

FALKLAND ISLANDS.

SGD/WHA/1 # 9

No.

Date of Receipt.

Governor's Office.



From

SUBJECT.

Secretary of State for the Colonies.

WHALE BONES

for manufacture of oil and manure.

No.

Date

36

21st March, 1916.

Colonial Secretary's Record No.

MINUTES.

580/16

Hon Col. Sec.

Registered Number of last Despatch.

211/15

Please send copy of the Report to Mr J. D. Wilson, Magistrate South Shetland and also to Mr Binnie, Magistrate South Georgia, and ask for information desired in last paragraph of the report.

10.6.16

*AD
for*

H.S./ Bone. Please see C.S. 580/16

C. J. Condell

No. next Despatch.

36/19

Issued 14/6/16

Despatch to S/S. No 179 of 19.10.16.

13.6.16.

Reference to previous correspondence:—

~~Secretary of State's~~
Governor's } Despatch No. 115, of 14th September
1915

Falkland Islands

No 36

Downing Street,

27th March 1916.

Sir,



I have the honour to transmit to you

the papers noted below on the subject of the utilisation of whale bones for the manufacture of oil and manure.

I have the honour to be,

Sir,

Your most obedient, humble servant,

A. BONAR LAW.

The Officer Administering

the Government of

the Falkland Islands

Date.	Description.
1916 1 st March	Report by Imperial Institute

4



No. 9611/153
Correspondence should be addressed—
"THE DIRECTOR,
IMPERIAL INSTITUTE,
SOUTH KENSINGTON,
LONDON, S.W."
and the above number quoted.
Each letter should be confined to one subject.

IMPERIAL INSTITUTE
OF THE
UNITED KINGDOM, THE COLONIES AND INDIA.

SOUTH KENSINGTON, LONDON, S.W.

March, 1916.

Sir,

In continuation of my letter No. 456/1916 of the 28th January 1916 on the subject of whale "finners", I now have the honour to enclose a report on the whales' bones referred to ⁱⁿ your despatch to the Colonial Office No. 115 of the 14th September last and the Colonial Secretary's letter No. 391/14 of the same date.

It will be seen from the report that the bones are not likely to find a market for button making or other similar purposes, but that there may be a sale for them for grinding into manure, if they can be shipped in pieces of suitable size and at a price similar to that paid for coarse bones for manure and bone-meal manufacture in this country.

The firm who reported on the bones desire to receive offers of shipments, and I shall therefore be glad if the names of exporters can be furnished to the Imperial Institute at an early date, together with particulars as to the quantities of bones, cut to a suitable size, which can be offered annually, and the price

His Excellency the Governor,
Falkland Islands.

price per ton c.i.f. United Kingdom ports.

In your predecessor's despatch No. 71 of the 15th June 1914 to the Colonial Office, which started the present enquiry, it is stated that thousands of tons of these bones in good condition are lying at Deception Harbour and in other parts of the South Shetlands.

In your despatch No. 115 of the 14th September 1915, however, it is stated that the practice of throwing away these bones has been discontinued and that the bones are now used locally with advantage for the extraction of oil and for the manufacture of manure. In this connection I desire to draw your attention to the fact that the waste bones sent to the Imperial Institute contain over 11 per cent of oil, and that as facilities for making oil and manure from the bones appear to exist locally, it might be advisable to work the bones for oil and manure in the Falkland Islands, rather than to attempt to export them as bones to England.

I have the honour to be,

Sir,

Your obedient Servant,

Wm. A. D. D. D.

Correspondence to be addressed—
"THE DIRECTOR,
IMPERIAL INSTITUTE,
LONDON, S.W."
and the following number quoted:

IMPERIAL INSTITUTE

OF THE
UNITED KINGDOM, THE COLONIES AND INDIA.

REPORT ON

WHALES' BONES FROM THE FALKLAND ISLANDS.

The whales' bones from the Falkland Islands which are the subject of this report were forwarded to the Imperial Institute by the Colonial Secretary with letter No. 391/14 dated 14th September 1915. The bones were stated to have been collected in the South Shetlands during the 1914-15 whaling season.

Description of Sample.

The bones forwarded to the Imperial Institute were as follows:-

(1) Four rib bones, measuring about 6 feet in length, with a diameter of about $2\frac{1}{2}$ inches, and having an average weight of about 22 lb. each.

(2) Part of a lower jaw bone, weighing $66\frac{1}{2}$ lb., and measuring about 4 feet in length, with a diameter of about 9 inches in one direction and $6\frac{1}{2}$ inches in the other.

(3) Two trough-shaped bones probably from upper jaws, weighing respectively 31 lb. and 8 lb., and measuring 7 feet and $3\frac{1}{2}$ feet in length, by about 6 inches in width.

(4) Two bones of uncertain origin weighing 25 lb. and 17 lb. respectively, one being a flat bone measuring approximately 2 feet 8 inches long by 12 inches wide, and the other also being 2 feet 8 inches in length with a diameter of 8 inches at the ends and 5 inches in the middle.

Results of Examination.

An average sample of the bones reduced to a meal was analysed at the Imperial Institute with the following results, which are shown in comparison with those recorded for commercial raw bone meal:-

	Present sample. per cent.	Bone meal (English untreated). per cent.
Moisture	7.3	8.80
Organic matter	40.4	34.94
*Phosphoric acid, P ₂ O ₅	20.24	21.66
Lime, CaO	24.06	28.53
Magnesia, etc.	7.39	4.62
Siliceous matter	0.61	1.45
<hr/>		
Nitrogen	3.87	4.19
*Equivalent to lime phosphate	44.20	47.33
Oil	11.5	about 10

The meal from whales' bones is therefore very similar in composition to English raw bone meal, used as a source of oil and bone manure.

Commercial

Commercial Valuation.

Representative samples cut from the bones were submitted to a firm of bone-crushers and button manufacturers, who reported that on cutting up several of the most promising pieces of bone to test for button-making they found them much too coarse-grained to compete with the cattle bones, which they use for this purpose.

The firm stated however that the bones would make a good manure when the oil was removed from them, and desired to ascertain the price at which they could be delivered at Hull. They stated that the value of the ground whales' bones would be about equal to that of English bone meal of the ordinary commercial quality, which is now selling at from £6 10s to £7 10s per ton (February 1916).

The firm considered that with the high freights now ruling, it is unlikely that these bones could be exported remuneratively from the Falkland Islands, and they also pointed out that the working up of such large bones would be more costly than that of ordinary kinds such as cattle and sheep bones. They expressed a desire, however, to be put into communication with exporters in the Colony, and the Imperial Institute will be glad to have the names and addresses of possible exporters of these bones, with particulars of the quantities available and the price at which the bones could be delivered at Hull.

March, 1916.

FALKLAND ISLANDS.

No. 179.

Government House, Stanley.

19th October, 1916.

Sir,

I have the honour to acknowledge the receipt of your despatch No. 36 of the 21st March, 1916, with its enclosure on the subject of the export to the United Kingdom and utilisation of whale bones for the manufacture of manure etc.

I submit herewith copies of letters from Mr J. James Wilson, Magistrate of South Shetlands, and Mr E. B. Finnie, Magistrate of South Georgia, on the subject, from which it will be seen that the bones of whales are now ground locally and manufactured into manure for export. It does not appear that the bones in their natural state could be exported remuneratively.

I have the honour to be,

Sir,

Your most obedient,

humble servant,

Douglas Young
Governor.

THE RIGHT HONOURABLE

THE SECRETARY OF STATE FOR THE COLONIES.

&c.,

&c.,

&c.

M. P. 580/16.

The Office of the Magistrate,

Fox Bay, West Falkland.

21st July, 1916.

Sir,

I have the honour to acknowledge the receipt of your letter No. 580/16 of the 12th June together with a copy of a report received from the Imperial Institute on specimens of whale bones sent home for examination.

2. In reply to the last paragraph of this report "Commercial Value" I would beg to state that it is quite impossible to say at present the price at which the bones could be delivered at Hull, but I believe the cost would be far beyond what would ever be paid for them. The shipment of whale bones from the South Shetlands and South Georgia has been spoken of during the past few years but such a venture has always been considered unrecunerative and therefore useless to attempt and from the report of the Imperial Institute there still seems the improbability of a favourable market for these bones. But apart from this it must be remembered that the whaling Companies both in the South Shetlands and South Georgia, with their guano plants, now utilize the greater portion, if not all, of the bones by boiling and grinding them into bone meal, which is either imported as such or mixed with the other whale guano, principally the latter, while in other cases the bones are boiled down with the flesh in the process of extracting oil (press oil), so that really there are comparatively few bones left over now a days. It will thus be seen that the only bones that

could

The Honourable

The Colonial Secretary,

Falkland Islands.

could possibly be shipped are as present scattered along certain of the beaches of Deception Island, South Shetlands, and one or two of the harbours of South Georgia, being the refuse and waste of the earlier whaling days. These bones are in most cases ready for picking up, and would no doubt give a few ship loads, but beyond that the business ends, if there could be any business in such freights from these far away and remote parts. Small quantities of whale bones are sometimes used as ships dunnage, although "balcon" as the true whalebone (from the mouth of the whale) is more commonly used for this purpose.

It will be seen from the foregoing that as far as I am aware there are no likely exporters of whale bones from the Colony, but it may be of some use to the Imperial Institute to have the names and addresses of the Companies engaged in the whaling industry of the Colony as follows:-

SOUTH SHETLANDS.

Messrs Chr. Salvesen & Co. Leith, Scotland.
 Fektor Whaling Company, Tonsberg, Norway.
 Laborenus Whaling Company, Sandefjord "
 South Sea Whaling Company " "
 Norge Whaling Company, Larvek "
 Orn and Nor Whaling Company, Sandefjord Norway.

SOUTH GEORGIA.

Ocean Whaling Co. Larvik, Norway
 Southern Whaling Sealing Co. E. Shields, England
 Messrs Fryde & Dahl, Sandefjord, Norway.
 Sandefjord Whaling Co. " "
 Tonsberg Whaling Co., Tonsberg "

I have ., etc

(Sd.) J. Innes Wilson.

Stipendiary Magistrate.

S.G. No. 100/16.

The Magistrate's Office,

South Georgia.

28th August, 1916.

Sir,

I have the honour to acknowledge the receipt of your letter No. 980/16 forwarding copy of a report from the Imperial Institute on specimens of whale bones.

2. With regard to the information desired in the last paragraph of the report: There is only one Factory in South Georgia that cannot make use of the bones namely "THOR I", and it is unlikely that this Company would undertake the extracting of the bones from the whale where so little return is offered, in comparison with the high freights at present ruling; if the bone when ground sells at £6.10. to £7 this would barely cover freight. I have made enquiries from the various Companies here, but, as the whaling stations are fully equipped with machinery to grind up these large bones it would seem preferable to export the manufactured article, therefore no one is prepared to make an offer in the direction of raw material at present.

3. I may mention that, in the early days of whaling the bone was not made use of, and consequently the beaches are somewhat overloaded, and from time to time there is always a certain quantity escapes from the factories, several ships loads could easily be collected should any one be desirous of making a speculation in this direction.

I have etc.

(Sd.) E. B. Binzie,
Stipendiary Magistrate,

The Honourable

The Colonial Secretary,

Falkland Islands.