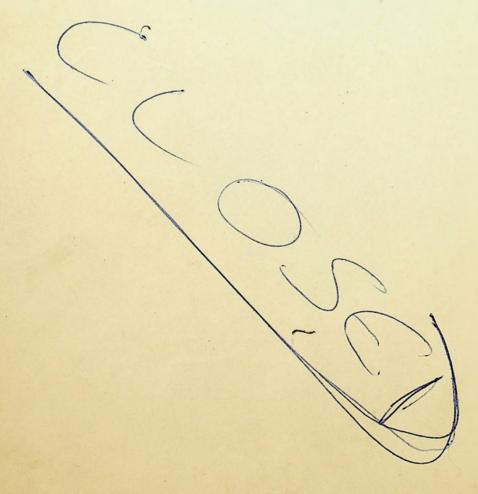
# FISH

SALMON OVA, TROUT OVA,



14

TELEGRAPHIC ADDRESS;
"CARLOS, PORTSTANLEY,"

Port San Carlos, 1/34/1996.
Falkland Islands, S.A.

February 11th 1956

Dear Fern,

I am wondering whether it has yet been decided what is to be done with the salmon fry that is presumably still in the hatchery. I am fearful that they may be frittered away among the little brooks around Stanley which are already overstocked with trout for which they cannot supply sufficient food. This is a plea that they should all be put in the San Carlos and that for the next three years shipments of eggs should be imported and all the fry put in the same river.

I cannot pretend to any great experience in the matter but I have read a little about it and when I was in Scotland last year I made a point of meeting W. J. M. Menzies, a leading authority who is in charge of several hatcheries in Scotland and has written books on the subject besides frequently contributing articles to the Field. I described the waters here to him and his opinion was that there was a good chance of salmon establishing themselves and that it chiefly depended on there being adequate spawning grounds. It is difficult to believe that these are available in the Murrel which within a short distance of the estuary is nothing more than a brook. Two other points are of equal importance, that the fry should be released where they are sure of finding sufficient food and lastly that they should be released where they are least likely to be preved upon. To what extent these conditions are fulfilled by the San Carlos is not known with certainty but what we do know is that there are more fish already in the Murrel than the river can support and these fish will allow salmon fry small chance of survival. In the San Carlos there are of course local fish in considerable quantities but it is unlikely that they would be so great a menace to the fry as the imported brown trout. I open the majority of the local fish I catch and I cannot recollect ever finding minnows inside them.

If it is conceded that the San Carlos offers the best chance for the success of the experiment then how are they to get there? If the cooperation of Mr. Bonner could be obtained perhaps they could be flown to Third

Corral in the helicopter. The helicopter would be unable to wait while the fry were released since they ought not to be decanted into the river in one place but spread over a mile or two of water to ensure an adequate supply of food for them, so someone from San Carlos would be required to help in the distribution.

You must forgive me writing to you at such length as though I were an authority which I am not. But it is a matter which interests me greatly. I have always thought that for a relatively small expenditure the waters of the colony can with certainty be stocked with Brown trout, very possibly with Sea trout and not inconceivably with salmon. (Acquiring the eggs is the only problem with Sea trout, but it can be done.) The pity is that so few other people are interested, only because it is not yet realised as in time it surely will be what a fascinating recreation can so easily be made available to all.

Your weekly talks are much appreciated in the camp, could you not give us one about the hatchery, the introduction of salmon and trout, the difficulties to be surmounted and the prospects of success? One reads of excellent trout fishing in Africa, were the rivers there not stocked in all probability by Government hatcheries?

Yours sincerely,

N. K. Cille Comeron

Dept ment of Agriculture

27 FEB 1956

FALKLAND ISLANDS

3/4/36

The Braal Hatchery,
HALKIRK
Scotland.

DEPARTMENT OF AGRICULTURE PORT STANLEY FALKLAND ISLANDS. SOUTH ATLANTIC. 16th February 1956.

# SALMON OVA.

Dear Sirs,

I regret to inform you that the recent importation of Salmon Ova received from you, (Reqn 6695, C.A.7646), has been a complete failure.

- 2. The consignment reached the Falkland Islands on the 10th January, and within an hour of its arrival the Ova were out at the Hatchery.
- 3. There were no instructions whatsoever, attached to the case, reflecting that ice should be added during the voyage; in fact the Mate of the SS Fitzroy, stated that the agents in Montevideo had given precise instructions that the box was not to be opened.
- 4, It was apparent, on opening the case that overheating had taken place. The contents were hot and steamy. The oats which had been used as packing, had sprouted and had grown to about 4 inches in length.
- 5. The great majority of the ova were already dead; having gone white Many had ruptured. Some 2500 Ova remained, but these did not appear to be very healthy.
- 6. The eggs were placed in the usual containers, and attended to every day. On an average about 170 eggs had to be discarded each day. By the 24th January not a single egg had hatched, and none were "alive".
- 7. This has been most disappointing, and I suggest that if ice had been added to the contents, on the voyage out, a tetally different result might have been obtained.
- 8. I shall be grateful if you will let me have your comments on this unfortunate happening, and at the same time please state whether any instructions were given to the Air and Shipping Companies regarding we tattention was necessary on the voyage.

Yours faithfully

AGRICULTURAL OFFICER.

EDWARD 1.

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.

S7/Air/Falkland Is. 6695/1.

TELEGRAMS INLAND: "CROWN, SOWEST, LONDON."

OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

25th January, 1956.

Sir,

# Indent No. 233/55.

I am directed to refer to this Office telegram dated 31st December, 1955, advising you of flight details in respect of the Salmon Ova supplied under the above indent, and to append an extract from a letter received from the supplier, Mr. David Sinclair, in connection with the packing of the consignment:

"Much care and attention has been given to the special container, and packing of this consignment and I am hopeful that it will arrive in good condition. I would, therefore, be glad to hear of its safe arrival at its final destination, and the condition of the box".

In the circumstances, it would be appreciated if you would kindly confirm, for the information of the supplier, that the packing of this consignment proved to be entirely adequate and that the owa reached you in a satisfactory condition.

I am, Sir,
Your obedient servant,

The Agricultural Officer,
Port Stanley,
FALKLAND ISLANDS.

FALLLAND ISLANDS

Department of Agr. on three

NCD.

# APPLICATION TO INCUR SUPPLEMENTARY EXPENDITURE.

HEAD	No.	SUBHEAD Description.	AMOUNT.	REASONS. (may be continued overleaf)
II•	19	Salmon Ova	£120• 0• 0•	Air freight to Montevideo Freight Montevideo to
				Stanley. 57.10.
		100	8-14	5. 17. 11. 57.16.
			£88. 11.	2 1.48.3

Savings of £ under Head Subhead

Signed EDWARD T. FERN.

Agricultural Officer

Date .22nd Hay 1956 .....

In the case of goods not of United Kingdom manufacture the items concerned should be indicated on the invoice and the country of origin stated.

# INVOICE.

(SECOND ADVICE COPY)



SE

%

# THE CROWN AGENTS

Dr. to Messrs. BRAAL HATCHERY.
of (full address)
Crown Agents' Reference CA 7646.
Indent No. 233/55.

Special Account (if any)

Department

Shipped by SS/MV

FITZROY .

To be filled in by Contracto

Date of Invoice 29: DEC. 1955.
Contractor's Reference No.
If goods have been despatched by post
Date of Posting
Post Office of Despatch
G.P.O. Serial No.

Item Nos. Quantity	Description of Article in wording of Tender		Weigl	nt	Rate	<del></del>					
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## SHIPPING AGENCIES LTD. AIR

66 LEONARD STREET, LONDON, E.C. 2

Telephones: CLErkenwell 3525-6-7 Cables: Airspage, London

Grown Agents for the Colonies. Dept. S.7. Millbank.

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Halkerk Carthness 29 "Struay 1936

Mar Sur

your A.M of 10 Tobruary, and I am includ sorry to hear that the consignment of 15,000 Eyeld Salmon Over has been a Complete Jailune.

Long inform you ital-greatlane & thrught was given to The packing of the consegnment a Special Container was made. What was in every way thought to be Sentable, and I was papeful that The own would already been informed by the Cooun agents that the arrival would be about 10 a farmary of put what I carefully estimated would be sufficient dee for the formary.

The lanon agents made the necessary arrangements with air & Shepping Companies, and serves of the eperson that the container would be fut in cold storage on the doal in which case I ded not see that any additional Dec would be required, and I facked the order on these lines. Moss " which I have always found most-salisfactory wen for freernys of 10 days or more and I am Curlainly most Surpresed to From that bals hed sprouled in grown to about of meder in Such a

Short period of line. I had goods on fee on label do a nexter of fact my ova in the hatchery see only how Starting to halch" from as deeply closeffounded do you are that after all our efforts things has gone Completely Worny. you would no doubt find outfrom the town agents whatinstructions if any was gruin to the aux Shepping Compones & frould he glad to hear from you tale on that fourt. yours Many faithfully Hutchery Manager







Againstant officer, Defartment of agriculture Port Starley Falkland Relands

Sender's name and address: Ricord Sincheir

Bonal Muenue Halkerk,

Government

ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL.

Pract Quenue Totalhus. 29 th May 1956

Dear dir

I refer to your letter of 16 th Letruny Il the consignmentof 15,000 Sakuon Ova Jonworded to you I had capital to have a reply to my letter to you som the question of whatwhen it was put on the boat. I, leke you, feel most desappointed that Things went so badly, and coprecelly Mal 110 ova survered, it Twould have been a great

achierment had the consignment. Arrived as I had heled it would Mi good condition

My Factor too is most desafferented At Jauliere

I had hafiel that the container would knew been placed in a look place on the boat-Would you be intrested us

trying again? provided we Could come to a satisfactory arrangement as to a fries or actually happened to the consegnment a free sample of a few thousands I would ful that suggestions to my factor, and I feel sure te would agree to saughing resemble. to have you compensated for the los suffered I feel ween that a Semetean

Container packed with moss

lould be placed in the ships hold survended north bags of see all would be well, I would be well, I would most without hims find the well, and most without the survey on my suggestions.





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/	Upartound officer agreement officer
	Pont Stanley
	Fuckland Island
	South allertie

Sender's name and address tweet Sinclair

Braal Guenue. Halders

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL.

Department of Agriculture,
PORT STANLEY. Falkland Islands
South Atlantic.
14th July 1956.

David Sinclair Esq.
Braal Avenue,
Halkirk,
Caithness
Scotland.

Dear Sir,

Many thanks for your letter of the 29th May 1956.

I wish to assure you that no fault can be attached to your hatchery, regarding the consignment of Salmon Ova. The delay occured in Montevideo, and this was due to circumstances beyond your control. Furthermore there is no cold storage chamber in the ship which runs between Montevideo and the Falklands.

Your kind offer to meet this department egarding the price of another consignment of Ova , is much appreciated. But I have no complaint whatsoever, over the price charged. The expense is on the aeroplane. The freight on the case, by air from London to Montevideo alone, amounted to £146. O. 6d. , so you will see the cost of the actual ova is a minor matter.

If a case of Ova could be placed in the cold storage chamber of one of the charter vessels coming direct to the Falklands, do you think the ova would survive? The voyage should take about 4 or 5 weeks.

I should like very much to try another experiment, but until such time as the air freights are workigh, I am afraid this will be out of the question.

I will appreciate any suggestions you may have to offer. Would it be possible to send the ova by air, in a very lightcontainer, for example?

If I should be able to reduce the terrific air freight charges, I might then persuade Government to place another order with you, but meanwhile I am afraid it is out of the question.

Again thanking you,

Yours faithfully.

AGRICULTURAL OFFICER.

# Salmon Eggs For The Falkland Islands.

The eggs are contained in two insulated boxes, they are very sensitive and it is essential that they are not subject to any mechanical shock, or to any warm room conditions. The boxes should be stowed upright in such a position that they will not slide about or be hit by anything in rough weather. They must be stored in a cool room (temp. 35-40 degrees farenheit) It will be necessary to see that the temperature in the box does not fall below freezing, for there must be a drip of water going through the whole time. This drip should be allowed to leak out through the bottom of the box to avoid a pool of stagnant water building up over the trays of eggs.

Each tea chest is made up in the same way. It is lined with black insulating blocks of ozanite. The trays containing the eggs are stacked on e above the other. The top and bottom trays contain moist sphagnum moss. There is also a tray of moss in the middle of the tier.

The procedure for inspecting each box is as follows :-

- (1) With the srewdriver provided remove screws from the lid and lift off.
- (2) Carefully remove onazite lid.
- (3) Lift off ice box and then gently remove tier of trays.
- (4) Remove dead eggs from each tray in turn, making sure that the other trays remain moist during operation.
- (5) Lower tier trays back into box with moss trays at top bottom, a centre.
- (6)Replace ice box

(replace onazite lid ( this is marked on one edge to ensure it is put back the same way ).

(8) Replace tea chest lid ( this is similarly marked ).

During the voyage, the tea chest lid need not be screwed down all the way round. A couple of screws loosely inserted with a weight on the top would suffice.

# Ice.

This should melt slowly over the eggs and may only need renewing onde a week. This depends on the temperature of the storage room. Lumps the size of hen's eggs to apples are the right size.

# NOTE.

Two black dots will probably appear in each egg during the voyage.

This isquite normal and shows that the black pigmentation of the eyes is being formed.

# MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

Fisheries Department,

Whitehall Place,

London, S.W.1.

I have this day inspected a consignment of 22,000 Atlantic Salmon Ova

to be exported by Ministry of Agriculture,
Fisheries and Food.

# to Falkland Islands

and hereby certify that to the best of my knowledge and belief they are free from disease.

Signed

Snr. Scientific Officer

Date 16/12/59

# PUBLIC NOTICE

# 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.

Colonial Secretary's Office, Stanley, Falkland Islands. 30th August, 1961.

Ref: 0392/II.

# 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

Goose Green, Lefonia.

3.3.60

# TROUT

I was Agricultural Officer from 1948 to 1954. When I arrived the fish hatchery was in being, and the dam, making a pond to feed it from the Moody Valley Brook. I think these had been erected before the war, but it was only after the war that the then Government Naturalist, Dr. Hamilton, had been able to obtain trout ova to hatch in it.

His first lot were Rainbow Trout, 10,000 eggs. These were more or less a failure, the few surviving fingerlings being put in the Moody Valley Brook, where fishing was then prohibited.

Around January 1947 or 1948 he got the first batch of Brown Trout eggs, as it was considered that the stream waters were too averagely cold, peaty and lacking in oxygen for the Rainbows to do well here.

This lot of Brown Trout eggs were a complete failure due to P.W.D. not being able to be made to see the point of hurrying up and getting hatchery troughs and trays shellaced well before arrival of eggs.

Dr. Hamilton did no manual work himself bar care of the eggs.

Next year his third lot were an unqualified success. He had about 5,000 fingerlings to put out. I, the Agricultural Department, supplied horse transport to put these out in the Murrel, the Marlo, the Passe Manares, Pony's Pass and Cave Arroya, and, I think, a few in the mile pond on the Common - or maybe I did this later.

After this Dr. Hamilton was retired. I took over Maturalist's Department, and Dr. Hamilton remained in the Colony, but remained unco-operative.

For three years I continued to get 10,000 eggs each early January by the 'Fitzroy' (now 'Darwin') down from Montevideo. These were from Mr. Lene of Nailsworth (I think), Gloucestershire. Two lots were from his Derbyshire Hatchery near Kedleston, which I know well as one of my cousin's farm land adjoins it, and his Manager there had been in Stanley in the Navy (Canopus, I think), in the 1914-18 war. Two other lots of eggs, 10,000 each, were obtained from Chile (Santiago, I think), through an Embassy contact. They were gratis, we paying all empenses - air frei ht to Montevideo etc., the Embassy in Montevideo collecting and keeping cool and renewing icc.

All these lots hatched successfully, P.W.D. being no longer called upon to do anything at the latchery. Each time we had, from lowest 4,000 to highest 9,000, fingerlings to put out.

Over-heating in transit was the worst cause of loss (Imbassy Officials in Montevideo lost interest), causing premature births - weak fingerlings with improper retraction of yolk sac.

By this time the Float Auster was flying here, Pilot V. Spencer, who was most helpful.

Places I know where fingerlings were put: The Murrel, the Frying Pan, Swan Inlet. Two streams entoring Camilla Creek. The San Carlos by the lat Mr. J. Borner. The stream in the Picos Camp at P. S. C.

The Lorenzo Pond, plane landing on it to do same. Some I think in ponds on Pebble near east end of Tiger Bay. A stream or streams at Fort Howard, the Warrah. The Chartres River, 2 or 3 lots. One lot to Port Stevens. I forget about Fox Bay, but none were ever put in the Pedro at Teal Inlet as they wished to keep this exclusively for the local trout (Charr). There were other places fingerlings were put, the Lantioka and the stream next to Frying Pan, Hill Cove, and others I cannot now remember clearly.

The trout from Chile - spawned between 25th April and 6th July - were differently marked to those from U.K., bigger mottling and readily distinguised and rather longer, looser built fish, growing a icker, but this was probably due to their hatching here at a more 'in season' time of year. These were possibly imported from U.S.A. (Salvelinus Fontinalis) into Chile, as opposed to those from U.K. of German antecedence (Salmo Fario).

# Points I found needed special note were:

- 1. A milk thermometer which will float on its own was best for finding water temperatures.
- 2. Speed without vibration in transit from ship to hatchery carrying box on my knee in slowly driven vehicle.
- 3. Allow hatchery water to drip onto eggs (not directly) but in situ in arrival box for 3 to 5 hrs. to bring them gradually to the same temperature as hatchery water before putting in trays.
- 4. Use as many trays as possible, i.e. spread out eggs as thinly as possible.
- 5. Remove opaque or blueish eggs and any othermot normal, ruthlessly, daily twice daily to begin with.
- 6. After hatching watch for crowding to stream entrance end of troughs, some will be suffocated. Put in a subdivision, half fish in each half.
- 7. Do not start feeding too soon they have protruding yolk sac to absorb and nourish them for a while.
- 8. Fingerlings may not be subjected to great and sudden changes with safety.
- 9. In transport time do not raise or lower the temperature by more than 10 F of hatchery water. Change water en route at Settlements if possible. Get them into intended stream within 5 or 6 hrs. of leaving hatchery's running water.
- 10. Carry can between knees to prevent vibration, jolts etc.
- 11. Stave fish before travelling, bumps etc. are transmitted through the water, it being incompressible, to the fishes flanks, making them 'sea-sick', then floating belly up, they die.
- 12. Always get eyed ova; this is the condition they are best fitted to travel in.

Having trout now well established here, Salmon, I think, will be difficult initially. Maybe the less peaty streams of the West and Lafonia would offer them the best conditions, as peatiness was, I think, the inhibiting factor with the Rainbows, not coldness of water, which

would only cause slower initial growth. Lack of oxygen was a Dr. Hamilton myth, as water absorbs air more rapidly at a low temperature.

Deposit your fry carefully by submerging can and contents in stream, and removing can - do not paw fish. Put in small springfed tributaries, not frequented by large fish.

Then, if a few survive to mature, come back and breed. Salmon, like Brown Trout, will be established in the Falklands for ever.

(Signed) John P. Oliver

His Excellency Sir Edwin Arrowsmith Government House, PORT STANLEY.

Dear Sir,

It is with pleasure that I inform you that the Salmon ova flown here on the 23rd. January has hatched out quite successfully.

As instructed, someone examined the Ova a week after introduction to the stream. At that stage only several white eggs could be noticed. They were again visited on the 11th of February, when it was found that only 35-40 white eggs remained in the tray. I think that it can be safely assumed that a good hatch has been obtained. Now we can only await the return of the big ones in a few years time.

The introduction of these fish into Deans River had created great interest locally, and it is hoped that it will be a successfull venture.

I am, your obedient servant,

Stephens.

Herewith a copy of the letter lie sent 4. K.

Things would appear to have gone alright and
without complications. Actually they were put in
a feeder to Deans River, we got they in about
thours after arrival - Some had been spilt
out of the Tray in the aircraft. Approx how
many came here? Certainly didn't look like 2000.
Do you want the box and Trays back? P.T.O.

Let me know in due course.

Anany manks hie permit maybe well get finished

quicker his year. Excuse (trey all complain) hie writing. Margaret sends her regards to Andrey & yourself and wonders when you're evaning out his way. Aye in haste Mike

# GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

RECEIVED

Wt: P2809 5/61

Number	Office of Origin	Words	Handed in at	Date
59/18	Foxbay	17	1600	4.3.63.

То

Etat Agricultural Officer Stanley

Grateful inform closing date salmon trout fishing stop Have had enquiries regards

operator



5/AG.

# GOVERNMENT TELEGRAPH SERVICE

# FALKLAND ISLANDS

# SENT

Wt P2809 5/61

Number Office of Origin

Words

Handed in at

Date

5/3/63

To

Maddocks Fox Bay

Closing date first May Regards

O i/c Agricultural Dept.



# GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

RECEIVED

Wt. P2809 5/61

Number Office of Origin Words Handed in at Date

34

177

FAY

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150

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16

PHONE GEORGE STE ART PSY

MISTAFORMED IN REGARDS TO THE FISHING IN THE MARLOW

MOULD LIKE TO SUGGEST THAT NO DEFINITE DECISION BE REACHED

PERSONAL INSPECTION WOULD BE MUCH APPRECIATED STOP WRITING

I BIGGS



8 ..

Fox Bay West.

20th.march 1903.

Mr.G.Stewart,

Stanley.

Dear George,

With reference to our telegram dated the 27th. March 1963 concerning the fishing in the Malo River, Fox Bay West, it is thought the few details following may be of interest to you.

This is the first year that any quantity of fish have been taken from the Malo since they were established in the 1948/1949 season, and we only located the area where these brown trout can be caught on the 2oth. February of this year. Previous to this they eluded the anglers almost entirely. This 'fishing spot' is in the estuary a mile or more below the mouth of the Malo River, and it is from this spot the big majority of the fish have been taken. figures given believed to be the total number of xxxxx taken from the Malo since they

word outablished		
were established.	Number	Number
	causht	kept.
D.Alazia	O	O
M.Biuss	2	2
D.Bonnett	2	2
J.Clyne	1	1
P. Gray	23	13
J. Hume	1	1
P. Hume	21	16
P.D. Waters	0	_0
	50	35

Add to this the catches of P.Short (2) and C.Perry (10 or perhaps 12) The largest catch at any one time was 13. 9 of these went back into the Heaviest 6 lbs caught by P. Hume. All fishing is done with conventional tackle and no attempt has been made to pull out 'for keeps'any record quantity. It is the practice to keep only what is required for eating. It is now some 2 - 3 weeks since any brown trout were caught as wind and tide must be favourable for a successful catch. The elements of these islands cannot be adjusted to suit anglers.!

We cannot understand why Mr P.D. Waters would want to have the season for these fish curtailed. He has never accompanied us to see what fish were caught, nor, has he ever hooked one himself. We are mainly amateurs and this is the reason why we would lake a person with some knowledge of ichthyology to come out and make an inspection or investigate before altering the existing regulation.

Yours faithfull;

for The Anglers. F.B.W.

x brown trout