SCIENTIFIC

(Rowett Research Institute)

1924.

No.

384/24

C. S. O.

C.S.

SUBJECT.

192 4

29th May

Previous Paper.

ROWETT RESEARCH INSTITUTE

Respecting forwarding of bones for examination.

CA 14/25 PA 12/8/25

MINUTES.

Contract from Letter from Roweth Research trettells
of 25 allarch 1924 — Corcl (1)

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This should be brought up in depleaser?

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A to dissible the anangement should be mide for in advance, In colliction of specimens in ochrete + the sinduction should be furfiand to be mady for ificu-say in august. Perhaps he memor and he so good a to advise what should be done. It is advised to the should be done. It is a should be done.

Subsequent Paper.

Mr. hums accordingly for prime of assice please till 31 hay 4

Hon. Cal. Decentary I will pregous directions as required in existely after I well grown Dunnelin. H. 2 - 4 - 6 - 24 Hor. Colonial Decutary Just of purposed directions of sample labels herewitt. Hommus, 8-7-24 Jes Submitter. I propose of write to following I taken in bones: _ Darwin San Carlos, Port Louis N., Port Award, for Bay white Part Stephens in lack case the specimens to be taken from the same haddocks as soil was sent for he! humo consider his the best. Sa. titlet & July 24 9 hly 424 Stock Commissioner. De aft of letter submitted, for your approval or amendment whose issue Ch. 28 Johngas

Inside Minute Paper.

Corcular fetter 28. h luly 1924 3

Enclosere containing derection 32

Botter from R.C. Pol Evans of

25" august 1924 - Eme @

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Acti G will be dealt with a the present her I harbert the Count.

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title & bei 24

Letter from Mr R. G. Tole Errans of 28. October 1924 _ Encl 4)

Chief Inspector of Stock
Referred. Re! Freenstields
is also I Neik med in in muste
y times.

we of the stations from which ramples have always been received.

On any bing ment to the thinklich by the fusent wail!

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The son Cal Dec: seceived samples of home from 4/11/24 The Carter 4/11/24 Ch king of Stock Letter from f. 9. Bos Manager at Darwin of 1st November 1924 - Encl 6 Chief on fech of North There see (5) and (6) enclosed Van Carles North had the bones Mady to rent in in Ochter where I was there. Here Telle 7 hr. 24 the Hon Col Sue: Samples of dones have Now lear received from hauren are at present buin prepared to dispatch & Rowell Institute The samples how Creen received from any ather elation 1 ces Caches 24/12/24 Oh. Impof Suck

Inside Minute Paper.

Sheet No.

Letter from W. R. Pole Evans 20 Dec 1924 (2)
List of bone 8 presentens received (8)
Letter to Director Rowell Research Inst (9)
30 th Dec 1924
Copy of onel 8 transmitted (92)
"" " 6 " (93)

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(9c) (9d)

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A sanaples of Nones un Wh sont to

CSS. This proper should be sont to

he Carles on his return to 8 monly
with regner May he will report which

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a remainder by he proper a leptone) should

this his sint to Man systems which ham nor

som in sample.

2. as many samples as from the should be sont topi march site to Snagellar a Lauterro. If propries they should be sont in represente chamber.

Chief Inspector of Stock
Will you please report
accordingly, Sphis
for US

the Hom. Col Lie. lef to the framt of have only newed samples of bones from Post-Howard & Warwin These samples have already been dispertehed to the Rowett Institute (100 Carlon 13/2/25. Oh Dust of Stock Subgram & Skeralor Fox Ray, 16 Febr. 1925 10.)
humage telephound to Fort Laws worth
and Saw Carlos South, 16th Sety, 19 25. Wait pt 3/21-5 Chief Inspector of Sweet, samples gan are forefraring for derpatch. 23 marchages The Hon in Samples of bones from San Carlo South of fox Bay west one being aufalche of & the Rowett Institute by S.S. Lantaro. Markei 24/3/25 Ch bust. of Slock

C.S.O. No. 384/21 Inside Minute Paper. Sheet No. 2 Letter 6 Rowett Research Justitule, 24/3/25 (12) Letter from Prowett Research Institute of 12" faturery 1925_ hel (13) E. Sulmitted for information, applies 1 may 1928. O.S.C./C.S.O.

Chij & specter of syrch to see. 1 may 425 = Chief Inspector of Stock arrow dung ly ". Or of see 6th May 1925 The fon Thank you Deen. Tan Carber 28/5/25 Ch. Aust of Stock. List of sampler of sheets bour tercovid from the Impeder of Stock. with, drawn or filed mi M. 12 84/21 ar brief 61 Chief reflector of Swell Acceived with our conving minite It's me clear to what it refers

and whether the specimens are now being forwarded. Specimens were received from Darwin un llovember 1924 aus forwarded to Rowell Institute are the specimens non received from the same locationes? I Have no specimens been received from Post Lanis N. nor from Vovo Elephons? 3 Please note that of specimens are being for warded by west mail, they should he sent in the refrigerator chamber of the visual. Oichsec 4 July 1925 Col. Ecc. deshauld have forwarded you q 3 of the grass camples were also tags showing that the bones forwarded to the Dealt with mM. 10 84/32 Rawell tradulate in 1924 were taken from that far treular locality 2. In Ofecimens of bones have yet been received from Port haves or Port Stephens. 7/7/25 leh. knep of Stat. P/3/11/9/

EXTRACT from letter from Rowettt Research Institute dated 25th March, 1924. No. S/11/24.

 \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x}

Bones In choosing bones to send us for pathological and chemical examination, will you please make certain that corresponding bones are sent. It would be suitable if the chief bone of the foreleg were sent in each case. We would need, say, three bones from each of the following cases:

- (a) lambs which have died;
- (b) healthy lambs of the same age;
- (c) sheep from areas where the animals do not thrive
- (d) healthy sheep of the same: age as (c) on areas where the animals do thrive.

Accompanying the bones there should be a statement enabling us to locate on the map the areas from which the bones came, and a full statement with regard to the health, mortality, etc., of the sheep in that area, and also an account of the particular sheep from which the bone was taken.

 \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X}

Derupt. It is ungently nequested that for the purpose of this investigation you shall seeme & formand to me for transmittal to the proper quarter, bone apleimens from the following classes of sheppon - station: (1) a lamb whill has died (not from one bounded) (2) a healty land of same age so he! (3) a sheep from an area on whill animal do not their (4) a healthy sheep of same age as ho3 quom an an anea where animals do think. The bones silyined in each Ruse are those quon the Joneanno (Rafins) i e those between the slleow & thee joint of both Jone lego -Opeline hot should be seemed from a land which dies pron natural causes Amble no linementances quom a healthy land Milled by accident. Tombo about a west old provide much better opecimens than those quite becauty Immediately a opecimen is seemed all flest showed be carefully bemoved 4the bones fastenens together, Calulia Though a day place where they will be sope from do york. until they can be Journauted to me. Pluse do not apple

any disingestant to the openimens-I'am forwarding herewith prepared Calelo for attactment to each oppesime. Auggnom while the specimens am taken, age, of seef of the should be insented by your on call babel-It is also requested that a letter should be addressed to me at the same time the sample. are sent loutaining -(a) all provide particular regarding the sheep from which end sample lines (6) a full statement with negand to the usual health, montality TC. of sheep huming on the ane from which each greenen Elme. (C) particulars which will enable me to locate on the map the area promeutice evel openier Dane - The best wethod of doing this will be lightles formanding a hough plan of the Station will the millet at on about the locality from which it Come or pailing this then by mentioning place names which I can location the umber He should be Dunegul to mention the Where this is possible the bont greeinen should be taken from sheep huming on the Camp Jum which the soil samples were necently formunded.

384/24.

28th July.

24.

Sir,

with reference to the recent requests for samples of grasses and soils required by the Rowett Research Institute, in connection with its investigations of the Stock Industry of the Colony, I am directed by the Governor to inform you that samples of the bones of sheep are also required for chemical and pathological examination. It is necessary that these specimens should be obtained as early as possible in the lambing season next spring, and that they should be received in Stanley for transmission to the Institute not later than the last week in October.

2. Directions for the collection of the specimens and for furnishing the particulars required concerning them are contained in the accompanying enclosure, and it is important, in the interests of the enquiry which is being made, that these should be followed in every detail. As indicated, the samples should be forwarded to the Chief Inspector of Stock and the particulars required regarding them addressed to this office.

The	Manager	Falkland Islands Co.	I am,
11	11	San Carlos South.	Sir,
11	9	Port Louis North.	Your obedient servant,
11	11	Port Howard. V.	G. R. L. Brown,
17	11	Fox Bay West.	for Colonial Secretary.
11	11	Port Stephens.	

Enclosure to Colonial Secretary's Letter, No. 384/24 of the 28th July, 1924.

3a)

Darwin
San Carlos South
Port Louis North
Port Howard
Tox Bay West
Port Stephens.

Station.

Samples of the bones of sheep are required from the following classes of sheep on Darwin Station.

San Carlos South Port Louis North Port Howard Poxt Bay West Port Stephens.

- No. 1. From a lamb which has died (not from one born dead)
- No. 2. From a healthy lamb of same age as No. 1.
- No. 3. From a sheep from an area on which animals do not thrive.
- No. 4. From a healthy sheep of same age as No. 3 from an area on which animals do thrive.

The bones required in each case are those from the forearms (radius) i.e., those between the elbow and knee joint of both forelegs.

Directions for the collection of the specimens.

Specimen No. 1 should be secured from a lamb which died from natural causes and under no circumstances, from a healthy lamb killed by accident.

Lambs about a week old provide much better specimens than those quite recently born.

Where possible the bone specimens should be taken from sheep running on the camp from which the soil specimens recently forwarded were obtained.

Immediately a specimen is secured all flesh should be carefully removed and the bones fastened together, labelled and hung in a dry place, where they will be safe from dogs, &c., until they can be forwarded.

It is important that no disinfectant should be applied to the specimens.

Prepared labels are enclosed for attaching to each specimen. The breed, age and sex of the sheep from which the specimen was taken should be inserted by you on each label.

The/

The specimens should be addressed to the Chief Inspector of Stock.

Description of specimens.

It is important that letters should be addressed to the Colonial Secretary at the same time as the samples are sent, containing

- (a) All possible particulars regarding the sheep from which each sample was taken.
- (b) A full statement with regard to the usual health, mortality, &c., of sheep running on the area from which each specimen came.
- (c) Particulars which will enable the area from which each specimen came to be easily located on the map. The best method of doing this will be by either forwarding a rough plan of the station with the number of each specimen inserted at or about the locality from which it came or, failing this, by mentioning place names which can be located on the map.

Care should be taken to mention the number of the specimen in each case.

Port Howard

West Falkland Islands
Aug. 25.1924

To

The Honourable H.Henniker-Heaton

Colonial Secretary

Port Stanley

Sir,

I have the honour to acknowledge the receipt of your letter No.384/24 of July 28th. relative to bones from sheep and lambs.

I beg to inform you that our lambing does not commence before the 18th. of October, and therefore I regret to say that it will be practically impossible to obtain and send in lamb bones before the beginning of November.

I shall be glad to know if this will be considered too Tate, as I should very much like to send samples from this Station.

I have the Honour to be

Sir.

Your Obedient Servant

Mestole Evans.

(5)

PORT HOWARD

WEST FAIKLAND ISLANDS
Oct. 28.1924

To

The Monourable H.Henniker-Heaton

Colonial Secretary

Port Stanley.

Sir,

With reference to yours of July28th. re bones from sheep, I am sending in this time to the Chief Inspector of Stock, Two samples from ewes.

No. 3 is from unhealthy camp inland, Mt. Edgeworth, the same place as No. 3 sample of soil mentioned in mine of June 20th.

No. 4 is from healthy camp inland, our Stud Flock, the same camp that No. 2 sample of soil was got from.

Samples of bones from lambs will be sent later, as our ewes have now been lambing only just over a week.

I have the Honour to be

Sir.

Your Obedient Servant

MbRoleboans

The Halkland Islands Company, Limited.

Darwin Harbour.

The Colonial Secretary Stanley

hovember 1st 1924

Sir. I have sent to the Chief Inspector of Stock, Stanley. four specimens of bones as per your letter of 28 July 1924 I enclose a sketch with the approximate positions where the speumens were obtained.

hoI is from a lamb that died aged about I week.

"I a strong healthy lamb that was killed aged about I week.

" III a Monney ewe aged 3 years. That had died in rather poor condition.

The ground from which these three specimens were Jaken, is to all appearances good land, well grassed with sheltered valleys & good water, but stock do not threve very well there at any time although the mortality there is not in Ences of the general average of the Coy's comp. The lambing penentages there are generally lower than on the other ewe grounds

ho IV a Ronney ewe, 3 years old that died on its lack. Jak and strong.

The ground from which this is taken is very good, dry camp with well watered valleys I with good shell from the wind. all stock do well on this piece of ground of the lambing Executages are generally in Encess of any other part of the Coy's peroperty.

heman Sir Your faithfully J.G Slaughte

2

Post Howard

Mest Falkland Islands

Decr 20th 1924

The Honourable # Henniker Heaton

Colonial Surctary

Ser

Further to my letter of Octor 28th re bones from sheep I am sending in now to the Chief Inspector of Stock, two samples from lambs.

no. I from healthy lamb

no 2 from dead lamb.

Both samples come from healthy ground inland - our stud Flock.

Regretting I have been unable to send these in sooner.

I have the honour to be

Ser

Jourobedient Servant

RbRoleboans

Enclosed are the africains of bone required by the Rowett Lustitute.

From Port Haward

Specimen ho, Bones from healthy love land Coroled age unknown do ho? Bones from dead rum land Coroled age unknown do ho? Bones from Cast God from foor ground. Pomney age 4 year oh ho & Bones from Breeding love from healthy ground. Romney age 4.

Specimen ho i Bones from unhealthy dead land from foodlamp age 1 week die ho & Bones from healthy land from food ground age unknown do ho & Bones from Ewe from poor ground on which wheely die not thrive Romany age & years.

aglistan Oh Ind of Rock.

24.

Sir,

with reference to your letter, No. S/11/24 of
the 25th of March, I am directed by the Governor to
inform you that a parcel containing specimens of
sheep bones, as detailed on the accompanying list
prepared by the Chief Inspector of Stock, is being
forwarded to you by the present opportunity. It
is regretted that these are the only specimens
which have been submitted for analysis, but if others
should later be received, these will be sent to you
in due course.

2. Copies of the letters addressed to me by the farm managers when forwarding the specimens are enclosed herewith.

I am,

Sir.

Your obedient servant,

H. Henniker-Heaton,

Colonial Secretary.

The Director,

The Rowett Research Institute,

Aberdeen.

N. B.

(Ja)

Enclosure to Colonial Secretary's Letter No. 384/24 of 30th December, 1924.

List of Samples of bones of sheep received from Port Howard, West Falkland and Darwin, East Falkland.

From Port Howard.

- Specimen No. 1 Bones from healthy ewe lamb Crossbred Age unknown.
 - " 2 Bones from dead ram lamb Cross bred Age unknown.
 - Bones from Cast ewe from poor ground. Romney. Age 4 years.
 - Bones from breeding ewe from healthy ground. Romney. Age 4 years.

From Darwin.

- Specimen No. 1. Bones from unhealthy dead lamb from poor camp. Age 1 week.
 - " 2. Bones from healthy lamb from poor ground.
 Age unknown.
 - " 3. Bones from ewe from poor ground on which sheep do not thrive. Romney. Age 3 years.
 - " 4. Bones from healthy ewe from good ground. Age 3 years.

R. W. Carter,
Chief Inspector

of Stock.

29th December, 1924.



Letter from Mr. T. G. Slaughter, Camp Manager for the Falkland Islands Company, Limited.

Darwin Harbour,

East Falkland,

1st November, 1924.

The Colonial Secretary, Stanley.

Sir,

I have sent to the Chief Inspector of Stock, Stanley, four specimens of bones as per your letter of 28th July, 1924. I enclose a sketch with the approximate positions where the specimens were obtained. No. 1 is from a lamb that died aged about 1 week.

- " 2 A strong healthy lamb that was killed aged about 1 week.
- 3 A Romney ewe aged 3 years that had died in rather poor condition.

The ground from which these specimens were taken is to all appearances good land, well grassed with sheltered valleys and good water, but stock do not thrive very well there at any time although mortality there is not in excess of the general average of the Company's camp.

The lambing percentages there are generally lower than on the other ewe grounds.

No. 4 A Romney wwo, 3 years old that dies on its back; fat and strong.

The ground from which this is taken is very good dry camp with well watered valleys and with good shelter from the wind. All stock do well on this piece of

ground and the lambing percentages are generally in excess of any other part of the Company's property.

I remain.

Sir.

Yours faithfully,

T. G. Slaughter.

Note: A small map of the Colony is attached to assist in locating the districts indicated on Mr. Slaughter's sketch.



Letter from Mr. R. C. Pole Evans, Port Howard, West Falkland Island.

Port Howard, West Falkland,

The Honourable H. Henniker-Heaton, Colonial Secretary.

Ded. 20th 1924.

Sir.

Further to my letter of Oct. 28th re bones from sheep, I am sending in now to the Chief Inspector of Stock, two samples from lambs.

No. 1 from healthy lamb.

No. 2 from dead lamb.

Both samples come from healthy ground inland - our stud flock.

Regretting I have been unable to send these in sooner.

I have the honour to be, Sir,

Your obedient servant, R. C. Pole Evans.



Letter from Mr. R. C. Pole Evans, Port Howard, West Falkland Island.

Port Howard,
West Falkland Island,
28th October, 1924.

The Honourable H. Henniker-Heaton,

Colonial Secretary,

Port Stanley.

Sir,

With reference to yours of July 28th re bones from sheep, I am sending in this time to the Chief Inspector of Stock, two samples from ewes.

No. 3 is from unhealthy camp inland, Mt. Edgeworth, the

same place as No. 3 sample soil mentioned in mine of June 20th.

No. 4 is from healthy camp inland, our Stud Flock, the same camp that No. 2 of soil was got from.

Samples of bones from lambs will be sent later, as our ewes have now been lambing only just over a week.

I have the honour to be, Sir,

Your obedient servant, R. C. Pole Evans.

Note: No. 3 sample of soil mentioned by Mr. Evans is that referred to as Sample No. 36 in enclosure to Colonial Secretary's Letter of 23rd September.

No. 2 sample of soil is that referred to as Sample No. 35 in same enclosure.

TELEGRAM.



From :

The Colonial Secretary

To:

The Wireless Operator, Fox Bay, West Falkland.

Dispatched :

Received:

16th February

1925.

Time.2 pm

Toon repruary

192

Time.

OPERATOR FOXBAY

FOLLOWING FOR FOX BAY WEST AND PORT STEPHENS
MESSAGE BEGINS WITH REFERENCE TO MY LETTER OF
28TH JULY WHEN MAY SAMPLE BONES BE EXPECTED
MESSAGE ENDS.

SECRETARY.

Samples of Comes from San Carlo 3. 101 - Dones from healthy lamb Breed - Nominey March. Oge - 7 days. Sex - Ewe Bones from lamb (dead.) Breed - Ronney march age - 8 to 10 days Sex - Ram Breed - Ronney March 5 years Euse Sey -Droskiemmen has been received of bones of sheep hos. - Sheep from took of the from

Samples of bones from Fox Bay West. ho! Bones from Lamb (Healthy land.) age - 6 days Lex - 10am Bones from dead lamb Brua - Temmy Croes Sy - Ewe. Breed - Rommey Cross age - 4 years Sex - Ewe Bones from sheet (Healthy Land) Breed - Tonney Cross. Dey - from wether

1

384/24.

24th March,

25

Sir,

With reference to my letter No. 384/24 of the 30th December, 1924, I am directed by the Governor to attach a list of further specimens of the bones of sheep which are being despatched to you by the s.s. "Magellan" on the 3rd of April. As a precaution against the deterioration of the samples during transit the package is being sent in the refrigerator chamber of the vessel.

I am.

Sir.

Your obedient servant,

H. Henniker-Heaton.

Colonial Secretary.

The Director,

The Rowett Research Institute,
Bucksburn,

Aberdeen, N.B.

Enclosure to Colonial Secretary's letter No. 384/24 of the 24th March. 1925.

LIST OF SAMPLES OF BONES OF SHEEP RECEIVED FROM FOX BAY WEST. WEST FALKLAND AND SAN CARLOS SOUTH. EAST FALKLAND.

From Fox Bay West.

Specimen No. 1. Bones from lamb (healthy land).

Breed - Romney Cross.

Age - 6 days.

Sex - Ram.

Specimen No. 2. Bones from dead lamb.

Breed - Romney Cross.

Age - 4 days.

Sex - Ewe.

Specimen No. 3. Bones from sheep (poor land).

Breed - Romney Cross.

Age - 4 years.

Sex - Ewe.

Specimen No. 4. Bones from sheep)healthy land).

Breed - Romney Cross.

Age - 3 years.

Sex - Wether.

From San Carlos South.

Specimen No. 1. Bones from healthy lamb.

Breed - Romney Marsh.

Age - 7 days.

Sex - Ewe.

Specimen No. 2. Bones from lamb (dead).

Breed - Romney Marsh.

Age - 8 to 10 days.

Sex - Ram.

From San Carlos South (Contd.)

Specimen No. 4. Bones from sheep from healthy land.

Breed - Romney Marsh.

Age - 5 years.

Sex - Ewe.

No Specimen has been received of bones of sheep No. 3. Sheep from poor land.

University of Aberdeen and The North of Scotland College of Agriculture.

(JOINT COMMITTEE ON RESEARCH IN ANIMAL NUTRITION.)



Director:
JOHN BOYD ORR,
D.S.G., M.C., M.A., M.D., D.SG.

Secretary and Treasurer:
D. B. GUNN,
M.B.E., M.A., LL.B.

Ref. R/9/25.

The Rowett Research Institute,

BUCKSBURN, ABERDEEN,

12th February, 192 5



H. Henniker Heaton, Esq.,
Colonial Secretary,
Colonial Secretary's Office,
Stanley,
FALKLAND ISLANDS.

Sir.

I have to-day received your letter of 30th December last and parcel containing specimens of sheep bones. The bones will be examined histologically and chemically at once.

The meeting at the Falkland Island Co. is arranged for February 17th. Mr. Munro, with whom we have already discussed the problem of the Falkland Islands, will be present at that meeting.

We have arranged to carry out experiments on land in the Western Highlands which appears to be very similar in nature and to have a similar climate to that of the Falkland Islands. We hope that we will be able to report the results of those tests in the autumn.

If Mr. Munro and the Directors of the Falkland Island Co. consider that practical tests could be carried out on the Falkland Islands, we will send out the necessary material from here. At the last interview with Mr. Munro, however, he was of opinion that tests should be carried out

From The Rowett Research Institute.

Continuation Sheet No. 2.

in this country under our supervision before tests were tried in the Falkland Islands.

I will report further after the meeting on 17th February curt.

I am, Sir,

Your obedient Servant,

Director.