

TRA/FIS/1#18

SECRETARIAT

(Formerly)

O 3 9 2 / 11	O 3 9 2 / 11

0392/11  
FIS

IMPORTED FISH.

CONNECTED FILES.

NUMBER

--

COLONIAL SECRETARY'S OFFICE  
8-OCT-1954  
FALKLAND ISLANDS

132  
BUP

INTRODUCED TROUT IN THE FALKLANDS

As is well known two species have been introduced.

(i) American Brook Trout (Salvelinus fontinalis)-a "Char", in the Moody Brook only.

(ii) Brown Trout (Salmo fario), in the Moody Brook, Murrell River, Arroyo Malo, Mullet Creek Stream, Cave Arroyo, also in some other places of which I have neither a list nor information as to numbers put out. (Note. For some years the term "fingerling" has been used for the stage at which the trout were put out; it is both erroneous and misleading; the fish which have been put out have been "fry", a stage very much younger and smaller than that indicated by "fingerlings".)

See 110  
in Vol II

Since I was asked to examine the present state of affairs in August 1953 I visited the Moody Brook 7 times Mullet Creek stream twice and the Murrell River once, ten days in all, from the 23rd. of September to the beginning of March. Besides the fish which I killed myself I was able to examine some killed by others in all 20 char and 12 fario, 32 fish. Measurements, details of stomach contents and scales were collected.

CHAR (BROOK TROUT)

The species has established itself well in the Moody Brook where it breeds freely. It has spread far up the valley from the places where I put in the fry; the upper reaches seem to be the nursery stretches since there I caught quite small fish with the greatest ease and from what I saw there are plenty of them.

No fish larger than 9oz. was taken anywhere, a circumstance which I do not understand ~~xxxxx~~ since in 1947 there were fish of 1½-2lbs. which I caught, weighed and returned but, as every angler knows, that one does not catch the larger fish is by no means proof that they are not there. Some at least of the char go down to the sea: I have examined one of 3lbs which was taken in a mullet net at the west end of the harbour: it was in superb condition. There may therefore be something of a drain of fish from the stream to the salt water and of course they might not be able to get back over the hatchery dam; in that event the spawning ground would be rather restricted. This is a matter which requires watching and the desirability of a fish ladder at the dam should be kept in mind. The smaller naval dam is no obstruction; it is somewhat decayed and if the fish could not get over the top it is highly likely that they would get underneath.

20th. 15th

have  
h

Like other trout the char feed not only on the miscellaneous bottom-living animals and those which swim but also on winged insects at or just above the surface. The fish may be taken with fly and worm, and I should expect with small spinners as well.

Since most of the fish I had were in good condition there cannot be a shortage of food but considering the small size of the Moody Brook: about 7 mi. in length: the possibility of overstocking by natural reproduction should be borne in mind.

Recommendations I)

BROWN TROUT

Fry were liberated in the Moody Brook in much larger numbers than those of the Brook Trout. In spite of this far fewer of the Brown Trout were taken but they all seemed strong plump and healthy fish; the largest was 11oz.

The extent to which these fish go down to the sea is not known; that some do so is certain and at ~~an~~ a comparatively early stage since I have seen two or three, say 4-5 in. long, which had been taken in mullet nets.

The food of this species is the same as that of the Brook Trout ~~but~~ some examples eat smaller fish, as do all trout ~~xxx~~ including, probably, the char. *may well take the artificial fly.*

In the Moody Brook there seem to be plenty of small Brown Trout below the hatchery dam, as if this stretch might be a nursery area. ~~These fish take the artificial fly.~~

As I have said I reached the Murrell River once. It turns

Reply at 135



turned out a cold, disagreeable and quite unprofitable day. My information regarding this stream has therefore depended largely on reports by others. In the Murrell there is a good stock of ~~fish~~ Brown Trout, some of them of respectable size, 1-2 lbs. It is true that I have had a first hand report of a trout which was seen quite clearly and the accuracy of the estimate of length was supported by the ~~information~~ observer with the information that he was an undertaker; even then I find it difficult to believe that the fish was a trout, or if it was, that it was three feet long: "mullet" will at times go up fresh water streams, as I have seen. \* Fish which came to hand include several quite small, immature specimens which must have been bred in the river. The introduction has been successful here also.

Mullet Creek Stream, except for a few pools is not a particularly good brook: it could be much improved by a number of very rough dams which in the course of time would form good pools. It is a ~~difficult~~ difficult stream to observe or to fish. This, however, is the brook in which a fish of 3 lbs. was unintentionally killed by an idle shot from a .22 rifle, the shooter firing at a ripple which he thought was caused by "minnows" which are common everywhere. This large fish was too light for its length and all the information supports the opinion that it was male kelt. Small trout have been taken on two occasions in mullet nets at the mouth of this stream.

From the Cave Arroyo Reports are few and do not mention any reasonably large fish. ~~It is not a large stream.~~ It is not a large stream.

Arroyo Malo and its tributary the Pasa Manaes Stream. Fry were put into the latter and have been reported to have grown to some size and to have spread to the Arroyo Malo. Nothing of any importance has as yet been caught in these waters but lack of adequate gear and technique might be ~~important~~ factors.

Rate of growth and age are important characters on which much light can be thrown by examination of scales, at least so far as Brown Trout are concerned. Scales have been kept from all fish ~~now~~ taken and I have had some correspondence with Mr. Pentelow, Chief Inspector of Salmon and Freshwater Fisheries in the Ministry of Agriculture and Fisheries, with whom I am acquainted, but I do not wish to make any statement on the ~~matter~~ subject of scales as yet; additional specimens should be collected.

### Recommendation

I. It is my recommendation that the practice of hatching imported ova of Brown Trout and distributing the fry should be continued. The annual cost is quite small. Care should be taken that the resulting fry are not frittered away by putting them out in too small numbers. If numbers are omitted it can look very well on paper since many places can be visited and each receive a trivial number of fry. To do this is an obvious temptation but it is pure waste not to put enough fry in any water which is to be stocked.

II. Experiments should be made in catching and handling the small Brook Trout to be found in the upper Moody Brook. They would be very suitable for distribution if sufficient numbers could be collected.

III. I must emphasise that all consignments of fry or larger fish should have over-riding priority, by any means of transport. There has been regrettable waste.

IV. In the hatchery experiment should be made with plastic mesh in trays, to replace perforated zinc. Zinc has rather a short life in our acid waters and in solution may conceivably be injurious to eggs or alevins, although it is a standard material, but then few places have to use acid water. According to published results of tests plastic mesh is almost quite indestructible.

V. I would suggest that I should continue my investigations in order that there may be acquired further data referring to the biology of the introduced trout.

VI. Since the amount which I was able to do in the field in the 1953-54 season did not come up to my expectation and since I have proposed that the enquiry should be continued I would advert to the ~~question~~ subject of the fee.

See 110  
on Vol I.

The fee which was agreed on for the twelve months' investigation was fifty pounds (£50) and I now suggest that for the first twelve months the fee of twenty-five pounds should be paid and that the remainder, twenty-five pounds, should be paid at the end of the next twelve months' investigation, that is to ~~xxxx~~ say in October 1955. If it would be a convenience from the point of view of accounting the second twenty-five pounds might perhaps be placed on deposit.

VII. Meanwhile I would ask that the previous arrangement regarding transport may continue, that is to say that I may ask for transport from the Public Works and Agricultural Departments as requisite. It would mean comparatively infrequent calls on the resources of the said departments, and I would ask that they may be informed accordingly. in

IX. A renewal of the permit to ~~take~~ fish ~~from~~ the Moody Brook and generally to take any species of trout throughout the year would be necessary.

NOTE. A very few Rainbow Trout survived from imported ova long enough to be put out in the Moody Brook. One was seen about a year later and looked a poor creature. Nothing has been seen since. Our waters are too cold and too acid for this species.

*J. E. Hamilton*  
(J.E. Hamilton)  
vii-x-54

*John*

*TH*



0392/II

13th October,

54.

Sir,

I am directed to refer to your Memorandum of the 8th of October, 1954, and to thank you for the interim report contained therein. I am to state that Government welcomes your suggestion that you should continue your investigations for another year and similar arrangements with regard to transport and permits will be made.

2. The Treasurer has been requested to pay to you a fee of £25 for the first 12 months and the balance of £25 will be paid on the completion of the next 12 months investigation.

3. With regard to your first Recommendation, I am to enquire whether you would advise what experiments in hatching imported salmon ova should be undertaken.

I am,

Sir,

Your obedient servant,

(Sgd) C. Campbell

COLONIAL SECRETARY.

Dr. J.E. Hamilton, I.S.O., J.P.,  
STANLEY.

C/VP

CT.

f.n.a.

Copy to Auditor

Reply at 137.

13th October,

54.

To: Acting Superintendent of Works,

From: Colonial Secretary.

01/c Agricultural Department.

STANLEY.

Field Investigation on Introduced Trout.111  
3.01

I am directed to refer to my Memorandum of 14th August, 1953, on the subject of "Field Investigation on Introduced Trout," and to request that you will extend the same facilities to Dr. Hamilton for a further year ending October, 1955.

(SGD) C. CAMPBELL  
Colonial Secretary.

95

(109) - 1(111)

Pr see (132) & (135). I suggest circulating  
this interim report to ExCo. and adopting  
the ExCo's recommendations as far as possible.

20/10

BRN  
21

By 1 week.

20/10

BRN 28/10



137

Ym. ref.  
03 92/11



Stanley  
October 22<sup>nd</sup> 1954

Sir,

135

Referring to your letter of 13<sup>th</sup> October I wish to say that it affords me pleasure to find that we agree on the subjects of my memorandum of October 8<sup>th</sup>.

2. (Your para. 3) I advise that enquiries should be begun as soon as possible in order to ascertain where Salmon ova can be obtained and where they are to be had. As a first step, may I suggest a telegram to the Midland Fisheries at Nailsworth whence I expect you shall order Trout ova.

If we eventually find that none are to be had in Britain the Fisheries Department of New Brunswick or Nova Scotia should be able to put us on the right lines.

The spawning time of salmon varies greatly but it is nearly always in winter. Eggs would not be fit to hatch for 3 or 4 weeks after laying.

Yours

138

A

1<sup>st</sup> m,

Sir,

Your obedient servant

J. H. Hamilton.

unequipped Government Naturalist  
F. I.

The Honourable Re Colonial Secretary  
Stanley

file

B

Life Regr Dept

(132) et seq

for your views on recommendation of (133) 7  
the introduction of salmon ova.

27/10

H. C. S.

C

15,000

I think that the 10,000 Trout eggs

we have on order will be sufficient for  
us to handle in the hatchery this year.

With reference to Salmon Ova, as far back as 1951 Mr Loney  
was asked what possibilities there were of obtaining Salmon  
Ova and he replied that they would be unlikely to get any  
at the very particular stage of development necessary for hatch  
O.P. 6/100 S. 27/10/54

I will want a/c notes on  
recommendation at (135).

Where is correspondence re salmon ova?

S.

A.C.S.

131 in Vol I att.

Para 3 of 135 & para 2 of 137.

SM.

3/11.

O/c. Agric.

B on 138 with 139 A. Your recommendations  
on Salmon ova are requested pl.

WJBS 3/11

H. B. S.

Ref. to recommendations at 133.

Yes

pe 1/11

- I. The fact it has been the custom to put fry out in many places, quite a number of farms have asked for them and to try to avoid any unpleasantness the fry has been split up into small lots. I think in future the decision as to where, and as to how many of the fry to be distributed should be left to Dr Hamilton.
- II. Doubtful if sufficient numbers could be collected, but will work a try.
- III. I quite agree that in the past large numbers of fry have been lost through transport, the fry being carried up and then not being able to be transported at once. By far the most suitable method is by plane.
- IV. With reference to plastic mesh for trays, it is too late to think of obtaining any for this season, but I think it should be kept in mind if we are going to continue hatching.

K.V.

we will  
consult him  
but remember we  
only pay him an  
hiring fee &  
we have a ret. of  
on interest.

I would suggest that Dr Hamilton be given control over the hatchery and the distribution of fry.

Salmon ova

I think there are quite a number of streams in the Falklands, with an outlet to the sea, that would be suitable for salmon, but the question is whether we can obtain the ova. It appears that the matter has



been gone into before (see X42 file 0392) and  
again I attach letter received from Mr. Loney  
in 1951 with reference to OVA.

A. Patten  
O/C O.G. Dept  
4/11/54

O/C O.G. Dept

(139) pre see my marginal comment.  
As regards salmon OVA I think the  
best thing is to enquire this Brown Agent.  
Pre p. a draft ~~going to the same setting~~  
out the information we require - cost, season,  
special travel, some process as Vantaff? etc.  
E.P.

A. B. S.

Comments noted, thank you.  
Attached draft of information required  
from Brown Agents.

A. Patten.  
O/C O.G. Dept.  
9/11/54

forward  
D.P.

0392/II

11th November 54.

Gentlemen,

I am directed to inform you that Government is anxious to import some salmon ova with a view to stocking the Colony's streams with these fish, and I am to request that you will be good enough to obtain the following information:-

- (i) Can the ova be supplied from the United Kingdom? If not, from where?
- (ii) What would be the approximate cost of 10,000 eggs, including packing and crating?
- (iii) Would the ova travel successfully to the Colony by air to Montevideo and thence by sea taking approximately 10 - 12 days for the journey?
- (iv) What are the earliest and latest dates on which the ova can be supplied?
- (v) How soon after receipt could the ova be expected to hatch?
- (vi) Does the process of hatching salmon ova differ materially from that of trout?

2. It should be added that Government has made several successful importations and hatchings of trout ova.

I am,

Gentlemen,  
Your obedient servant,

(Sgd) C. Campbell

COLONIAL SECRETARY.

See 157

C. F. Requisition No  
6695 refers.

Replies at 147, 149, 158

The Crown Agents for Oversea Governments  
& Administrations,  
4, Millbank,  
LONDON, S.W. 1.

Ag. A.O.

141 f-i. P. 12/11/54

H. B. S.

Noted, thank you.

A. R. W.

O/K Ag. D. 12/11/54

BU 311/55

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

142

Number	Office of Origin	Words	Handed in at	Date
				16-12-54
To	DINLEY, SURREY TROUT FARM, BASINGSTOKE, SURREY.			

DATE OF SAILING OF FLETCHER FROM MONTEVIDEO VERY  
UNCERTAIN PROBABLY JANUARY STOP WILL ADVISE YOU  
AS SOON AS DATE IS CONFIRMED



Rec 3/1/55

C I/C AGRICULTURAL DEPT.

Time



# GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

143

Number	Office of Origin	Words	Handed in at	Date
				30.12.54
To				
HAGSTADIA MONTIVIDEO				HAG/C

PLEASE TELEGRAPH ACTUAL SAILING DATE, FURTHER TO LARNEY HURRY TROUT FARM COMMA  
HASTADIA COMMA HURRY GIVING SUFFICIENT TIME THEN FLY TROUT OVA MONTIVIDEO TO  
CONNECT.

SECRETARY

O/p. Agric.

To note 143 pl.

30/12/54

H. B.S.

Inst. H. & A.

A.R. 0 1/2 09 2000

30/12/54

Time

JH/GM

143 10/2/55

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

144

Number

Office of Origin

Words

Handed in at

Date

17.1.55

To

MACINTYRE MONTEVIDEO

HQA/C

143  
MY TELEGRAM 30TH DECEMBER TROUT OVA NOT ON FITZROY GRATEFUL YOU  
INVESTIGATE

SECRETARY

Ag A.O.

Do note 144 pt.

noted  
18/1

H.C.S.

noted, 16/1/55

A.R.

See 150

Time

JB/NN

0 1/8 24 24 19.1.55

DECODE.

TELEGRAM.

145

From Macstaple, Montevideo

To The Colonial Secretary

Despatched : 19th January, 1955 Time : 1042

Received : ..... 19.. Time : ....

Cabled Leney Surrey Trout Farm fly trout ova to  
connect next FITZROY. Writing.

MACSTAPLE.

Oi/c Agric. Dept informed.  
Send him a copy pl.  
(Intld) J.B.  
19/1.

copy sent under c.s.  
Sm.  
19/1.

See 150

P/L.  
SM

See after next  
more of 2/1  
Box. 14/2/55



146

TELEGRAPHIC ADDRESS:  
"CARLOS, PORTSTANLEY"

Port San Carlos,  
Falkland Islands, S.A.



February 2 19 55

The Hon. The Colonial Secretary,  
STANLEY.

Sir,

IMPORTED TROUT.

The Moody Valley brook must now be overcrowded with small imported fish for which it has insufficient food. It would be sensible to remove some hundreds every year by netting them or catching them with barbless hooks with a view to introducing them to waters where they are not at present to be found. In batches of fifty or so it should not be difficult to transport them by air around the Colony. Dr. Hamilton could advise on ways and means. I myself would very much like a few dozen with which to stock Smyley's Brook.

I am,  
Sir,

Your obedient servant,

N. R. R. Conner,

*I have discussed this with Dr. Hamilton, who agrees we should collect some small fish and send out to San Carlos. The arrangements are now being investigated.*

477. R/O 14/2/55 Ode Apr 1955

132  
As with Hamilton's investigation file 782

*This is in conformity with Dr. Hamilton's recommendation. No. 132. There are in any quantity the best solution would be a small tank at the hangar with fresh water. Building through which could house the trout until they could be flown out in a small container. See for the discuss the whole problem with AD. When he has pulled in 782*

Communications to be addressed to  
THE CROWN AGENTS  
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of this letter being quoted.



147  
4, MILLBANK,

LONDON, S.W.1.

G6/Falkland Is.6895.



14th January 1955.

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."  
OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

Sir,

141 I am directed to refer to your letter 0392/II dated 11th November 1954, in which you enquire regarding the possibility of importing Salmon Ova.

148 The Surrey Trout Farm and United Fisheries who have supplied the trout eggs which you have imported do not themselves spawn salmon. They state however that "there is every chance of salmon eggs getting to the Falkland Islands with equal success as trout eggs, their handling and treatment being precisely the same." On the advice of the Ministry of Agriculture and Fisheries an enquiry was made of Braal Hatcheries of Halkirk and a copy is enclosed of the reply which has been received.

It will be seen from the letter that it is necessary to place an order for eggs well in advance of the spawning season which falls at the end of the year and it would be appreciated if you would state whether you now wish your requirements to be noted with a view to supply at the end of 1955. Braal Hatcheries are being approached further for a more precise answer to the questions set out in (iv) and (v) of your letter and a further report will be sent to you in due course. The cost of container, freight and incidentals in respect of the trout eggs supplied in 1952 amounted to approximately £36 and freight charges on salmon ova are expected to be of the same order.

I am, Sir,  
Your obedient Servant,

*[Handwritten signature]*  
*[Handwritten initials]*

The Colonial Secretary,  
Falkland Islands,

HMS.

LP.

COPY

148



Braal Avenue,  
Halkirk,  
Caithness.

7th January, 1955.

The Crown Agents,  
4 Millbank,  
London, S.W.1.

Your Ref. G6/Falkland Islands 6695.

Dear Sirs,

Salmon Ova

Thank you for your communication of 5th instant requesting information as to Salmon Ova for the "Falkland Islands".

I am of the opinion that Salmon ova would successfully travel on such a journey provided, that the consignment was forwarded at the most opportune time. I supply customers with Eyed Salmon ova annually. Ova is, generally speaking, eyed at 40 days incubation that is the best time to transport and, provided, it is securely packed and iced a consignment will then travel successfully on a long journey and certainly much longer than 10-12 or more days.

2. I do not hatch trout but the process for hatching salmon are practically the same as for trout.

3. I do not have any more salmon ova for sale now as I have just finished supplying our regular customers with their annually consignments.

4. At the present time I supply salmon ova at 22 10/- per thousand plus carriage paid both ways on containers supplied.

If you should consider placing an order with us from this back ends spawning, then I suggest that you write direct to our factor, Wm. Macbeath, Ulbster Estate Office, Thurso, or if you wish to me at the above address. All our orders for salmon ova are booked early in the year by so doing we try to lay in a stock of ova to meet our customers requirements.

I am Sirs,  
Yours faithfully,  
David Sinclair,  
Superintendent.

*Received 11.1.55  
2.15.55  
1.2.55  
2.2.55  
6/*

Communications to be addressed to  
THE CROWN AGENTS  
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of this letter being quoted.



149  
4, MILLBANK,

LONDON, S.W.1.

G6/ Falkland Islands 6695



25th January, 1955.

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."  
OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

Sir,

141  
I am directed further to refer to your letter  
0392/II dated 11th November, 1954, regarding the  
importation of Salmon Ova.

The Hatcheries have now reported that the Ova  
are likely to be available for exporting between the  
10th December and 10th January in each spawning season.  
It is estimated that Ova which were sent at about  
40 days incubation, i.e. when "Eyed", might be expected  
to hatch some time between late January and early  
February.

Your instructions are awaited as to whether an  
order should be provisionally placed for the supply  
of Ova at the end of this year. | x

I am, Sir,  
Your obedient servant,

*M. Mayman*

*See 157*

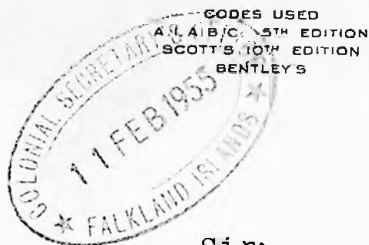
The Colonial Secretary,  
Falkland Islands.

*AS The answer to  
if it is yes but  
have we permission?*

*14/2*

RGR/KE

# MACLEAN & STAPLEDON S.A.



CASILLA DE CORREO 193  
COLON 1486-90  
**MONTEVIDEO**  
(URUGUAY)

TELEGRAPHIC ADDRESS  
MACSTAPLE MONTEVIDEO  
TELEPHONES: 86382  
85042  
82940

January 27th. 1955

Sir: -

144

We beg to acknowledge receipt of your telegram dated the 18th inst., which reads as follows:

"MY TELEGRAM 30TH DECEMBER TROUT OVA NOT ON FITZROY  
GRATEFUL YOU INVESTIGATE"

145

and confirm our reply of the 19th, stating:

"CABLED LENEY SURREY TROUT FARM FLY TROUT OVA TO CONNECT  
NEXT FITZROY STOP WRITING"

With reference to these telegrams we would explain that as there was a certain doubt as to the actual date on which "Fitzroy" would leave the Dry Dock, we decided that it would be better to leave the trout eggs for the next trip, in order that the wait in Montevideo would be of the shortest possible duration.

We regret that due to an oversight we did not inform you of the situation at the time.

We have now been informed by the Surrey Trout Farm, that the eggs, if in a suitable condition, will be forwarded by KLM on the 5th February in order to connect with "Fitzroy", which we expect will sail from Montevideo on the 7/8th February.

Yours faithfully,  
MACLEAN & STAPLEDON, S. A.

The Colonial Secretary  
PORT STANLEY.

JAD/vD.



157.

# MACLEAN & STAPLEDON S.A.

CODES USED  
A.I.A.B.C. 5TH EDITION  
SCOTT'S 10TH EDITION  
BENTLEY'S

CASILLA DE CORREO 193  
COLON 1486-90

**MONTEVIDEO**

(URUGUAY)

TELEGRAPHIC ADDRESS  
MACSTAPLE MONTEVIDEO

TELEPHONES: 86382  
85042  
82940

February 4th. 1955



Sir:-

We beg to transcribe text of cable received from Messrs. Surrey Trout Farm, Surrey, which you will find self explanatory:

"GREATLY REGRET UNABLE DESPATCH TROUT EGGS NEXT SAILING FITZROY"

Yours faithfully  
MACLEAN & STAPLEDON, S. A.

A handwritten signature in dark ink, appearing to read "J. A. Drum", written over a horizontal line.

Colonial Secretary  
PORT STANLEY

IG/vD.

*Handwritten initials or mark, possibly "J.A."*

*Mail from 147  
K.I.V. 146.*

## Fishing in the Moody Brook.

As a result of recent experiments it has been decided to issue two permits for one day each for each week ~~for the rest of the present season~~ up to March 31<sup>st</sup>, the end of the open season.

2. Further information and permits may be had from Mr. John Board at the Secretariat, during office hours.

---

### Conditions

1. A permit will allow fishing only on the date for which it is issued.
2. Rod and line only may be used.
3. Not more than one permit at a time may be issued to the same person.
4. Not more than 6 fish may be kept.
5. No fish may be kept if it is less than 9 inches in a straight line from the tip of the lower jaw to the middle, that is the fork, of the tail.

only

- 6 All fish must be shown to Dr. Hamilton for examination before they are cleaned.

Note Permit holders are urged to accustom themselves to distinguish between the two quite different species of trout - they are likely to see.

H.C.S.

So far as the stock goes, the idea behind this proposal is to reduce overcrowding (overstocking) which is always a danger in small streams where the fish do well.

J. H. Hamilton.

16-ii-55

The fish which would be removed would <sup>of the class of</sup> not be those of which Mr. Cameron has written to you

as

No further work on this file?

T. S. 1/2  
1/12/55

6329

134

PUBLIC NOTICE.

Fishing in Moody Brook

As a result and in continuation of recent experiments it has been decided to issue two conditional permits to fish in Moody Brook for one day each per week up to the end of the current open season, March 31st.

Permits and details of the conditions may be obtained from Mr. J. Bound at the Secretariat during office hours.

Colonial Secretary's Office,  
Stanley.

17th February, 1955.

Copies: Dr. Hamilton  
Agricultural Officer  
Secretary, Angling & Shooting Club.

28. reminder  
18/2

ACS. KIV for me to mention to SUPERB. CC 16/2.

Issue 2

DECODE.

Original filed in I/171/54

156

TELEGRAM.

COPY

From The Colonial Secretary

To The Crown Agents

Despatched . 15th February, 19 55 Time :

Received : ..... 19 .. Time :

I/171/54  
Your letter G6/Falkland Islands 6638/1 of 20th January.

Please cancel order trout ova.

SECRETARY

P/L.

LJH

21/3/54  
(Kiv. season)  
24/7

Communications to be addressed to  
THE CROWN AGENTS  
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of his letter being quoted.



157.  
4, MILLBANK.

LONDON, S.W.1.

G6/ Falkland Island 6695

4th February, 1955.

TELEGR: { INLAND: "CROWN, SOWEST, LONDON."  
OVERSEA: "CROWN, LONDON."

TELEPI: ABBEY 7730.



Sir,

141 I am directed further to refer to your letter 0392/II dated 11th November, 1954, regarding the importation of salmon ova.

147 As reported in the letter which was addressed to you on the 25th January there was not any supply of ova to be obtained in this country before the end of the year and enquiries are, therefore, being made into the possibility of obtaining ova elsewhere.

On the advice of the Ministry of Agriculture & Fisheries it appears that the most likely source will be New Zealand and enquiries are being made in that country regarding the possible supply of ova during the spawning season in the middle of the year.

A further report will be sent to you when a reply is received from New Zealand.

I am, Sir,  
Your obedient servant,

*[Signature]*

The Colonial Secretary,  
FALKLAND ISLANDS.

As to see,  
2/7

Reply at 147

RGR/KE



Communications to be addressed to  
THE CROWN AGENTS  
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of this letter being quoted.



4, MILLBANK,

LONDON, S.W.1.

G6/Falkland Islands 6695

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."  
OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

4th March, 1955.

Sir,

141  
159  
I am directed further to refer to your letter 0392/II  
dated the 11th November, 1954, regarding the importation of  
salmon eggs. A copy is now enclosed of a letter which has been  
received from the Senior Research Officer of the New Zealand  
Marine Department regarding the supply of quinnat salmon eggs.  
With regard to the arrangements for despatch of the eggs, it  
should be possible to arrange for the air lines concerned to  
look after transshipment at San Francisco and re-icing as  
necessary along the route, provided the consignment is despatched  
on a through Bill of Lading. The air freight charges for the  
journey from Auckland to Montevideo are estimated as between  
£85 and £90 for a plywood box and between £75 and £80 for an  
aluminium box. It will be observed that if the eggs are to be  
supplied in May, it would be necessary for the order to be  
placed this month, and you are asked therefore to notify the  
Crown Agents by telegram in the event of your wishing a supply  
to be ordered from New Zealand.

I am, Sir,  
Your obedient servant,

*Wm*

To A.O. EARLY RE  
8/4

Reply at 162.

See 163

The Colonial Secretary,  
Port Stanley,  
Falkland Islands.



IN YOUR REPLY PLEASE  
M.1/6/6  
QUOTE THIS REFERENCE

MARINE DEPARTMENT

Fisheries Laboratory,  
27 Wingfield St.,  
WELLINGTON, N.Z.  
19th February, 1955.

F.T.K. Pentelow, Esq.,  
c/- Ministry of Agriculture and Fisheries,  
Whitehall Place,  
LONDON, S.W.1.

Dear Pentelow,

Many thanks for your letter of February 10th. It was pleasant to hear from you again after all these years. I have seen with interest many references to your activities in English publications.

I think we may be able to help you with regard to the supply of quinnat salmon eggs. These should be available about May, but it would be necessary for the order to be placed some time next month to make sure of the supply since little or no hatchery work is being done with this species now and the eggs would probably have to be taken specially.

We would have to get them from one of the Acclimatisation Societies which function here rather like your old Fishery Boards, but this Department would make the arrangement on your behalf.

As regards transport, I can think of nothing better than your suggestion of flying them to San Francisco and then south again to Montevideo. We would be able to arrange for them to be put on the plane here and if necessary for them to be re-iced at some stop en route. You would I assume be able to get somebody to look after them at San Francisco.

Although we have not actually arranged such a consignment, it happens that we did go into the question fairly thoroughly about a year ago for a suggested consignment to South Africa. It would be necessary to have special boxes made to contain the eggs. An estimate of the cost of a box to hold 35,000 eggs was then £15, in plywood, or £30 in aluminium. On the trip to South Africa the saving in weight on the aluminium box (24 lbs plywood, 12 lbs aluminium) would reduce the cost of freight by about £6. The price of salmon eggs at that time was 15/- a thousand. The total cost of a consignment of 35,000 eggs sent to South Africa would then have been between £70 and £80. For consignment to the Falkland Islands I imagine the freight would be a good deal more. To help you to get information on this, our estimate of the total weight of a box of 35,000 eggs, including eggs and ice, was 64 lbs for a plywood box or 52 lbs for an aluminium box.

The prospects for Atlantic salmon are not nearly so good despite the publicity they have received in the Salmon and Trout Magazine and other journals. They are restricted here to one river system in which they are apparently landlocked and rarely grow larger than about 6 lbs. No hatchery work has been done with them for many years, although it might be possible to arrange for some eggs to be taken for you. Unfortunately, the man with whom I would have to discuss them is out of Wellington for the rest of the month and I do not want to delay this reply. Even if eggs could be obtained I feel they might not be altogether desirable since there is the possibility that our landlocked race has become in some way genetically distinct from the usual migratory stock.

I know very little about conditions in the Falkland Islands, but in view of the history of the salmon here I could not feel too optimistic about the chances of a successful introduction. Quite vigorous and long-continued attempts were made to introduce Atlantic salmon in a number of rivers but it was only in the Waiau system that even limited success was achieved and here they are largely domi-

Contd.

by the rainbow trout which are of equal size and much more numerous. The quinnat salmon has been successful in a limited area. It was introduced in the Waitaki, a large river at the southern end of the east coast of the South Island: it quickly established itself there and spread north of its own accord almost to the other end of this strip of coast. Outside this area it has not become established, either through natural wanderings or by large scale liberation in some places. There is one very small stock on the West Coast of the South Island. In the area where it is established the initial spread was confined to a series of very large rapid snowfed rivers. Smaller and more stable streams entering the sea between these big rivers were passed over at the time. In later years there has been a tendency for the salmon to occupy the smaller rivers and this is probably still going on. I rather wonder, however, whether they would have become established in the first place if the large snowfed rivers had not been there for them.

There is a very good paper on the distribution of the Pacific salmon by Davidson and Hutchinson:-


"The Geographic Distribution and Environmental Limitations of the Pacific Salmon (Genus *Oncorhynchus*)."  
By Frederick A. Davidson and Samuel J. Hutchinson,

from Bulletin of the Bureau of Fisheries, Volume XLVIII, Department of Commerce, U.S.A. - Bulletin No. 26, 1938.

I hope this information will be of help to you and I am sure that if officially approached the Department would be prepared to arrange the collection and shipment of salmon eggs for you. An official letter should be addressed to the Secretary, Marine Department, P.O.Box 2395, Wellington, C.I..

With best wishes,

Yours sincerely,

  
(K.R. ALLEN)  
Senior Research Officer.

A.O.

(157)

161

I understand that you now recommend that the £100 for Mont ova be devoted for salmon ova particularly as Mr Hamilton states that we have sufficient trout. This is at variance with his ~~recommendation~~ recommendation 1) on (133) but no doubt he has changed his mind in the light of later investigations.

- 2) I approve the £100 being used for salmon ova and will mention to S.C.  
Would you now please take over the correspondence.

Yes: certainly.

E. J. F. A/O.

24/3/55.

2313

162

Agricultural Office,  
Port Stanley,  
Falkland Islands.  
6th April, 1955.

Dear Sirs,

Importation of Salmon Ova.

158 I have to acknowledge receipt of your letter No. 66/Falkland Islands 6695 of the 4th March, 1955, and to inform you that it has now been decided to obtain a trial consignment of Salmon Ova from the Ulbster Estate Office, Thurso, this year.

2. The address of the suppliers in New Zealand, has been noted for future reference.

Yours faithfully,

EDWARD T. FERN

Agricultural Officer.

The Crown Agents for the Colonies,  
4, Millbank,  
London, S.W.1.

Reply at 164

See 165

163  
Agricultural Department,  
Port Stanley,  
Falkland Islands.  
24th June, 1955.

Sirs,

Salmon Ova.

158  
I/233/2  
With reference to your letter  
G6/Falkland Islands 6695, I am ordering  
under separate indent 15,000 Salmon Ova  
to be despatched by the end of 1955.

I understand that these will be  
ordered from The Superintendent, Braal  
Hatcheries, Braal Avenue, Halkirk,  
Caithness.

I would be grateful if every  
facility could be extended to the sup-  
pliers to dispatch by air to connect  
"Fitzroy" at Montevideo.

Exact date of "Fitzroy's" depar-  
ture from Montevideo is not yet known  
but provisional dates are 10th Dec.  
1955 and 5th Jan. 1956, and confirmation  
of these dates will be telegraphed  
to you.

Yours faithfully,

EDWARD T. FERN M.R.C.V.S.

Agricultural Officer.

The Crown Agents for the Colonies,  
4. Millbank,  
London.S.W.1.

↑  
First fold here  
↓

17  
Communications to be addressed to  
THE CROWN AGENTS  
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of this letter being quoted.



164  
4, MILLBANK

LONDON, S.W.1.

G6/ Falkland Islands 6695

2nd June, 1955.

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."  
OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

162  
Sir,

I am directed to refer to your letter dated 6th April about the importation of Salmon Ova and to advise that Mr. Wm. Macbeath, Ulbster Estates Office, Thurso, has been asked whether he is prepared to accept a provisional order for a quantity of up to 10,000 eggs.

It would be appreciated if you would confirm that this is the quantity in which you are interested and state whether a formal indent for the supply of these eggs will be forwarded.

Your early advise on this point would be of assistance.

I am, Sir,

Your obedient servant,

The Agricultural Officer,  
PORT STANLEY,  
Falkland Islands.

IRMT/KE

- advise sent air mail  
covering indent



Communications to be addressed to  
THE CROWN AGENTS  
OVERSEA GOVERNMENTS AND ADMINISTRATIONS  
the following reference and the date  
of this letter being quoted.



165  
4, MILLBANK,  
LONDON, S.W.1.

G6/Falkland Islands 6695

21st June, 1955.

TELEGRAMS { INLAND: "CROWN SOWEST LONDON."  
OVERSEAS: "CROWN, LONDON."  
TELEPHONE: ABBEY 7730.

Sir,

162  
164  
With reference to your letter of the 6th. April and the Crown Agents' reply dated the 2nd. June. I am directed to advise that Braal Hatcheries have now agreed to accept an order for 10,000 Salmon Eggs. As already indicated the price will be £2 10s. 0d. per thousand, plus cost of a special container and air freight charges to Monte Video.

In order that a firm contract can be issued to Braal Hatcheries, will you please confirm that the quantity required is in fact 10,000 eggs.

I am, Sir,  
Your obedient servant,

*Lb. Mason*

The Agricultural Officer,  
Port Stanley,  
Falkland Islands.

*15,000 ordered.*

IRMT/DJR

168  
166

The Surrey Trout Farm,  
Haslemere, Surrey.

Dear Sir,

July 7th 1955.

Late this coming September I am attending the annual dinner of the Cobbinshaw Angling Society, one of the foremost fly fishing clubs in Edinburgh.

For many years I have supplied them with yearling and two-year-old Brown trout to their Cobbinshaw loch of several hundred acres, in the Pentland Hills, some 20 miles south of Edinburgh. In return I receive freshly spawned eggs taken from their large fish by netting, as such come inshore for spawning. We get excellent results from such hardy stock, entirely wild fed, and the fry are tough and do well.

These eggs we have sent out to the Falklands on several occasions since the war, (as also to Kenya, Kashmir etc.)

I have mentioned this to Cobbinshaw members whom I have met when taking trout to the loch and they expressed great interest, particularly since, as I gather, there are many of Scottish descent in the islands.

I know that the members would be delighted to hear more of what happens to the Cobbinshaw eggs after arrival.

If you could possibly spare the time to give me any idea of the difficulties and trials which your operators have to go through, getting the produce to "stocking stage", eg. hatchery set up, water supply, food, natural enemies; and finally the transport cross country for stocking, and very roughly the type of waters which are stocked etc. I would be most grateful, and I know it would be of great interest. In the form of short disjointed notes would be quite sufficient.

I do not know whether the Crown Agents were ever able to send you out any Salmon eggs last winter. It would have been very difficult to provide a batch at the right incubation to fit in with the variations in s.s. Fitzroy's itinerary!

My apologies for worrying you, but it is in a good cause!

The Agricultural Officer,  
Agricultural Department,  
Port Stanley,  
Falkland Islands.

Yours truly,

*D.F. Leney*  
D.F. Leney.

Reply at 167

Stanley  
Balkland Islands  
South Atlantic  
August 17th. 1955

149  
167

Dear Leney,

It may be a surprise to you to see the signature at the end of this letter which is a reply, at his request, to your letter to the Agricultural Officer, dated July 7th.

I have been asked to answer since I designed the hatchery and started the hatching and distribution of fry. I never made any attempt to keep fish beyond that stage, since, as you said, that is when real difficulties start.

The hatchery is built on the bank of a small stream which has the character of a mountain stream and is liable to occasional flooding, but it was all we could use.

The pH of the water varies from about 4.5 in floods to almost neutral in dry weather, but it is always on the acid side. In floods a little rubbish and a good deal of suspended mud come down; we have no trees.

One difficulty was to find place for the dam and the hatchery with sufficient fall between them and in the end we had to put the outlet pipe only a couple of inches below the sill of the dam. To it was attached a rubbish guard in the form of a box-like triangular box which has proved satisfactory. The pipe line (3") is say 200 yards long and enclosed in a wooden casing filled with dried pieces of one of our heath-like plants, the purpose being protection from frost. The pipe empties into a wooden box inside the hatchery where some at least of the sediment is deposited.

The hatchery building is about 20 x 12 feet, concrete floor and concrete walls for 2' 6", then wood, sloped roof and three rather large windows facing S.E. away from the sun.

The water runs through three troughs in each of which are <sup>six</sup> ~~three~~ trays with wooden sides and zinc bottoms which curve up to make the ends; the result is rather boat-shaped in side-view.

The troughs are of three different heights to give a few inches fall from one to another and there are splash boards on to which the water ~~xxxxxx~~ falls and it spreads on them, the idea being to improve aeration. Each trough has lid and everything is dressed with asphalt varnish.

The arrangement works pretty well except that the zinc has to be renewed, sometimes each season, as it dissolves in the acid water.

Floods are a trial and a few have been much worse than was expected. After 1" in one night the lowest trough was flooded out and ~~was~~ went afloat in the hatchery. Fortunately the fry in it were almost ready for liberation since they all got out and most went down the drain into the stream; the short section there must have been rather heavily stocked.

Another crab was the very heavy death rate among ova and new-hatched fish and it was, I consider, due to the ~~xxxxxx~~ prolonged journey. A liberation of 30% would be quite good. Since the eggs do not all hatch simultaneously hand feeding was necessary until all the fry were ready to put out and the only available food is sheep liver which was used raw. It was rubbed through a fine zinc strainer to remove the stringy tissues and then washed until it resembled very fine oatmeal and did not make a cloud in the water. The fry took this liver readily and ~~thove~~ <sup>throve</sup> on it. When they were turned out they sometimes began fading at once so the liver had not undermined their independence.

For distribution a churn was used and transport has included lorry, jeep, Bren-gun carrier and pack-horse. All except the jeep were quite satisfactory. The carrier seemed to be very good, that batch travelled over twelve miles across rough country and were quite spry when liberated; the water was refreshed once. Since I retired in 1949 fry have been distributed almost exclusively by air (we have a small plane). There have been some catastrophes due, I think to the use of too small a container and inadequate briefing.

The streams here are nearly all of the moorland type but some are large enough to be described as rivers. All are liable to heavy flooding. The banks are usually devoid of cover for the angler since we ~~hav~~ <sup>have</sup> have no bushes to speak of and no trees at all. There seems to be plenty of natural food, caddises, chironomid larvae and a variety of small two-winged flies may be mentioned and there are plenty of amphipods which live in the moss at the bottom of the water.

The success of the enterprise is a little difficult to assess as a whole. Fry have been put into waters and nothing heard of them since,

Reply at 171

470 168  
sometimes too few fish into too much water I would think. Besides, people are not usually possessed of the patience required to enable them to see fish. I can speak best of the streams where I put in fry myself. The hatchery stream, about 7 miles long, the Murrell River, about 14 and three others, two small and the third a tributary of a good little river the Arroyo Hato. There are no natural enemies that I know of. In the hatchery stream and the Murrell the trout have established themselves and bred almost too well. There are plenty of them but fish over half a pound are seldom caught, what we need are a few active pike although I am pleased to find that even the half pounders do a little to keep down the stock. The larger fish are usually rather slender with large heads, but the little chaps seem to be good enough fish for their size. In the Arroyo Hato tributary I hear of good sized fish jumping and two or three have been caught, there is also a report of trout in the A.H. itself.

One was taken in a net in the Murrell estuary, salt or brackish water; 2½ lbs a beautiful, fat, golden fish. I wish more of them would go down and then perhaps some of them would turn into sea-trout (if it does really happen)

The largest of all was taken on a fly last summer, 4½ lbs and the captor was sure it had not been to salt water; I was not so certain, the distance being negligible. That fish could not possibly have been more than 5 yrs. 4 mos. out of the egg. The man has done a lot of angling at home; he never thought of keeping some scales.

There are still good streams which are not stocked, including a river or two.

I have written this without a notebook, from memory but I think you can rely on it.

There are not nearly so many of Scottish descent here as is popularly believed.

With kind regards yours sincerely,  
J.E.D.

P.S. I have put forward the ideas that small fish might be netted out and distributed and also that it would be well worth while to try to get salmon ova. There are more frequent trips to Monte Video in (our) summer than ~~xxxxxxx~~ spring so I think it ought to be possible to arrange something. There is all the food a fish could want in the sea including a small pilchard

D.F. Leney Esq.  
The Surrey Trout Farm  
Haslemere  
Surrey, England

Stanley.  
15th August 1955 1109

Reference : Fishing in Moody Brook.

Dear John,

18/8  
Correct  
Step  
September 1st is the start of the open season for Trout Fishing, reading the Public Notice with regard to fishing Moody Brook, I understand the concession was for the season ending March 31st 1955.

I would be gratefull if you could get a ruling on the above matter has I know a number of local fishing enthusiasts are talking of giving Moody Brook a try once this season opens, many thanks,

Yours Sincerely.

Ad. the file, pl.

15/8

J Morris.

ACS  
A.O. holds this file as ~~its~~ his own Departmental file now.

15/8/55.

170

20. Reverse.

Mr. Morris (Chairman of the Stoney  
Fishing & Shooting Club) is correct  
in his para. 1.

2. Is it intended to extend  
the concession for the forthcoming  
open season?

Q

17.8.

Yes: concession to be renewed - but not to  
commence until 1<sup>st</sup> Nov. 1955.

570.

A/p

30/8/55.

mm

We are keeping  
file here 28/10/1  
(above number)  
4 11/10

Retained from  
As. Dept. on 18/1/56  
PAP



171

P U B L I C       N O T I C E .

Certain streams in the Stanley area are considered to be overstocked with trout and it is hereby notified that holders of licences may now take trout from Moody Valley Brook for the remainder of the open season.

Rod and line only may be used and no trout taken may be less than 5" in length.

This temporary measure also applies to the Murrell River.

Colonial Secretary's Office,

Stanley

13th January, 1956.

174  
Y. E.

Mr. Cameron (C. C.) called & requested that Y. E. may consider extending to Trout Fishing Season from 31<sup>st</sup> March to 30<sup>th</sup> April this year on the grounds that the streams are still overstocked. Mr. Cameron has discussed the matter with Dr. Hamilton & the Chairman of the Stanley Angling & Shooting Club. & they both agree that no harm would be done if the season was extended.

2. R.S.C. is happy that Y. E. has the power to do this under the last sentence of Sect. 12 of the Fisheries Regs. (at G.C.) as we did when 171 was issued.

3. Would Y. E. agree pl?

Q.  
10/4.

AMM  
Dmt  
11

PUBLIC NOTICE

It is hereby notified that the fishing season for imported trout has been extended to the 30th April, this year.

This is a temporary measure and applies to 1956 only.

Colonial Secretary's Office,  
Stanley,

11th April, 1956.

JB/VM ✓

Copy to: Chairman, Stanley Angling and  
Shooting Club.

BROADCAST TO STANLEY AND THE CAMP PL.

H.C.S.

Is it the intention to import more  
Salmon ova this year; if so we should  
start considering soon.

J.R.M.  
12/4/56

Ref to a.s. - also 172 & 173 f.r.

Q.  
2/4.

A.O.

172 & 173 for information.

Salmon Ova - is the experiment  
to continue this year pl?

J.R.M.  
f.r.c. 12/4/56

H.C.S.

Yes - a further batch of 10,000 Salmon Ova  
will be ordered, shortly.

E.T.F.  
H.C. 23/4/56.



0329/III 17



DEPARTMENT OF AGRICULTURE.

16th August 1956. 19.....

STANLEY, FALKLAND ISLANDS.

The Hon. The Colonial Secretary.  
STANLEY.

FISH : INTRODUCTION INTO STREAMS IN THE FALKLANDS.

Until such time as air freight charges are reduced, and cold storage facilities are available, in ships coming to the Falkland Islands, I do not think the expense, and the risk, of importing salmon ova is justified.

2. Meanwhile, I submit that something should be done towards the introduction of trout into other streams in these islands. The Moody Brook is reputed to be overstocked with trout, and it is proposed to "net" some of these, and to send consignments by air, to various farms in the East and West Falklands, from whom several requests for young trout have already been received.

3. For this purpose a  $\frac{1}{2}$ " mesh net is required, and I shall be grateful if you will be good enough to authorise the purchase of this as a charge under Vote 2 subhead 17 ? The estimated cost of a suitable net is £20. I should like to order this as soon as possible.

*Edward. S. Fern*  
AGRICULTURAL OFFICER.

*A.C.S.*

*Please advise A.C. that the net may be ordered and charged to Sub-head 17. (I have discussed with the Auditor who considers it a reasonable charge)*

*Reply at 17*

*E.S.F.*  
22.8.56

25th August,

56.

To: The Agricultural Officer,

From: Acting Colonial Secretary,

STANLEY.Purchase of Fish Net.

175.

I am directed to refer to your minute of the 16th August, 1956, in connection with the purchase of a  $\frac{1}{2}$ " mesh net and to convey approval for the purchase of this net charging subhead 17.

(Sgd) L.R. Morrison.

for ACTING COLONIAL SECRETARY.

TMM/MF Copies to: Treasury, Audit.

PAH

0392.

From. The Chairman,  
Stanley Angling and  
Shooting Club.  
15th March, 1957.

To;

The Hon.

The Colonial Secretary,  
Port Stanley.

Sir,

Reference: Extension Open Season for  
Trout.

I have been approached by Club members and some of the general public, asking me to make an application to the Government for an extension to the Open Season for Trout Fishing,.

Last year the season was extended for 1 month, (till April 30th.) to reduce the number of small fish that were overcrowding the streams.

Owing to the very dry period of weather, the streams have been very low and unfishable, and the number of fish taken from them not enough to keep overcrowding down.

I have spoken to Dr Hamilton on this matter, he is also of the opinion that the streams should be harder fished, so that the only way this can be done is for the few people who do fish to have a longer period to fish.

40  
\$ This extension should only be yearly, and if at any time it is noticed that the numbers are falling, the the original period (31st August - 31st March) as laid down in the Fisheries Regulations, 1952. para. 2.

Trusting this will receive your usual kind consideration.

I am Sir,

Your obedient Servant.

J. C. B. P.

18/3

J. H. M.

Chairman  
Reply at 179.



178  
Y. H.

Reverse.

I've did this last year - pl. see  
172 - 173. "

Y. H. will agree to a similar connection  
this year?

$\frac{0}{20\%}$

HCS/

I am certainly not happy about the Department's  
interpretation of the last sentence of Regulation 12!?!  
- but I approve the proposal.

CH/T

20.3.57.

21st March

57

177  
Sir,

I am directed to refer to your letter of 15th March, regarding the open season for trout fishing and to inform you that His Honour has approved the extension of the season to 30th April, 1957.


2. This is a temporary measure and will be subject to review annually.

140  
3. A copy of a Public Notice which will issue today is attached for information.

I am,

Sir,

Your obedient servant,

  
ACTING COLONIAL SECRETARY.

Chairman,  
Stanley Angling & Shooting Club,  
Stanley.

JB/FBR.

PUBLIC NOTICE.

180

It is hereby notified that the fishing season for imported trout has been extended to the 30th April this year.

This concession applies to 1957 <sup>and</sup> only / must not be regarded as permanent.

Colonial Secretary's Office,  
Stanley.

21st March, 1957.

JB/MT

Rec. 7/3/58.  
22/3

See 179.

It is requested that, in any reference to this memorandum the above number and date should be quoted.



## MEMORANDUM.

11th. April 1957

To; The Hon. The Colonial Secretary

From; Agricultural Officer

Stanley

Stanley, Falkland Islands.

SUBJECT:- TROUT: MOODY VALLEY DAM AND STREAM

On the 10th. April the staff of this department endeavoured to "net" some small trout from the Moody Valley, for dispatch to Port San Carlos.

The Assistant Colonial Secretary had been previously notified of this intention. Sergt. Norris was invited, but unfortunately, was unable to be present.

2. On arrival at the Valley, it was found that the exit pipe from the Dam had been left open. All that remained was an isolated pool, some twenty feet square, and mud. There was no fish in the pool, which was about eighteen inches at its deepest point. The actual stream for a distance of about a quarter of a mile, had been reduced to a mere trickle, a few inches deep. It contained no fish.

3. The following day I inspected the dam and stream, only to find that the heavy rain overnight had caused a flood; the stream and dam were filled to overflowing. The water was cascading over the wall.

4. Whether the operations of the Civil Engineer's department have necessitated the emptying of the dam I cannot say. It may well be that the exit pipe has now been re-closed.

5. Whatever has happened, I am afraid the possibility of supplying trout from this dam and stream for farms streams, is now very remote.

Meanwhile, a report of a quantity of trout off the Public Jetty in Stanley Harbour, has already been received.

*Edward J. Leon*

Agricultural Officer

C. E.

for your comments.

R. 12/4

Atty. C.S.

All work being done at the Trout Hatchery Dam is of the utmost importance and necessitates completely draining the dam of water. No water was released from the dam without H. G. Dept first being informed and their personnel were present. May be this proves there were no fish in the immediate vicinity of the dam. A fish pass could be constructed if the was labour + money available. to allow fish to pass upstream. *nm*

18/4

A.O.

for your information

R. 17/4

P.T.O.

182.

H.C.S.

I think prolonged argument in this matter will serve no useful purpose. There appears to have been some misunderstanding somewhere. Perhaps this was on my part, because I got the impression that the water was to be lowered two feet only — in the first instance. My staff were present when the bung was removed, but not throughout the whole draining process.

A second attempt to drag the pool with the net, has been made, but there are too many stones on the bottom to make a success of the operation. I have neither labour nor money to construct a fish pass. I am bold enough to suggest that this might be included in the "water-scheme operations".

E.T.F. A/O.

24/4/57.

C.E.

183

What would be the cost of a fish pass?

H.C.S.

184

Q. 25/4

Could be £50 - £200 depending on what was required

J.H. 7/6/5

185

Chief Constable's Office.  
Port Stanley.  
28th. May, 1957.

To:-

The Hon. Colonial Secretary,  
Secretariat.

Sir,

IMPORTED TROUT.  
=====

I respectfully report that during the week-end 25th-27th. May, 1957, imported trout were caught in nets by local fishermen who were fishing for mullet.

One was caught at the top of the harbour, and a considerable amount were caught off the clam bank in Mullet Creek.

Whilst it is unavoidable for these persons to catch trout when fishing for mullet, it is very distressing that these trout were not returned after having been netted.

The person who caught the trout at the top of the harbour, when told that he should have returned it to the water, stated that he was under the impression the fish would not have lived.

The other person who caught his in Mullet Creek, stated that he mistook the trout for a class of cod, as he did not think there would be any trout where he was netting.

According to the information given to me by these persons, these trout were about to spawn, one of them actually having done so in the net, owing to having having been agitated by the other fish.

Judging by these reports, it appears to me that the "closed season" dates are not fixed for the proper time of the year, and should be amended to 30th. April till 30th. September.

I have personally caught trout at the commencement of the "open season" at present in force, and am of the opinion that the fish were then still "unclean" and had not yet sufficiently recovered from spawning.

I am convinced that the season opens and closes too early, and respectfully request that serious thought be given to amending the Regulations to the dates already quoted.

I also respectfully request that a Government notice be broadcast over the local network to both Port Stanley and the Camp, to the effect that all trout caught in nets by persons fishing for mullet or smelt, must be returned to the water immediately, quoting Sec. 9 (1)(c) ~~and Section 9(c)~~ Fisheries Regulations, 1952, which read as follows:-

No person shall take or attempt to take trout with any net in any estuary.

I am Sir,  
Your obedient Servant,

*J. Morris.*

Chairman,  
Stanley Angling & Shooting Club.

*C. J. B.*

*1/1/57*

*4.5.57*

KIV 184

Reply at 189

186

H.C.S.

On a first move, please ask Sgt Morris  
to draft a suitable appeal to the public for  
broadcasting.

Then please note for next week. H.C.S.  
Should be asked to comment.

✓ 18 Feb  
S. 12/6/57

G. J. F. F.

187 12.6.57

Sgt. Morris

Notice, suggested notice attached.

JH/PJH  
14/6/57

Ad.

Accy. R.

S. 2/6

H.C.S.

188

I think Sgt Morris's suggestion that the closed  
season be 30<sup>th</sup> April to 30<sup>th</sup> September is a good one.  
I have collaborated with him, in the  
drafting of the above-mentioned public notice  
for broadcasting.

S. J. F. R/P. 14/6/57.

ac 60



0392/II

20th June,

57.

Sir,

185 I am directed to refer to your letter of the 28th May, 1957, which refers to imported trout being caught in nets of local fishermen who were fishing for mullet.

2. Mr. Norman Cameron has expressed the view that there is possibly serious overcrowding of the streams and that in such circumstances the taking of trout by net in any estuary might do more good than harm.

3. It is suggested that you might consider discussing this problem with Mr. Norman Cameron the next time he is in Stanley, together with the point you raise in connection with the opening and closing dates of the fishing season. The matter could then again be raised with Government, and it is suggested representatives of your club might discuss the matter personally with the Colonial Secretary.

4. A copy of this letter is being sent to the Agricultural Officer for his comments.

I am,

Sir,

Your obedient servant,

(Sgd.) A. G. Denton Thompson.

COLONIAL SECRETARY.

The Chairman,  
Stanley Angling & Shooting Club,  
STANLEY.

AGWT/EC

Copy to: The Agricultural Officer.

524/8  
28/7  
12/4  
Bel  
d  
8/11

2nd September, 1957.

D/O

185 I am passing to you a copy of a letter we received from the Chairman of the Stanley Angling & Shooting Club about the trout fishing season together with a copy of my reply.

I understand that Morris did not in fact discuss the matter with you or if he did nothing appears to have transpired.

I am sorry to worry you with this little matter but you are the obvious person to advise us and I should be very glad for your comments on the suggestions put forward by Morris in his letter.

A.G.D.T.

N. Cameron, Esq., O.B.E., J.P.,  
Port San Carlos.

AGDT/MC

191

A.C.S.

No alteration in the Fishing Season until we hear further from Norman Cameron when the matter can again be considered.

30.8.57.

192

Notes - Mr. Constable has kindly agreed to take on the issue of licences in the absence of a Secretary of the S.A. & S. Club

3/9

SOP.

191

## Trout Hatchery

I visited the trout hatchery in company with O.C. Ag. Dept. & the dam from which its water supply flows (or did flow) with B.C. My conclusions are as follows:-

### The Hatchery.

This building, on cement foundation & of timber construction, is about 12' x 24' measurement. The roof is tarred felt & there is considerable evidence of leakage - the first step is a new roof - corrugated iron is recommended. Internally - a good scrub up is indicated. The fish troughs appear to be in good order but the fish trays all require new bottoms.

### The Water Supply.

This consists of a pipeline (3" piping approx.) about 300 - 400 yards long. It appears to be in a poor state & will require stripping & a thorough examination before use. I suspect this will reveal corrosion & possibly renewal of many lengths of pipe. <sup>will be necessary</sup> O.C. Ag. Dept. tells me that it was out of use for a couple of years prior to the importation of the ill-fated salmon or earlier this year. On being put into use on this occasion only a trickle of water made its way to the hatchery & the control tap had to be removed to allow barely sufficient water to flow.

This water was polluted with rust and dirt.  
The pipeline is connected to a dam across  
the Moray Brook - the connection is near  
the top of the dam presumably to obtain  
a gravity flow. At present however the dam  
is drained & it is not possible to say  
whether the dam will fill sufficiently to  
allow a continuous flow to the hatchery.  
The E/E hopes to stop up the dam  
again within a month & if the stream  
remains as low as it is now we  
~~would~~ be in a better position to ascertain  
whether a continuous supply will be  
possible from the present connection. In  
the meantime I suggest we await the  
result of E/E's stopping up operation.

  
3/9.

Y.E

ACS' minute 191.

I asked him to go into this matter before we arranged finally for the ova to come out.

Apart from the fact that the hatchery needs a fair amount of work done to it (which could be done easily enough), I am ~~worried~~ about the likely effects of the filtration plant project as this will pump its supply from the dam above the hatchery - the same dam in fact that supplies the hatchery. My own guess is that heavy pumping from the dam may well affect the supply to the hatchery and we may have difficulty in maintaining the ova and fry for the maximum period of three months which, I gather, we must budget for.

If you have no strong objections I should prefer to do a trial run this year (once the dam, now opened up, has been blocked up again & and once pumping has started.) and see whether or not we are going to have to move the hatchery to another site or alternatively whether and what modifications are needed. All going well or if we can make alternative arrangements to we can bring the ova out next year.

R.H.J.1  
4.9.57.

193.

HCS

This is disappointing, but I am sure the course you propose is the right one.

RA 12.9.57

194

B. U. in one month.

B.H.J.1  
12.9.57.

Bu. 12/4/57.

J.H.1.1.



TELEGRAPHIC ADDRESS:  
"CARLOS, PORTSTANLEY"

*Port San Carlos,  
Falkland Islands, I.A.*

September 14th 1957

Dear D-T,

The present fishery regulations are more or less in line with suggestions that Erik Hamilton and myself were invited to put to Sir Miles Clifford in 1954.

The success or otherwise of the introduction of brown trout was then a matter for conjecture and the regulations were framed primarily with the object of protecting the trout and ensuring that they were given a fair chance to establish themselves. It was pointed out that the regulations would require to be reviewed in the light of experience.

What we now know six years later is that the experiment has proved successful beyond the imagination of anyone, that the conditions governing the original regulations no longer obtain and that the time has come perhaps to amend them.

When doing so there are one or two points that should be borne in mind. Whereas in the U.K. too many anglers are chasing too few trout and the regulations must be framed accordingly, the position here is precisely the opposite and so far as I know into every water into which they have been introduced, the trout population is in excess of available food largely for want of anglers to correct the balance. Such appears to be the case even in the Stanley area where at least a few keen fishermen are to be found, and outside of Stanley anglers for brown trout are virtually non-existent. In time of course more and more people will acquire the interest, the right tackle and the little bit of know-how and take to the sport but certainly so far as the camp is concerned there are never likely to be sufficient anglers to keep the trout population under control.

There is a further point. Norris is correct in saying that in September fish are not in good condition as they haven't recovered from the effects of winter and spawning, but that is not true of estuary fish which get unlimited food from the salt water. This day a year ago I caught several lovely trout in perfect condition from the estuary of the Malo and it would make little sense to prohibit the taking of them there because the fish higher up were not yet in their prime. In this country where there is a dearth of outdoor recreation and a surplus of trout it would seem reasonable to allow trout fishing for as many months as possible during the year, that is from September 1st to April 30th. In all those months there are days when it is a pleasure to be on the banks of a river, and if as will sometimes happen a fish is caught too poor for the frying pan, well a sensible man just returns it to the river.

*On f.h.  
C.B.H.  
21. 9. 57*

I am not sure how responsible an organisation the Angling and Shooting Club is, but probably it has responsible members belonging to it and it would be all for the good if they took a genuine interest in safeguarding the brown trout in the waters around Stanley and acted as unofficial water bailiffs, certainly their views should be consulted before any change is made in the regulations.

Restrictions on numbers and size no longer serve a useful purpose but I would not be in favour of legalising the netting of trout since two men with a net might well ruin the sport of a dozen anglers with rod and line and these are the people that we want to encourage. Around Stanley the regulations will have to be reviewed every few years since the proportion of anglers to trout will not be constant and the ways in which the trout may yet develop are quite unpredictable.

Yours sincerely  
Norman C. 10.



197.

Recs.

Who has taken over from Morris as Secretary of the Club - and  
is the club alive or dead?

B.H.P.  
12/10/57.

198

198

Morris was Chairman & no one has taken over  
from him. The Secretary (S.A. Booth) resigned  
some time ago. I am afraid the Club  
is dead or at least has been inactive  
for the past three years. Mr. Morris  
has sent the Club records over to me  
before he left.

B.H.P.  
12/10/57.

199

Regulation.

Could we please have an amending Regulation  
changing the season from the 31<sup>st</sup> September to the 31<sup>st</sup> March  
to the following dates

1<sup>st</sup> September - 30<sup>th</sup> April.

B.H.P.  
18/10/57.

18/10/57

D/O

Thank you very much for your letter of the 14th September about the Fisheries Regulations. I am sorry I have been so long in replying.

198.

I entirely agree with the various points you make and think also the obvious move is to extend the fishing season by the additional month. We shall probably be taking amending regulations to the next meeting of Executive Council.

One of our snags is that the Angling and Shooting Club seems to have folded up for the same reason that so many other organizations folded up or nearly did so - lack of people to take on the administrative and organizing jobs. There has, however, been a spurt of keenness this year and we may be able to get it going again.



The Hon. Mr. N.K. Cameron, O.B.E., J.P.  
PORT SAN CARLOS.

AGDT/SJA

201.

A.C.S.

1. Please note for next Ex. Mem. and then pass to Registrar to draft a short amending Reg.
2. Memo at b.c. can then be typed for submission to H.E.

B.G.P.  
18/10/57.

202.

R.S.E.

I. draft a short amending Reg. re.

203 <sup>Q</sup> 5/11

Hon. Col. Sec.

Attached draft amending Regs. submitted, please.

Licences are granted for only the waters specified in the Schedule and I feel the Schedule should be extended to include such waters as the San Carlos River for it is a well known fact that "imported" trout are being fished for in such waters.

SP. B.  
6.xii.57.

204.

Registrar.

Surely you are mistaken - see Regulation 3(2) ?

205

Hon. Col. Sec. <sup>11/11/57</sup>

I am mistaken. My apologies.

B.G.P.  
10/12/57.

SP. B.  
11.xii.57.

206

B.G. Re. type Ex. Memo. (at b.c.) in draft

B.  
17/12

Ref: 0392/II

20th December, 1957.

MEMORANDUM NO. 52 FOR EXECUTIVE COUNCIL.Trout Fishing.

The Fisheries Regulations, 1952 provide for an open season for trout fishing between the 31st August and 1st day of April following.

2. The Chairman of the Stanley Angling and Shooting Club recently expressed the opinion that the trout fishing season opens and closes too early and suggested that the season should run from 1st October to the end of April. He based his suggestion on the fact that a number of fish about to spawn or insufficiently recovered from spawning had been caught during September.

3. Mr. Norman Cameron has been consulted and has expressed the view that the opening date should remain the 1st September but that the season should be extended from the end of March by one month to the end of April (which is invariably done in any event by the exercise of the Governor's discretionary powers under Regulation 12). He contends that estuary fish are in a satisfactory condition in September and that there would seem little sense in prohibiting fishing during that month because the fish higher up the river are not yet in their prime.

4. It is suggested for the consideration of Honourable Members that Mr. Cameron's advice should be accepted and that the appended amending Regulations, which formally extend the fishing season by an additional month, should be made.

*A. C. [Signature]*  
COLONIAL SECRETARY.

## THE FISHERIES ORDINANCE (Cap 27)

REGULATIONS  
(under Section 3 of the Ordinance).

No.

Governor.

Cap. 27. His Excellency the Governor in exercise of the powers vested in him by Section 3 of the Fisheries Ordinance, is pleased, by and with the advice of the Executive Council, to make the following Regulations:-

Short title. 1. These Regulations may be cited as the Fisheries (Amendment) Regulations, 1958, and shall be read as one with the Fisheries Regulations, 1952, hereinafter referred to as the principal Regulations.

Amendment of Regulation 2 of the principal Regulations. 2. In Regulation 2 of the principal Regulations the interpretation of "open season" is amended by substituting the word "May" for the word "April".

Made by the Governor-in-Council on the \_\_\_\_\_ day of \_\_\_\_\_, 1958.

Clerk of the Executive Council.


1870  
ACT FROM MINUTES OF MEETING OF MEMBERS OF EXECUTIVE COUNCIL HELD ON  
23rd & 24th JANUARY, 1958.

.....

5. FISHERIES REGULATIONS (Memo. No. 52).

Council advised that the Fisheries (Amendment)  
Regulations, 1958, should be made.

.....

211  
  
Clerk of Executive Council.

211  
Dain Lees fl.

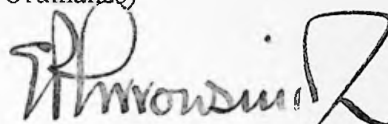
8  
5/2/58

212  
Not copy sent to H.S.  
213  
Bu. J. J. copy 8. 6/2  
DR 6/2/58  
Bu. J. J. 24

# The Fisheries Ordinance Cap. 27

## REGULATIONS

(under section 3 of the Ordinance)



Governor.

No. 1 of 1958.

His Excellency the Governor in exercise of the powers vested in him by section 3 of the Fisheries Ordinance, is pleased, by and with the advice of the Executive Council to make the following Regulations:—

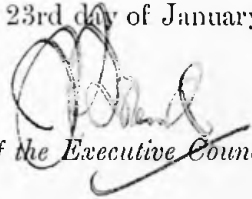
1. These Regulations may be cited as the Fisheries (Amendment) Regulations, 1958, and shall be read as one with the Fisheries Regulations, 1952, hereinafter referred to as the principal Regulations.

Cap. 27.

2. In regulation 2 of the principal Regulations the interpretation of "open season" is amended by substituting the word "May" for the word "April".

Short title.

Made by the Governor in Council on the 23rd day of January, 1958.



Clerk of the Executive Council.

Ref: 0392/II.

215

Draft a P.M. explaining the effect of zone, p.

17.3.58.

216

ACS  
Draft P.M. Rfc 17/3/58

P U B L I C   N O T I C E .

Trout Fishing

It is hereby notified for general information that the Fisheries Regulations 1952 have been amended and the open season now is from the 31st August to the 1st May.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

18th March, 1958.

MC

Copy to: The Chief Constable.



218.  
F. I. ref: 0392/II

C. O. ref:

• SAVING TELEGRAM.

*From:* The Officer Administering the Government of the Falkland Islands.

*To:* The Secretary of State for the Colonies.

*Date:* 18th March, 1958.

No. 49. SAVING. COLONY

Legislation.

214 Enclosed herewith are 6 copies of Regulation No.1 of  
1958.

GOVERNOR.

MC

RG  
24/3/58

X.H.

219

We discussed the possibility of closing the Murrell Stream to fishing during the open season for conservation purposes. According to Mr. A. Carey who I regard as one of the more responsible anglers, many of the trout taken from the stream are unclean within the meaning of the Fisheries Regs. as back cover. This in effect means that the fish are being disturbed during spawning - & Carey estimates that some 400 mature fish have been taken from the stream & to continue fishing at this rate will seriously jeopardize stocks. Carey & others have been in the habit of keeping an eye on the breeding trout during the close season & he tells me that they normally see around 50 mature fish up the stream during the winter but this year they have only observed about  $\frac{1}{2}$  a dog.

2. The trout season opens on 1st Sept. & in the meantime I will ask Mr. Carey & his supporters to let us have a note on their experience & findings & we can then consider not issuing licenses for the stream.

3. H.E. is undoubtedly the expert on trout matters & pending his return & providing you are satisfied with the representation of the more responsible anglers, we could issue a notice prohibiting fishing in the stream defining it as west of Drunken Rock Pass - 'until further notice'.

221

I

7.8.59.

Yes - until Drunken Rock Pass, i.e. further west.

RM

1/8/59

Bu. 20/8/59

10.8.59

Stanley,  
12th August, 1959.

Sir,

We, the undersigned, do hereby recommend that the Murrell River is not reopened this coming season (1st Sept.) for trout fishing, and that it remains closed till such time as the stock of fish shows a favourable recovery.

This recommendation is based on the fact that during last winter a number of observations were made of the river, resulting in very few trout having been seen as opposed to previous spawning seasons.

It is thought that over-fishing of the river at the commencements of previous open seasons and the heavy catch of fish taken from the estuary later in the seasons has proven too great a demand of such a small river to maintain its stock, also that by restricting fishing to salt-water only, will allow the spawned fish to return to the sea and regain their lost weight. We should also like to mention that whilst fishing the river a large number of yearlings and two-year-olds are hooked, most of these are destroyed to enable the hook to be extracted, of the ones returned to the river many are later found dead.

We suggest that a line running north and south at Drunken Rock Pass is the most westerly point one may fish.

<u>A. J. Blyth</u>	<u>[Signature]</u>
<u>R. Innes</u>	<u>P. W. Lark</u>
<u>W. Chaddock</u>	<u>W. Flanagan</u>
<u>to [Signature]</u>	<u>J. H. [Signature]</u>
<u>J. Malliday</u>	<u>_____</u>
<u>I. C. PERRY also wishes to be associated with above</u>	<u>[Signature] 14.8.59</u>
<u>_____</u>	<u>_____</u>

The Honourable,  
The Colonial Secretary,  
Stanley.

Die, pl  
14/8/59.

Reply at

X. H.

223

219-222 for information.

1/2 included.

It is pleasing to note that the Stanley anglers are taking an interest in the conservation of the imported trout.

We will issue a notice accordingly about a week before the season opens on 1st Sept.

Q

15/8/59.

224.

Act. C.S.

What does Norman Cannon

say about this?

1.4.7.7

17.8.59.

~~224~~ 225

Discussed with H.H. & decided to issue

notice

Q

18/8/59

DECODE.

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

Despatched: 17.8.59.

Time: 1600

Received:

Time:

No. 129. Following for Arrowsmith from Denton Thompson.

We can take 20,000 salmon ova without difficulty. This is estimated maximum capacity present facilities. C.D. & W. application is better done by savingram and will follow next mail.

Officer Administering the Government.

P/L:IM

Original in 0392/11 (K.I.V. for arrival on Kista Dan)  
Copies in 0040/11

KIV 224

A/R  
225.

Draft notice for issue on 25<sup>th</sup> August pl.

228

18/8/59

229

N.B.

I hope underlined on  
revenue and 20 go off  
like this?

Ag. C.S.

The underlined would  
not be correct.

dm

19/8/59.

230

231

A/R  
227

dm

227 Draft of

dm  
25.8.59



25th August, 59.

Sir,

222

233

I am directed to refer to your letter of the 12th August, 1959, suggesting that the Murrel River, west of Drunken Rock Pass, be closed for trout fishing in the interests of the preservation of stocks of imported trout and to enclose herewith a copy of a Public Notice which is being issued today. The notice prohibits fishing in this area until further notice.

2. I am to add that Government very much appreciates the interest shown in the welfare of the imported trout by the signatories of your letter and I am to ask you to be good enough to inform them accordingly.

I am,  
Sir,  
Your obedient servant,

(Sgd) J. Bound.

ACTING COLONIAL SECRETARY

Mr. A. Carey,  
STANLEY.

PUBLIC NOTICE.

Trout Fishing

The trout fishing season opens on 1st September, 1959, and anglers are advised that in the interests of the preservation of stocks of imported trout, no fishing will be permitted in the Murrel River west of Drunken Rock Pass, until further notice.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

Copies to: Oi/c Ag. Dept.  
Chief Constable  
Mr. A. Carey.

25th August, 1959.

Chief Constable

Re: 0392/II

Please cause the above notice to be brought to the attention of all anglers when applying for trout fishing licences this season.

J.B.H.

J.E.

J. 222 s. f. i. On the strength of this and what I understood to be your views, we issued J. 233. Are there any further steps that we should take?

B.G.J.

2. XI. 59.

235.

HCS.

Yes - I think it is sensible to rest the river for a year.

2. Regarding 226. Mr. Penfellow of the Min. of Ag. & Fish has been most helpful, and will be sending us 20,000 salmon ova by the Kista Dan. He hopes we may get them free, but I said we wd. go up to £100 if absolutely essential.

RA. 3.11.59

236

Office.

Pl. b.u.

early December to check on arrangements for their reception.

B.G.J.

5. 11. 59

Bu 29. 12.59

237.  
See. Thru 1/1/60  
238. Dr. A. Dept. has discussed  
with Dr. E. - is keeping him in touch.

5/1/60.

J.A.

C. 1/1/60

6/1/60

Copied from Sir Edwin Arrowsmith's private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
Fisheries Department,  
Whitehall Place  
(East Block),  
London, S.W.1.,  
England.

Our Ref: FGB. 17751

Dear Sir Edwin,

This is to let you know that 22,000 eyed salmon eggs were stowed in the cold vegetable room of the KISTER DAN yesterday.

My people who went down with them were very satisfied with the conditions and we do hope they arrive at Port Stanley alive and unhatched. I have in fact taken the precaution of asking one of the young scientists coming down to take an interest in them, though I think the Chief Steward is pretty competent and will look after them well.

The only charge is one of about £3 for the box which we had to have specially made, and Miss Wells does not seem to think that this will break her.

I do hope the experiment is a great success.

Yours sincerely,

F.T.K. Pentelow

Sir Edwin Arrowsmith, C.M.G.,  
Government House,  
Port Stanley,  
Falkland Islands.

Narrows Harbour 240.  
Falkland Islands.

Extract to Ology  
file

19<sup>th</sup> December 1959.

Dear Governor,

Something that I meant to speak to you about last Tuesday and though we did talk about Fishing, I forgot all about it.

Very soon the Salmon Oo will arrive in Stanley and no doubt the Woody Brook Hatchery has been fixed up to accommodate them. In due course the small fish will have to be taken out to some stream where, we hope, they will grow and increase in numbers. At one time you thought there might be a suitable stream on the west Falkland - I cannot think of one there that has not already got from trout in, anyway, you will be making enquiries about this.

What I wanted to discuss with you is a stream in Lafonia - known locally as the ORQUESTA ARROYO, it rises just about the middle of Lafonia, runs due north for about 12 miles, then East for about 3 miles and empties into BODIE INLET - you will be able to follow it on the Chart. For the second half of its length it is about as wide as your office is long - running through low lying country it is a bit "laggy" - no waterfalls or fast running water. This 15 mile stream is fed by sundry smaller streams - really

2.  
which together might add up to some 10 miles  
and there might be ideal for the fish to spawn in.  
There are no Brown Trout in this stretch of water  
but there are a great many of the so-called Freshland  
Islands Trout.

When you do manage to visit Dawson, I cannot  
very well take you to the Ogishka stream by River  
since the going is somewhat rough. But you will  
be able to see it clearly from the air if you arrange  
for the plane to fly over the area. Also you  
might ask George Baird to photo the stream on his  
visit - or show you the photographs of Lafontaine?

When the Salmon is to be put in this stream, I doubt  
whether they will be caught in my time, or yours, but  
it is a suggestion.

Will you think it over? Fact is that in  
the event of your selecting a more suitable stream  
elsewhere, I would try to stock the Ogishka with  
Brown Trout this autumn - and once they are introduced,  
the water would be spoiled for Salmon.

Norman thinks that you require wide rivers to  
fish Salmon as they would be difficult to 'play'  
in confined waters - but if we do not have a  
suitable wide river, then we have to make do with  
the next best.

This is a lovely day and I shall probably go



at 15 the Camille Creek stream this afternoon.  
The lack of rain has made the streams a bit  
low and the water very clear - however.

With Kind Regards.

Yours sincerely,  
Tom Gilbert

31st December 1959

Extract to  
Colony file

Many thanks for your letter of the 7th December about our salmon eggs. They are now on their way out here in the 'Kista Dan', and I was very interested indeed to hear that they come from the Levon. As you say, this all arose out of my meeting Chadwyck-Healey who put me on to Pentclow at the Ministry of Agriculture. He has been most helpful, and I am very grateful to the Lancashire River Board for letting us have these eggs free of charge. I had nothing down for them in our Estimates and, although I do not think the Finance Committee would have made me pay for them myself, I am sure they will be delighted to hear there has been no charge. Our little hatchery is all ready for them, and I do hope they will be a success. I am wondering how long it will be before the smolts go down to the sea, because I have read that in Norway they do not usually migrate until after the third or fourth winter, so even if I were to be appointed for a second term, I doubt whether I would be able to catch them on their return!

I am glad you had a pleasant trip to Australia. I believe Anthony Hurd recently made a trip there also, and he is due to arrive here in the new Dutch ship, the 'Rotterdam' on the 4th January. She is doing a cruise round South America and comes here for a day before going on to Montevideo. As I expect you know, Hurd is a Director of the Falkland Islands Company and he and his wife will be here until the end of January.

We are just over our annual race meeting, which was held on the 26th and 28th and went off very well, although the weather was not too kind. I have been out fishing once or twice, but there is not much on at this time of the year, for the run only begins in late February or March. I got a two-pounder a few weeks ago, but that is the best so far this season. The ideal way to go fishing is in one of H.M.S. Protector's helicopters, for, if there is not much going on in one strip of the river, one can get in the helicopter and go a couple of miles up stream in no time at all! A journey to a river which would take about four hours by Land Rover over very rough country, can be done in about fifteen minutes.

All our very best wishes to you and Chips,

Lord Fraser of Lonsdale, C.H., C.B.E.,  
1, South Audley Street,  
LONDON, W.1.

Sir Edwin Arrowsmith, K.C.M.G.

31st December 1959.

Dear Pentelow,

Many thanks for your letter No.FGB.17751 of the 25th November about the salmon eggs. They are now on their way here in the 'Kista Dan', which is due to arrive about the 15th January.

It is very good of you to have taken so much trouble over this, and I am most grateful to the Lancashire River Board for letting us have these eggs free of charge and, as Miss Wells said, there will be no trouble about the £6. for the boxes.

Our hatchery is ready to receive them and I do hope everything will go well.

With best wishes, and thank you again,

(signed)

F.T.K. Pentelow Esq.,  
Ministry of Agriculture, Fisheries & Food,  
Fisheries Department,  
Whitehall Place (East Block),  
LONDON, S.W.1.

Extract to Colony File

31st December 1959

Many thanks for your letter of the 19th December about the salmon ova and the Orqueta Arroyo. I heard in the last mail that 60,000 eggs are in the 'Kista Nan' which is due here about the 15th January. The hatchery is ready for them and I hope all will go well. I believe the incubation time varies according to the temperature of the water, and at 50°F hatching occurs in 50 days. When the water is 42°F it takes 90 days and at 34°F it takes 60 days.

I am not at all sure that the presence of brown trout in a river would mean that the salmon would have no change of survival. In England and Scotland salmon certainly spawn in rivers which also hold brown and sea trout. I think it is important that whatever stream we put them in it should have good redds for the fish to spawn in if they do establish themselves here. The upper reaches of the Murrel are very good in this respect, but I think the Murrel has very little natural food in it and the brown trout population in this river is large, so, even if the brown trout do not eat up the little salmon, there would probably be too much competition for such food as there is. How is the Orqueta Arroyo off for gravel beds where the fish can spawn? One needs a good flow of water through the redds if spawning is to be successful.

Apparently the length of time the salmon smolts stay in the river before going down to the sea depends on the amount of food available. According to one of the books I have, in the Aberdeenshire Dee, the migration length extends from one to four years and 80% of the smolts only spend two years in the river. On the other hand, in Norway where the temperature is low and food is scarce, it is usual to find smolts migrating after the third or fourth winter. Another interesting thing my book says,

./...

is that the little salmon (parr) feed according to the temperature of the water. Food increase until a temperature of 60 to 64° F is reached, and ceases altogether when the temperature drops below 45° F. So, the rate at which they grow depends not only on the food supply available, but also on the temperature of the river. I do not know what the average temperature of our rivers is, but I took the temperature of a pool in the Murrel on the 13th December, and it was 55°.

It seems that our best bet for these fish would be a river not too heavily stocked with brown trout, with good redds and with good food. I am afraid I know very little indeed about the food question, but I should think that a river which carries a good supply of the local trout would have good food, and this might well apply to the Orqueta Arroyo. Depending on how the eggs hatch, I think the best plan would be to put the parr in, say, three or four rivers.

We had some good finishes at the races on the 26th and 28th, but I hear that the tote did not do as well as last year.

All the best for 1960,

The Hon. T.A. Gilruth, J.p.,  
DARWIN

PS.  
for file

# The Falkland Islands Company, Limited.

(INCORPORATED BY ROYAL CHARTER 1851.)

REGISTERED 1902.

Extract to Clough file

AGENTS FOR LLOYD'S

TELEGRAMS "FLEETWING PORTSTANLEY" VIA RADIO.

Darwin.

4<sup>th</sup> January. 1960.

Dear Governor,

Thank you for your letter of 31<sup>st</sup> Dec. which arrived here to-day.

I read all you wrote with interest, particularly the part about hatching at different temperatures. Perhaps you are right about its not being very important if there are already young trout in the stream that the young Salmon are put into. (I had gathered from Norman that I was)

whether there are good gravel beds in the Orquídea Arroyo - I am not sure - but I supposed there must be reasonably good spawning grounds that are used by the local (F.I.) trout. Anyway, we can see. The first thing is to hatch the Eggs!

I don't know when you are to get out to fish here, but perhaps after the Darwin sails for Monte next time. I do not have much time for fishing these days and so often the weather at the week-ends seems to be bad.

Regards.

Yours sincerely.

Tom

6th January 1960.

(d/o)

The salmon ova will be arriving in the 'Kista Dan' about the middle of this month. There are 60,000 of them, and the Lancashire River Board has let us have them free. They come from the Leven.

Our hatchery is ready for them, but 60,000 may be too many for it to take, and I wonder if it would not be a good idea to put some down direct in one or two of our rivers. I should think it would be quite an easy matter to make a suitable redd. Tom has written to me about the Orqueta Arroyo. He says it has no imported trout in it, but is inclined to be rather sluggish and is not very wide. Apart from the fact it has no imported trout, it does not seem a very good salmon river.

I wonder just how important the presence of imported trout in a river, in which we will put down either ova or salmon fry, will be? Certainly brown trout and salmon both spawn in English and Scottish rivers, where, from what I read, the competition is for food rather than for each eating up the other. What do you think about this? Most of our rivers, anyhow, have imported trout in them by now, and I very much doubt whether we can find a good potential salmon river that has no imported trout in it. I certainly think it would be worth while putting some fry or ova in the Warrah on the West, and what about your river on the East? I think we should try for a river that has as much natural food in it as possible, but I am afraid I know very little about this. I should think that a river that has a good number of local trout in it, probably has good supplies of food. Dad mentioned to me the other day that the Murrel has never carried the local trout, and I wonder if this is because there is very little natural food in it. It seems an ideal river for spawning, with its gravelly bottom and good flow.

Do you happen to have a Taverner's 'Anglers Fishes - Their Natural History'? I have been reading about salmon in this book, and one of the most interesting things I have come across is that where the temperature is low, and food scarce, salmon smolts do not migrate until after the third or fourth winter in the river. Apparently in the Aberdeenshire Dee, where food is plentiful, the migration period extends from one to four years, and 80% of the smolts only spend two years in the river. I would have thought it would have been just the opposite, and where the food is scarce they would have gone down to the sea earlier! Taverner also says that salmon parr feed according to the temperature of the water, and their feeding increases until the temperature reaches 60 or 64°F. It ceases altogether when the temperature drops below 45°F. So, the rate at which they grow depends not only on the food supply available, but also on the temperature of the water. I do not know what the mean average temperature of our rivers is, but I took the temperature in the tail of a pool in the Murrel last month, and it was 55°F.

Do any of your books say anything about whether salmon which are put down in a river as fry, have the same urge to return as those which are actually hatched in the river? I cannot find anything about this in my book, and I wonder if those that are put in as fry and survive, and go down to the sea as smolts, will, in fact, return to the river, or whether they might not return to one of the rivers on the coast. I hope the ova will get here in good condition, and, if it does, and we are successful in hatching the salmon and putting them in the rivers, it looks as though it will be six or seven years before we know whether our experiment has been a success.

The Hon. N.K. Cameron, O.B.E., J.P.,  
Port San Carlos.

./...



Forbes was telling me about his visit to you, and his fishing, both of which he enjoyed very much indeed.

Best wishes to you all,

(signed)

(Sir Edwin Arrowsmith)

12th January,

60

In the interests of the preservation of the fish in the Murrel River area you are hereby authorized to kill by shooting any seals you may encounter in the approaches to the Murrel River west of an imaginary line drawn between Navy Point and Blance Bay light.

2. The Chief Constable has been informed.

I am,

Sir,

Your obedient servant,

(Sgd.) J. Bound.

Mr. W. J. Grierson,  
J. Bound, Esq., E.D., J.P.,  
Mr. M. Clarke,

STANLEY

for COLONIAL SECRETARY

Copy to Chief Constable.

JB/MF

13/1/60

247

239

H.C.S.

233 The Chief Constable has raised the question of trout fishing in the Murrel River as the season is about to open.

233 says until further notice. According to what I hear fishing will have to be prohibited for some time.

He is very interested and you may care to seek his views and we could issue another announcement informing the public.

Y.H.

11.8.60.

Y. L.

248

Should we prohibit fishing again?<sup>2</sup>  
Actually the prohibition is till further notice  
but it is best to issue a fresh one for next season

on

12/8/60

15th January 1960

To Alamy fdi

We are expecting 60,000 salmon ova to arrive in the 'Kists Ben' on the 15th or 20th of this month, and if they have all survived the journey, there will be 30,000 more than our hatchery can take. George Stewart has been making some cages, measuring about 15" square, which we think we can put directly in a river with the ova inside. Do you think we could put one of the boxes in the Wairah, somewhere near Llanosca's house so that he can have a look at it occasionally. I do not know if this experiment would be a success, but I think it is worth trying.

I am very tied up in Stanley at present with people passing through, and I shall be going South in the middle of February for about 18 days. I am very keen to get out to the West to see you all, and do some fishing, but it looks as if it is going to be about April before I can get away.

D.L. Pole-Evans Esq., J.P.,  
POPE HOWARD.

15th January 1960.

(d/o)

I think the 'Kista Dan' will get here about the 19th or 20th of January with our salmon ova. As I mentioned in my last letter, if they all arrive safely, we are going to have about 30,000 more than our hatchery can take. George Stewart has had some lattice work cages made, measuring 15" square, inside which we can put fine mesh wire cover. We would put the ova in these cages direct in to some of our rivers, and I think this would be worth trying. Would you like to try one in your river? George thought it might be possible to get far enough up in your motor boat to find a suitable place, but I do not know about this. Another possibility might be in the Warrah on the West, near Llamosa's house, so that he could keep an eye on them. It is a pity it is so late in the season, and I wish we could have got the ova out here soon after the winter.

We were out at the Malo on Wednesday, and caught four fish, three of one pound and one of a pound and a half. Three were silver, but the largest one had not been down to the sea. The water was very clear and the tide low, and there were big fish about, but not taking.

D-T spoke about the possibility of your having us for a duck shoot before Protector leaves at the end of March. I think this would be great fun. I gather that Protector has some experienced shots, and there would be no likelihood of anyone beating the duck to death with the barrel of his gun!

(sgd)

by Sir Edwin Arrowsmith.

The Hon. N.K. Cameron, O.B.E., J.P.,  
PORT SAN CARLOS

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT*30 Albany file*

251

Number

Office of Origin

Words

Handed in at

Date

568

22.1.60

To

CAMERON, PORT SAN CARLOS

AC II O

IN THE END ONLY 22000 SALMON OVA WERE SHIPPED AND IT HAS  
BEEN POSSIBLE TO PUT THEM ALL IN HATCHERY

GOVERNOR

Time

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT

252

*To Colony file*

Number	Office of Origin	Words	Handed in at	Date
569				22.1.60
To				
POLE EVANS PORT HOWARD			A/C 110	

IN THE END ONLY 22000 SALMON OVA WERE SHIPPED AND IT HAS  
BEEN POSSIBLE TO PUT THEM ALL IN HATCHERY

GOVERNOR

Time



5th February 1960.

(d/o)

I was hoping that after the Bishop leaves us on the 9th, I might have been able to get out on the following day to Darwin for a couple of days with you, but now the 'John Biscoe' will be arriving back here from the Weddell Sea on the 10th or 11th, and Dr. Robin will be staying with us.

I am afraid we have not had very good luck with our salmon ova. They have been dying at the rate of almost a thousand a day, and now there are only a few thousand left. The hatchery is in good condition, the flow of water is alright, and so is its temperature. George Stewart has taken infinite trouble with the eggs. I am sure the trouble is our peaty water, which leaves a brown deposit on the eggs, and Ted Mathews, who had a look at the hatchery yesterday, agrees with me. As a last resort I am getting George Stewart to put a tray of eggs in a sink in his office, and see what effect the clean water (but with chemicals) has on them. It is all very disappointing, but I cannot think of anything else we could have done.

(signed by Sir Edwin Arrowsmith)

The Hon. T.A. Gilruth, J.P.,  
DARWIN.

5th February 1960

(d/o)

We have not been having very good luck with the salmon ova, and they have been dying at the rate of almost a thousand a day, so we have but few left now. Some 30 have hatched out. The hatchery is in good condition, there is a good flow of water, and the temperature of the water has been around 45°. I am sure the trouble is our peaty water, which did alright for the brown trout, but is not suitable for salmon. As a last resort I have asked George Stewart to put a tray in a sink in his office, where he can get a reasonable flow. I have no idea what effect the various chemicals that are put in the water will have on the ova, but at least the eggs will have a chance without the peaty deposit which the water of Moody Creek leaves on them. If by any chance this should work, we would be able to try again. It is all very disappointing I am afraid, but I do not think there is any more we could have done. Ted Mathews had a look at the hatchery yesterday, and he agrees that the peaty water is the trouble.

Forbes told me you had written to him about the duck shoot. I do not know if he has suggested a date yet, but I understand it will be between the 23rd March and the 29th March, when Protector finally leaves Stanley. I am sure it will be great fun, and I am looking forward to it very much indeed.

I have not been able to get in any fishing lately, but I hope to do so after the ships leave.

(signed by Sir Edwin Arrowsmith)

The Hon. N.K. Cameron, O.B.E., J.P.,  
PORT SAN CARLOS.

Copied from H.E.'s private file.

17th February 1960

(Dear Pentelow,)

Many thanks for your letter FGB.17751 of the 17th December, about our salmon eggs. They travelled very well in the "Kista Dan", and only about 1,000 were lost en route. We had our hatchery all ready for them, and transferred them there as soon as the ship arrived. Most unfortunately, they proceeded to die at the rate of about a thousand a day. Some 30 or 40 hatched out, but did not survive, and I am sad to say that there are no eggs or alevin left. We tried everything we could think of, the water temperature was around 45°, and there was a good flow through the troughs. I do not know the pH value of the stream which feeds our hatchery, but the only conclusion we could come to was that the water is too peaty. The water of most of our streams, and certainly the one that feeds our hatchery, leaves a brown deposit in such things as flower vases, which is quite difficult to remove. I wiped one of the dead eggs on a piece of blotting paper, and found this rust coloured deposit was left behind. Perhaps we should have gone into this before getting the ova, but we had assumed, wrongly I fear, that because the brown trout had hatched out so well, the salmon would do the same.

I am very sorry about this, particularly after all the trouble you so kindly took to get the ova for us, and have it shipped. I do not really know what to do now, for although we might find a stream which is rather more pure than the one I mentioned, I do not think we could get any supervision for a hatchery much further afield.

With kind regards, and thank you again for your help.

(signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow, Esq.  
Ministry of Agriculture, Fisheries & Food,  
Fisheries Department,  
Whitehall Place (East Block),  
LONDON, S.W.1.

Fisheries Department,  
Ministry of Agriculture,  
Fisheries and Food,  
Whitehall Place East,  
LONDON, S.W.1.

Our Ref:- FGB.17751

9th March, 1960.

Dear Sir Edwin,

I was most disappointed to receive your letter of the 17th February as I am sure you must have been to have to write it. However, these things do happen and at least we now know that we can get salmon eggs safely to Port Stanley by ship.

I think, as you say, the trouble must be water supply in your hatchery. Have you a government analyst? If you have and he would give us an analysis of the water we would try to guess what was wrong. Alternatively, if you could send us about a quart home I could get the government chemist here to look at it. It could come by ship for it would be mineral constituents that would interest us, and they would not change.

There is some story that fish incubated in hard water take badly to soft water, and it may be that your water is soft, though not acid, and of course the eggs were incubated in London tap water which is very hard. We could another time try incubating them in soft water.

If there is another ship next year at about the same time, would you like us to try again, and I wonder whether you would think over the suggestion that it might be worth using your domestic water supply to hatch the eggs out. I don't know whether this is practicable, but Frank Buckland hatched many thousand salmon in his kitchen in Albany Street.

All good wishes.

Yours sincerely,

F.T.K. Pentelow.

His Excellency the Governor,  
Government House,  
FALKLAND ISLANDS.

22nd April 1960.

Many thanks for your letter No.FGB 17751 of the 9th March. I think you have hit the nail on the head, because our water is very soft, and it seems likely that the change from the London tap water to our water proved fatal. We did try to hatch a few in our domestic supply after it had been through the filtration plant, but this was unsuccessful, and the eggs became covered with fungus. Perhaps the chemicals that we put into our water were the cause of this. The hatchery itself is on the bank of the stream which supplies the filtration plant. I shall send you a sample of the water from this stream, by either the 'Kista Dan' or the 'John Biscoe', in about a month's time.

I wonder whether it might not be an idea for us to try sea trout instead of salmon? I have felt doubtful whether putting the salmon-parr into a river would give them the same urge to return to that river after they had been to sea, as it would if they had actually been hatched in the river. On the other hand, we do know that the brown trout, which were hatched here and put into the rivers between 1949 and 1952, have done very well, and have adapted themselves to feeding in the salt water and returning to the rivers to spawn.

There is an interesting point about this, which I have also mentioned to John Barclay to whom I have sent some scale to be read, that when fishing in the salt water we catch about six hen fish for every cock fish. Fishing the other day in the first fresh water pool in the Malo river about a mile above tidal water, I caught four fresh-run hen fish, the best  $6\frac{1}{2}$  lbs. and two cock fish. The latter, of which the better was somewhere around  $2\frac{1}{2}$  lbs., were horrible looking things with heads like pike and long tapering bodies. They had clearly never been down to the salt. I have never caught a hen fish in this condition. Perhaps the hen fish have developed more of an "urge" to go down to the sea to feed than the cock fish! On the other hand, the best fish caught here this season has been a cock of 12 lbs. in the salt water, and I also caught one in very good condition of  $4\frac{1}{2}$  lbs.

To revert to the possibility of sea trout; they would not have to acquire the habit of going down to the sea as our brown trout have done, and with the abundance of food in the estuaries and the sea, they might grow to a size rivalling those of the  $E_m$ . I would be very interested to hear what you think of this idea, and whether we would be able to get sea trout ova from the U.K.

I see in Taverner's 'Anglers' Fishes & Their Natural History' that Norwegian sea trout tend to migrate later than those in Scottish rivers. The same might well apply here, but if once we did manage to get them established, I am sure they would give magnificent sport.

I think trout fishing is doing a great deal for these Islands. More and more people are getting keen, and the keenest are blazing Land Rover and motor-bike trails to the distant rivers. This is quite a good way of making roads in the Falklands! It is also a good thing for the farmers, and gives them something else to think and talk about than sheep!

(Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.  
Ministry of Agriculture, Fisheries & Food.

COPY

3rd August 1960

The 'Kista Dan' is sailing this year somewhere between the 28th November and the 8th December, so I am afraid it will be too early for us to get any sea trout and salmon ova off by her. H.M.S. Protector will be in Montevideo between the 1st February and the 9th February, and if the ova could be flown out by Comet, and provided we were advised of the flight number, we could arrange for them to be taken as quickly as possible from the airport to Protector's cold room. I do not know what B.O.A.C. would be likely to charge us, but perhaps Rear-Admiral Sir Matthew Slattery, the new head of B.O.A.C., may be a fisherman. I cannot think of any other opportunity of getting them out quickly.

People here were very interested to hear of our visit to Hornby, and are most grateful for the interest the Lancashire River Board is taking in the stocking of our rivers.

If you know of any books on hatching that might give us some tips that would be helpful, I should be very grateful if you would let me know.

Signed Edwin Arrowsmith

F.T.K. Pentelow, Esq.

REPORT ON NINE SETS OF SCALES FROM  
TROUT CAUGHT IN TIDAL WATERS OF THE PALKLAND ISLANDS

The scales from the three smallest fish had poor centres and I had to search through many to find six good ones for estimation of their growth; the other scales had more good centres than poor ones. The circuli (rings) at the centre were narrow and in some, e.g. the 12-lb. fish from Murrel River, circuli were evenly but narrowly spaced up to a width corresponding to 9 inches in length. I find it difficult to believe that this is really only one year's growth and I think it represents the growth in freshwater with even summer growth, a sudden stop in autumn and a sudden start again in spring and no "winter band" at all. Dr. Jones has recently reported for Llyn Tegid that fish may stop growing so suddenly that there is no mark on the scales. In some scales there are clear winter bands in the freshwater growth. There is good distinction between freshwater and tidal water growth and winter bands consisting of only a few broken circuli are clear in the seawater growth. The scales collected in January all had wide circuli at the edge while those collected in March had the narrow circuli of the winter band and the single fish caught in February also had narrow circuli at the edge. It therefore seems that the winter band is laid down in February and March (corresponding to September and October in our trout).

I looked for spawning marks but was unable to find any that were clear and beyond doubt.

It is very interesting that the proportion of fish in tidal waters should be at least six hens to one cock and that there should be cocks of stunted growth above the estuary at Malo. It reminds me of the fact that male salmon parr may be fertile in freshwater while female parr, which mature later, always migrate before maturing.

The information about the trout is summarised as follows:

Date of capture 1960	13.1	13.1	13.1	?Feb.	16.2	11.3	24.3	24.3	16.3
Place	Malo	Malo	Malo	Malo	Malo	Swan Inlet	San Carlos	San Carlos	Murrel River
Length (inches)	13 $\frac{1}{2}$	13 $\frac{1}{2}$	17	18	27	18	24 $\frac{1}{2}$	25	30 $\frac{1}{2}$
Weight (lbs/ozs)	-/12	1	1/10	3	10	2/8	7/3	6	12
Condition (K)	70	100	80	120	120	100	115	90	100
<u>Freshwater Growth</u>									
Length at year 1	4 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	6 $\frac{3}{4}$	6 $\frac{1}{4}$	4 $\frac{1}{2}$	10	4 $\frac{1}{4}$	9
2	-	-	6 $\frac{3}{4}$	-	-	-	-	10	-
Probably spent more years in freshwater than seen as winter bands	-	-	?	+	+	-	+	-	+
<u>Estuarine and Sea Growth</u>									
Length at year 1	12 $\frac{1}{4}$	7 $\frac{1}{2}$	11	14 $\frac{1}{4}$	16	15 $\frac{3}{4}$	17 $\frac{1}{2}$	18 $\frac{3}{4}$	16 $\frac{3}{4}$
2	(13 $\frac{1}{2}$ )	11 $\frac{1}{4}$	15 $\frac{3}{4}$	18	21 $\frac{1}{2}$	18	21	20 $\frac{3}{4}$	23 $\frac{1}{4}$
3		(13 $\frac{1}{2}$ )	(17)	-	27	-	22 $\frac{1}{4}$	22 $\frac{1}{2}$	28
4					-		24 $\frac{1}{2}$	24 $\frac{1}{2}$	30 $\frac{1}{2}$
5							-	25	-
Scale centres	poor	poor	poor	good	good	good	good	good	food
Circuli at edge of scale	wide	wide	wide	narr.	narr.	narr.	narr.	narr.	narr.
Total age	2+	3+	4+	3	4	3	5	7	5
			?+1	?+1/2	?+1/2		?+1/2/3		?+1/2/



There are too few fish for basing conclusions about growth rates, etc. but it does seem that these trout may move into estuaries after only one year in freshwater or they may stay in rivers until they are 9 or 10 inches long and perhaps two or three years old (or even more). Growth in tidal water seems very variable at Malo - perhaps some fish move further down into the sea and grow better while others stay almost in freshwater - and good at the other localities. Judging only from the variation in length increments, the trout may have spawned when about 21 inches long at San Carlos and not until 28 inches long in the Murrel River. One Malo fish may have spawned at 11½ inches and another not before this year when it is 27 inches long.

Margaret E. Brown,  
18, Apsley Road,  
Oxford.

13th August 1960

H. C. S.

I spoke to the Carey Brothers and Tom Perry yesterday regarding the further closing of the Murrel River. After the very excellent catches in 1957 and 1958, very few fish were caught last year. This is not to say the fish are not still there, but ~~very~~ perhaps 600 to 700 large fish were caught in these two seasons, and observations up the river during the present winter have shown them to be spawning in fewer numbers than in 1957/1958. The river is still heavily stocked with small fish.

The season opens in September, and during that month many fish, which have spawned up river during the winter, are still making their way down stream. These kelts are useless for eating, and are not worth catching. If we could rely on everyone to return the spent fish to the river, it would not be so bad, but if some one has a large fish on the end of their line, they are going to stick a gaff in it. On many English rivers the use of a gaff is prohibited during the first part of the season, but that is not really practicable here. We therefore think, that in the interests of fishing in the future, fishing should again be prohibited in the river west of Drunken Rock Pass for the forthcoming season. *Ans*

Please return this file to me in due course.

13th August 1960

*BT*

*8.*

*Received from  
at 233 p*

242  
261

P U B L I C   N O T I C E .

Trout Fishing

The trout fishing season opens on 1st September, 1960, and anglers are advised that in the interests of the preservation of stocks of imported trout, no fishing will be permitted in the Murrel River west of Drunken Rock Pass, until further notice.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

15th August, 1960.

Ref: 0392/III.

Chief Constable

Please cause the above notice to be brought to the attention of all anglers when applying for trout fishing licences this season.

FH

Copies to: Chief Constable & O i/c Agricultural Department.

CODE.

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 15.8.60. Time: 1115. Received: 15.8.60. Time: 1440.

No. 87. Salmon Eggs.

Ministry of Agriculture, Fisheries and Foods now feel eggs should be flown to Montevideo for transshipment sometime in February 1961. Cost air freight about £45. May this be met from Colony funds?

Secretary of State.

244 263

HCS

This will mean a Special Warrant.

244

16.8.60

G.F. 8

16/8/60

Reper, at 244 266

GTC : LH Typed IM

KIX 244

244  
264.

H. C. S.

Reference telegram from the Secretary of State at  
243.

I enclose a copy of a letter I wrote to Mr. Pentelow at the Ministry of Agriculture, Fisheries and Food, on the 3rd August. We have no provision in the Estimates to pay the cost of air freight, but I anticipate no difficulty with Standing Finance Committee, to which we should refer this at the first opportunity. In the meantime, I think we can assume that approval will be given, and telegraph the Secretary of State accordingly.

17th August 1960

~~ST~~  
S.

96  
26  
17

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

London.

Our Ref: FGB. 17751

17th August, 1960.

Dear Sir Edwin,

In view of the telegram sent to you by the Secretary of State on 15th August it seems to me that I ought to write and tell you how things have gone.

As I promised you I explored the possibility of getting B.O.A.C. to fly the salmon and sea trout eggs to Montevideo free of charge, and I had the great good fortune to find a personal contact with the Chairman. Unhappily though, he could not help because apparently on that route there has been a lot of international trouble about the maintenance of agreed price schedules and people have gone in for a good deal of concealed under-cutting, so B.O.A.C. are having to stick strictly to the terms of the agreement.

Having failed there I thought it would be worth having another shot at the Colonial Development and Welfare Fund, and as a preliminary I got an estimate for the cost of flying the eggs to Montevideo and found, to my surprise, it was only £45 for 50 lbs. of freight, so I went along to Hickling and asked whether the Colonial Office would finance the project, using as my argument the social and amenity value of salmon and sea trout fisheries in the Falklands.

Now I see they have got their own back on me by asking you to stand the cost, but perhaps it is not so much a let-down as I first feared because I believe that last year you told me that you would have been prepared to go to about £50.

We talked of sending some water weeds out to you by the KISTA DAN, but on reflection I doubt if this is wise. The introduction of foreign water plants has generally been followed by evil consequences if they manage to establish themselves, and the examples that are in my mind are Canadian water weed here and the water hyacinth in Africa. Moreover I doubt whether your streams are deficient in plant material of all kinds. Even if there are no rooted plants I expect you have mosses and microscopic things like diatoms, and they are quite capable of providing all that our water weeds do in this country. Indeed many of our salmon and sea trout rivers are themselves devoid of flowering plants.

I am going to Lancaster again in October and I hope then to get on with the arrangements for the collection and incubation of the eggs. I remember I promised you the dose rate for malachite green, and I will get that looked up by the time I write again.

All good wishes,

Yours sincerely,

F.T.K. PENTELow.

Sir Edwin Arrowsmith, C.M.G.  
Government House,  
Port Stanley,  
Falkland Islands.

DECODE.

266

24

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

Despatched : 18.6.60      Time : 1100      Received :      Time :

262.  
243.

No. 118. Your telegram No. 87.

Salmon eggs.

Airfreight costs may be met from Colony funds.

Governor

P/L : DRM/LH

267  
247.

Repair ~~262~~, then to Ag.

C.T. for S.F.C.

268 (Intld.)

248.

DRM

~~243~~ repaired.

(Intld.) IEM



145 C.T.

269

To note 266 for S.F.C. pl

B

for C.S.

18. 8. 60

Hen. L. L.

270

Special Agent is at back cover of  
H. E.'s signature, and freight is estimated at  
£45 I have attached £5 for incidentals.

I have noted for next S.F.C. meeting  
thank you.

A.C.T.

22.8.60

g. & for signature

Phone

on 25/8/60

271

25.8.60

26th August 1960

272

(Dear Pentelow,)

We had a telegram from the C.O. asking us whether we were prepared to pay £45. for the air freight on salmon and sea trout ova in February, and I have replied saying that this will be all right. People here are particularly keen on our trying to get sea trout established.

Last year it was decided to close the Murrel River, which is the one nearest to Stanley, to all fishing above tidal waters. This was because kelts were frequently killed early in the season in the past, and because when spinning with a treble hook many small fish are caught, and even if they are put back they are liable to be too damaged to survive. This last Sunday two of our keenest local fishermen walked along the whole length of this river above tidal waters, and saw no large fish. They have been out several times during the close season and saw many fewer fish on the spawning grounds than before.

Spinning in the salt water in the 1957 and 1958 seasons (1st September - 30th April), in the Murrel River was most successful, and a total of some 300 to 400 good fish must have been caught. Last year I should think that no more than a dozen were caught, the biggest of which was one of 12 lbs. I was up the river myself last season fishing with a barbless hook, and although I caught small trout of a few inches at practically every cast, I saw nothing that I could bring home. We are wondering very much what has happened. When we began fishing seriously, that is in 1957, no one had fished with anything other than worms or lumps of mutton, but in 1957 and 1958 the trout had all manner of ironmongery hurled at them. Many were pricked and got away, and I think there is no doubt that they have become a lot more sophisticated, but I wonder whether this is the whole answer. The number of small fish in the river would seem to indicate that there are still plenty of trout about, but the run last year in no way seemed to compare with that of the two previous seasons. There is one school of thought which thinks that we depleted stocks too severely by our fishing, but I believe that seals, which are common around the estuary lower down, must have caught many more fish than the fishermen. The Murrel is, without doubt, the most heavily fished river (although people only fish at week-ends), and last season large fish were caught in the more distant rivers every time that people went out. It will be interesting to see what happens this year.

Fry were first put in the Murrel about 1949, and up to 1952. It is a very short river, not more than six miles above tidal waters. We do not know the ages of the fish that have been caught, but I sent some scales to Barclay to be read last April, and when I hear from him we shall know more.

With these scant details I wonder if you have any ideas what has happened? Our observations are infrequent and irregular, and all we have actually proved is that far less fish were caught last year. Fishing is fairly new, but there have always been seals. I believe there may still be plenty of good sized fish about, but they are no longer prepared to take anything which is chucked at them.

All best wishes,

(Yours sincerely,

Edwin Arrowsmith)

F.T.K. Pentelow Esq.

1st September 1960.

(Dear Pentelow,)

I am sending you by parcel mail one of the fish trays that was used in our hatchery for the salmon ova. There are 18 of these trays in all. You will see that both the wooden part of the tray and the gauze was painted with a sort of varnish. I am afraid I cannot give you any particulars of this varnish, for it is in an unmarked can, but it was what was used before when we hatched the brown trout ova ten years ago. I think the main idea in using varnish on the wire mesh was to prolong its life, for it seems to rust very rapidly. I believe that plastic mesh was tried by Dr. Hamilton, but was not stiff enough, and inclined to sag.

When the tray does arrive, probably about November, I should be most grateful if you could have a look at it, and advise me what is best to do. We do not want to take any chances with our next lot of ova, and I feel that the varnish coming off this gauze, as well as the much in the old pipes - which are being replaced - was probably a bad thing.

(Yours sincerely,

Edwin Arrowsmith)

It would be interesting too, if you would tell me the number of ova you think we could safely put in each of these trays. It was Dr. Hamilton's practice to spread them out very thinly, but from what we saw in Lancashire, it would seem that one of these trays could contain quite a lot of ova, particularly if we have some of the green stuff which prevents dead eggs contaminating the others.

F.T.K. Pentelow Esq.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

London.

2nd September, 1960.

Dear Sir Edwin,

I thought just before I go on leave I would send you a note to say that the arrangements for your salmon and sea-trout eggs are in train. I am hoping to arrange for them to be flown to Montevideo when H.M.S. PROTECTOR is in. That seems to me to give us a better time schedule than trying to catch the DARWIN on one of her three-weekly passages.

I think we must have had the sort of summer you get. You certainly had the best of it when you were here.

Yours sincerely,

F.T.K. PENTLOW

Sir Edwin Arrowsmith, C.M.G.  
Government House,  
Port Stanley,  
Falkland Islands.

275  
~~253~~

Hen S.S.

Supplementary expenditure (£50) required  
for air freight, etc on salmon and trout ova  
was approved by S. T. G. on 27/9/60.

A.C.T.  
29/9/60.

BCC 4. 12. 60  
to KIV - acceptance  
Salmon ova - 2000

to 20.12.60  
(mail)

No mail  
22/12/60.

Arrived Darwin  
25th

254  
~~252~~ 276

A.O. I understand the ova arrived by Darwin on 25th.  
For record purposes would you please be good  
enough to say what action has been taken.

277

2.2.61

H.B.S.

40000 ova arrived 20,000 of each Salmon + Sea Trout.  
The latter being in an advanced stage of incubation.  
Quite a late stage indeed, the salmon have been put  
in the lots of 1100 into 3 streams in cashmere NASHMOR  
boxes. all the rest are in the Hatching

278  
26/2.

3/2/61

279

~~225~~ 279

Fisher ~~about~~ Dr. Lee of Drunken Rock is

indicated till further notice.

The bar should not be raised till H.E.

considers no matter. A note like 262 can

go on r/h (as is remembered in H.E.'s return

5<sup>2</sup> 30/6/61

256  
280

P U B L I C   N O T I C E

Trout Fishing

The trout fishing season opens on 1st September, 1961, and anglers are advised that in the interests of the preservation of stocks of imported trout, no fishing will be permitted in the Murrel River west of Drunken Rock Pass, until further notice.

Chief Constable

Please cause the above notice to be brought to the attention of all anglers when applying for trout fishing licences this season.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

30th August, 1961.

Ref: 0392/II.

FH

Copy to: Chief Constable.    Copy to O i/c Agl Department.



G.E.

The fishing season started when G.E. was away and he  
 was on fishing week of Drunken Rock Pass continues till it is  
 lifted. I did not wish to lift it anywhere till G.E.  
 came back. As far as I know there is no enthusiasm  
 on lifting it

S  
 14/9/01

PA  
 S.

PA.

Copied from H.E.'s private file.

8th October 1960.

Many thanks for your two letters of the 17th August and the 2nd September, which arrived here by our last mail. Thank you for trying to get the freight on our eggs to Montevideo paid from C.D. & W. Funds. As you say, the C.O. hit the ball smartly across the net to me, but I do not expect I shall have to pay the £50 myself! I quite agree it would not be wise to try and establish foreign water weeds here. I am always nervous of this sort of thing, and it would be a pity if our rivers became choked with weeds. Judging from the way the brown trout have done, they must have found plenty to eat in the rivers when they were first put in them. During last summer, a young F.I.D.S. biologist - James Stammers by name - spent a couple of weeks examining the creatures which live in our streams. He took his results home with him, and is checking these with the British Museum. I hope to hear from him before long, and I will ask him to send a copy of his report to you.

I enclose a copy of Dr. Margaret Brown's report on the scales I sent to Barclay to be examined. This is most interesting, and I am sure you will be able to draw many more conclusions from it than I can. Would you think that these trout may spend several years at sea, or in the estuary, without coming back into the fresh water?

I had a very good time last Monday in a river, the estuary of which is joined some 400 yards below the fresh water by a small stream, in which trout were put some years ago. I went all up this small stream fishing a fly, and there were many beautiful little trout in it about as long as my forefinger. I then went up the main stream, and at the confluence of the fresh and salt water, I had the best sport I have had here. I saw the trout jump just below a point where the fresh water runs over some rocks into the salt, but nothing showed interest in the worm fly which I was fishing. I then changed to a light spinning outfit, and in an hour caught six fish in this one pool, the best of which were a cock and a hen, each weighing 3 lbs. All fought magnificently, far better than any I have caught here before, and reminded me of Rainbow in South Africa. I left some fish behind with my host, but I brought some back with me, and I enclose the scales from three of them. Perhaps one of your biologists could have a look at these some time.

I hope you had a good holiday, and got some good fishing.

With all best wishes,

(signed by Sir Edwin Arrowsmith)

F.T.K. PENTELow ESQ.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

LONDON.

Our reference:-  
FGB.17751

4th November, 1960.

Dear Sir Edwin,

I am afraid I have been extremely dilatory in answering your last few letters, but I have been very pushed lately and my correspondence is well behind schedule.

I have however read them with great interest and during the next week or two we will get the scales read and write to you again.

In the meantime we have arranged for your salmon and sea trout eggs to come here from Lancashire on November 17th. Then we will incubate them and fly them out to Montevideo either to catch the DARWIN or the PROTECTOR, as seems most convenient.

All good wishes,

Yours very sincerely,

F.T.K. PENTLOW.

Sir Edwin Arrowsmith, C.M.G.  
Government House,  
Port Stanley,  
FALKLAND ISLANDS.

DECODE.

TELEGRAM SENT.

*From* GOVERNOR *to* SECRETARY OF STATE

*Despatched:* 19.11.60

*Time:* 0100

*Received:*

*Time:*

For Pentelow Ministry Agriculture. Would it be worthwhile trying Vibert boxes see Field January 14th to supplement hatchery. If so could you get six for us.

P/L : MW

*Reply at 285*

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSRECEIVED

(W. &amp; S. Ltd.—250 Pd/7/59).

*In Albany file 285*

Number	Office of Origin	Words	Handed in at	Date
6	London	34	1735	21.11.60.

To

Etat H.E. The Governor port Stanley

Food x 122 from pentelow do not advise vibert boxes kashmirs much  
more reliable have borrowed two from Somerset River board to be  
shipped on Kister Dan

Foodkeeper  
London.

*See 284.*Time RB/ *DW*

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD, LONDON.

Our Ref: FGB. 17751

30th November, 1960.

Dear Sir Edwin,

I am afraid I have been very slow in thanking you for your letter of 8th October. I have been extremely busy and I am afraid that my correspondence has rather got into arrears.

However, that has not interfered with the arrangements for this year's experiment. We have about 20,000 each of salmon and sea trout eggs incubating happily downstairs; they arrived from Lancaster last Thursday and look to be doing well. We have a little more time this year so they are being kept at a rather lower temperature. If they eye in time we shall fly them out to Montevideo to join the KISTA DAN there. If they are later than that we shall try to get the DARWIN on January 21st.

We have had a bit of luck in that we have a contact with B.O.A.C.'s publicity man at Montevideo and he will see that the eggs are looked after from the time they leave the Comet to the time they go aboard ship.

We have found that Vibert boxes are a bit difficult. In the right places they do very well, but those places are difficult to identify, and if the boxes are distributed by guess a great many of them silt up and the eggs die. We find Kashmir boxes much more reliable and I am sending you a couple that I have borrowed from the Somerset River Board on the KISTA DAN. You simply put eggs into them, peg them down in three or four inches of water and leave them to hatch. I thought if you had two boxes you could use one for salmon and the other for sea trout and it would avoid any risks in your hatchery. The hatching trays you refer to in your letter of September 1st have not arrived yet, but we will examine them when they do for I suspect the varnish is cracked and they ought to be repainted. We use ordinary black bitumen paint and find it quite satisfactory.

I remember promising you the dose of malachite green for use on the eggs in the hatchery. We make up a stock solution containing 10 grams M.G. per gallon of water, and every morning we put into the top trough 50 cubic centimetres of this solution for every gallon of water flowing through the tray per minute. The dye washes through our troughs in about an hour and seems to keep the eggs in good condition.

I was extremely interested in your description of the Murrel River and my first reaction is that there has been one of those natural fluctuations which seem to be common in all sorts of fisheries. Going over some figures the other day I noticed that in a good year the rod catch on the Usk may be about ten times what it is in a bad one. As you say, the fish get more cautious with practice and catching them is not so easy, but nevertheless I think that would not be a sufficient explanation for so sudden a decline. I suspect that a few years ago there was for some reason a bad hatch or the migrating smolts had the misfortune to run into a heavy concentration of some predatory beasts (fish, seals, dolphins) that were just ready for a heavy meal. It would be interesting to see what happens this year and no doubt you are keeping an eye on it.

I will see if I can get hold of Stammers and have a talk with him.

I am sending you by seal mail some prints of the scales you sent to us with Hartley's notes on them. You will see that he is inclined to call them slob trout, but so long as their growth is satisfactory what does it matter?

All good wishes,

Yours sincerely,

F.T.K. PENTELOW.

Sir Edwin Arrowsmith.

Copied from H E.'s private file.

3rd December 1960.

Many thanks for your letter of November 4th, and for your telegram about the Kashmir boxes. I think it was the quickest answer to a telegram I have ever had from London!

Protector will be in Montevideo from February 1st to February 9th. I think it would be best if you were to plan to send the ova in her, for Comets have a habit of running late. I do hope we shall be lucky with the flight the ova are on, because I should not think it would do them any good if the Comet were to be held up for 24 hours at somewhere like Dakar. The Comet leaves London every Monday and Thursday, and Captain Forbes thinks it would be best if the ova were sent on the flight leaving London on February 2nd. He will make arrangements to pick them up at the airport, and might perhaps be able to do this by helicopter. Protector has a cool room, which is kept at a temperature of 15° F, and a large refrigerator, which is kept at about freezing, and which could accommodate a box measuring 20" x 33" x 45". Could you let me know how you suggest they should be carried?

The new pipe is at present being put in between the reservoir and the hatchery, and we shall be running the water through it as soon as it is in place. Is there any special technique that you would recommend when we move the boxes from the Protector to the hatchery. If the eggs are moved immediately from a temperature of 15° to the trays where the water will be running at a temperature of between 45 and 50°, is it likely to have any adverse affect on them?

I apologise for bothering you with all these details, but we are very anxious to make a success of hatching the ova this time.

(signed by Sir Edwin Arrowsmith)

F.T.K. PENTELow ESQ.



Copied from H.E.'s private file

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD,  
London.

Our Ref: FGB. 17751

14th December, 1960.

Dear Sir Edwin,

Your hatching tray arrived safely last week and I think we have at last tracked down the most likely cause of the death of the eggs in your hatchery early this year.

It appears that the varnish had entirely worn off and the eggs were in contact with the perforated zinc. We had trouble from exactly the same cause some years ago and it appears that sufficient zinc dissolves to kill the eggs. If you wish to use them again this year, give them a good coating of bitumastic, let it dry, and wash them for about a week before the eggs are put in.

Those for the next experiment are incubating downstairs. We have had a fair sized mortality, but it appears that either the eggs were taken before they were fully ripe or some of the cock fish were no good. We did, however, get a considerable surplus and unless things go quite wrong we shall have quite enough salmon eggs but we may be a little short on sea-trout.

It looks as if the eggs will be shipped on the DARWIN on January 21st at Montevideo. I do not think they will be ready in time to catch the KISTA DAN at Montevideo, and anyway flights from London at that time are complicated by Christmas. I quite expect that having decided that, the wretched things will eye on Christmas Day and then we shall have fun and games keeping them back so that they do not hatch until they have arrived at Port Stanley. However, everyone seems to be agreed it is better for the fry to hold them back than to hurry them on.

I was delighted with your Christmas card. Thank you very much. I am afraid my intention of sending you one failed because your Christmas mail left here a week earlier than I expected. However, may I tender you my best wishes for 1961?

All good wishes,

Yours sincerely

F. T. K. PENTELOW

Sir Edwin Arrowsmith.

Copied from H.E.'s private file.

6th January 1961.

Very many thanks for your letters of November 30 and December 14, and for your advice on our hatching tray. Actually, we had scraped most of the varnish off the tray we sent, and were thinking of using them unvarnished this year. You have certainly saved us from making that mistake, and they are now having a good coat of bitumastic in preparation for the arrival of the eggs in the next 'Darwin'. The two Kashmir boxes also arrived safely in the 'Kista Dan' a couple of days ago.

I was very interested in what you thought about the Murrel River. Seals can be a menace in the estuary, and migrating smolts may very well have run into some of them. Nothing has really been caught there this year so far, but we do not expect very good results before about February or March.

I saw the account in The 'Times' about the eggs coming out here, and hope that in a few years time we shall be able to catch a Lune salmon like the one illustrated in the F.G. of a few issues back.

All the best for 1961,

(signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

290

(W. &amp; S. Ltd.—250 Pd/7/59).

RECEIVED

Number	Office of Origin	Words	Handed in at	Date
8	London	43	1535	9.1.61.

To etat sir Edwin Arrowsmith Government House Port Stanley fi

Foodx 4 from pentelow eggs eyed dispatching by comet 16 January  
to connect with Darwin on 21st young of Falkland Islands Trading  
Company travelling with them BOAC experienced egg transport so have  
good hopes

Foodkeeper London.

*To Along file*

JC

Time

*DM*

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

291.

W. &amp; A. LTD.

Number	Office of Origin	Words	Handed in at	Date
				10.1.61
To	FOODKEEPER LONDON		To Colony file	

For Pentelow Please advise Young on how eggs should be stored in Montevideo and ask him telegraph Macstaple of their arrival stop I will also inform Embassy stop Darwin proposes to carry box on deck and to ice it stop Eggs could be taken direct to Darwin but temperature at docks may be around 80° and eggs would be there three days stop Darwin has cold room kept at 35° but doors measure only 1 foot 9 inches

Time

GOVERNOR

## GOVERNMENT TELEGRAPH SERVICE

292.

FALKLAND ISLANDS

SENT

W. &amp; A. LTD.

Number	Office of Origin	Words	Handed in at	Date
To	PRODROME, MONTEVIDEO			11.1.61
<i>To Colony file</i>				

Salmon and sea trout eggs arriving Montevideo Comet  
17th January stop Young of FIC accompanying them and informing  
Macstaple stop Most grateful if you could expedite customs  
clearance at airport

GOVERNOR

Time

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

London.

Our Ref: FGB. 17751

11th January, 1961.

Dear Sir Edwin,

I do hope the eggs arrive safely and I hope the decision to send them by the Comet on the 16th has not put you to a lot of trouble. We incubated them at as low a temperature as we thought safe, but they began to eye last week and we feared that if we kept them until they could be shipped on the "Protector" they would hatch and then we could not send them at all.

We have in fact had a good deal of luck in this matter of transport because B.O.A.C. seem to know all about carrying trout eggs and how they should be looked after. A neighbour of one of my colleagues downstairs is the Publicity Manager for B.O.A.C. in Montevideo and is interested in the experiment, so I think he will see that everything possible is done there. All that is in addition to Mr Young travelling out to Port Stanley by the same plane and ship. We have, of course, written to them all, so there are good hopes that there will be no misadventure.

I think the box should go into the "Darwin's" Cold Room all right for it is only  $16\frac{1}{2}$  inches square, and if it can, it will save a lot of worry.

When the eggs arrive would you be good enough to give instructions that the box should be brought very gradually to the temperature of the hatchery, and I suggest this would best be done by arranging that the hatchery water supply should be trickled over the ice and through the box until all the ice has melted.

I can now tell you that we have had a very worrying time incubating these eggs; they have developed mysterious diseases and we have lost quite a lot. The result is that though I think we have enough salmon, we are distinctly short of sea-trout, but our good friends in Lancashire have again come to our rescue and their eggs in their hatchery have eyed at the right time and they can make up, if necessary, both the salmon and sea-trout to provide a full box.

After all these happy chances, surely the experiment will succeed this time.

Yours sincerely,

F.T.K. PENTTELOW.

Sir Edwin Arrowsmith.

Copy to Mr Young - for information

Copied from H.E.'s private file.

TROUT FRY

1949

Johnsons Harbour  
Port San Carlos  
San Carlos  
Felton Stream  
Mile Pond  
Round Pond

1950

Port San Carlos  
Chartres  
Pebble Island  
Darwin  
Port Howard

1951

Hill Cove  
Fox Bay (east & west)  
Lorenzo  
Port San Carlos  
Elephant Beach  
Pebbly Pond

1952

North Arm  
Kidney Pond  
Mile Pond  
Round Pond  
Pebbly Pond  
Fitzroy

Not sure what year  
but before 1949

Marlo  
Murrel  
Pony Pass  
Moody Brook.



DECODE.

TELEGRAM.

295.

*So colony file*

From .....FOODKEEPER, LONDON.....

To .....H.E. THE GOVERNOR.....

---

Despatched : 11th January 1961 19 Time : 1400

Received : 12th January 1961 19 Time : 0900

No.6 from Pentelow.

Instructions noted and carried out. Box  
will fit cold room 'Darwin'.

p/l : MW

## GOVERNMENT TELEGRAPH SERVICE

296

FALKLAND ISLANDSSENT

W. &amp; A. S. LTD.

Number	Office of Origin	Words	Handed in at	Date
				13.1.61
To	CAPTAIN WHITE RUS DARWIN			<i>To Colours file</i>

EGG BOX WILL FIT COLD ROOM

GOVERNOR

Time

## GOVERNMENT TELEGRAPH SERVICE

297

FALKLAND ISLANDS**RECEIVED**

Number	Office of Origin	Words	Handed in at	Date
			'Darwin'	22.1.61
To	H. E. THE GOVERNOR			

*To Colony file*

SALMON OVA SOUTHBOUND STILL IN APPARENT

GOOD ORDER

MASTER

Time

Copied from H.E.'s private file.

26th January 1961.

Many thanks for your letter No.17751 of January 11, which arrived to-day with the salmon and sea trout eggs. Of course, it would be just about the hottest day on record, and the temperature of the water in the hatchery is over 60°, but the box was brought very gradually up to the temperature of the hatchery, and I hope all goes well. I have a bucket with rain-water in it in my deep freeze, and we will add some ice gradually to the hatchery water if the temperature continues to run as high as it is at present.

The salmon ova looked to be in excellent condition, but quite a few of the sea trout lower down in the box had already hatched, and I am afraid those are lost.

We are going to put out two Kashmir boxes tomorrow by helicopter, and on Monday send another two, manufactured locally, out to the West.

I do hope all goes well, but I wish our temperature was a little lower - an unusual thing to say in the Falklands!

With very many thanks for all the trouble you have taken over our shipment,

(signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

8th February 1961.

Since I wrote to you on January 26 I have been out to our hatchery practically every day. I think all the sea trout ova that are going to hatch have already done so, and we have a few hundred healthy looking alevins - just how many there are I cannot guess. George Stewart, our chap who looks after the hatchery, says 2,000, but I would put it at less than a quarter of that number.

We have lost quite a few salmon eggs, but have several thousand left still looking healthy. The first one hatched on February 2, and three more yesterday. When we arrived at the hatchery at noon to-day, we found to our horror that the water from the dam had ceased to flow, and on lifting the lids I was wondering whether we would find all the alevins dead in the trays. Happily this was not the case, and we got the water moving by emptying buckets from the stream into the tank. We have now rigged up a pump to the pipe at the dam, and water is flowing again. As bad luck would have it, the dam must have sprung a leak in the night, but we hope we can get this fixed without too much delay.

We planted the two Kashmir boxes of salmon ova successfully on January 27, and another one on the West Falkland on the 30th. I have not heard yet how these are doing, but I hope all goes well with them.

With kind regards, and I shall let you know next month how things have gone,

(Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

London.

Our Ref: FGB. 17751

21st February, 1961.

Dear Sir Edwin,

Many thanks for your letters of the 26th January and 8th February. I am sorry the sea trout have hatched a bit prematurely, but at least it is satisfactory to know that you have some.

I hope indeed the salmon do a great deal better for I am not quite sure that the results from sea trout would be any better than those you have had from brown trout, and after all the salmon, if it can be established, has the merit of being easier to catch than sea trout, at least in this country.

It is our experience that the water always goes off at the critical time. There is a gremlin which sees to that sort of thing and he is full of ingenuity. However, you apparently nearly caught him at it and managed to save the day.

Sir Harold Parkinson has very kindly asked me to go and stay with him at Thurlestone in May with a visit to our Axe trap in prospect, and I hope to do so if a visitor from Australia will rearrange things to suit me.

All good wishes,

Yours very sincerely,

F.T.K. PENTLOW.

Sir Edwin Arrowsmith.

10th March 1961.

I am afraid that once again our hatching of the salmon ova in the hatchery was not a success, and we produced only three alevins. It is not very easy to account for this, for the eggs looked very healthy when they arrived. I fear the cause may have been the high temperature of the water when the eggs were put out, but more so the occasion when the water stopped running for some hours. When a pump was connected to get the water going, a rusty deposit was washed from the galvanized iron pipe (new in December), and got into the first trough.

There is, however, better news of the Kashmir boxes, and I think they may be the answer for the Falklands. We planted the two boxes you borrowed for us from the Somerset River Board, and another we made here, in some small streams feeding into tributaries of our three largest rivers. The two Somerset boxes contained about 1,200 eggs, and only some 200 dead eggs remained when the boxes were recovered. We think the rest hatched out successfully, and the fry are in the streams. We have not had a chance to inspect the third box, but it is interesting that the number of dead eggs was almost exactly similar in the other two boxes, one of which was planted on the East, and the other on the West Falkland.

The original estimate of the number of sea trout hatched was much too high, but in the end some 120 fry survived, and these were planted last week in the head waters of a river which contains none of the brown trout. This river flows into the sea in Salvador waters, into which some of our best trout rivers flow, and I think there is quite a good chance of a few of these sea trout surviving to spawn in future years.

There have been some very good trout caught this year, and last week some ten rods from H.M.S. Protector in one day caught about 200 lbs. of fish. The best was over 11 lbs., and the average must have been between six and eight pounds. Most of the rods were inexperienced, and were hurling miscellaneous ironmongery into the estuary with 9 lb. b/s line and fixed spool reels. Two of us were fishing up stream with a fly without success, for the run into the fresh water has not quite begun. The trout seem to go up and down in the estuary with the tide.

I am hoping to be able to come home for a month or more in July, and I shall look forward to seeing you then.

(Signed by Sir Edwin Arrowsmith)

F.T.K. PENTLOW ESQ.

Copied from H.E.'s private file.

11th March 1961.

I am most grateful to you and your Board for your kindness in letting us have salmon and sea trout ova again this year. I am afraid we have not been very successful, but I think we have succeeded partially, and now the fry of Lancashire salmon and sea trout are in Falkland Island rivers.

Once again we were unsuccessful with the salmon ova in our hatchery, and only succeeded in producing three alevins. The temperature of the water in the hatchery was over 60° on the day the box arrived here, which, unfortunately, was one of the hottest days in the year, and the high temperature continued for several days afterwards. We ran the water over the box for several hours before putting the ova out in the trays. They continued to look healthy for ten days, with very many fewer turning white than last year, but we had a disaster one night when the level of the dam, from which the pipe feeding our hatchery runs, fell suddenly in the night, and the water ceased to flow into the hatchery. It is hard to say for how long the water ceased running, but it may have been for 10 to 12 hours. A pump was connected to the end of the pipe, and unfortunately when it was set going, a rusty deposit was washed into the first trough before it could be disconnected. From that time on the death rate increased, and no more eggs hatched. New galvanized iron pipes were put down only in December, and it was surprising that in such a very short time this deposit had formed. We have no plastic pipes out here, such as you have in your hatchery, and I am told that on some farms where plastic pipes have been used, they have been troubled by rats chewing the pipes.

We did, however, plant out some 3,500 salmon ova in Kashmir boxes in small streams leading into tributaries of three of our largest rivers. Two of these boxes have been recovered, and they contained only some 200 dead eggs - about 1,200 eggs were put in each box. We have not yet been able to return to the place where the third box was planted. It seems that Kashmir boxes are probably the answer for the Falklands, and another time we could put more ova in them.

The sea trout ova were very much more advanced when they arrived in the Falklands, and some had, indeed, hatched in the box on its way here. Again we were not very successful, but in the end were left with 120 lively fry, which have been planted in the head waters of a river containing no brown trout. Since we have no predators like eels here, I think they have quite a good chance of survival.

As I told you, our imported brown trout have really changed into sea trout, or certainly into slob trout, and some really magnificent specimens have been caught this year. The best has been over 11 lbs., and there have been 20 to 30 of between 6 lbs. and 11 lbs. These trout had to acquire the habit of going down to the sea, and since this would be the natural habit of the sea trout, I should think the latter would grow to a sensational size if they do become established.

Thank you again for your help, and please give my best wishes to the Members of your Board when you see them.

(Signed by Sir Edwin Arrowsmith)

L. STEWART ESQ.  
The Lancashire River Board,  
Fishery Office,  
18a, Great John Street,  
LANCASTER.



TROUT SCALES FROM FALKLAND ISLANDS1. General

Both specimens are very similar. They have a central area representing two or three years' growth in a stream, followed by widely open growth consistent with lake or fiord conditions. Both fish have spawned twice, and the spawning marks are boldly marked, and quite definite; they are stronger than the normal sea trout spawning mark, and erosion has been definite almost all round the scale.

Condition assessed by the ordinary formula is a little lower than average by trout standards; the fish were more salmon-shaped.

2. Fish A 27½ inches; 8½ lb. K=0.96

Sea trout type of growth - 2 years stream, 3+ years in sea or estuary or lake; spawned on last two winters. Estimated annual lengths: 4.7, 10, 18.5, 22 (SM), 25.5 (SM) ins.

3. Fish B 27 inches; 7½ lb. K=0.9

Sea trout type of growth - 3 years in stream, 3+ years at sea or lake or estuary; spawned on last two winters. Estimated annual lengths: 3.1, 5.9, 9.9, 19, 25.2 (SM), 25.6 (SM) ins.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
LONDON.

Our Ref: FGB. 17751

27th March, 1961.

Dear Sir Edwin,

Thank you very much for your letters of the 8th February and 10th March. They arrived within two days of each other so I suppose the earlier one was delayed.

It is a pity that the eggs in the hatchery were unfortunate again but I do congratulate you on your foresight in getting some Kashmir boxes as a second line of defence, and I hope indeed that the results from those will make up for the losses. It looks as if the fish hatch all right any way, and it may be that boxes are the right answer.

It will be most interesting to see if the sea trout manage to establish themselves; it is a very small planting and I suspect too small for the purpose, but in your conditions the survival may be higher than we should expect here, and any way we can but hope.

I was most interested to hear about the sea trout fishing. It seems first-rate on the right day and you must find it a distinct asset.

--- I enclose Hartley's report on the scales. I do not know why he was so cautious in his opening sentence for surely these are fish which spent their youth in a river and then migrated to the sea. Whether they went beyond coastal waters is certainly open to question, but I do not suppose they were reared in a hatchery nor that you have a lake big enough to produce that sort of growth.

I was delighted to hear you are coming home in July and shall look forward to seeing you. As far as I know I shall be in London all that month except for a visit to Scotland on the 17th and to the Game Fair on the 21st and 22nd.

Sir Harold Parkinson kindly invited me to stay at Thurlestone in May but I had to refuse because of an engagement with the Head of the Fish and Wild Life Service of the State of Victoria.

All good wishes,

Yours sincerely,

F.T.K. PENTELOW.

Sir Edwin Arrowsmith.

Copied from H.E.'s private file.

TROUT SCALES FROM FALKLAND ISLAND

1. General Both specimens are very similar. They have a central area representing two or three years' growth in a stream or possibly hatchery pond, followed by widely open growth consistent with lake or fiord conditions. Both fish have spawned twice, and the spawning marks are boldly marked, and quite definite; they are stronger than the normal sea trout spawning mark, and erosion has been definite almost all round the scale.

Condition assessed by the ordinary formula is a little lower than average by trout standards; the fish were more salmon-shaped.

2. Fish A  $27\frac{1}{2}$  inches;  $8\frac{1}{2}$  lb.  $K = 0.96$ .

Sea trout type of growth - 2 years stream, 3+ years in sea or estuary or lake; spawned on last two winters.

Estimated annual lengths :- 4.7, 10, 18.5, 22(SM), 25.5(SM) ins.

3. Fish B 27 inches,  $7\frac{1}{2}$  lb.  $K = 0.9$

Sea trout type of growth - 3 years in stream, 3+ years at sea or in lake or estuary; spawned on last two winters.

Estimated annual lengths :-

3.1, 5.9, 9.9, 19, 23.2(SM), 25.6(SM) inches

(Initialled)

W. G. H.  
23/3/61

Copied from H.E.'s private file.

LANCASHIRE RIVER BOARD

18a GREAT JOHN STREET

L. STEWART

LANCASTER.

Our Ref. LS/PB

28th March, 1961.

Sir Edwin Arrowsmith,  
Government House,  
Falkland Islands.

(Dear Sir Edwin,)

Thank you very much for your letter of the 11th March which, on the whole, indicates that our efforts have not been completely futile. There is certainly no reason why further consignments could not be made and by carrying on this project for a period of, say another three years, that some major beneficial result could accrue.

In the first instance I would suggest that Mr Pentelow be asked to co-operate again and for our part, we in the Lancashire River Board Area would be only too pleased to help you.

I had a word with Sir Harold Parkinson the other day and he has asked me to convey to you his very kind regards and those of Lady Parkinson and if and when you come over to the old country, he would be pleased to see you, and likewise ourselves.

Kind regards and thank you for the information given.

(Sincerely,

Leslie Stewart)

● Copied from H.E.'s private file.

28th April 1961.

I am returning one of the Kashmir boxes lent to us by the Somerset River Board in the R.R.S. 'John Biscoe', which is due to dock at Southampton on May 29. It is addressed to you, and no doubt the Agents will forward it to the Ministry. I am sorry I have not been able to get hold of the one we sent to the West Falkland. They said it had been sent in in our little ship which arrived yesterday, but it was not on board. I am afraid the earliest I shall now be able to get it back will be in July. We have had a couple of copies made of the box, and I think we should have more made here, for I believe ova will do better in them put directly into the streams than in our hatchery.

I am coming home in July for a couple of months, and look forward to seeing you then.

(Signed by Sir Edwin Arrowsmith)

F.T.K. PENTLOW ESQ.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
LONDON.

Our Ref: FGB. 17751

19th October, 1961.

My dear Governor,

Two Kashmir boxes lent by the Somerset River Board are coming down to you by the JOHN BISCOE. They are addressed to you and I suggest they should be unpacked when they arrive because I understand from the Fishery Officer to the River Board that one of them requires some minor attention which he had not time to give it. I understand he has put in a note explaining what should be done.

The Lancashire River Board has promised us the eggs and we expect those next month.

All good wishes,

Yours sincerely,

F.T.K. PENTLOW.

Sir Edwin Arrowsmith.

Copied from H.E.'s private file.

October 23, 1961.

The box which came out with the ova last time is leaving here in the 'A.E.S.' on the 25th, and should get to London towards the end of November. The Falkland Islands Company will be able to give you the exact date of her arrival nearer the time.

I think the best time to get the ova out would be to connect with the 'Darwin' which is due to sail from Montevideo on January 16 or 17, and to arrive in Stanley January 20 or 21. I am also expecting Protector to arrive in Stanley on January 23, from a trip South, and this would help us in getting the Kashmir boxes to the streams by helicopter.

We had a very long, cold winter, but spring seems to have come at last, and the fishing is good.

All best wishes,

(Signed by Sir Edwin Arrowsmith)

F.T.K. PENTLOW ESQ.

P.S. Just to remind you, the 'Darwin's' refrigerator can accommodate a box measuring 20" x 33" x 45".



November 10, 1961.

Many thanks for your letter No.FGB.17751 of October 19, which had crossed with mine of October 24. I look forward to receiving the two Kashmir boxes from the Somerset River Board in the 'John Biscoe', which is due here round about November 22.

I had a very pleasant day fishing on West Falkland last week, and got my best trout on a fly for far - a nice 4 lb. cock fish on a small Silver Doctor. The man I was fishing with got three cock fish between 3 lbs. and 4 lbs. spinning. This particular river is not easy to get to, trout were put in it over ten years ago, and it has only been fished three times. The trout I caught was in good condition, and silvery. It is interesting that at this time of the year there seem to be more cock fish than hens in the streams, and it looks as though the hen fish go to sea or to the estuaries earlier, and return later. My companion also caught a spent hen fish which was 25" long, but would only have weighed about 3 lbs. It must have spawned pretty late.

We have made six Kashmir boxes here during the winter, and with the three we have from the Somerset River Board, ought to be able to spread them well round the Islands. I am also hopeful that we shall do better in our hatchery. We are changing the galvanized pipe for a plastic one, and are painting the boxes and trays with what appears to be a better grade of green bitumastic paint.

I was going to ask you to send me some Malachite Green in the 'Kista Dan' in this letter, but it cannot reach you in time, and so I shall send a telegram.

All good wishes,

(Signed by Sir Edwin Arrowsmith)

F.T.K. PENTELOW ESQ

(Telegram was sent to Pentelow on 10.11.61)



Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

LONDON.

Our Ref: FGB. 17751

13th November, 1961.

Dear Sir Edwin,

Many thanks for your two letters and telegram. We will put a bottle of malachite green sufficient for your purpose on the KISTA DAN.

We have not got the eggs yet but your timetable seems to be admirably fitted to salmon incubation, and unless something unforeseen happens we shall carry out your wishes.

It is most kind of you to return the box. We are grateful for the trouble you have taken.

The B.B.C. have got me to do a broadcast on the experiment for their overseas service, and I hope I do not drop any bricks.

Yours sincerely,

F.T.K. PENTLOW

Sir Edwin Arrowsmith.

# REPORT ON A PRELIMINARY INVESTIGATION OF SOME FRESH WATERS IN THE FALKLAND ISLANDS

## INTRODUCTION

Four reaches of the Murrell River were examined briefly on 24th and 25th November 1961 by M.W. Holdgate (Scott Polar Research Institute, Cambridge), R.A. Heywood, and P.J. Tilbrook (F.I.D.S.).

The first study area lay on the upper reaches, nearly due west from Two Sisters Gate and immediately downstream from the line of telegraph poles linking Stanley with Horseshoe Bay. The second area, which was only examined briefly, lay on the east-flowing reach of the river just before the point at which it drops into its broad lower valley. The third and fourth stations lay on the lower Murrell, both just above and just below the point where it becomes tidal. This point lies some 1700 yards NNE by N from Mount Longdon. The approximate location of these areas is shown on the attached sketch map.

Collections were made largely by hand, by searching moss tufts and the undersides of stones.

## THE UPPER REACHES

At the first station the Murrell is a rapid stream about 12 ft. to 15 ft. across, in which torrential sections are interrupted by only occasional pools. On 24. Nov. 1961 the river was in moderate flood and a large pool under an eroding bank was from 3 ft. to 4 ft. deep in many places. The boulder-stream rapids falling from this pool, at a slope of about  $1^{\circ}40'$  (determined by Abney Level), were about 1 ft. to 2 ft. deep. Both pool and rapids were floored by stones ranging from 4" to 1 ft. across. The flow of water in the rapid reach was of the order of 2 ft. per second. The water was strikingly cold and discoloured by peat sediment. Tests with a B.D.H. general indicator gave a circum-neutral reaction, but this is probably significant only in showing that there was no strong acidity and that the water contained few dissolved ions.

Tufts of a species of moss (probably *Mnium* sp.) were the only significant submerged vegetation. They grew on stones in the rapid current and contained entrapped gravel and sediment. The largest tufts covered an area of about 1 square foot and the moss felt was about 5" thick. On some stones there was a slippery felt, probably of filamentous algae and diatoms. There was no rooted aquatic vegetation, but owing to the high water level bankside vegetation had been submerged in many places.

The moss tufts contained large numbers of a small fresh-water shrimp (Gammarid sp.), and many small bright-red worms (probably Enchytraeidae). Small insect larvae (probably of a non-biting midge belonging to the family Chironomidae) were also abundant. A stone-fly (Plecoptera) larva was less numerous. A pale grey flatworm (Planarian) was common on stones and a large leech was present. There were a few empty caddis-fly cases, but no living larvae were collected. All this fauna was bottom living and of cryptic habit (that is, it occupied situations not exposed to the scour of the current). A tow-net dragged across the large pool below the eroding bank did not yield any small free-swimming or planktonic animals, and these would not be expected in so rapid a torrent.

Below the first station, as far as the second, the character of the river changes little. At the second station the slope was more gentle - only about half a degree - and the stream was wider (15 to 18 ft.). In several places, including the second station, there were islets and side channels relatively sheltered from the main current. The vegetation of moss tufts was the same throughout this stretch of river and the fauna at the second station

## EXAMINATION OF SOME TROUT STOMACHS

A sample of 10 brown trout, not from the Murrell River, have been dissected and their gut contents examined. The results are set out in the attached table.

The commonest single item of food in these fish was a small black ~~Chironomid~~ fly (probably a Chironomid), which was not seen on the Murrell but could be the adult stage of the species whose larvae were found there. In certain fish (e.g. 1 and 5 in the table), this species predominated and these animals must therefore have been feeding at the surface. Conversely, the second commonest food species ~~is~~ the Gammarid crustacean found in the Murrell, and fish 4, 9, and 10, in which it predominated, had clearly been bottom-feeding. This division into bottom and surface feeders is not, however, complete. Gammarids, Plecoptera larvae and Trichoptera larvae occur in almost all fish, and only one fish (6, which had a nearly empty gut) contained no surface-taken material (except the fly on which it was caught!). These trout are clearly generalised feeders, taking whatever is going, and the differences between them probably reflect the chance availability of food in the different lies in the period immediately before capture.

There is no common aquatic species in these guts which was not also found in the Murrell (although the caddis larval cases in the latter river were generally empty while those in the guts contained larvae). This suggests that the fauna sampled in the Murrell is reasonably typical for the region and season. On the other hand the small worms seen abundantly in the Murrell are not conspicuous in the guts, perhaps because of the rapid digestion of their soft bodies.

Small stones and vegetable material were present in many of the trout guts. Probably they were swallowed inadvertently. The gammarid and Plecoptera larvae are commonest in moss tufts and to obtain them fish probably nuzzle into the plant patches. Gravel and plant fragments could easily be ingested in this way.

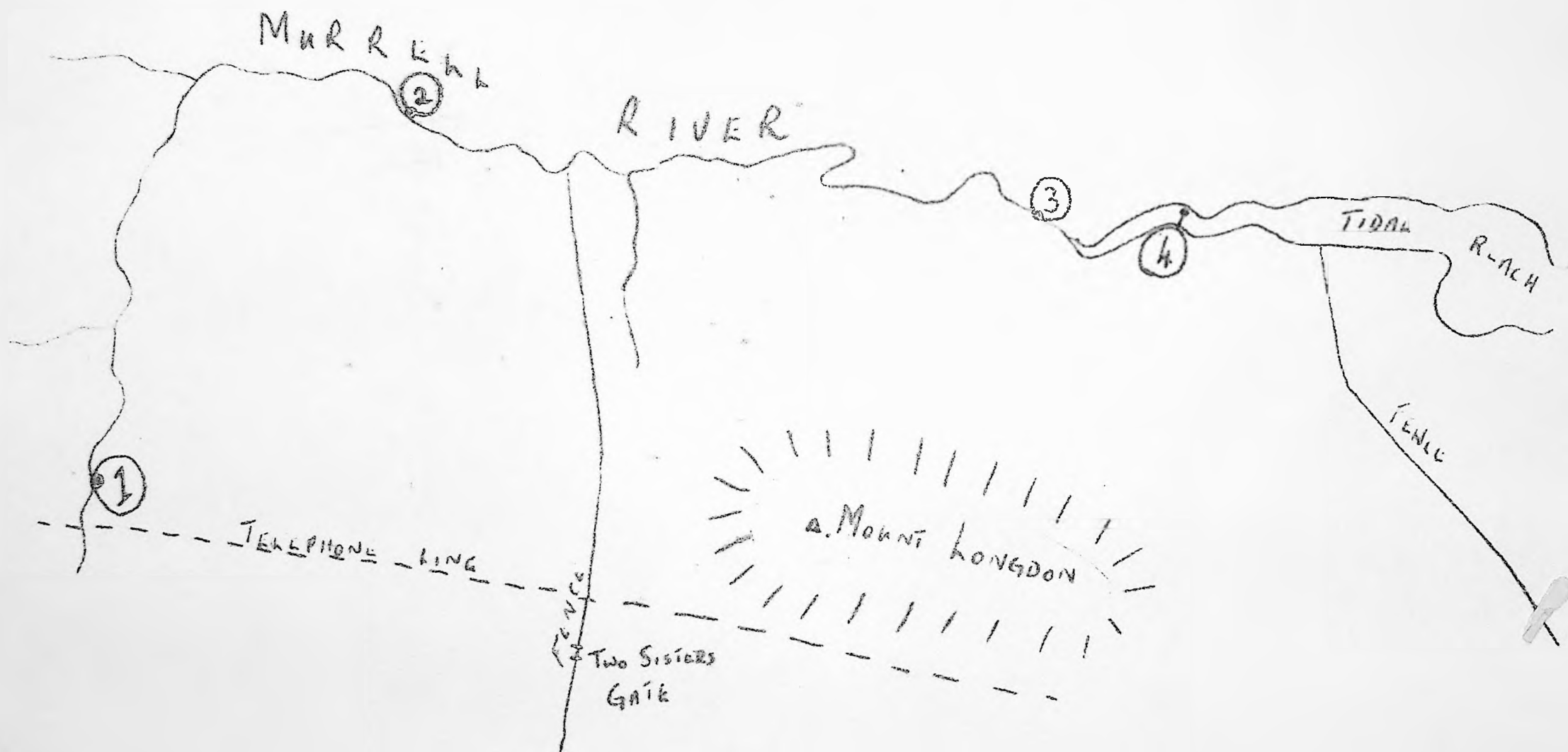
Among the surface-gathered (or non-aquatic) food, there are several species in no way associated with water. A small Delphacid bug occurred in many fish, and a 'leaf-hopper' of the same or an allied species is common among 'white grass' on the Camp. These insects jump vigorously when disturbed and could readily land, or be blown, onto the water. Another common insect in white-grass is a small brown moth rather similar to that seen in many trout guts, and its presence may have resulted from a similar accident. The weevils seen in 3 trout are not unlike a species present in Empetrum (diddle-dee), which is a frequent bankside plant.

## DISCUSSION

The examination of trout stomachs confirms that they are generalised feeders and that while they take the common fresh-water animals they depend for a great deal of their food on ~~flycatching~~ adult insects alighting or being blown onto the water surface. In summer, when the insect life of the Camp reaches a maximum, this element in the diet is likely to increase and food is probably abundant. In winter the trout probably depend more on the aquatic species and it is possible that at this time food may become limiting. If stocking is to be increased it might be worth exploring possible introductions of harmless freshwater insects (stoneflies and mayflies) from suitable high streams in Scotland or similar regions. It would also be interesting to know whether many fish drop down the rivers and feed in the sea in winter. A more detailed study of these subjects is desirable, for the present remarks are based on too little information to be reliable.

T R O U T											GUT CONTENTS	
1	2	3	4	5	6	7	8	9	10	All		
3	2	1	9	-	6	-	3	12	13	48	Gammarid sp.	
1	3	-	3	1	2	-	1	5	-	19	Trichoptera larva	
-	1	1	-	-	-	-	-	-	-	3	Trichoptera adult	
3	1	1	2	3	2	5	3	3	-	23	Plecoptera larva	
-	-	-	1	-	-	-	-	-	-	1	Small worms	
1	-	-	-	1	-	2	-	1	1	6	Diptera larva	
1	-	-	-	1	-	1	1	1	1	6	Diptera pupa	
-----												
15	3	12	-	20	-	3	3	-	-	59	Diptera sp. Chironomid adult	
1	-	2	-	3	-	3	4	1	-	14	Other Diptera adults	
3	1	-	-	2	-	1	6	-	-	12	Delphacid bug, adult	
-	-	-	-	1	-	-	-	-	-	1	Cerabid beetle	
-	-	-	-	-	-	1	1	-	1	5	Curculionid beetle (weevil)	
1	-	-	-	-	-	-	-	-	-	1	Lepidoptera pupa	
-	2	2	1	2	-	3	-	3	2	15	Lepidoptera (moth)	
-	-	-	-	3	-	-	-	-	-	3	Parasitic Hymenoptera	
-----												
+	+	-	-	-	-	+	+	+	+	(6)	Plant material	
-	+	+	+	-	+	+	+	-	+	(7)	Stones	

Table. The gut contents of 10 brown trout from the Falkland Islands. The first group at the top of the table is of truly aquatic ~~xxxxxx~~ species ( apart from the Trichoptera adults). The second group is of flying or non-aquatic insects. The third group is of non-animal material.



Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
LONDON.

Our Ref: FGB. 17751

29th December, 1961.

Dear Sir Edwin,

We have had a lot of trouble with the salmon and sea trout eggs this year. For some reason they have not taken kindly to being transported in the green stage from Lancashire to London, and why this is we do not know. We did not have this trouble in 1959. We did have it last year but we were able to make up the consignment, and this year again it seems worse.

However, we hope that we shall have sufficient survivors to fill a case, half with salmon and half with sea trout eggs, to put on BOAC Flight BA 661/492/15 leaving London Airport on January 15th. That should connect with the DARWIN on the 17th.

If our stocks here should not survive we have a second line, for Stewart has put down enough eggs in his own hatchery to replace ours at the eyed stage if necessary. The difficulty about that is that as there is no temperature control the date of eyeing cannot be foretold. They should be fit to transport by the 15th, but we are having a remarkably cold spell and they may be delayed. At the worst that will mean that they will have to catch the DARWIN on her next trip and of course we shall notify you in good time if the shipment on the 15th is not made.

I hope the parcels sent by ship have arrived quite safely.

All good wishes for 1962.

Yours sincerely,

F.T.K. PENTELOW



## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

314.

SENT

W. &amp; S. LTD.

Number	Office of Origin	Words	Handed In at	Date
<u>TELEPHONED</u>				10 1.62
To				
FOODMASTER, LONDON, S.W.1.			So Wong file	

FOR PENZANCE. WILL CVA ARRIVE MONT VIDEO TO CONNECT

DARWIN JANUARY 16th

GOVERNOR

Time

Reply at 316

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

315

Number

Office of Origin

Words

Handed in at

Date

To

10.1.62

CAPTAIN WHITE, HMS DARTMOUTH

So Colony file

HOPE SALMON OVA WILL ARRIVE TO COMPLET YOUR RETURN VOYAGE  
STOP HAVE ENJOYED L NOON AND WILL LET YOU KNOW WHEN I  
GET REPLY

GOVERNOR

Time

See 318



DECODE.

TELEGRAM.

258

316

From Foodkeeper, London

To Governor, Port Stanley, Falkland Islands.

Despatched : 10th January, 19 62. Time : 1630

Received : 11th January, 19 62. Time : 1015

FoodX 142 from Swain over due Montevideo p.m.  
January 16th Maclean and Stapledon advised.

Foodkeeper London

See 314.

~~259~~ 317

G.I. submitted

8 11/1/62

P/L : LH

HE  
has one a telegram. 10m with copy for  
our file 2m

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

318

W. &amp; S. LTD.

Number

Office of Origin

Words

Handed In at

Date

411  
11.1.62

To

et  
CAPTAIN WHITE NEW DARWIN

To Albany file

SALMON OVA DUE MONTEVIDEO P.M. 16th PRESUMABLY BY BOAC 661 STOP  
MACSTAPLE HAVE BEEN ADVISED FROM LONDON STOP GRATEFUL IF YOU  
COULD SEE ROSE AND ASK HIM TO ENSURE THAT WE GET CO-OPERATION  
OF CUSTOMS SO THAT OVA GET FROM PLANE INTO YOUR COLD STORE AS  
QUICKLY AS POSSIBLE

GOVERNOR

Time

Reply at 319

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

RECEIVED

260.  
319

Number	Office of Origin	Words	Handed in at	Date
10	Darwin	22	2125	11

To  
etat Governor Stanley

318 Reference ava will do everything possible affect successful transhipment  
and carriage stop Truste any necessary detailed instructions accompanying  
White

Time

NB

320  
Reply at 262.

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

320

SENT

W. &amp; S. LTD.

Number	Office of Origin	Words	Handed in at	Date
469				12.1.62
To	etch			
	CAPTAIN WHITE, RMS DARWIN			To Coling file

319

MANY THANKS MESSAGE STOP TREATMENT OVA SAME AS LAST TIME  
STOP I THINK MAIN POINT IS TO KEEP TOP OF BOX FILLED WITH  
ICE

CONFIRM

Time

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSRECEIVED

321.

Number	Office of Origin	Words	Handed in at	Date
1	ZDLC	30 7 1225		
	ETAT GOVERNOR PSY			
	PERFECT TRANSHIPMENT OVA EFFECTED BY			
	SAME IN XX 36 F COOL STORAGE 24 HOURS AFTER			
	DEPARTURE LONDON PROBABLY UNLIKELY NECESSARY RENEW			
	ICE ON PASSAGE REGARDS			

*To Colony file*

WHITE

Time

322

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
Fisheries Department,  
Whitehall Place,  
London, S.W.1.

I have this day inspected a consignment  
of 25,000 SALMON AND SEA TROUT EGGS  
to be exported by FRESHWATER FISHERIES LABORATORY  
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD,  
10, WHITEHALL PLACE, LONDON, S.W.1  
to FALKLAND ISLANDS  
and hereby certify that to the best of my  
knowledge and belief they are free from  
disease.

Signed

*A. Swain*

Principal Scientific Officer

Date

15 JANUARY, 1962





264  
323

VALUE AND ORIGIN OF GOODS

TO:- SIR EDWIN ARROWSMITH, C.M.G.,  
GOVERNMENT HOUSE,  
PORT STANLEY,  
FALKLAND ISLANDS.

FROM: FRESHWATER FISHERIES LABORATORY,  
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD,  
10, WHITEHALL PLACE,  
LONDON, S.W.1.

SIZE OF CONTAINER 16" x 16" x 20"

WEIGHT APPROXIMATELY 22 KILOS.

CONTENTS 25,000 LIVE SALMON AND SEA TROUT EGGS.

VALUE FREE GIFT TO THE GOVERNOR, FALKLAND ISLANDS.  
NOMINAL VALUE APPROXIMATELY £50.

ORIGIN GREAT BRITAIN.





I N V O I C E

TO:- SIR EDWIN ARROWSMITH, C.M.G.,  
GOVERNMENT HOUSE,  
PORT STANLEY,  
FALKLAND ISLANDS.

FROM:- FRESHWATER FISHERIES LABORATORY,  
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD,  
10, WHITEHALL PLACE,  
LONDON, S.W.1.

VIA B.O.A.C. FLIGHT BA 661/492/15 LEAVING LONDON AIRPORT FOR  
MONTEVIDEO ON 15th JANUARY, 1962.

AND S.S. "DARWIN" FROM MONTEVIDEO TO PORT STANLEY ON  
17th JANUARY, 1962.

DESCRIPTION OF GOODS

ONE BOX CONTAINING 25,000 LIVE SALMON AND  
SEA TROUT EGGS.

SPECIAL INSTRUCTIONS

BOX TO BE KEPT UPRIGHT IN A COOL (NOT FREEZING) PLACE.

BOX TO BE HANDLED GENTLY AS CONCUSSION IS FATAL TO THE EGGS.

ALL FREIGHT CHARGES TO BE SENT TO:-

FALKLAND ISLANDS GOVERNMENT,  
COLONIAL OFFICE,  
CHURCH HOUSE,  
GREAT SMITH STREET,  
LONDON, S.W.1.

*H. Anderson*





~~May 14, 1962~~

Fisheries Laboratory,  
Ministry of Agriculture,  
Fisheries and Food,  
London.

Our Ref.  
FGB 17751

17th January, 1962.

Dear Sir Edwin,

I am writing on behalf of my Chief, Mr. Pentelow, who is in hospital just now. He went in a week ago to get gall-stones removed, and I am happy to report that he is progressing very satisfactorily. I understand he plans to be back in the office in mid-February.

I took the consignment of salmon eggs to London Airport on Monday, the 15th and they were due to fly out that evening. I cabled the waybill number to Mr. Drever of Maclean and Stapledon who knew the eggs were due in Montevideo on the 16th. I am hoping that at this moment they are aboard the "DARWIN" on their way from Montevideo to Port Stanley.

Most of the consignment consisted of salmon eggs. These were in the early 'eyed' stage and in excellent condition for the long journey. The bottom four trays were sea trout - about 8,000 eggs I should say. I did not want to risk a larger number of sea trout as there was no obvious sign of 'eyeing' and I was not sure how they would travel. However, they were in very good shape after their journey up from Lancashire, so I have a strong feeling that they will be alright.

The eggs, from Lancashire, have been incubated at a fairly low temperature so I do hope the weather is kind to them when they arrive in Port Stanley.

Wishing you every success with the hatching.

Yours sincerely,

A. Swain.

Sir Edwin Arrowsmith.

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

326

W. &amp; S. LTD.

Number	Office of Origin	Words	Handed in at	Date
				23.1.62
To	FOODCOMPER, LONDON, S.W.1.		<i>Do Colony file</i>	

FOR PETERLOW STOP SALMON EGGS ARRIVED IN EXCELLENT  
SHAPE AND WERE PUT OUT TODAY IN STREAMS IN WASTEIR  
BOXES

GOVERNOR

Time

To Along file.

## Instructions Kashmir Boxes.

Protect box as far as possible from bumps when taking it to the stream.

Place box in small flowing stream, either well up river you hope to stock, or in feeder stream connecting with river. The stream should be sufficiently deep to float box when stream at lowest level. If you can find a shady spot so much the better. It does not matter much how the box is placed, but we have found that where the stream is fairly fast flowing, placing it diagonally is best.

Secure box with rods passing through eyelets on either side, take hammer to drive rods into the stream bed.

If necessary, tie box to bank to keep it in position, but it should be able to float up rods if stream rises.

*throw men away,*

When box is in position, float eggs from tray in which they have travelled, into box. The easiest way to do this is to slit the material of the travelling tray and wash eggs into box by pouring water gently from a tin or cup.

Close and secure lid, and leave eggs to hatch. The alevins will find their way out. If you get a chance to have a look at the box in a week or so, all eggs which have turned white and opaque should be removed. This is best done with a glass tube, placing your thumb over the end and sucking the dead egg into the tube by releasing your thumb. Failing this, tweezers can be used, or a spoon.

January 1962

For Secretariat

File  
328.

Fish File.

— Boxes containing  
approx 5,000 eggs each

On 23. 1. 62

3 boxes sent to

West for —

Hill Cove.

Port Howard (Warah)

Port Stephens.

2 boxes planted

by helicopter: —

Port Carlos river.

Malco river  
83.

24. 1. 62.

1 box planted Two

Sisters stream for  
murrel river. P.A.

Copied from H.E.'s private file.

February 2, 1962.

The salmon ova arrived in splendid condition in the "Darwin", and we had them planted in Kashmir boxes in the rivers just over a week after they left London. The sea trout ova were not so advanced, and we are trying to bring them on in the hatchery. No reports yet how the boxes are getting on, but I hope to hear something soon. Very many thanks for all your help.

I have booked from July 15 to July 30 at the Newport House Hotel - any chance of your being there?

(Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

Copied from H.E.'s private file

February 3, 1962.

I think you might like to know that the salmon ova arrived here in splendid condition, and we put them out in Kashmir boxes in the rivers just over a week from the time they left London. I have not heard yet how they are getting on, but after the trial in Kashmir boxes we did last year, we think they should do well, and it would be a splendid thing if we could establish salmon from the Lune in the Falklands.

Thank you and your Board very much indeed for your kindness in letting us have the ova.

(signed by Sir Edwin Arrowsmith)

L. Stewart Esq.

Copied from H.E.'s private file.

LANCASHIRE RIVER BOARD

18a Great John Street,  
Lancaster.

LS/MS

16th February, 1962.

Sir Edwin Arrowsmith,  
Government House,  
Falkland Islands.

Dear Sir Edwin,

How nice to receive your letter of February 3rd, and to know that the Salmon Ova are doing so well. This, I am sure, is the result of incubating them as far as possible in Lune water and then transferring them to you via London.

I will place your thanks before the Board and I am sure they will be very pleased to know that their help is appreciated.

If you could let me know in the future what survival ratio you have, I shall be extremely grateful.

Yours sincerely,

L. STEWART  
Fishery Officer.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

London.

Our Ref: FGB. 17751

23rd February, 1962.

Dear Sir Edwin,

Many thanks for yours of February 2nd. I am delighted to hear that the salmon arrived in good order and I hope the sea trout came on later. As you know, we had our troubles here and I am so glad that they were overcome, at least to some extent.

I am back in circulation again. I am afraid I shall not be at Newport House in July for I have an engagement there in May, and I think my leave will have to be taken late this year. Nevertheless I hope we shall meet from time to time throughout the summer.

All good wishes,

Yours sincerely,

F.T.K. PENTELOW

Sir Edwin Arrowsmith.



Copied from H.E.'s private file

Port Stephens

Falkland Is.

1. 3. 62.

His Excellency Sir Edwin Arrowsmith,  
Government House,  
PORT STANLEY.

Dear Sir,

It gives me great pleasure to be able to inform you of the fact that the Salmon Ova flown here on the 23. 1. 62. has hatched out quite successfully.

As instructed the box was taken to the stream nearest the Settlement feeding into 'Deans River'. Someone visited the box after the first week noticing only several white eggs. The box was again examined on the 11th of February, when it was found that only 35 to 40 white eggs remained in the trays.

I think that it can be safely assumed that a good hatch has been obtained. Now patience is required to await the return of the "Big Ones".

The introduction of the Ova into 'Deans River' has aroused keen local interest, it is hoped by all that it will be a successful venture.

I would like to thank you again for allocating some of the Ova to this Station. And if the fish reared here are anything like the rest of the Station, they'll be 'rough and tough', so we should expect good sport.

I am, your obedient servant,

(signed) R.M.W. Shaw.

Copied from H.E 's private file.

March 6, 1962.

Many thanks for your letter of March 1.  
I am very pleased to hear that you have had such  
good results with the salmon ova, and I hope that  
will mean salmon fishing at Port Stephens four or  
five years from you (sic).

(Signed by Sir Edwin Arrowsmith)

M. Shaw Esq.

Copied from H.E.'s private file.

March 20, 1962.

I think we have had really good results with the salmon ova this year. We reckon to have had a 90% hatch in the six Kashmir boxes we put down. Two of these were planted in rivers where there are no imported trout, and these should have a good chance of survival. It will be very exciting to see what happens in a few years time.

I have booked at the Newport House Hotel from the 15th to 30th July. Any chance of your taking a holiday in Ireland at that time and giving me some lessons? I hope to arrive home on leave on June 10, and am looking forward to seeing you again.

With all best wishes,

(Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
LONDON.

Our Ref: FGB. 17751

10th April, 1962.

Dear Sir Edwin,

I was most cheered to receive your letter of March 20th and I do congratulate you on the good hatch of the eggs. It looks as if there is now a good hope of all your efforts producing a result.

I am afraid that there is no chance of my being at Newport House Hotel in the last half of July. I expect to go to America on August 1st and I shall have this year to take my leave later on. Nevertheless I hope I shall see something of you between the 10th June and your departure to Ireland, and I shall very much look forward to it.

Yours sincerely,

F.T.K PENTLOW

Sir Edwin Arrowsmith.

Copied from H.E.'s private file.

April 10, 1962.

Many thanks for your letter of February 16. We believe we have had a 90% hatch in the six Kashmir boxes we put down, and this is an excellent result. There are no brown trout in two of the rivers in which we planted the Kashmir boxes, and the fry should have a very good chance of survival with our lack of other predators.

With best wishes,

(Signed by Sir Edwin Arrowsmith)

L. Stewart Esq.

Copied from H.E.'s private file

LANCASHIRE RIVER BOARD

18A Great John Street,  
Lancaster.

Our Ref:- LS/PB

1st May, 1962.

Dear Sir Edwin,

Thank you very much for your letter of the 10th April from which I note that the Kashmir boxes are providing results and that the fry appear to be developing and have a good chance of survival.

I shall be extremely grateful if you will let me know the results of your survivals as I shall be really pleased to feel that the effort was worthwhile.

With best wishes and kind regards.

Yours sincerely,

L. STEWART  
Fisheries Officer.



Copied from H.E.'s private file.

May 4, 1962.

I hope this is right, for I think I met you when I called at the office. Many thanks for your letter of January 17, which eventually arrived here on April 28. We had three bags of airmail over-carried to Buenos Aires, and your letter was in one of them.

No doubt you have heard by now how very pleased we were with the salmon ova, and we think we have had a really good hatch. The sea trout were not so fortunate, and only a very few of them hatched out. We tried them in the hatchery, but put all the salmon out in Kashmir boxes, and I am sure that the latter is the right answer here.

Thank you very much for your interest, and all the help you gave us about this consignment.

(Signed by Sir Edwin Arrowsmith)

Miss A. Swain

Copied from H.E.'s private file.

May 4, 1962.

Miss Swain's letter of January 17 (I hope she is 'Miss' Swain) arrived here at the same time as yours of April 10. I was sorry to hear that you had to go into hospital, but very glad that all went well, and that you are now back in the office.

Our fishing season closed on April 30, and there have been some good fish caught, but nothing better on a fly than the four pounder I caught early in the season. Five of us spent a few hours on April 28 in the San Carlos river, and three of us fishing flies had nothing, while the spinners had a good catch of ten fish, including two of over four pounds - all fresh run and in excellent condition. I was using a Terror, and one of the others a Fly Spoon, but even these failed to attract them. I was reading about the American "Streamers" in the Spring fishing number of the 'Field', and I must see if I can get some in England. If not, I shall give you a commission when you go to America in August.

I am much looking forward to seeing you again when I get home,

(Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.



Copied from H.E.'s private file.

May 11, 1962.

Your letter FGB.17751 of December 29 was another of those delayed in a missing air bag. We have been very fortunate that the salmon turned out so well after all the trouble you had with the eggs in the initial stages.

Signed by Sir Edwin Arrowsmith)

F.T.K. Pentelow Esq.

G. E. vide 222.

I consulted Mr John Blyth who headed the <sup>that most</sup> ~~the~~ ~~first~~ ~~and~~ ~~the~~ ~~most~~ ~~fishermen~~ were  
in favour of the closure continuing. He feared that  
even if fly fishing was allowed some people might use  
them as.

He then asked about salmon and when I told him that  
a box had been planted to him (vide 266) he said the  
prospect is definitely open to be kept closed.

✓ Shall I continue the prohibition and reason?

8<sup>th</sup> 30/7/62.

30.5.62

30 acids  
gr.

Box 24 8.62.

is 256  
gr.

268  
343

P U B L I C   N O T I C E

Trout Fishing

The trout fishing season opens on 1st September, 1962, and anglers are advised that in the interests of the preservation of stocks of imported trout, no fishing will be permitted in the Murrel River west of Drunken Rock Pass, until further notice.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

28th August, 1962.

Ref: 0392/II.

O i/c Police

Please cause the above notice to be brought to the attention of all anglers when applying for trout fishing licences this season.

FH

Copies to: O i/c Police; O i/c Ag. Dept.

82.

PUBLIC NOTICE

Fishermen and others are reminded that the Camp immediately north of the old Naval Wireless Station, which is bounded on the east by the fence running north from the Wireless Station, is a ewe camp which will contain young lambs which must not be disturbed. This camp of course includes Black Point and Maston Point. Up till the end of November therefore those who go fishing on motor vehicles should leave their vehicles this side of the fence which goes north and south and also this side of the cross fence going east and west, that is about  $\frac{1}{2}$  a mile this side of Dirty Ditch.

They should proceed to the water's edge as directly as possible and avoid wandering about the camp unnecessarily.

Those who do not fish but desire an outing are requested to avoid this camp during the season.

The question whether fishing is to be allowed in future in this camp during the lambing season is likely to be considered further and the decision may be affected by the degree of co-operation given by the public in the next few weeks.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

21st September, 1962.

Ref: 0392/II.

RHDM/FH

Please broadcast tonight and  
Sunday, Monday and Wednesday  
in the Camp announcements.  
~~please~~

270

345

PUBLIC NOTICE

Fishermen going to Black Point are reminded to leave their vehicles this side of the fence and not to disturb the lambs.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

Please broadcast at 12.45 p.m. on  
Saturday, 22nd September, 1962.

21st September, 1962.

Ref: 0392/II.

RH/MFH

By 21.10.62 to review.

27 346

I have been here several times and I observe  
that the few people who take vehicles (Ted Lang &  
Tom Perry) leave them at the right place.  
By now it seems that nobody is optimistic  
enough to go here at all (except myself)

I think we can take it that the  
Browning has had the desired effect & need  
not bring up his matter again unless Mr. Wells  
does.

But look for August to issue  
a similar notice in consultation with Mr. Wells  
and for Muller's book in consultation with Mr.  
Browning

8/23/60/62.

BW 10-8-63.

27  
347.

PUBLIC NOTICE.

The restrictions on taking motor vehicles to the neighbourhood of Black Point are now removed. Mr. Richard Hills has requested that his thanks be conveyed to the Public for their co-operation in this matter which has resulted in a very definite improvement in lambing figures.

Colonial Secretary's Office,  
Stanley, Falkland Islands.

5th December, 1962.

Ref: 0392/II.

RHDM/TB

Please broadcast tonight  
Thursday and Friday.

Bk 10.8.63

Copied from H.E.'s private file.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

LONDON.

Our Ref: FGB. 17751

29th November, 1962.

Dear Sir Edwin,

We have been making enquiries about your supply of salmon eggs this year, and after discussing the subject with the Lancashire River Board we have concluded that they had best be shipped from Montevideo on the "Darwin" sailing on January 28th; they would be due to arrive at Port Stanley on February 1st.

The previous sailing of the "Darwin" on the 3rd is a bit too early for we cannot be sure that the eggs will have eyed by then.

There is a suitable B.O.A.C. connection to Montevideo and the eggs would leave London on the 24th January.

All good wishes,

Yours sincerely,

F.T.K. PENELOW

Sir Edwin Arrowsmith.



273  
349



The Colonial Secretary,  
Colonial Secretary's Office \*  
Secretariat.  
STANLEY.

10 DEC 1962 7th. December. 1962

Sir,

It is clear to me that I am not required to have a Driving Licence in this Colony unless I propose to drive a vehicle in Port Stanley. In fact, I am not required to have a Driving Licence to drive on the Farm which is Private Property.

The position regarding a Fishing Licence is far from clear. The Police Department issue Fishing Licences free of charge - this in itself has always seemed odd to me ! The Police, or the Government do not dictate where a person is to fish with this Fishing Licence - but there are regulations as to when one may fish.

Am I to understand that I do not require a Fishing Licence to fish for Trout on the F.I.Coy. Farms. The Farms are Private property - so, one presumes that if a Driving Licence is not required on Private property, a Fishing Licence is not required either.

Will you kindly confirm that a Fishing Licence is not required to fish on Private Property ?

I am,

Sir,

Your obedient servant,

L. A. Gilman

Ack'd

EH.

11.12.62.

Reply at 275.

274 350

Rebels as at 6/c

/ mine compass but I do not know

He could never discover by what authorities

no Police issued them but he knows all

the steps he governs delegated to

he C.C. he further previous

held by General of the Fistic Club.

Anger it seems to work as if words

given it are words like it at

that

Ref 13/12/62

1000-12902

15th December,

62.

Sir,

273 I am directed to refer to your letter of the 7th December, 1962,  
and to inform you that the Police only issue fishing licences for -

Murrel River and its tributaries  
Mullet Creek Stream  
Cave Arroyo  
The Mile Pond  
The Round Pond  
Turner's Stream

2. The Regulations prescribe that licences to fish in other fresh water should be issued by Park Managers.

3. By taking out a licence a person is presumably considered as accepting the conditions thereon and the licence reminds him of these conditions. Presumably it was for this reason that the Regulations were framed and it was not considered necessary to charge for the issue.

I am,

Sir,

Your obedient servant,

(Sgd.) R.H.D. Manders  
COLONIAL SECRETARY.

The Honourable  
T.A. Gilruth, J.P.,  
DARWIN.

Bu 10 8 63

RDM/III.

Reply at 26 11 2083

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

352.

SENT

Wt. P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
571	Psy			18.12.62.
To <i>8</i> Etat	FOODKEEPER	LONDON S.W.1	<i>To Adams file</i>	A/c HO

348

FOR PENTELLOW STOP YOUR INTERIER ~~NOVEMBER~~ 29 DARWIN SAILING  
 MONTEVIDEO FEBRUARY 4 OVA SHOULD ARRIVE DOAC FEBRUARY 1

GOVERNOR

Time

MFA/ER

Reply 353

DECODE.

No. 73.

TELEGRAM.

From Foodkeeper, London.

To Governor, Port Stanley.

Despatched . 4th January, 19 63. Time : 1657

Received : 5th January, 19 63. Time : 1015

Food K5 from Pentelow confirm ova booked B.O.A.C.  
flight 661R leaving London 31st January due Montevideo  
1st February to connect with Darwin 4th February.

Foodkeeper London

See 352.

h-e.

277 354.

8 7/1/63

P/L : LH  
(Intld.) DM

Copied from H.E.'s private file.

January 14, 1963.

(Dear Douglas)

The salmon ova are expected to arrive in the "Darwin" on February 8 and I shall try and get them flown out to the West early the following week; I hope on the 11th. Could you arrange to have a box planted in the Warrah, as before? It is a pity from the salmon raising point of view that the river is so full of brown trout, but I think it is worthwhile continuing to try. They obviously have a very much better chance in rivers where there are no brown trout, but it is no good trying to introduce salmon in small streams where it would be impossible to fish for them, unless the small streams connect with a large river.

I am hoping to visit the West later in the year, probably in March, and I wonder if you think it would be possible for me to spend a day or two with Bill Llamosa to see if I can catch some trout, or, if you yourself can get off, perhaps we could have a day or two at Purvis ?

I hope you had a good time at Christmas, but we certainly could not have had much worse weather for it !

With kind regards to you all.

(Yours sincerely,

Edwin Arrowsmith)

D. M. POLE-EVANS, ESQ. J.P.

Copied from H.E.'s private file.

January 14, 1963.

(Dear Bill)

Once again we are getting salmon ova out this year, and they are due to arrive in the "Darwin" on February 8. I am anxious to get them out in streams as soon as possible, and I hope to arrange a flight to Hill Cove on February 11, if that would be convenient to you. I think your river and the one at Port Stephens give us the best chances of raising salmon, because they have no brown trout in them.

I hope all has gone well with shearing and that you had a good Christmas in spite of the weather.

(Yours sincerely,

Edwin Arrowsmith)

W. W. BLAKE, ESQ. J.P.

January 14, 1963.

(Dear Mike)

The salmon ova this year are due to arrive in the "Darwin" on February 8, and I hope to be able to arrange a flight to Port Stephens on the 11th. Would you be able to put the box out as before ?

I am very hopeful of results at Port Stephens because your river has no brown trout in it. It is not going to be easy to raise salmon in the rivers on the East Falkland, but we should continue to try, and also in the Warrah.

(Yours sincerely,

Edwin Arrowsmith)

M. Shaw, ESQ.



January 23, 1963.

*To Colony file*

(Dear Arturo)

Our salmon ova are due to arrive in Montevideo by Comet on February 1, and the 'Darwin' is also due to arrive there on that day. Captain White thinks he will get in before the Comet, and I am most anxious that the ova should get from the Airport into the 'Darwin's' cool-room as quickly as possible. I think you have been able to arrange this for us in the past. I am also dropping a line to the Ambassador in case he can help with Customs, and I expect he will be getting in touch with you. The B.O A.C. flight number is 661-R, due to leave London on January 31.

With kind regards.

(Yours sincerely,

Edwin Arrowsmith)

Sr. A. E. Beare.

January 24, 1963.

*30 Colons file*

I enclose copies of letters I have written to the Ambassador and to Arturo Beare of Maclean & Stapledon, about our salmon ova. I don't expect there will be any complications, but just in case DARWIN should be delayed on passage, I should be most grateful for your help.

CAPTAIN R.H. GRAHAM, MVO, DSC, RN.

January 24, 1963.

To Wilson file

I enclose a copy of a letter I have written to Arturo Beare about our salmon ova. We have imported it in the past without difficulty, but it is most important that it should get from the aircraft into the DARWIN's cool-room with the absolute minimum of delay, and without any bumping. I wonder if you could help by getting one of your chaps to seek the co-operation of the Uruguayan Customs, to make sure there is no delay.

There is just a possibility that if the DARWIN encounters very bad weather and the COMET runs on time, the ova may reach Montevideo before the DARWIN docks. If this should happen, I am sure that Captain Graham would help by taking the ova into PROTECTOR's cool-room.

HIS EXCELLENCY  
SIR NORMAN BRAIN, KBE. C144

Recd 10.00  
29/1/63

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

RECEIVED

361.

Wt. P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
2	protector	26	1215	28
To				
etat governor Falkland Islands				

30 Colony file

In case we have to accomodate salmon ova, would they prefer to be kept  
at 15 Degs F or 30 Degs F stop we have two cold rooms

CO protector

Time

R

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

362.

Wt. P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
592	Psy			29.1.63.
To <del>etst</del>	C.O. PROTECTOR	To Colony file		HOA/c

OVA SHOULD BE KEPT IN COOL ( NOT FREEZING ) PLACE STOP BELIEVE  
DARWIN'S COOLROOM IS KEPT AT 33 DEGS F STOP DARWIN SAILED 2200  
LOCAL 28TH SO MAY ARRIVE AFTER COMET STOP PERHAPS MACSTAPLE  
COULD ARRANGE OVERNIGHT COOL STORAGE IF NECESSARY STOP MOST  
GRATEFUL IF YOU COULD CHECK ON THIS

GOVERNOR

Time

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

363.

SENT

Wt. P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
694	Psy			31.1.63.
To	Etat	FOODKEEPER	LONDON S.W.1.	HOA/c

FOR PENNELLLOW PLEASE TELEGRAPH NUMBER OF OVA DESPATCHED

GOVERNOR

Time

DECODE.

No. 42.

TELEGRAM.

From Foodkeeper, London.

To The Governor, Port Stanley.

Despatched : 31st January, 19 63. Time : 1557

Received : 1st February, 19 63. Time : 0950

Foodx 17 from Pentelow about 40,000 Salmon Ova  
despatched by B.O.A.C. 31st January.

Foodkeeper London

P/L : LH

Copy to OIC Agrio.

'Phoned P.S. 1.2.63  
(Intld.) HLB

J.E.

~~279~~ 365

I have passed a copy of this to  
Mr. Aq. for information.

You may wish to discuss arrangements  
for reception of the ova with George?

J 1.2.63.

366

~~280~~

ACS

Thank you. I have had a  
word with George.

J 1.2.63

BU 7.2.63



Telegram phoned through 1st February.

367

*So along file*

From Darwin Phone Governor Stanley

B.O.A.C. delayed Dakar Eggs expected  
0200 Saturday Will be placed cool storage  
on arrival Regards

White

Telegram phoned through 2nd February

368

From Darwin

Ova received on board 0330 today  
Examined 0730 found apparent good order

WHITE

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

RECEIVED

281  
369.

Wt P2809 5/61

Number	Office of Origin	Words	Handed in at
4/31	Darwin	19	1955
To			
Phone Governor Stanley			



Boac delayed dakar eggs expected 0200 Saturday will be placed cool storage on arrival regards

White

Shona P/S  
J

Time NE/PM.

DECODE.

No. 1/47.

TELEGRAM.

*From* Captain White, R.M.S. Darwin.

*To* Governor, Port Stanley.

*Despatched* : 2nd February, 19 63. *Time* : 1225

*Received* : 19 *Time* :

Ova received on board 0330 today examined 0730  
found apparent good order.

White

P/L : LH

Phoned PS.  
(Intld.) HLB

282  
370

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

~~283~~  
371.

Wt P2809 5/61

CONFIRMATION - Phoned 1150

Number

Office of Origin

Words

Handed in at

Date

Pay

2.2.63

To

etat MASTER RMS DARWIN

HOA/c

369, 370

~~281, 282~~MANY THANKS TELEGRAMS OVA DELIGHTED TO HEAR

THEY SEEM GOOD CONDITION REGARDS

GOVERNOR

Time

A O 372.

to with

or

B.A.S.

6/2/63

By to record  
results

27.2.12

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

Wt P2809 5/61

285  
373.

Number	Office of Origin	Words	Handed in at	Date
	Psy			6.2.63.
To etat	MANAGERS	HILL COVE PORT HOWARD PORT STEPHENS		HOA/c

HOPE SALMON OVA IN KASHMER BOXES WILL GET  
TO YOU BEAVER MONDAY FEBRUARY 11.

GOVERNOR

Time EPA/ER

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT284  
374.

Wt P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
	Psy			6.2.63.
To	etat	G.O. PROTECTOR		HCA/e

SALMON OVA ARRIVING DARWIN 8TH stop IF POSSIBLE WOULD  
APPRECIATE CHOPPER FOR THREE BOXES ONE TO MALO ONE TO  
SAN CARLOS RIVER SAME AS LAST YEAR AND THIRD ONE TO  
NEW PLACE IN FEEDER TO PIZEROY RIVER stop GEORGE STEWART  
WOULD ACCOMPANY

GOVERNOR

Time

EPA/ER

copy for Secretariat file

375 286

For Secretariat file, if of any use.

Copy of instructions for planting Kashmir boxes  
of salmon ova, which have been sent to Messrs.  
W.W.Blake, D.M.Pole-Evans and M.Shawe.

E Read  
Private Secretary

7.2.63.

0339/1 PL

Protect box as far as possible from bumps when taking it to the stream.

Place box in small flowing stream, either well up river you hope to stock, or in feeder stream connecting with river. The stream should be sufficiently deep to float box when stream at lowest level. If you can find a shady spot so much the better. It does not matter much how the box is placed, but we have found that where the stream is fairly fast flowing, placing it diagonally is best.

Secure box with rods passing through eyelets on either side, take hammer to drive rods into the stream bed.

If necessary, tie box to bank to keep it in position, but it should be able to float up rods if stream rises.

When box is in position, throw rose away, float eggs from tray in which they have travelled, into box. The easiest way to do this is to slit the material of the travelling tray and wash eggs into box by pouring water gently from a tin or cup.

Close and secure lid, and leave eggs to hatch. The alevins will find their way out. If you get a chance to have a look at the box in a week or so, all eggs which have turned white and opaque should be removed. This is best done with a glass tube, placing your thumb over the end and sucking the dead egg into the tube by releasing your thumb. Failing this, tweezers can be used, or a spoon.

February 1961.



## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT290  
377.

Wt P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
	Psy			8.2.63.
To	etat	C.O. PROTECTOR		HQA/c

SUGGEST ON OVA TRIP CHOPPER SHOULD GO NALC AND  
SAN CARLOS RIVER FIRST AND RETURN TO HATCHERY FOR  
THIRD BOX AND SHORT TRIP TO FITZROY RIVER

GOVERNOR

Time EPA/ER

Copy for Secretariat

DECODE.

No. 2.

TELEGRAM.

*From* ..... Commanding Officer, H.M.S. Protector.

*To* ..... Governor, Stanley.

---

*Despatched :*                      8th February,      19 63.      *Time :* 2100

*Received :*                        9th February,      19 63.      *Time :*

'Phoned.

Fully agree your proposals for ova trip. Chopper  
will land hatchery.

Commanding Officer

P/L : LH  
(Intld.) HLB

288  
378

## GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDSSENT289  
209  
379

Wt P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
	Psy			8.2.63.
To	stat C.O. PROTECTOR			EOA/c

288 MANY THANKS TELEGRAM ~~stop~~ EVERYTHING FINE BUT GRATEFUL  
 IF CHAMPER COULD LAND NEAR HATCHERY JUST WEST OF  
 FILTRATION PLANT TO COLLECT OVA AND STEWART

GOVERNOR

Time

EEA/EE

Copy for Secretariat



291  
380

BRITISH EMBASSY,  
MONTEVIDEO.

February 1, 1963

*Dear Anon,*

7  
Thank you for the copy of your letter of January 23 to Beare about salmon ova (he had not received the original by today)

2. We have been in touch with the Uruguayan Customs about this and they have as an exceptional measure agreed to allow our official car (which will be meeting the B.O.A.C. Comet to collect the bag) to take the ova direct (in bond, with an escorting Customs officer) to the "Darwin (or, if she is late, to "Protector"). Normally this would be strictly prohibited unless we could present at least one day in advance details of the requisite consignment documents - i.e. the number of the bill of lading, the number and type of packages, the value and weight of the contents, and so forth. Even after cabling London B.O.A.C. here were unable to supply these details with the requisite notice. It would, I think, be desirable to ensure that in future cases the consignors should airmail or telegraph these details to Maclean and Stapledon well in advance.

3. I trust that the fish will survive their passage and will not put on airs when mature as a result of having received diplomatic privileges. Or are they merely bait?

*Yours sincerely*  
*Norman*

(H.N. Brain)

Sir Edwin Arrowsmith, K.C.M.G.,  
Government House,  
Falkland Islands.

381 291A

File to be submitted to

HE in return  
gr.

390  
See 291A

February 7, 1963.

*So (Kang) file*

(Dear Bill)

Just in case you have not the note handy that I sent last year about planting the Kashair boxes, I am sending you a copy.

I hope all will go well with this lot of ova. The Comet was delayed at Dakar on her flight to Montevideo, and arrived almost twelve hours late, but I have heard from Freddie that the ova seem to be in good condition.

W. W. BLAKE, ESQ. J.P.

(Hill Cove)

Same letter to:

D. M. Pole-Evans, Esq. J.P.	Port Howard	(Dear Douglas)
M. Shawe, Esq.	Port Stephens.	(Dear Mike)

(Added to letter to D.M.Pole-Evans "Many thanks for your letter. Hope to get to you, if convenient, about last week in March.")

SOURCE CVA.

Protect box as far as possible from bumps when taking it to the stream.

Place box in small flowing stream, either well up river you hope to reach, or in feeder stream connecting with river. The stream should be sufficiently deep to float box when stream at lowest level. If you can find a shady spot so much the better. It does not matter much how the box is placed, but we have found that where the stream is fairly fast flowing, placing it diagonally is best.

Secure box with rods passing through eyelets on either side, take hammer to drive rods into the stream bed.

If necessary, tie box to bank to keep it in position, but it should be able to float up rods if stream rises.

When box is in position, throw moss away, float eggs from tray in which they have travelled, into box. The easiest way to do this is to slit the material of the travelling tray and wash eggs into box by pouring water gently from a tin or cup.

Close and secure lid, and leave eggs to hatch. The alevins will find their way out. If you get a chance to have a look at the box in a week or so, all eggs which have turned white and opaque should be removed. This is best done with a glass tube, placing your thumb over the end and sucking the dead egg into the tube by releasing your thumb. Failing this, tweezers can be used, or a spoon.

February 1963.

DECODE.

292  
384.

TELEGRAM.

*From* Colonial Secretary, Stanley.

*To* Governor, H.M.S. Protector.

*Despatched :* 12th February, 19 63. *Time :* 1245

*Received :* 19 *Time :*

Distribution of ova according to instructions completed 5,000 to each farm only Murrel left to do but 11,000 ova still left number in each tray being apparently greater than anticipated and death rate being small. A.O. suggests putting 5,000 odd in Murrel and giving remaining 5,000 in last remaining box to Salvador who would transport themselves.

Colonial Secretary

385  
Reply 273

DECODE.

No. 18.

TELEGRAM.

From Governor, H.M.S. Protector.

To Colonial Secretary, Stanley.

Despatched : 10th February, 19 63. Time : 1215

Received : 13th February, 19 63. Time : 1030

~~272~~ 384 Your telegram ova I agree.

Governor

P/L : LH  
(Intld.) DM

HCS

291A

386  
~~294~~

By 28.2.63

File submitted accordingly

*[Signature]*

28.2.63



Copied from H.E.'s private file.

389

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
LONDON.

Our Ref. FGB 17751

19th February, 1963.

Dear Sir Edwin,

I think it is about time to write to you confirming the various cablegrams I have sent.

In spite of the very cold weather the eggs eyed in the Lancashire River Board's hatchery during the last week in January, and we were able to obtain between 35,000 and 40,000 salmon eggs which we despatched by B.O.A.C. on January 31st.

I do hope they arrived in good condition and that you will have a good hatch.

If you have any information about the progress of last year's stocking I should be most interested to hear about it.

All good wishes.

Yours sincerely,

F.T.K. PENTELOW

Sir Edwin Arrowsmith.

March 1, 1963.

(Dear Norman)

380

294

Many thanks for your letter of February 1 and for all your help with our salmon ova. In spite of the delay at Dakar, they arrived in very good condition and we were able to get them out in the streams at once.

No doubt, since they received diplomatic privileges, we can expect them to hatch out without any trouble.

I shall send a copy of the second paragraph of your letter to Pentelow, at the Ministry of Agriculture & Fisheries, so that we can get the necessary details telegraphed to Macleans in advance. The eggs are packed at the Ministry only a few hours before the Comet takes off from London, but we would certainly know the type of package, value, weight of the contents, and so forth, and I daresay they could give us a number in advance for the Bill of Lading.

I returned here on February 19 in "Protector" after a three day visit to South Georgia, - pretty rough both ways. They all thoroughly enjoyed their time in Montevideo.

(Yours ever,

Arrow)

His Excellency  
SIR NORMAN BRAIN, KBE, CMG.

March 2, 1963.

d/o

Thank you once more for the splendid supply of salmon ova from the Lune, which arrived here safely. We were rather worried because the Comet bringing them was held up for twelve hours in Dakar, but we got them through Customs quickly in Montevideo and they went straight to the ship bringing them here. They arrived on February 8, and we had them all planted in Kashmir boxes by February 11. There were very few dead eggs. This is the third lot we have put out in the Kashmir boxes and I hope we shall be seeing results before long.

Would you please tell your Board how very grateful I am to them for their generosity in letting us have these ova.

With kind regards,

(Sgd) Edwin Arrowsmith

L. STEWART ESQ.

(Fisheries Officer,  
Lancashire River Board,  
18a Great John Street,  
Lancaster)

Copy to file 0392/II

March 2, 1963.

d/o

.... We were rather worried when we heard that the Comet bringing our ova had been held up for about twelve hours in Dakar, but they got through Customs quickly in Montevideo and were taken straight on board the "Darwin". We had excellent co-operation from the Embassy in Montevideo, and I enclose an extract from a letter from the Ambassador about this. I know that the eggs are packed only a few hours before the Comet takes off, but I wonder if, next year, we could get some information in advance, to prevent the possibility of any delay with Customs at Montevideo.

The eggs arrived here in splendid condition on February 8, and with the help of H.M.S. "Protector's" helicopters we had three boxes planted on February 9 in East Falkland streams. Three boxes were sent to West Falkland and planted on the 11th, and the remaining one was planted in a stream not far from Stanley. This is the third lot we have put out in Kashmir boxes and I hope that we shall see some results before very long. I shall be fishing one of the rivers on the West Falkland later in the month, and shall keep a look-out for any parr. Probably our best bet for successful results will be two streams on the West Falkland leading into rivers where there are no brown trout.

A 16 lb. trout was caught on a spinner in the Malo a few days ago. It is almost impossible to catch them on a fly in the salt water but I have hopes later this month of some success in the fresh water, when they are on their way upstream to spawn.

With kindest regards, and thank you very much for all your help.

(Sgd) Edwin Arrowsmith

F. T. K. PENTELOW ESQ.

(Ministry of Agriculture, Fisheries & Food,  
Fisheries Department,  
Whitehall Place (East Block)  
London S.W.1.

Copy to file 0392/II

Extract from letter from the Ambassador, Montevideo. Dated February 1, 1963.

We have been in touch with the Uruguayan Customs about this and they have as an exceptional measure agreed to allow our official car (which will be meeting the B.O.A.C. Comet to collect the bag) to take the ova direct (in bond, with an escorting Customs officer) to the "Darwin (or, if she is late, to "Protector"). Normally this would be strictly prohibited unless we could present at least one day in advance details of the requisite consignment documents - i.e. the number of the bill of lading, the number and type of packages, the value and weight of the contents, and so forth. Even after cabling London B.O.A.C. here were unable to supply these details with the requisite notice. It would, I think, be desirable to ensure that in future cases the consignors should airmail or telegraph these details to Maclean and Stapledon well in advance.

BU 10.8.63

x/ on 27/

(Dealt with in Vol III)

Closed

See Vol III

RA  
12.9.63