

u/c

FALKLAND ISLANDS

FIS/14/1

SECRETARIAT

VOL 1

NAT/FAU/4#11

FIS/14/1

NERC

ARCHIVE

File Opened

25 - 4 - 73

Closed

4.11.85

DCS	25/6	RSC	±	29/9
BU	/	CS	±	30/9
DCS	8/5	RSC	2	1/10
BU	21/5	CS	8	5/2
DCS	21/5	DCS	2	3/10
BU	0/6	Type	1	4/10
DCS	10/6	DCS	4	1/10
HE	11/6	DCS	4	1/10
CS	1/6	DCS	6	1/10
BU	1/7	PA		
CS	20/6			
HE	3/7			
Type	3/7			
HE	3/7			
DCS	3/7			
HE	3/7			
BU	1/9			
HE	6/9			
DCS	7/9			
HE	7/9			
BU	1/1			
CS	1/1			
BU	27/2			
CS	27/2			
PA	11/9			
CS	11/9			

10/6
DS

(1)

YE

No reply yet to your R 2.

W. H. H.
8.6.73

C.S. *W. H. H.*
11.6.73

(2)

I discussed in London and a T.A. application for (1) goes off next mail. We decided to drop (4) and SAS will consider whether they can help re (2) + (3). Pl BU file to me 1/7.

(3)

W. H. H.
11/6

HE

File submitted as requested

W. H. H.
29.6.73

BU 1/7/73

4.

R.S.C.,

P.H. knows Grants are, I think, made by the Governor. If HE approves the application by Lic. SAS a Grant is simply drawn up, signed, and sealed? Is there any legal objection to making the Grants requested?

W. H. H.

10.9.74

BU 1/9

BU 1/1/74

BU 27/2

5.

B.S., The procedure mentioned by you for the issue of a Brown Grant is correct.

2. I do not think H.C. should give an assurance that any Brown Grant will be made until the grantee is known because the grantee (such as an alien) may be barred from holding land without other lawful authority.

R.B.
13. IX. 74.

6.

C.S.,

⑪ with 4 and 5. The Dic BAs can I think be informed along the lines of para 2 above?

§

28. 9. 74.

7

DCS

⑪ w. 4 & 6

Have we any interest in these houses pl.?

§
1.10.74

8

C.S.

Both houses have been up for sale for some time. Tenders closed 16th Sept and I have heard that 1A Pioneer Row has been sold to Johnstons and I imagine the other house has been sold also.

§
1.10.74

9

DCS

Th. u. Reply as at 5 pl.

§
2.10.74

Pa

New File

21st April

73.

You will remember that during your visit to Stanley in March we discussed briefly whether there were any projects in the Falklands which might be able to attract National Environmental Research Council Funds. I said that we had one or two proposals, and promised to write to you about these. I am sorry that my visit to South America and subsequent Council meetings have delayed this letter longer than it should have been.

The projects we wish to put forward are, in order of priority:

(1) The study of the probable pollution effects of the establishment of a Calcium Alginate manufacturing plant in Stanley. Alginates Ltd. have informed us that they propose to pump a million gallons of effluent from their plant into Port William each day, and we are naturally worried at what effect this might have on our wildlife, beaches and indeed on Stanley waterfront. Allied to this is a study of the erosion and other effects which the cropping of kelp may cause in the Alginates concession area.

(2) A study of the control methods which we should insist on for tourists visiting our wildlife areas - particularly the penguin and albatross rookeries. We receive a great deal of conflicting advice as to how many, how often and how close our groups of tourists should go. Allied to this is a study of the movement of the rookeries. This year I have been struck by how often I have heard farmers say that there are far fewer or far more penguins than usual and how the nesting areas have moved.

(3) Messrs. Conroy and White have been most helpful and I have had long discussions with them each time they have passed through Stanley. They feel that what we really need here is a complete census of our flora and fauna to establish what we have and what steps we should take to preserve it. This seems very logical, and we would be very keen on obtaining someone to undertake the task.

(4) Tussock grass disease has been the subject of intermittent correspondence with Doctor Greene for quite a number of years, and it would be nice if someone could come out to get to the root of the problem.

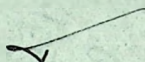
Chris Barrow is now here and getting down to his peat survey with great enthusiasm. It does seem that we might make more use of DAS experts on their way to and from the south in the same way as we have done with Barrow - by flying them in or out and

BU 21/5/73

making use of the time they would otherwise have spent on the ship.

I may be in London for a week or two soon - indeed by the time you receive this letter, and there may perhaps be an opportunity to discuss these ideas.

I am sending a copy of this letter to David Hall.



(T. H. Layne)

Sir Vivian Fuchs, Kt., Ph.D.,
British Antarctic Survey,
30 Gillingham Street,
London SW1.

c.c. D. G. F. Hall, Esq., M.B.E.,
West Indian and South Atlantic Dept.,
Foreign and Commonwealth Office,
London SW1.

LEASE

LEASE made the day of one thousand nine hundred and seventy two in pursuance of the Land Ordinance
 BETWEEN The Natural Environment Research Council on behalf of its component body the British Antarctic Survey of Port Stanley Falkland Islands (hereinafter called "the Lessor") of the one part and Mr. W.E. Bowles of Port Stanley (hereinafter called "the Lessee") of the other part

WITNESSETH that in consideration of the yearly rent of £100 (one hundred pounds sterling) to be paid by the Lessee to the Lessor (in advance) on the first day of each quarter in every year the first quarterly payment of £25.00 to be made on the 1st day of April 1972 and of the implied covenants on the part of the Lessee the Lessor hereby lets and the Lessee hereby takes ALL that piece of land described in the schedule together with the equipment detailed in the schedule attached hereto and that during the currency of this Agreement the Lessor shall hold the buildings and equipment insured against fire and the Lessee will reimburse the cost of such insurance

THE Lessee shall be responsible for maintenance and upkeep of both the buildings and the machinery

PROVIDED that the yearly consideration of £100 (one hundred pounds sterling) heretofore stated will be reviewed after the expiry of a period of three years from the first day of April 1972 (one thousand nine hundred and seventy two)

HOLD the same unto the Lessee his executors administrators and assigns for the term of five years from the first day of April one thousand nine hundred and seventy two

PROVIDED that the lease may be terminated by one party giving to the other party not less than twelve months notice of their intention so to terminate the lease and that the earliest date on which such notice may be given by one party to the other shall be the first day of April 1973 (one thousand nine hundred and seventy three)

WITNESS whereof the parties hereto have hereunto set their hands the day and year first before written

NOTE: A supplement to this lease describing the condition of the plant and machinery on the 1st of April 1972 will be added on that date.

Signed by the Lessor)
 in the presence of)

Signed by the Lessee)
 in the presence of)



3rd July

Please refer to my letter FIS/14/1 of 21st April concerning certain projects which it had been thought that NERC might be able to finance in the Falklands. We discussed this when I was in London in May, and as a result of our discussions I have submitted an application for Technical Assistance for the first project on the list - the study of pollution from an Alginates plant in Stanley.

2. Tussac grass disease seems to be recurring in Sedge and Carcass Islands, and Doctor Greene has promised that Tim Gunn should spend a few weeks here on his way back from South Georgia in April 1975.

3. This leaves items 2 and 3 on my list, and you thought that it might be possible for one or two of your scientists passing through Stanley at the beginning or end of the 1973/74 Antarctic summer to fly in early or out late and spend a few weeks here. We shall presumably need to seek Technical Assistance funds for their air-fares and extra expenses, and as this takes time I am wondering whether you are yet in a position to take this any further?

(T. H. Layng)

Sir Vivian Fuchs, Kt., Ph.D.,
British Antarctic Survey,
30 Gillingham Street,
London SW1.

HRT.

Notes on Terrestrial invertebrate studies in the Falkland Islands

Whilst the flora of the Falkland Islands is fairly well documented very little work has been carried out on the land invertebrates and microorganisms and even the larger more conspicuous groups, such as the arthropods, are poorly known. Quite apart from other considerations, it would be desirable to obtain certain basic information about the biota of these islands, such as its composition. There are also two particular reasons for requiring such information.

Firstly, there is the biogeographic aspect. The Falklands are a temperate island group separated from the mainland South America by some 600 km. They are also a possible source area for dispersal to the subantarctic and maritime Antarctic islands of the Scotia Arc. Detailed comparison of their land fauna with that of the mainland, other southern temperate islands, and the Antarctic region, is therefore of particular interest biogeographically. It should help to explain the origins of the more southern faunas and may throw some light on the dispersal mechanisms operating in these latitudes.

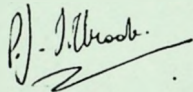
Secondly, there is an ecological/economic aspect. The Falkland Islands are intensively grazed, mainly by sheep, and consequently the vegetation cover has been considerably affected. There are very few areas which have remained free from the influence of man or his domestic stock and these are mostly confined to small islands. It is important to study the invertebrate and microorganism community structure of both "natural" and grazed areas in order to establish what changes have taken (and are taking) place. Such information would be necessary for the formulation of management plans, particularly for reserves and possibly even for areas used by stock. Also, a broader knowledge of the fauna may make it possible to deal more rapidly and effectively with any specific problems such as the sudden destruction of large areas of tussac which has been reported in recent years and which is apparently due to the larvae of a beetle.

The current state of our knowledge of the Falkland Islands invertebrates rests on various isolated, mainly taxonomic, references spread throughout the literature. Apart from early collections, material was brought back by M.W. Holdgate and P.J. Tilbrook after a brief visit in 1961. Some of this has been identified. Collections were made by H.G. Smith in 1968 in order to examine the protozoan fauna and this information will be published shortly. Smith also collected some examples of the beetle larva which at that time was thought to be responsible for the extensive tussac damage. This was identified as possibly belonging to the family Pythidae but adults were required for a specific determination. Unfortunately, efforts to rear the larvae failed. Material extracted from samples of young tussac and tussac affected by the beetle has yet to be analysed in detail. It is understood that some material was also collected in the late 1960's by Chilean workers but it is not known whether this has been, or is likely to be published. Opportunist collections and extractions were carried out by Tilbrook in late 1971 though unfortunately only the areas around Stanley and Port William were examined. This material is probably one of the most detailed collections yet made and it is hoped to start analysis of it shortly.

Ideally someone should be appointed to carry out a broadly based survey of the Falkland Islands terrestrial fauna though the subsequent taxonomic work would require the cooperation of several specialists. This should then be followed by a more specific study of the ecology of particularly interesting or economically important species or communities. In the absence of any such appointment by the Falkland Islands government, much useful preliminary work can be carried out by the British Antarctic Survey biologists during

their periods in the islands. It is also suggested that the British Antarctic Survey is probably best suited to coordinate any isolated projects.

In view of my interest in the fauna of the area and the collection I already have, I should welcome the opportunity to act as coordinator.

A handwritten signature in dark ink, appearing to read 'P.J. Tilbrook', with a stylized flourish underneath.

P.J. Tilbrook

6.6.73

TOURISM AND WILDLIFE IN THE FALKLAND ISLANDS

BOTH the gentoo and rockhopper penguins offer a pleasant attraction to the tourist. To reduce the disturbance effect of humans on the overall population in the Falkland Islands, it would be advisable to set aside specific colonies for tourist visits. These could be managed in either of two ways.

1. Spread visits over different colonies throughout the season.
2. Use one colony per season, spread over several colonies over a period of years.

There are advantages in both systems; if visits are to fall within a few weeks of the hatching period (December-January) then (1) would be the better system; but if the tourist season is to be spread throughout the complete breeding season then (2) would be the more suitable. However, these tourist colonies should not be visited before egg laying has been completed (mid December), and if possible should not be in the immediate vicinity of human habitation, where they may already be under a certain amount of pressure.

Counts

It might take several years to demonstrate any changes within the populations but they should be monitored regularly, preferably annually. Counts should be done at the time the eggs are hatching (December-January), which has a threefold advantage:

- a) Although more birds are in the colony during the pre-egg period, they may have been disturbed, and although returning to the colony, may not be part of the breeding population. Although at this time of the season, the numbers will be high, and may give a fairly accurate count of the number of birds, they will not record variations in recruitment to the breeding stock. It may therefore take much longer for population changes to be recognised.
- b) Disturbance affects the birds more during the egg period than the chick period and continual counts at this stage in different years will reflect changes which may only be short term.
- c) Disturbance will have a less marked effect on counts made after hatching.

Counts of the chick production from each colony at the end of each season would be worth-while.

Control counts

Coupled with tourist colonies one should set aside a similar number of control colonies which are left undisturbed except for census. From these one will get a check on the natural fluctuations within the populations.

Restrictions

There are certain restrictions to be made on the tourists visiting the colonies in order to reduce disturbance.

1. Direct interference, either by handling the birds, getting too close to the nests or too large parties should be forbidden. This can be reduced by not allowing people nearer than a certain distance from the colony, which will vary from species to species. For the rockhopper penguin about 10 feet should

suffice, whereas for the more timid gentoo penguin the distance should be nearer 25 feet. The size of tourist groups approaching the colony should not be more than twelve at any one time.

2. While in the area of the colony movements should be kept to a minimum and sudden sharp movements should not occur. The effect of movements can also be accentuated by bright colours and such clothing should be discouraged, drab smocks being issued if necessary. Noise should also be minimal.

3. Interference away from the colonies. Gentoo penguins have definite routes from the sea to their colonies. Parties of tourists should not use these routes, if possible should approach the colony from a different direction.

Special cases

King penguins. At present the population (42 chicks in 1973) is too small to withstand a tourist impact. We would suggest that no visits be made to any colony until it numbers more than 60 chicks. If the recolonisation on the Falkland Islands follows a similar pattern to Heard Island, this figure should be reached in another few years. Annual censuses of the colonies should be made in April.

Mollymauks. These cliff nesting birds are fairly tight sitters and can be approached fairly closely. We would again suggest small parties and the minimum distance to be 6 feet.

Smaller burrowing petrels. These are mainly nocturnal birds and by day can only be seen by removal from the burrows. With a group of people digging about the holes in a colony, damage will be done not only to the holes being dug up, but also the adjacent burrows. Viewing these birds can best be done by a visit to the colony a few days before the tourists by a local guide. He can search the area until he finds and marks suitable nests. When the tourists visit the area he, and only he, should then remove the birds from the burrow. It would be advisable to appoint a guide: (1) to see restrictions enforced, and (2) to carry out the monitoring counts.

BIOLOGISTS FOR THE FALKLAND ISLANDS GOVERNMENT

The work which the British Antarctic Survey can undertake in the Falkland Islands is restricted by the short periods of time which the biologists spend in the colony. It has been suggested that the transient biologists might be flown to and from the Falkland Islands at the expense of the Falkland Islands Government, so giving them the time they would otherwise have spent on the ship in the field. This would be very valuable, but because of the expense involved, such trips should initially be restricted to work which would have direct value to the colony.

In the immediate future British Antarctic Survey biologists might become involved in two types of programmes not necessarily independent. First, the compilation of an inventory of the Falkland Islands flora and fauna. Secondly, smaller scale studies, fairly intensive and possibly with direct bearing on the colony's economy and/or ecosystem.

1. Census work. Because of the methods of collecting data, this needs to be spread over many years. The first phase of the study should be restricted to the current reserves, with possible priority being given to those reserves where the human impact has been least. For each reserve a list must be compiled of what has to be done and observed. Each season when sending scientists south, visits could be arranged to visit the reserves where their disciplines could be of most use. The major work would be on the vegetation and the macrofauna, however it should be possible for ecologists in other fields to carry out a certain amount of their own work.

2. Specific projects. It is in this field that it might be desirable for scientists to have a longer time in the colony, and such programmes may be initiated by the Falkland Islands Government, or from the results of census work and the need for more intensive studies of a particular problem. An example of such a problem is the recolonisation of areas of ground denuded by breeding gentoo penguins; there is evidence that it is alien plants which recolonise these areas at the expense of the natives.

A major extension of British Antarctic Survey biological programmes into the Falkland Islands is unlikely in the near future because of financial limitations and our terms of reference. However, much of the current British Antarctic Survey research in the Antarctic/Subantarctic regions is of a comparative nature throughout the islands of the Scotia Arc and the Antarctic Peninsula. The Falkland Islands offer an opportunity to obtain data from the northern part of the Arc and from a group of islands north of the Antarctic Convergence. Such work if it developed could be directed and co-ordinated by the senior scientists of the various disciplines.

Excluding this comparative work which would be directly related to the Survey's own research programmes, the work would be mainly for the benefit of the colony and salaries and work space in the U.K. for working up collections etc. may need to be discussed.

For the maximum return from (1) and (2) above it would be beneficial to have an overall supervisor/co-ordinator either in the U.K. or in the Falkland Islands who, knowing the scientists coming south, could decide what would be the best programmes for the season, and brief the people. As an essential first step to avoid duplication it would be desirable to draw up a list of what has already been done.

BRITISH ANTARCTIC SURVEY

LIFE SCIENCES DIVISION
MONKS WOOD EXPERIMENTAL STATION,
ABBOTS RIPTON,
HUNTINGDON.

TEL: ABBOTS RIPTON 381-2 (STD. 04873-381)

RML/LMJ

1st August, 1973

T.H. Layng, Esq.,
The Secretariat,
Stanley,
Falkland Islands,
South Atlantic.

Dear Mr. Layng,

NERC File

Sir Vivian has passed on to me your letter of 3rd July and I apologise for this delayed reply.

I am pleased to know that you have submitted an application for technical assistance for the alginate pollution study, which is clearly of prime importance.

It will obviously be useful if Tim Gunn can look at the areas on Sedge and Carcass Islands where tussac disease is recurring. I enclose a note on terrestrial invertebrate studies and have marked a passage on the beetle suspected of causing damage. You will see that recent collections are being examined.

xx I also enclose some notes that we have drawn up concerning projects 2 and 3 in your letter of 21st April. I am rather concerned that the work is properly done, avoids duplication and is adequately coordinated. It seems to me that we do need some more preparation and information before embarking on what will be relatively long term projects to ensure that they are well planned. We are still rather ignorant here about what has already been done (by people like Ian Strange) and it would be helpful if you could supply this information.

This year it will not be possible to put a man in early in the summer but if you think it worthwhile I could supply a biologist to spend a few weeks on his way out. My own view is that it might be better first to gather the background information so as to plan the longer term programme more carefully, but you may feel that it is important to make some kind of start. Perhaps you would let me know your thoughts.

I shall be passing through Stanley myself in January and we could talk about this at that time.

Yours sincerely,

R.M. Jorgensen

p.p. R.M. Laws
Head of Division

c.c. Sir Vivian E. Fuchs,
Director.

Stanley,
Falkland Islands

5th September, 1973.

His Excellency
The Acting Governor,
Secretariat,
Stanley.

Dear sir,

Further to our conversation concerning the query made by Dr R. M. Laws on work which has been carried out in the Falkland Islands by myself, the following is a broad outline of that work and what I am planning for the future.

Basically my aim has been the one suggested in your letter Ref FIS/14/1 dated the 21st April 1973 (Section 3) - to obtain a basic census of our wild life areas, the wild life in those areas, and their degree of value in ecological terms. I must emphasise that all this work has been of a very general nature and restricted mainly to the larger forms of fauna -i.e. birds and mammals. Special attention has, however, been taken of tussac grass areas and an attempt has been made to establish exactly how much of this grass exists in the Islands.

Most of this information was compiled and then used to support recommendations for certain areas to be designated as Reserves or Sanctuaries.

As an example, information would first be sought on the past history of an island thought to be worth surveying. Attempts would be made to establish if the island had ever been stocked, if it had been used for sealing or penguin oiling, if it had been fired, etc etc. Depending on the answers to these, the island would be given an initial classing. An aerial survey would then be made where possible to establish the positions of tussac growth, seal colonies, some of the larger bird colonies and any other information which would assist a ground survey. The ground survey would establish the degree of tussac growth, bird species to be found breeding on the island, certain plants and other information required to establish the island's value as a potential reserve.

It was not the intention to make studies on specific types of fauna but to suggest that the more valuable regions be put aside ready for scientific studies in the future. However, some fairly detailed studies have been carried out, especially on birds which were rare or endangered such as the Johnny Rook (*Phalacrocorax australis*). It is expected that a paper will be published eventually on this particular study.

For some years a study has been made of the King penguin populations in the Islands. This was not centred on the ecology of the bird so much, but on its population growth over a number of years in an attempt to establish the rate at which certain colonies were growing and whether or not they were influenced by human activities.

Over a period of years a fairly accurate picture has been drawn up of our penguin populations, in particular distribution and numbers of the three main species, i.e. Rock-hopper, Magellan and Gentoo.

The distribution of most Falkland breeding species of petrels has also been mapped. Census figures are available for certain species.

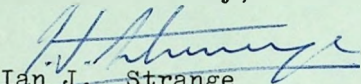
Distribution and populations of all Falkland seal has been given special attention and a survey report was produced for the Sea lion Otaria byronia and Fur seal Arctocephalus australis. This survey covered the entire archipelago and is considered to be accurate. The report was not published, although it is the intention to make further counts and bring the work up to date for publication.

Future Plans.

The main reason for acquiring New Island, as you will have learnt from the New Island Project, is to set the island up as a Wild Life Reserve. There are basically two main objectives in this scheme - (a) we hope to illustrate that both sheep farming and the operation of a small tourist lodge can work on the island for the benefit of both wild life and the island's economy, and (b) to create a centre for the continuing study of different species of wild life.

Both these objectives would seem to fit in with the proposals being made by B.A.S. biologists. Certainly one of my main concerns is the correct control of visiting tourists and it is the plan to take particular note of this possible problem on New Island, with a view to making suggestions to other land owners. Specific studies are also expected to be run on New Island and the adjacent islets and it would seem that here we have the possibility of some arrangement being made whereby B.A.S. biologists and the New Island project can work on certain schemes together.

Yours faithfully,


Ian J. Strange

6th September, 1973

Many thanks for your letter of August 1st concerning biological work and wildlife studies in the Falklands.

2. I enclose a copy of a letter from Ian Strange which, I think, answers the question you ask at the end of paragraph four.
3. We look forward to seeing you here in January when, as you say, we shall be able to talk in more detail.

(T.H. Layng)

Dr R.M. Laws,
British Antarctic Survey,
Life Sciences Division,
Monks Wood Experimental Station,
Abbots Ripton,
Huntingdon,
England.

ENCL:

file pl.

BRITISH ANTARCTIC SURVEY

Please quote in reply

No. BAS/519

PORT STANLEY,
FALKLAND ISLANDS

30th August, 1974.

URGENT

The Acting Chief Secretary,
Secretariat,
STANLEY.

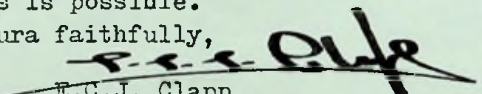
Dear Sir,

The Natural Environment Research Council is now prepared to sell the properties 1A Pioneer Row and 56 Davis Street on general tender. Both properties are on Government Lease, being Lease No. 97 for 1A Pioneer Row and Lease No. 98 for 56 Davis Street.

Resultant from our conversation of this morning, I am now making a written application for confirmation that Government will act under the normal "Crown Grant" procedure to the prospective purchaser with a value of the land being paid to Government Revenue. This value would be paid by the Natural Environment Research Council once the purchasing transactions have been completed. The Superintendent Public Works has valued the land as £200 for each property.

I would very much appreciate an early reply as I am under instructions to make the necessary procedures as soon as is possible.

Yours faithfully,


E.C.J. Clapp,
Officer in Charge,
British Antarctic Survey, STANLEY.

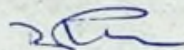
4th October

74

Dear Sir,

I refer to your letter of the 30th and confirm that Crown Grants will be issued provided the grantees are British or a British firm.

Yours faithfully,



(D.R. Morrison)
for CHIEF SECRETARY

Oic B.A.S.,
STANLEY

CMCD



The Institute of Terrestrial Ecology

Headquarters: 68 Hills Road, Cambridge CB2 1LA

Telephone 0223 69745/9

The Chief Secretary
The Secretariat
Stanley
Falkland Islands
South Atlantic



Your reference

Our reference

Date 5 July 1977

Dear

Anchor.

As you know, I have moved away from BAS to a sister Institute still within the Natural Environment Research Council.

Having now an understanding of the work of my new Institute it often strikes me that some of our projects closely align to those in the past engaged upon in the Falklands through MOD/ODA. I wonder, therefore, if at some time or the other you may find the enclosed literature useful.

Yours sincerely

Se

E C J CLAPP
Establishments Officer

ECJC/EMC

Encs

*Secretariat
Ref.
Section*