

The number of the vertebræ in the two previously known skeletons of *P. sibbaldii* is sixty-four. Malm gives sixty-three as the number in his specimen, a very small bone corresponding to the last caudal of the other two being apparently absent. The number of the vertebræ in *P. antiquorum* appears never to exceed sixty-two.

From the coincidence of these and other minor characters, for which I must refer to the work itself, it appears to me highly probable that the Gothenburg Whale is a third example of *P. sibbaldii*.

To the previously known osteological characters we are now enabled to add a description of the external appearance of the species. It differs notably from *P. antiquorum* in colour, being described by Malm as of a deep slate-colour, dashed with washes of a paler hue, and gradually passing to a lighter shade below, with scattered small spots of milk-white on the inferior surface. The inner sides of the pectoral fins are white, and the under surface of the lobes of the tail approaching to that colour.

Like the other two known examples of the species, the present specimen was not a full-grown animal; it measured 53' 10" long in a straight line. The skull is 10' 2" in length. The skeleton, prepared skin, and portions of the viscera are preserved in the Museum at Gothenburg, of which Prof. Malm is the superintendent.

## 2. On the Seals of the Falkland Islands. By Captain C. C. ABBOTT. Communicated, with Notes, by P. L. SCLATER, M.A., Ph.D., F.R.S., Secretary to the Society\*.

Sealskins and Seal-oil are two of the principal products of the Falkland Islands. The boats employed in collecting these articles of commerce are usually from 20 to 30 tons in measurement, and are manned by four or five men. They are sent out laden with provisions, casks for the oil, and salt for preserving the sealskins; they are frequently out for months together, cruising about the islands, and seldom return without a full cargo.

I only know of four varieties of Seals being found among these islands. These are:—1. The Sea-Elephant; 2. The Sea-Lion; 3. The Fur-Seal; and 4. The Sea-Leopard.

### 1. THE SEA-ELEPHANT. (*Morunga elephantina*.)†

This Seal is called the "Sea-Elephant" from the prolongation of

\* My friend Capt. C. C. Abbott, who was formerly resident in the Falkland Islands, and has contributed so largely to our knowledge of its ornithology (see his articles in the 'Ibis,' for 1860 and 1861), has kindly drawn up this article at my request. We know so little of the habits and localities of the marine Carnivora that the value of such notes of a practical observer cannot be estimated too highly.—P. L. S.

† There can be no question of this being the *Morunga elephantina* (Mol.); Gray, Catal. of Seals and Whales (1866), p. 39. Dr. Gray must have made some mistake when he says (Ann. Nat. Hist. March 1868, p. 215) that Capt. Abbott informed him that this animal has become extinct in the Falklands.—P. L. S.



its upper lip, which is somewhat like a diminutive proboscis. It is not at all common in this group of islands, and comparatively few of the skins are brought in by the sealers; it is, however, frequently seen in one or two of the bays on the north shore of East Falkland, where it is little disturbed, owing to the sealing-boats being unable to approach the shore. In these bays the Sea-Elephants breed in some of the many caverns, the only entrances to which are by water. I have never met with this Seal alive, but I have examined the skins and skulls which have been brought in by the sealers; its hair is very coarse, and its hide very thick. This Seal is by far the largest of all the four kinds inhabiting the Falkland Islands, its skull being one-third larger than that of the next species.

## 2. THE SEA-LION. (*Otaria jubata*.)\*

I presume that this Seal derives its name from the roar that the male makes when disturbed or fighting, and from the long mane-like hair which covers his neck and shoulders. It is very common in the Falklands, being found plentifully on many of the islands, and even on the north shore of West Falkland; here also it breeds, being little disturbed by the sealing-boats. There is a remarkable disparity in size between the male and female of this Seal. The male is as large as a bullock in circumference, while the female is no bigger than a calf. At one time only the female was killed by the sealers, as the skin of the male was considered to be of little value; and this may account for the preponderance of males which I have observed.

\* This is *Otaria jubata* (*Phoca jubata*, Schreb., from Forster's "Sea-Lion." *Otaria leonina*, Péron; Gray, Catal. of Seals and Whales, p. 59). Capt. Abbott's skin and skull of this animal are now in the British Museum; so that there can be no doubt about their identity, although they are not included in Dr. Gray's latest enumeration of the specimens of this portion of the collection.

The older authors (Schreber, Gmelin, &c.) confounded under the name *Phoca jubata* the present animal and the Sea-Lion of the Northern Pacific (*Leo marinus* of Steller = *Phoca stelleri*, Fischer = *Arctocephalus monteriensis* et *Otaria stelleri*, Gray = *Eumetopias californiana* Gill). I agree with Dr. Peters (Monatsb. Berl. Ac. 1866, p. 274) in thinking it best to reserve the name *jubata* for the southern species, and to call the northern one *stelleri*. I consider *O. leonina*, F. Cuv., to be probably the same as *O. jubata*, as appears to be admitted by Dr. Peters in his last paper (*l. c.* p. 670). The fine series of the skulls of *O. jubata* in the Museum of the College of Surgeons has lately been increased by the receipt of a skull of an adult male of this species obtained by Dr. Cunningham at Dungeness Point, in the extreme south of South America.

Since the death of our Sea-Bear in the Gardens I have had an opportunity of examining its skull, and have now to confess that I have been wrong in determining it to be *O. hookeri*. The skull certainly belongs to the long-palated series, and is not distinguishable from specimens in the Museum of the Royal College of Surgeons, which are believed to be females or young individuals of *O. jubata*. Nor is this animal distinguishable externally by any marked characters from Capt. Abbott's skin in the British Museum. I am therefore disposed to agree with Dr. Peters's views (*l. s. c.* p. 666) and Dr. Gray's opinion (Ann. Nat. Hist. ser. 4. vol. i. p. 108) that our beast was only a stunted male of *O. jubata*. In this case, however, the animal must be some years in coming to its full stature, and the mane (whence it has received its name) only apparent when the beast is fully adult.—P. L. S.



Now, however, the skin of the latter is considered the more valuable of the two. During the breeding-season the males fight most desperately, and I have seen them covered with scars from old wounds. When these Seals are on the shore they appear to have a great disinclination to go to sea. I recollect on one occasion, accompanied by a friend, rolling stones down from above on some that were lying on the beach. When one was hit, he gave a roar and rushed at his nearest companion, fancying no doubt that he had attacked him; others swallowed the stones thrown at them. This dislike to going into the water may have arisen from their laying up to change their coats. Although these animals are so unwieldy in appearance, they have wonderful powers of climbing, chiefly by means of their flippers, and can ascend rocks that are almost perpendicular. I recollect once watching a number of Seals from the top of a very steep ledge of rocks about 20 feet high, when, upon hearing our voices, a large Sea-Lion gave a sudden roar and rushed up the rock to where I was sitting. Having no weapons of defence it did not take me long to beat a retreat. I fancy that it was on account of a female companion near him that he made this attack, as among about fifteen males there appeared to be only two females.

On one occasion I made an excursion to the north shore to procure the skull of a Sea-Lion. On finding about a dozen of these animals basking on the shore, I fired both barrels loaded with bullets into the shoulder of one lying about 5 yards off, but with no effect, for he only gave a roar and shuffled into the water. I then reloaded, and going close to another fired at him, but without doing him any apparent harm. Upon this the others took the alarm and retired into the water, whence I could see them gazing at me, their bodies half-raised up out of the sea, perfectly motionless, like large rocks, the water being quite smooth. I was afterwards more successful; for finding two Sea-Lions with two females and their cubs in a small cave, I killed one of Sea-Lions with a bullet through the ear, and wounded the other badly; but the latter animal managed to escape into the water. I then drove out the females and secured the cubs. Wishing to have the skull of the Sea-Lion that I had killed, I sent the Gaucho, who accompanied me, for a lasso, which we made fast round his head (his body being half in the water) and proceeded to haul him out.

I have never taken the dimensions of a Sea-Lion; but I once skinned a large one, and it was as much as the man who was with me and myself could do to carry only the skin across the bay and up the hill to my tent; on returning to the settlement I found the weight of the skin to be 240 lb. The hair of both sexes is very coarse, that of the female being somewhat the finest. The young ones also have coarse hair, and are much darker in colour than the old ones, being almost black. I have seen hundreds of skins, and never saw on any of them anything approaching to fur. The skin and skull of the Sea-Lion that I shot are now in the British Museum.



3. THE FUR-SEAL\*. (*Otaria falklandica*.)

This is one of the Fur-Seals of commerce, of which I fancy there are many varieties. It is not uncommon in the Falkland Islands, but, as it is much sought after on account of the value of its skin, only frequents places difficult of access. A favourite locality is the Volunteer Rocks, at the northern entrance to Berkeley Sound, these rocks, owing to the heavy swell, being inaccessible, except in fine weather and after many days of calm. I once procured a specimen from this place, but it was only half-grown. Others full-grown were killed at the same time; and, on measuring one of the latter, the skin appeared to be about the same size as that of the common English Seal. The largest skin I have ever seen I do not think measured more than 4 feet in length, perhaps hardly as much. The hair differs in colour, being sometimes grey, and at other times of a brownish tint; that of the young is of a dark or brown colour. In speaking of the hair of this Seal, which gives the colour of the skin, it must be understood that the fur lies underneath, and the coarse hair is removed in the process of preparing the skins for the various purposes for which they are now used, such as ladies' cloaks, &c. The skin and skull of my half-grown specimen are now in the British Museum.

4. THE SEA-LEOPARD†. (*Stenorhynchus leptonyx*.)

This Seal is so scarce in the Falkland Islands that I have little to say in reference to it. I once saw a specimen which had been washed ashore dead near Port Louis; and afterwards the sealers brought me a skin, but, as they had neglected to preserve the flippers, it was of no use as a specimen. The spots on the skin render it easily distinguishable from other species.

## 3. On some New Fishes from Madras.

By Surgeon FRANCIS DAY, F.L.S., F.Z.S.

The following fishes have either been personally collected in the Madras, Coimbatore, and Kurnool collectorates, or received from

\* On accompanying Capt. Abbott to the British Museum in order to identify his specimen of this animal, we found it labelled *Otaria jubata*, as Dr. Gray has already mentioned (Ann. Nat. Hist. Feb. 1868, p. 104), having been supposed to be the young of the same animal of which he had sent the adult! Dr. Gray has now identified this specimen, and, I believe, correctly, with his *Euotaria nigrescens* (l. c. p. 106). I am, however, inclined to doubt whether there is really more than one species of Fur-Seal in the Falkland Islands, which should be called *Otaria falklandica*, being the *Phoca falklandica* of Shaw (from Pennant). I do not deny that Dr. Gray's *Arctocephalus falklandicus* (l. c. p. 103) may be different from his *Euotaria nigrescens*; but there may have been some error in the locality of his specimen.—P. L. S.

† A fine skull of this Seal, now in the Museum of the Royal College of Surgeons, was presented by the Directors of the Falkland-Island Corporation, having been obtained in the Falklands, and sent to England by their Manager at Port Stanley.—P. L. S.