of obscurus on the S. African coast. It is true that it is many years since I was on the African coast but it is my opinion that obscurus is an obviously more slender and notably paler animal than australis.

I am informed by Dr. F. C. Fraser that the skull of australis is much broader than that of obscurus and has a more robust beak, characters which go well with the more heavily built animal-australis.

The first specimen of australis which I collected was one of a party which was swimming and diving slowly, and even lying on the surface with the blow-hole open, in a bed of Macrocystis The stomach of the animal killed contained pieces of Octopod molluses which were presumably being caught as they climbed about the Macrocystis plants. The deliberation of the movements of the dolphins is of course to be explained by the time required to search the weed thoroughly. I have since seen the species behaving in exactly the same way in other beds of the plant, their behaviour being varied by sudden rushes and plunging about on the surface. Misfortune seems to follow collection of this animal, the skull of the first disappeared after it had left my hands and the entire second skeleton was destroyed by some irresponsible person. Length 6ft (1.83 m.).

(no English name) Lagenorhynchus thicolea A specimen of this dolphin was stranded near Stanley.

It was so decomposed that the sex could not be determined and as for the colouration, all that could be discerned were traces of longitudinal striping reminiscent of *Delphinus delphis* coll. J. E. H. B. M.

The only other known specimen is also in the British Museum.

Commerson's Dolphin (Cephalorhynchus commersonii) Locally called "Porpoise" or "Puffing Pig", but if necessary recognised as the "Small black and white porpoise" as opposed to the "Large black porpoise" i. e. L. australis.

Well-known in the Falklands and seems to be commoner on the West side of the group than on the East. Like L. australis this animal may be seen cruising slowly in kelp beds but unlike that species it has a partiality for playing in the breakers coming in to sandy beaches. These dolphins may be seen keeping pace with the advancing waves even until they rise up before falling over, but the animals never seem to make the mistake of staying in the waves too long and thus becoming stranded. At the last moment they dash out into deeper water before the wave breaks. It is an entertaining and pleasing creature.

The brilliant white on the flanks of the male contrasts strongly with the black parts of the animal. I refer the brightest colouration to the male since the first specimen I had was of that sex whereas an adult female secured later had the light area very pale grey, not white. At a little distance no difference can be detected in life coll. J. E. H., B. M. Length 4ft (1-22 m.).

It is curious to consider that the smaller cetacea are so seldom seen in life. One may suggest that the usual windy weather of the Falklands may prevent them being observed. It is almost invariably by the blast, or blow, that the large cetaceans are first noticed and the similar exhalations of the smaller whales will simply be blown away and moreover the disturbances caused by their movements in the water will be well concealed by the normal roughness of the surface.