SCIENTIFIC

(Forestr y)

1923.

No. 236/23

Forest Officer

SUBJECT.

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3rd April

Previous Paper.

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Report on pregress of Forest Trees in the Falkland Islands.

1923.

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MINUTES.

Minute from forest Officer of 3rd april 1923 \_\_\_\_\_ Encl (1)

Popy of Report by forest Offices

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Sespatch to S. of s. ho. 49 of the 11th April, 1923. End. (2)

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Subsequent Paper.

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237/23 W. & S. Ltd. 549/25

a qually legret thus this despotch was not submitted to your Excellery in the anderson, way, I am quite unable of enefolain who it was overlooked. or elser Ford Office I send this third of Jon 4 you are proceeding to the West at we I was cutainly und the lings vers in that the minute paper had been sent to you but it has been Oi. B/Sec noted accordingly and returned James Reid Forest Officer

9

MINUTE.

(It is requested that, in any reference to this minute, he above Number and the date may be quoted).

From James Reid

Joseph Office!

.....

3 rd April 1923

To

THE COLONIAL SECRETARY

Stanley, Falkland Islands.

Sit, I herewith beg to submit a report, on the progress of Forest trees in the Halkland Islands

I have the honous to be, Sir, your obedient servant James Reid Officer. Report on the progress of Forest trees in the Falkland Islands.

The condition of the various species of Forest trees imported in to the Falkland Islands have proved very unsatisfactory.

Fractically all the broad leaved species

except the bommon aldet, mountain ash, and

Sycamore have entirely failed.

a small percentage of the Alder have made several growths from the base ranging from 4 to 8 inches in length, others are in good healthy condition and are in full leaf. The mountain ash have not done so well they

have made very small growths from the base

measuring 2 to 3 mohes, the original stem having

remained dormant.

The Sycamore are doing nothing, they came into full leaf, but were found to be rather scorched, the leaves were all burned brown and the joung buds blackened.

The Bommon ash, Birch, English Elm, Wych Elm, and Black Italian Poplar are all dead.

It was found on examining the roots of some of the dead plants, that they were in a state If decomposition, owing to the roots being surrounded by excessive more ture.

The boniferous species have done slightly better, Seot Pine and bossican Pine take the leading place. a few of each of those varieties are quite. healthy and strong.

There are very few of the Vitha and norway Spruma alive, the few that are left are not in a healthy condition. a consignment of 3,000 austrian Pine which were secured here in January 1922, from messers Dickson's Edinburgh and planted out straight away, are the most promising. a fair percentage are nice strong healthy plants with young growth measuring 2 and 3 inches. The young trees showing any life have been protected by placing sods taken from ground in ditching operations all round them. The condition of the soil at Int Low has been improved greatly by the draining operations. additional ditches have been dug the dictance between each ditch being 6 yards. In the newsery at Port Stanley 1,000 1 years seedlings of Pinus insignis, 500 maritime Pine and roughly 5,000 Scots Pine have been lined out from sowings made in 1921 Immediately after being lined out. a South East gale was experienced which gave the seedlings a nasty check, many died and others were turned frown then leaves being sorely scorched. It took the seedlings 3 months to recover from this check, but after doing so they have gone on well and have made an average growth if 4 inches.

In the spring of 1922 seed beds of Sitha Spruce, borsican Pine and Scoto Pine were made The Sitka Spruce were very slow in germinating taking from 8 to 12 weeks. The borsican and Scots Pine germinated in 4 to 5 weeks and fine brainds were got on the whole at Hell bove, West Falklands, seeds of Sitha Spruce Consican and Scoto Pine Thave also been sown, the seed beds have been laid down in the fath manager's garden which is surrounded by a goose hedge 6 feet high, but up to the present no details are available as to the condition of the seedlings heither have any details come to hand from the warrious farmers and Farm managers as to how they have succeeded with the various seeds sufficed to them! omit is how a railable of the 3 april with a supermire plant the 3 april 18 ap It is now anticipated that trees taised from seed locally will be more successful than imported trees.

James Reid Forest Officer 2. nd April 1923. HNCLOSURE TO FALKLAND ISLANDS DESPATCH No. 49 of the lith of April, 1925.

## REPORT ON THE PROGRESS OF FOREST TREES IN THE FALKLAND ISLANDS.

The condition of the various species of Ferest trees imported into the Falkland Islands have proved very unsatisfactory.

Practically all the broad leaved species except the Common Alder, Mountain Ash and Sycamore have entirely failed.

A small percentage of the Alder have made several growths from the base, ranging from 4 to 3 inches in length, and a few others are in good healthy condition and are in full leaf.

The Mountain Ash have not done so well, they have made very small growths from the base measuring 2 to 3 inches, the original stom having remained dormant.

The Sycamore are doing nothing, they came into full leaf, but were found to be rather scorched, the leaves were all burned brown and the young buds blackened.

The Common Ash, Birch, English Elm, Wych Elm, and Black Italian Poplar are all dead.

It was found on examining the roots of some of the dead plants, that they were in a state of decomposition, owing to the roots being surrounded by excessive moisture.

The Coniferous species have done slightly better, Scots Fine and Corsican Pine take the leading place.

A few of each of these varieties are quite healthy and strong.

There are very few of the Sitka and Horway Sprace alive, the few that are left are not in a healthy

condition.

A consignment of 3,000 Austrian Pine which were received here in January, 1923, from Messrs Dickson's Edinburgh, and planted out straight away, are the most promising. A fair percentage are nice strong healthy plants with young growth measuring 2 and 3 inches.

The young trees showing any life have been protected, by placing sods taken from ground in ditching operations all round them.

The condition of the soil at Mount Low has been improved greatly by the draining operations. Additional ditches have been dug the distance between each ditch being 6 yards.

In the nursery at Port Stanley 1,000 1 year scedlings of Pinus insignis, 500 Maritime Pine and roughly 5,000 Scots Pine have been lined out from sowings made in 1921.

Immediately after being lined out a South-East gale was experienced which gave the seedlings a nasty check, many died and others were turned brown their leaves being sorely storched.

It took the seedlings 5 months to recover from this check, but after doing so they have gone on well and have made an average growth of 4 inches.

In the spring of 1922 seed beds of Sitka Spruce, Corsican Pine and Scots Pine were made. The Sitka Spruce were very slow in germinating taking from 8 to 12 weeks. The Corsican and Scots Pine germinated in 4 to 5 weeks and fine brairds were got on the whole.

At Hill cove, West Falkland, seeds of Sitka Sprace, Corsican and Scots Pine have also been sown, the seed bede have been laid down in the Manager's garden which is surrounded by a gorse hedge 6 feet high, but up to the present no details are available as to the condition of the seedlings.

It is now anticipated that trees raised from seed locally will be more successful than imported trees.

(Signed.) James Reid,
Forest Officer,
2nd April, 1923.

FALKLAND ISLANDS. No. 49.

GOVERNMENT HOUSE, STANLEY, 11th April, 1925.

My Lord Duke,

In duplicate.

No. 71 of the 16th of May, 1922, I have the honour to transmit herewith a report by Mr. J. Reid, Forest Officer, on the Forest trees which were imported from England in 1920 and 1922 and on the experiments which are being carried out at Government House and at Hill Cove, of reising trees from seed.

I have the honour to be,

My Lord Duke,

Your Grace's most obedient,

humble servant,

M.

J. Middleton.

IS GRACE THE DUKE OF DEVOUSHIRE,

P.C., K.G., G.C.M.G., G.C.V.O.,

SECRETARY OF STATE FOR THE COLORIES.



DUPLICATE

22 August, 1923.

Sir,

of the 11th of April, I have the honour to transmit to you the accompanying copy of a letter from the Director of the Royal Botanic Cardens, New, regarding the report of the Forest Officer on the progress of forest trees in the Falkland Islands.

2. The Cross Agents for the Colonies have been instructed (copy of letter herewith) to obtain a copy of the paper entitled "Northern Trees in Couthern Lands" and to forward it direct to your Covernment.

I have the honour to be,

Sir,

Your most obedient humble Servant.

(Signed) DEVONSHIRE

2650 JULY 1922

THE GOVERNMENT OF THE FALALAND LODAND.

## ROYAL BOTANIC GARDENS

KEW

26th July 1923.

Sir,

I beg to acknowledge receipt of Colonial Office letter No.27888 /1923 of 27th June 1923, enclosing a copy of the report by Mr. J.Reid on the afforestation experiments that are being carried out in the Falkland Islands, which I have read with much interest, and beg to offer the following observations.

The success of the experiments in afforestation appears to depend primarily on the provision of adequate windbreaks and on the drainage of the ground where the plantations are being established. The system already adopted of planting on "hills" made from the sods cut during drainage operations, which is the system which has given such good results on the peat lands at Corrour in Scotland, seems to be the only method of ensuring success in the water-logged peat bogs of the Falkland Islands. The more closely the Corrour methods can be adopted in the Islands the greater, I feel sure, will be the success of these interesting experiments.

Conditions in the Falkland Islands, as is well known, are not conducive to tree growth, and owing to the persistent winds growth must be expected to be very slow with the earlier plantations; but from the results already achieved I feel confident that in due course the experiment will prove successful.

It is evident that the sowing of seeds in the Islands and raising the stock of young trees in carefully selected

The Under Secretary of State

Colonial Office

Downing Street, S.W.1.

selected and prepared nurseries is a far better procedure than purchasing plants from England. Not only can young trees be moved to their permanent homes without risk of loss at the most suitable time for transplanting, but should any losses occur refills can be provided at once from the nurseries. No doubt this method is slower, but it has the great merit of sureness and is also far less expensive than buying in fully grown trees from home.

Until plantations that will act as windbreaks become established it will be desirable to devote attention more especially to Coniferous trees, and then later the experiment can be continued with broad leaved trees, though as a rule the broad leaved trees of the north are not so successful in the southernhamisphere.

An interesting and instructive paper on the results attending the introduction of trees of the northern hemisphere to southern lands has recently been published by Mr.E.H.Wilson, Assistant Director of the Arnold Arboretum, Harvard University, and I would suggest that a copy of this paper should be obtained and for arded to the Falkland Islands, as it would prove a useful guide to Mr. Reid in his selection of seed. The paper is entitled "Northern Trees in Southern Lands", by E.H.Wilson, and is published in the Journal of the Arnold Arboretum, Harvard University, Jamaica Plain, Mass., U.S.A. Vol. IV.1923,pp.61-90, and has been reprinted in pamphlet form.

I am etc.

(Sgd) Arthur W.Hill
Director.

Downing Street

22 August, 1923.

Gentlemen.

I am directed by the Duke of Devenshire to request you to obtain and send out to the Covernment of the Falkland Islands if possible by the sail of the 5th September a copy of a paper entitled Northern Trees in Southern Lands" by E.H. Vilson, which was published in the Journal of the Arnold Arboretum larvard University, Jamaica Plain, Massachusetts, United States of America Volume IV 1923 pages 61-90 and has been reprinted in pamphlat form.

2. This paper may be obtainable from Leasers. Theldon and Tealty, 2-4 Arthur Street, New Oxford Street, 2.C.2, price 31. or from Leasers. Dulau and Company Limited, 34,35 and 36 Margaret Street 1.1. It is understood that one or other of these firms is more

likely

THE CHOM AGENTS

FOR THE COLONIES.

that they could obtain a copy from America. If however, you find any difficulty in obtaining the paper you should refer the matter again to this Department.

The expenditure involved should be charged to the Colony and a copy of this letter is being sent to the Officer Administering the Government by the outgoing mail.

I am,

Gentlemen,

Your most obedient Servent.

(Signed) G. GRINDLE