261/26

1926.

Mr. J. E. Hamilton

SUBJECT.

192 6.

22nd May.

MEMORANDUM ON SEALS BY MR. J. E. HAMILTON.

Previous Paper.

See Wors. 296/22, 391/28, 565/24, 21/26, 06/34

1-5. Letter from Mr. J. E. Hamilton of May. 1926 6.-10. Typed copy of memoranda left by Mar Hamilton.

13 efore leaving for Cape Town W. JE Bambion handed in the attacked memoranda which he stated your Excellency had directed should he flaced on record.

Ofeseil. 28 June 1926.

O/c Seel. Yes; in conversation with me M. Hamelow mentioned a vois he had paid while's in Cape Sourd to the Office of the Even ment Grano Islands, when he had been furnished with a men or and um on the local praches of Skinning and Jacking Seal Skins. I Suggested that it might prove useful to have a copy on record here, serticularly

Subsequent Paper.

me vovemment had clearly been taking Steps for a trial Shipment of seal Skins b' bu made (mp 2. Holing fort. Maturalist Shones Dec. 39-11-26 ag. Sovemment Naturalist Co see. Hon Cal. Sery Seen. an instructive paper. The welling would seem to be the secret in this case. Jet I believe Cape skins are at present a drug on the market

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W. Zeederberg.

Government Guano Islands,

(Superintendent's Office)

Malagas Buildings,

Tel:- Lower Bree Street.

Central 509.

CAPETOWN.

23rd Dec. 1925.

I interviewed Messrs. W. Zeederberg and #

H. Jackson of the Government Guano Islands and was
handed the attached paper.

It appears that the sealing is done in winter, July onwards, and that only "yearlings" are taken, of these about 70% are males.

Working out the life history have been made, and no separation into breeding and non-breeding herds has been noted although once or twice something like it has been incidentally observed.

/ Zeederberg = Superintendent.

Jackson = Chief Outdoor Offer

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MEMORANDUM ON SEALS.

The group of Seals is composed of a considerable number of species, the great majority of which are found in polar or sub-polar waters.

They are all carnivorous, feeding on fish, squids, etc., but the Sea Lion and Sea Leopard also catch birds.

Seals fall into two principal divisions :-

- (1) "Eared" seals, which have a distinct external ear, or gristly flaps on the outside of the head, and are able to use their hind legs (hind flippers) in walking on land. This division contains Fur Seals and Sea Lions only.
- (2) "Earless" seals, in which there is no external ear, but only a hole in the side of the head. These animals cannot use the hind legs on land but progress with a wormlike movement. The Common Seal of Europe and the Sea Leopard and Elephant Seal of the South are examples of the Earless Seals.

Successful attempts have been made to control the sealing industry in two places of which I have knowledge - the Pribiloff Islands and South Georgia, in the first place with reference to the Fur Seal, in the second with reference to the Elephant Seal.

In both cases the animals assemble in large numbers - the so-called "rookeries" to breed, and on this habit the system of control or "farming" depends.

In each place the system is based on the observed fact that the animals are polygamous, and the assumption, which is supported by results, that the sexes are born in equal numbers and have no substantive difference in death rate.

It follows that when the animals reach a state of sexual maturity there will be considerable surplus of males. These are the animals which should form the raw material of the industry.

In the case of the Fur Seal, the skins which are the valuable product are at their best when the males are about half grown, but in the Elephant Seal it is the oil from the blubber which is sought after, and the fully grown male naturally produces far more than a young animal would.

So far as is known the Sea Lion is polygamous, and since the oil is probably the most valuable product to be obtained from it, it would be reasonable to suppose that the adult male is the most economical stage for killing.

With reference to oil producing seal there is considerable seasonal variation in fatness, the general trend being towards an ever increasing adiposity up to the beginning of the breeding season, but while breeding a great deal of the fat is expended in sexual activities with the accompanying fighting and chasing of intruding males.

The Sea Lion breeds in the first part of summer in the Falklands and after Christmas the adult males are in poor condition and killing is not profitable, and is indeed undesirable. The seal, however, begin to improve steadily after breeding has ceased and constantly improve until the next breeding season.

From the information at my disposal I consider that the months - August, or even July, to November, or perhaps December, are those in which killing should be done; it is necessary to allow to survive a number of males sufficient to serve the breeding females and virgins.

The detailed life history of the Falkland Sea Lion has not been worked out, and if an industry is to be established such an investigation is necessary - for example the sexual capacity of the male is a factor of great importance since the greater the sexual capacity the smaller the number of males requisite for the service of a given number of females. An estimate of total population is also of great assistance in controlling killing.

Note:- "Hair Seal" is a side term applicable to any seal not a "fur" seal. In the Falklands it is usually confined to the Sea Lion.

"Clapmatch" is apparently a corruption of a Norwegian name for one of the Northern Seal: it is used locally for the female Sea Lion.

"Sea Lion" is properly applied to all stages of the species, but in the Falkland Islands is usually confined to the adult male.

(Signed) J. E. HAMILTON.

The methods employed in killing seals are, either by clubbing on shore, or netting in the waters.

The sain should be taken off the carcase as soon as possible after the knockdown is completed, more especially an warm weather, otherwise the fur will start to slip, if left on the body too long after the seal has been killed. It is an established fact that seals left lying in the sun after being killed, with their backs upwards, will in less than half an hour invariably start slipping the fur.

The skin is taken off the body with practically all the blubber on. This is done to get the skins off the bodies as luickly as possible without cutting them, which would most likely happen in the hurry if the knife was used too close to the former. After removing the skins from the carcases, it is well to remember that they (the skins) should never be piled one on top of the other, as they are generally still warm and, if this heat is not allowed to cool off first, the skins will in a very short time start to slip the fur. They should be well washed after being taken from the body, in order to remove any traces of blood from the fur.

The skins are now ready for Beaming and this is done by stretching them over beaming boards and, with long knives, the excess blubber is flayed off leaving just sufficient to cover the skin say up to a quarter of an inch. This thin coating of blubber is left on the skin for two reasons - one is that the skin cures better in this condition and the other - that the buyers feel more confident that the skin has not been pierced by the knife, which, if it does happen, greatly reduces its value. After the beaming is finished the skins should be thoroughly washed again and while still wet placed, blubber side up, and salted. The wet skins will hold sufficient moisture to moisten the salt. The salt should be slightly rubbed in especially around the flipper holes as it is here where skins generally start going bad owing to the edges of these holes getting turned in and the same remark applies to the outside edges. Therefore care should be exercised when laying out the skins for salting that they are lying quite flat. The skins may be piled one on top of the other (of course salting in each layer) until the pile is anything up to three feet high but it is not necessary to make a single tier. Four or more skins can be laid down for the ground tier and carried up to the required height of about three feet.

At what intervals should the pile of skins be taken down and resalted depends very much on what length of time it would be before the skins are placed on the market. After the skins have been in the pile from 6 to 10 days they should be quite sufficiently cured to stand transport provided that the old salt is thrown off and the skins wetted,

preferably with strong brine and freshly salted before packing them into the casks. On the other hand if the skins are not to be marketed immediately it would be advisable to take down the pile and throw off the old salt after say about three weeks to a month. Then repile the skins putting the top ones at the bottom of the new pile, laying the skins out as before and wetting each layer with brine and resalting. The skins will now keep for a considerable time provided they are kept in a cool place and are damped down occasionally with brine. The best way to do this is to cover the top of the pile with sacking and keep it constantly wet.

The appearance of a well salted skin, as opposed to an improperly cured one, is that the well salted ones will show on the blubber side, after being in salt for a little while, a yellowish brown colour, darkening to brown as the skin becomes older, on the other hand, if a skin is improperly cured the blubber side will show a pinky colour which at once denotes that putrifaction has set in - then again skins that appear perfectly sound on the blubber side may when being tested be found to be slipping the fur and this is probably caused by decomposition taking place on the fur side due to salting the skins when too dry. It is, however, known that seals that have been bruised about the body in the killing are very apt to turn bad no matter how well they have been salted.

The pile of skins will drain themselves provided the floor on which they are placed will allow the liquid to run away gradually. It is advisable when making the pile to place a little dunnage on the floor in the shape of some sacking, sprinkled with salt and it is also a good thing when setting up the pile to place a pad of sacking at intervals under the edges of the skins so as to keep them from hanging down too much, otherwise, if left in that position the ends of the skins are inclined to drain off too quickly.

It is very necessary that the casks used for packing should be clean, and if they have contained greasy substances, it is advisable to wash them out with washing or even caustic soda. After being well rinsed out, they should be left standing for some hours with a little brine in them and occasionally shaken to allow the liquid to get well over the inside of the casks.

In conclusion I might mention that the salt used in the curing of seal skins should not be too fine or too coarse. A medium grained salt known generally as No. 2 grade will be found the most suitable.

(Signed) H. JACKSON.

Chief Outdoor Officer.