

Enclosure.

NEW ZEALAND SEAL-FISHERIES.

THERE are no records of the number of the fur-seals that formerly existed on the coasts of New Zealand and the adjacent islands (Antipodes, Bounty, Campbell, Auckland, Chatham, and Macquarie Islands). All that is known is that they were very numerous. Information on the subject of the numbers of seals that were killed in the first half of the present century will be found in the article on seals in the "Handbook of the Fishes of New Zealand."

The numbers of the fur-seals gradually decreased until there were but few left. Steps were taken in 1881 to close the seal-fisheries, and they were so kept closed until last year, and in spite of occasional poaching the seals appear to have increased in numbers to a considerable extent. The fisheries were last year opened for two months (July and August), the regulations providing that only male seals of over 36in. in length were to be killed; but there is reason to believe that these regulations were not adhered to, and that the seals were killed irrespective of size or sex. There is no definite information of the number that were killed during these two months, but 1,322 skins were exported during the September and December quarters. There will be no open season this year.

2. The decline of the seal-fishery is attributed to the indiscriminate slaughter of the seals while on shore at their breeding-places. As far as it is known they have never been killed—that is to say, in any great number—when on the circumjacent ocean.

3. The seal-fishing has been and is carried out by vessels fitted out, with a considerable number of men, which landed parties at various places. These parties proceeded to the seal-rookeries, killed and skinned the seals, the vessel calling for them at the close of the season. Parties also went out on the coast of New Zealand in large open boats, called sealing-boats.

4. The following memorandum on Antarctic seals, by Sir James Hector, K.C.M.G., gives particulars of all that is known of the life-history of these animals:—

"At least nine species exist, but the nomenclature has been greatly confused and rendered untrustworthy by the injudicious record of species founded on imperfect specimens, on characters due only to age and sex, and to reliance having been placed on hearsay evidence. For commercial purposes the following classification may be considered sufficient:—

"I. EARED SEALS (THE OTARIAS).—These, like land mammalia, have a direct communication through the integument from the organs of hearing, and have also an external ear-lobe, which enables them to appreciate the direction from which they receive sounds.

"These are again divided into—

"A. *Hair-seals*, or *Sea-lions*, which are covered with long coarse hair and have no under-fur, and are therefore only commercially valuable for the production of oil;

"B. *Fur-seals*, or *Sea-bears*, which have an under-fur as well as a clothing of long hair, both of which are cast and renewed each summer, so that the skin of the animal when taken at the proper season is of value as a 'pelt' or furriers' material.

"II. EARLESS SEALS (THE PHOCAS).—The common varieties of the North Atlantic, such as the Greenland seal, the harbour seal, and the crested seal, belong to this class, but they are not represented in the Southern seas. This class is known by the following Antarctic representatives:—

"A. *Sea-leopards*, which are large spotted seals, covered with coarse hair, but, not being gregarious in their habits, although abundant and widely distributed, have no commercial value.

"B. *Sea-elephants*.—These are massive, unwieldy, and gigantic animals, which have a very restricted distribution, being confined to the islands in the extreme south. They are chiefly prized for the large quantity and fine quality of oil which they produce.

"III. WALRUSES, or SEA-PIGS.—These are valuable for their oil, and for their ivory, which, though inferior to elephant ivory, is used for the same purposes. The evidence of the actual existence of this southern walrus is at present founded only on hearsay report, but it is very probable that when the great Antarctic islands and ice-floes, as yet unvisited, are explored, not only this but other novel forms will be found.

"The walrus, or morse, is now found only in the Polar seas, about and northward of Behring Strait; but their range has been restricted of late, as Captain Cook found them much further south along the coast-line of the North Pacific.

"To describe more in detail:—

"I. EARED SEALS.

"A. *Hair-seals*.—This group, the sea-lions, rendered so familiar by the rookery outside the Golden Gate of San Francisco, is represented in the North by *Zalophus lobatus*, which is found chiefly in the longitude of the Cape of Good Hope, and *Protoarctus hookeri*, which is supposed to be a different species frequenting the islands in the longitude of New Zealand and southward, and is best known at the present time as the Auckland sea-lion.

"Like all the eared seals, these species are polygamous, and have a very definite life-history. The males are enormously larger than the females. About December they take up stations on the coast in warmer latitudes, such as the west coast of New Zealand, and formerly used also to frequent the islands in Bass Strait and on the west coast of Tasmania. Soon after the cow-seals appear, and, on landing, give birth to the young, each male securing a harem of ten to twenty cows, and protecting the mothers and young pups. The rutting-season is in January, after which the males (or lions) leave the mothers to bring up the young until May, when they all leave the coast for the winter. The mode of life of the hair-seals has, however, been much altered since 1863, when I made my observations, and I think that the New Zealand hair-seals have become much more solitary, and that they will soon become extinct.

"B. *Fur-seals*, or *Sea-bears*.—This is in the southern seas the 'seal' of commerce, and it is much to be regretted that so little accurate information was collected in former years about its life-