

C.S.

MEDICAL

(Board of Health)

1926.

No.

499/26.

Hon. Col. Surgeon.

SUBJECT.

1926.

11th October.

SUGGESTS THAT MEASURES BE TAKEN FOR
THE DESTRUCTION OF RATS IN THE TOWN OF
STANLEY.

Previous Paper.

721/20.

M.P.S. 117/25 11/10/25 117/25

MINUTES.

Minute from Hon. Col. Surgeon of 11/10/26.

Hon. Col. Surgeon.

I read H.P. 721/20 : you doubtless
remember the discussion in this connection
which is therein recorded.

2. It is, I understand, now your
considered opinion that systematic measures
for rat destruction are necessary in

Stanley and should be undertaken at

short delay ?

Subsequent Paper.

3. In this case will you kindly submit detailed
proposals for H.C.'s consideration.

Memorandum to Hon. Colonial Surgeon. ^{19.10.26.} 7th Dec 1926. 2.

Hon. Col. Secretary.

I regret that this paper has not been dealt with before. I would advise the local adoption of the rats and rice destruction act of 1919 which puts upon the Citizens of London the responsibility of taking steps to destroy rats on their premises and of taking reasonable measures to keep the numbers of vermin in check. All food supplies should be protected (including any waste foodstuff thrown away) from rats, since the birth-rate of rats is practically dependent on the available food supply. "No food no rats." Poisoning by means of barium carbonate and squill (*scilla maritima*) should be commenced. Trapping by the use of lithographers varnish spread on cardboard. I will indent for a supply of suitable poisons etc., to deal with these vermin early next year as soon as the Estimates are passed please.

J. G. Deane

Colonial Surgeon.
10th December, 1926.

Y.S. Submitted. I was present at a meeting of the Board of Health at which this matter was raised and I have also discussed it with Mr. George Hethcote, Mr. H. H. R. Juba, W. Brown of this office, and others of Harley. I am not satisfied that the Col. Surgeon has made out a sufficient case to justify the introduction of legislation as proposed, nor that rats are prevalent in the form in such numbers as

to constitute a pest.

2. The Colonial Surgeon's recommendation is to all intents the same as that put forward by him in M.P. 721/20 - minute of 15.3.21 on sheet no 2. It remains yet to be shown that the situation in this regard has materially altered since 16.5.21 or that data the Col. Surgeon was unable to estimate how the sum of £10 could be spent usefully. vide minute on sheet 3 of M.P. 721/20.

3. The protection of food supplies and disposal of rubbish is a matter for the Colonial Surgeon to consider in his capacity as President of the Board of Health of the East Falkland Island

Geo B
11.11.11

Such bye laws as may be framed by the Board
in amendment or amplification of the existing bye laws
shall come in the course of time to the Executive
Council for approval.

3. The Colonel Sagen does not say how
or how to perform or carry on poisoning and
killing by means of toxic carbide, sulphur, and
arsenic. Before expenditure of this money can be
sanctioned a definite ^{scheme} ~~proposition~~ of operations should
be formulated.

11/11/26

4. I will refer back to the Col. Sagen
for further consideration.

JWS

11. 12. 26.

11/11/26
The Board of Directors
of the United Fruit Company
has received from the
Colonel Sagen a report
on the proposed
operations for
the poisoning and
killing of
the
fruit
trees
in
the
plantation
at
San
Juan
de
los
Rios
in
the
Department
of
Cordoba
Colombia
and
the
results
of
the
operations
for
the
poisoning
and
killing
of
the
fruit
trees
in
the
plantation
at
San
Juan
de
los
Rios
in
the
Department
of
Cordoba
Colombia
and
the
results
of
the
operations
for
the
poisoning
and
killing
of
the
fruit
trees
in
the
plantation
at
San
Juan
de
los
Rios
in
the
Department
of
Cordoba
Colombia

Inside Minute Paper.

H.C.

1. I quite agree
2. Hon Colonial Surgeon should be referred to as proposed. My information is that there has been a remarkable decrease in the number of rats in Stanley during the last three years. It is quite possible however, that the sealing up ~~of~~, in connection with the Stanley Improvement Scheme, of the innumerable small drains, which previously ran out on to the foreshore, may have led these pests to visit houses more.

B.
11 Dec. 1926.

Hon. Col. Surgeon

Referred to you, please,

accordingly,

[Signature]

By Col. Sec.

13. 12. 26.

Hon Col. Secretary

I would not at present advise a rat extermination campaign, but I think that the numbers on the rubbish dumps could be dealt with later on please.

[Signature]

15. 12. 26

J. E. Schottel. It is up to the Col. Surgeon
to suggest any measures that he may consider
necessary to deal with the rats at the
 rubbish dumps.

2. In the absence of further representations
from the Col. Surgeon I think that the matter
may rest.

J. E. Schottel
15. 12. 26

H.C.S. I do also. These changes of opinion
are very trying.

B.
15 Dec. 1926

The Col. Surgeon.

Please note.

J. E. Schottel
J. E. Schottel

16. 12. 26

Hon. Col. Secretary

Yours please.

J. H. Deane

Colonial Surgeon

17. 12. 26

P. A. J. Schottel
17. 12. 26

3 Minute pour. St. C. the Gov. 29/8/29

Hon. P. M. O.

Referred for report accordingly.

W. L. B.

Ag. C. S.

4.11.29

Hon. Col. Secy.

4-5 Report, please.

J. L. M.

5.9.29.

1. Submitted in a separate M. P. I have asked the Hon. Col. Secy. by letter, to say what is being done in the matter of rat destruction.

2. I think the suggestion in para 6 of Redo 5.4 regarding rat campaigns a good one and I will ask the Hon. P. M. O. to arrange one in the near future, due publicity being given to it, well in advance through the medium of the

Penguin.

M. 18
A.C.S.
6. IX. 29

Hon C.S.

yes. After consultation with P.M.O.
arrange a suitable day. Advise
it well in Penguin. Let Sanitary
Inspector tempt rats with unpoisoned
food a few days before the poison is
put down in accordance with instructions
laid down in yesterday's supplement to
Penguin. A few days before perhaps Hon
P.M.O. would oblige by giving final
instructions by Broadcast?

M.
(6.29)
9

What about the hulks?

M.

Expenses, if any, could be charged, I think, "Stock
XV Sect 5"?

M.

Hon P.M.O.

For info.

M. 18
A.C.S.
7. IX. 29

Hon. Col. Secy.

May I suggest 23rd to 28th Sept. as not week.
26th to be the day of attack. 23rd, 24th, 25th
the days of preparation.

This will give us time to work up the
publicity side of the campaign.
There is a B. of A. meeting on 23rd Sept. at which
the matter may be brought up.
May we have some Penguin Rat Supplements for this Office?
By day 25.

J. James Moir.
10/9/29.

25 copies handed
to Hon P.M.O.
14/9/29.

6-7 Letter from Dr. Meir 9/9/29

Re: 6-7. Published in "Penguin"
11/9/29 ~~10/9/29~~ 11/9/29

8 Minute from P.M.O. 11/9/29

Hon P.M.O.

Expenditure approved.

The Inspector of Narratives might
call at this office and obtain
an issue voucher for the
articles in question.

Hon Col Secy

M.A. 11/9/29
A.L.S.
11. IX. 29

Noted. Thank you

J. James Moir.
13.9.29

P.A.
12/11/29

Minute from P.M.O. 4/10/29

9-10

C.B. Submitted. It will be better I think when the next campaign is tried to give the public more warning. On this occasion there would appear to have been a scarcity of rat poison in the local stores.

J.R.S.
A.J.C.S.
7.X.29

How C.S.
Please. Put up wire, is carried out.
again in good ends of
Please me out 6 R.R.
7.29
10

How P.M.O.

To note.

C. J. S.
8/10/29

Minute from P.M.O. 9/10/29

(11)

C. where is the pamphlet on Red squalls?

J.R.S.
A.J.C.S.
12.X.29

M.S.

Encl. 117/25 attached.

A.C.C.
35/10/29

Hon S. M. O.

I should be glad if you would draft form return for Penguin which I think should be inserted now.

A.C.C.
30. X. 29

Hon Col Secy

12.

As ever please.

J.M. 4.XI.29

S.S.

I regret that through an error in filing this paper was filed in the 1927 bundle. It had evidently been picked up with a 1927 paper and filed without being noticed. I am unable to say how the paper came to be placed for file.

A.C.C.
24/1/30

"
y E.

I regret very much the error on the part of the office in placing this paper.

2. I am afraid April will be too short unless now and would suggest June. If your Excellency approves I will expect alterations to have P.M. O before publication.

W. B.
C. S.
24. 1. 30

H.M. C.S.
April will do. Set
make issue. M.
(2530)

Hon. P. M. O.

Notice published in issue of "Penguin" of 28 Jan. 1930.

C. D. D.
for M.
24/1/30

J. M.

28/1/30

H. 36/3/30

Hon. P.D.O.

Will you please

say that action, if any, you

desire taken in this matter?

Yours
f

31. 3. 30.

Hon. Col. Secy.

Publicity.

i. Notice in "Penguin" that there is to be a rat week commencing on 21st April, & inviting the Public to join in poisoning, trapping, or destroying rats in any possible way.

Poisoning.

(i) Baits - non poisoned - to be set on 21st & 22nd, blank day on 23rd, & poisoned baits to be set on 24th. All poisoned baits to be collected on 25th.
(Notice to animal owners to restrain their animals on 24th & 25th)

(ii) Traps may be set all the week.

ii. Broadcasting Notice as above for "Penguin"

iii. Chief Constable to bait dumps etc as in previous campaign.

IV Authority for expenditure by Chief
Constable on baits, & poison as in Red (8)

V Last Sept, or October Penguin published a
supplement (I am sorry I have no copy left)
on 'How to Catch Rats'. This might be done
again with advantage.

These are the necessary steps, please,

Editor, Penguin.

James Moir.

1/4/30

For necessary action:

~~2/11/30~~
4.11.30

4.3.30.

9/6

The total expenditure which
will be incurred in this connection
will amount to about £4.10/-
made up as follows:

hunting traps £ 1. 15/-

Printing Penguin

supplement as requested 2. 13 9.

(two copies) £ 4 - 8 - 9.

2 On last occasion such
expenditure was charged under
Stock Prevention of Animal Diseases
but in this case it would be better

I think to take out a special warrant.

Sp. 18
for OS.
4.11.30

Hon C.S.

No. Change to Stock

'Prevention etc'. next year

include destruction of notes

under this heading. Proceed

with Campaign.

Sp. 13
7.5.30

4.30
4
J.V. 14.

13. Despatch to S of S. no. 71 of 22.4.30.

14. Minute from Hon S/O. 29/4/30

y.2. Sketch for expansion at

approval.

J.V.

2.5.30.

Hon C.S.

Approved. 2/5.30. J.V.

Jan 11/30.

For Wks.

Wks.

J. L. M. 2.5.30.

2.5.30.

PA. 9.1.30.
SB.

Hon C. S.

Penguin 6. x1.30
157.

Jan 6/30

~~ff. 15/11/30~~
~~G. 29 8/11/30~~

Hon C.S.

had 6 published

Penguin 18. x1.30.
157.

ff. 24/11/30.
G. 22 18/11/30.

Hon G. M. O.

Could you please report result of
rat campaign last week.

S. L. M.
for C.S.
24/x1/30

G. M. O.
24/x1/30.

Minute from Hon. P. M. O. 24/11/30

(15)

E. J. Submitted for information.

S. L. M.
for C.S.
24 Nov 1930

PA. 25/1/30
SB.

Hon C.S.
S. L. M.
25.50.
11

(16)

Minute from Hon. P.M.O. 28/11/30

G.P. Submitted

G.P. for C.S.
28/11/30

14th C.S. Hon. P.M.O.
Please work 14th P.M.O.
Put up again in January.
28.30
" "

Hon. P.M.O.

Accordingly

G.P. for C.S. J.S.M.
28/11/30 29/11/30

ff. 1/1/31.

C.S. 29/11/30

G.P. Submitted as directed.

? To ask Hon. P.M.O. for

his recommendation as to further
measures in this campaign.

V.S.

3.1.31.

Hon C.S

Please.

JM

(5/31)
1

Hon P.O.

Accord! please

Yudky

5.1.31.

Hon. Col. Leary.

May I suggest that those places which are not infested be poisoned again by the usual methods on Jan 15th. Then I think the matter may be left over until April again.

J.E.M. 6.1.31.

y.p.

Submit to approval

18 7.1.31.

Hon C.S

Approved.

JM

Hon P.O.

(9/31)
1

Approved.

Hon. Col. Leary.

I spoke in Hooley today. This will be done. Both Mr Hooley & myself have seen quite a number of rats within the last few days. We have difficulties about obtaining rat poison locally, some of it is very unsatisfactory. Would it be possible to buy through Crown Agents from V.H. Stark & Co. Red Squills or some suitable poison.

Yudky

8.1.31.

J.E.M. 9.1.31.

(J28/31)

C.S.O. No. 499/20

Sheet No. 10

Inside Minute Paper.

M. P. O.

Certainly : will

you please prepare the
necessary indent in collaboration
with Vet- Officer who should
sign it as Head of Dept.

Yudky

9. 1. 31.

Hon. Col. Secy.

o Thank you.

- (i) 2 8 lb. Powdered Red Squills @ 2/- 1/2 lb.
- (ii) 2 doz. tins "Ratan" red powder @ 1/- per doz.
- (iii) Indent herewith.

Same Moi.

11. 1. 31.

Minute paper sent to 17/1/31

(17)

Pub 17 see at approval.

Pub approval is n.a. 3/24/31

Pub

14. 2. 31

30/6/31
28/16/21/31

Pub

30.6.31

Minutes from Hon. P. B. O. of 28/9/31

48. Subject for information at for approval.

Hon C.S.

I am pleased with report of P.M.O. and am glad to note that he suggests the campaign be repeated in his time

2 It is satisfactory to know the lat part is being thoroughly systematically dealt with.

C.S.

28.9.31

Pub

28.9.31

The P.O. To see.

Pub

29.9.31

Hon. Col. Secy.

Noted, Thank you.

J. Inner Moor. 29/9/34

of 31/10/34
a. J. 29/9/34

Prague
2.11.34

(19) Minute from Hon. S.M.O. 22/1/34

Submitted for information

C. J. P. 23/1/34

Hon. Col. Secy.

Thank you seen. Report is very satisfactory. The Sanitary Inspector should lay further visits as recommended by the S.M.O.

mch

25. 1. 34

Ans. S.M.O.

to note.

J. J. M.
C. J. P. 23/1/34. 25/1/34

Hon. S. M. O.

bf-30/6/34

Have you anything further to report in this connection please.

C. D. 29/1/34

mch
ag et.
30.6.34.

Hon. Col. Grey.

Nothing please. If there is a period of suitable weather towards the end of this month or beginning of August I intend to have the clumps poison baited. One prefers to poison bait in dry bright weather. Nothing has been reported to me about any excessive numbers of rats lately, please.

James Mori.
3.17/34.

Yr. Information.

mch
ag et.
3.7.34.

✓ June 2
4.7.34

B. f 5. IX. 34
mch 4. VII 34

Muriel's penstock SMO 23/8/34

Yk. Submitted for information.

mch
ay cd.
24. 8. 34.

Hon. C. S.

See : This appears

to be satisfactory.

Ynd

24. 8. 34.

Hon. S. M. O.

To see

mch
ay cd.
27. 5. 34.

J. S. M.
27. 8. 34

S. C.
27/8/34

21. Minute from Hon. S. M. O. of 8/3/35.

Hon. S. M. O.

Felix Kerevutu.

mch
cd.
8/3/35

C.S.
Thank you, I understand that
the rats are not very numerous at present;
another attack might be launched in 4-5 months
time.

14/3/35

Sanitary Inspector.

W. Blevett
S.M.O.

no note.

MCH

15. 3. 35

Hon. Col. Secy.

Noted thanking you

15/3/35

S.H.H. & J

Hon. S.M.O.

Perhaps another attack
on rats could be launched.

~~31/7/35~~

~~28. 16/3/35~~

~~31. 8. 35~~

~~MCH. 31. 7. 35~~

Hon Col. Sec.

MCH
C.I.
31. 8. 35

Minute paper submitted

28-9-35

Minute paper Hon. S.M.O. 28/9/35 (34)
See. The Chief Constable informed
me that he considers the attack
has been successful.

P.R.

MCH
C.I.
1. 8. 35

(23)

Minutes No + from Ch. Constable of
17-18/4/39.

Hon. S. M. O.

To see. The dump mentioned
is alive with rats.

MCH
cl.

X.65

18.4.39

① The Chief Constable's minute
will have been noted. Poison
has been put out twice I understand
this year.

② As the scavenging system gets
established I hope we can insist
on the elimination of edible garbage
at these dumps more firmly.

③ I have been a little reluctant
to introduce Liverpool Virus i.e.
mouse typhoid but if the rat
population is on the increase
I might ask advice as to how
this agent is now regarded.

MCH
5 MCH
18.4.39

Chief Constable

To see. Report say
in a months time if
the rat population is
increasing or diminishing

MCH
cl.

19.4.39

Hon. Col. Secty
Noted thanking you

SMO
20.4.39

1/2 20/5/39
MCH 20/4/39

Chief Constable,

For report please.

C.I.D.
for C.S.
20/5/39.

Hon. Col. Secty.

I have the honour to submit report. I laid 604 baits on April 24th and I have been taking notice of rubbish dumps. I find that there are not so many rats now. I am laying more baits this month only been waiting for the snow to go as it is no use to put down the poison when wet

S.H.H.

25.5.39

Seen.

P.A.

W.H. C.S.

25.5.39.

~~H.S.~~

4 E.

you wished to see this? A copy has gone to the
to the

KB

19/1/45

Pl. apply for, say, 24 copies of both circulars
& manual for distribution to ranches etc. &
ask for their remarks.

21/1/45

Circular Despatch from S. of S. of 14/11/44. 24.
Saving telegram to S. of S. of 19/1/45. 25.
Letter from Secretary, F.I.R.L., of 31/1/45. 26.

27. Letter to Secretary, F.I.R.L. of 6. 2. 45.

(28)

Hon. Smd.

To see (26) & (27) pl. The situation has certainly become serious as the rats are spreading deep into the town. Can anything be done to combat this pest, pl.?

H. G. G. J.
6/2/45

H. G. G. J. (29)

① In Const. Hood's time we had poison put out regularly. When Const. Swain succeeded him poison ceased to be put out regularly and when I complained to the Hon. Cst. Sec. I got nowhere. The situation has remained the same over the 4 years and will continue until a Sanitary Inspector is secured who will do his job.

② I submit that there is a good deal of exaggeration in the Reform League letters. I have just inspected the rubbish dump and I can testify that "deplorable state of the rubbish dump" and "literally alive" are both absurd statements.

③ I know of no reason why the Reform League could not sponsor an "anti rat campaign". Everybody knows how to kill rats and if the individual citizen ceased to put out food for them and took an active part in their extermination the rat mortality rate would rise.

④ Finally, I wrote Mr. Swain last week about the rat problem and sent him a copy of the brochure on "rodent control". I also asked him again to set out poison in view of present complaints.

H. G. G. J.
6.2.45

46.

Hon. Sm's minutes at (29) submitted pl.

While the picture painted by the F.I.R.H. is perhaps exaggerated, nevertheless I do think that an officially sponsored effort should be made to control this pest. The previous campaign was considered reasonably successful & well worth while.

I suggest the Board of Health be asked to investigate the possibility of launching a drive by baiting the refuse dumps East & West of Stanley, and at the same time soliciting the cooperation of owners of land or property where rats are known to abound, i.e.,

Yalt. Is Co.

Slaughterhouse
East Jetty & Warehouse
West Jetty (?)

Mr. J. McGill

Slaughterhouse.

Mr. N. J. Hutchinson

— — —

I feel sure that these owners would gladly cooperate, more especially if it was made known to them that their cooperation would be part of a scheme for a concerted attack on rodent throughout the town.

I understand that a stock of rat poison is held at the Hospital, but if this was not sufficient the Army would no doubt assist from stocks held by them.

(31)

Pl. confirm
Chin. 7/2/45
A.D.

W. G. G.
7/2/45.

(32)

46. about 4 lbs of poison is held at the Hospital & 25 lbs is available for purchase from R.A.S.C. stocks.

(33)

W. G. G.
8/2/45.

B. V. Shen Hon. Cl. Sec. returns.

A.D. 9/11/45

Minute to Chief Constable of 20/2/45.

34.

from " " " " 11/3/45.

35.

H.S. 17-0

to see

(35) W. G. G.

7-3-45.

(37)

100 to
20 M's
7-3-45

100
7/10/45

- 38. Letter from Secretary, F.I.R.L., of 13. 3. 45.
- 39. " " " " " " 15. 3. 45.
- 40. Despatch, No. 22 from S. of S. of 15. 5. 45.
(41).

h.o.

Here are the copies of this booklet. Pl. keep one on the file & distribute the others where they are likely to do most good. Chief Constable will advise you. F.I.R.L. should be roped in.

KB

7/7/45

J. D. Arthur
h.o.

42 Memo. from H. E. the Governor of 4. 1. 52

43

H. S. M. O.

Yr. obs. on H. E.'s memo. at 42 pl.

W. J. for C.S.
4/1/52

H.C.S.

44.

The main trouble is that too much food is thrown on the dumps; the people are not co-operative. It was an old rule, I think, that stale food etc should be deposited in one ash-bucket, and ashes in another. The food should be burned in an incinerator.

To meet the problem of the existing rats, I think that the reward system is well worth trying. I think 3d a tail would be ample.

RH
5/1/52

This should be
re-enforced.

Y.E's

minute at 42. Please see S.M.O's minute overleaf. Major Aldridge suggests that the new Firearms Ordinance, which prohibits the use of firearms within the town limits, may be in part responsible for the growth of the rat population since before the passage of this Ordinance people used to enjoy themselves shooting rats with a .22 rifle. As the rubbish dumps are out of the town in all but the legal sense it might be worth letting it be known that, despite the law, anyone is free to have a rat shoot if he wants to. If people would do it for the fun of it, as apparently they did before, it would save us having to pay for their destruction.

46

I think that the Medical Department should take action either directly or through the Chief Constable as Sanitary Inspector to re-enforce the former request to place food in one container (which could then be incinerated as SMO suggests) and ashes in another. Spreading of the ashes helps the Common according to AO.

8.1.52.

2. I had an idea that the use of a .22 was prohibited on the Common? If not, by all means let us start paying 3d. a fair. The trouble about .22 is that there is a house quite near the ash dump and Police should advise on safety.

MC 8/1.52.

47

To Chief Constable for advice.

ll 8/1.52.

Minute from Ch Constable of 1/2/52.

MS

ACS

49

Who is now responsible, Town Council? ^{yes}
Who has ordered the bait? (S.M.D.)? A.C. has
got some bait in stock, so there is really no
need to wait.

U 1/2/52

50

Hon. S.M.D.

I understand that the Town Council
has now assumed control of rat extermination and
that your Dept. has ordered a supply of rat poison
on behalf of the Council. As there is still some
poison in the Ag. Dept. would you raise the matter
at the next meeting of the Council with a view to
baiting being re-commenced at an early date, pl?

51

yes yes, I will do this. A.C. 4/6/52

W. J. S.
1/2/52

Sec. U 5/2/52

~~W. J. S.~~

B.W. 29/2/52

52 Letter from Town Clerk of 20.2.52.

53

ACS

Paying a bounty for bait is ~~to~~ a good idea.

But Govt. sh. pay the bounty is not such a good
idea. If the T.C. is responsible let the T.C. pay the
bounty.

U 27/2/52

54

Letter to Town Clerk of 3. 3. 52

B.W. (Progress)
30/4/52
7/5

499/26

55A

JL

Bo. got this on the
mail. It might be
useful here.

W

14/1/52. SHO

To see pt +
copy to notes of Town
Council

ME. 14/
1.52

HCS This matter was brought up at
the Town Council meeting.

On account of its very high cost
"Wagner", it was decided to use the
well-bored or make cheap "holes".

Wagner

JL 1000's minute SP!

Noted Me. 18/11

Handwritten signature and scribbles

MEMO.

Departmental Number.

From.....The Colonial Surgeon.....

IX.....MEDICAL.....

Date.....11th October.....1926.....

To.....The Hon. Col. Secretary.....

Reference
Numbers.

The drains that are being laid about the Town afford the rats an easy and safe way for reaching the houses, and the place is being overrun with them.

I would suggest that all offal etc. from the two slaughter houses be destroyed by burning, also any food in the hulks and stores upon which the rats are likely to feed be dealt with and that a proper campaign for rat destruction be entered upon, please.

J. W. Deane
Colonial Surgeon.

No. 499/26.

is requested that, in any reference to this minute, the above number and the date may be quoted).

MINUTE.

.....7th December, 19 26.

To...The Hon. Colonial Surgeon,

.....STANLEY.....

From

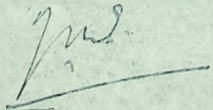
THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

I am directed by the Acting Governor to inform you that the undernoted paper, which was sent to you on the 19th of October, has not yet been returned and to request that you will give the matter your early attention.

No.
499/26.

Subject.
Measures necessary for extermination
of Rats.


Acting Colonial Secretary.

Hon C. S

3

I should like a report as soon as possible re the progress of the extermination of rats campaign. In connection with the Town, also Huelho.

I have just been reading an article on Tristan de Cunha. It is alarming.

Rats have ruined the Island. The matter is of importance.

A. H.

29/29
8

FALKLAND ISLANDS.

The Public Health Ordinance, 1894.

—:0:—

Bye-laws made by the Board of Health for the East Falkland Island, under sections 18 and 19 of the Public Health Ordinance, 1894.

- | | |
|--|--|
| 1. These Bye-laws may be cited as the "Extermination of Rats and Mice Bye-laws, 1929". | Short Title. |
| 2. The owner or occupier of any premises shall take such steps as may from time to time be necessary and reasonably practicable to keep such premises free from rats and mice. | Premises to be kept free from rats and mice. |
| 3. The Extermination of Rats and Mice Bye-laws, 1928, are hereby repealed. | Repeal of the Extermination of Rats and Mice Bye-laws, 1928. |

Made by the Board of Health at a meeting held on the 28th day of January, 1929.

F. O'SULLIVAN,
Clerk of the Board of Health.

Approved by the Governor in Council at a meeting held on the 2nd day of February, 1929.

A. I. FLEURET,
Clerk of the Executive Council.

6. Suggestion. Twice a year concerted rat campaigns of a week's duration should be instituted against rats in their strongholds. Individual action is of little use against rats as they merely shift their habitat if attacked in one spot. The Sanitary Inspector might bathe the rubbish dumps, and arrange for co-operation of all owners, and occupiers of infested premises in the campaign.

James Moir.
Principal Medical Officer.

Principal Medical Officer's Office,
Stanley,
5th September, 1929.

Destruction of Rats.

Sir,

Legislation. Under Public Health Ordinance, 1894, bye-laws were made by the Board of Health, and approved by the Governor in Council 2/2/29, providing for the destruction of Rats and Mice. (Copy appended)

- 2. An amendment, approved by the Governor in Council 24/5/29 provides for a penalty for non-compliance with the bye-laws.
- 3. The bye-laws place the onus of extermination of rats and mice on owners, and occupiers.

11. Present State.

1. The Board of Health has received no complaints so far in 1929 with regard to rats and mice infestation of premises.

2. This year the Sanitary Inspector has, from time to time, poisoned with "Rodine" various town rubbish dumps, and he has reported that this has a salutary effect, as rats are not so numerous on the rubbish dumps as formerly.

3. No financial provision is made for the extermination of rats. Last year about £5 was expended from X. Medical., Other Charges, 14 Incidental Expenses on "Rodine", and this poison was chiefly used this year.

4. During the past fortnight the P.M.O. has twice inspected the town rubbish dumps and has not observed a single rat. Rats, of course, are present, and are likely to increase unless constant warfare is waged against them

5. Copies of the bye-laws have been distributed for public information by the P.M.O.

The Hon.,
The Colonial Secretary,
STANLEY.

Pont Stanley.

9/9/29.

(7)

The Hon.
The Col. Secy.

This might serve as an introduction to the publicity part of the rat campaign, if you consider it of sufficient merit to publish, in that case, of course, you will be kind enough to withhold my name.

James Mow.

The Depredations of the Rat ⁽¹⁾

The rat is a ~~robber~~ "robber" & a reiver of the worst type. He attacks man both in health, & pocket. From every nation he levies tribute. In one year he did in the United States a billion dollars of damage, in France he destroyed 200 million francs worth of commodities & in German 200 million marks, & in Britain the bill was 15 million pounds. Just for a while ponder the loss to the Community in food, & valuable goods.

Let us now enumerate the diseases spread by the rat: (1) plague, (2) jaundice - spirochetal (3) rat-bite fever, (4) trichiniasis - worms, (5) tuberculosis - rat leprosy, (6) pseudo-tuberculosis (7) trypanosomiasis, (8) foot & mouth disease, (9) food poisoning, (10) hydrophobia (11) equine influenza. Just for a while, ponder the fact that these diseases may be carried from any one part of the world to another.

There are two varieties of rats, the black & grey. In the late years of the Roman Empire the black rat migrated from Asia to Europe, from Asia, where in the middle ages, he disseminated terrible plague

epidemics, - e.g. plague of London. In $\frac{2}{3}$
the eighteenth century, the grey rat
followed hard on the trail of the black,
& eventually mastered him. In those
days everyone was his own public health
officer, & rats multiplied exceedingly,
& adventured in ships, & colonised all
over the world, even as the hardy Britons.

In suitable environment rats are
prolific to an amazing degree. In one
year one pair will produce 800, 900
offspring. In four months rats are mature,
& commence to breed, & the period of
gestation is three weeks, & the litters are
eight to ten in number. Just for a while,
ponder what an unmolested rat
community can do ^{in a year} in the way of multiplication.

All good citizens must resist the advance
of the Rat. The Penguin supplement of
6th Sept. indicates the duties of a good
citizen in this matter, & just for a while -
ponder the part you will play now, & in
the coming rat week.

James Mow.



Principal Medical Officer's Office,
Stanley,
11th September, 1929.

Sir,

Submit for approval the following expenditure in connection with the rat week commencing 23rd September,

2 doz tins of Rodine at 1/3	£I.	10.	0.
4 loaves at 7d.		2.	4.
1 lb butter at 2/4		2.	4.
		<hr/>	
	£I	14.	8.

1 tin of Rodine provides 24 baits
1 loaf of bread provides 80 baits.
Butter is prescribed by the manufacturers as best for use in making baits.

James Moir.
Principal Medical Officer.

The Hon.,
The Colonial Secretary,
STANLEY.

Principal Medical Officer's Office,
Stanley,
4th October, 1929.

Sir,

A campaign against rats was carried out during the period 23rd to 27th September. Prior to the initiation of the campaign a supplement of the "Penguin" was published on 6th September, describing modern methods of suppressing rats followed by a more insensive publicity campaign by means of broadcasting, articles, and notices in the "Penguin" and placards asking the public to join the Government in destroying rats.

On the 23rd, 24th, and 25th of September the Sanitary Inspector baited with scraps of bread rendered tempting with the aid of dripping, and butter the following places:-

The West and East end of the rubbish dump to the east end of the town.

The Public Jetty and its environs.

The Government Dockyard.

The vicinity of the Colonial Secretary's Office.

The Stanley Improvement Scheme Works, Magazine Valley

On the evening of the 26th of September, these areas were baited with scraps of bread and butter or dripping and "Rodine". The result was as follows.

West end of rubbish dump all baits taken and one dead rat seen

East end of rubbish dump no baits taken.

Public Jetty no baits taken.

Dockyard, a few pieces taken.

Magazine Valley, all baits taken.

The Hon.,

The Colonial Secretary,

STANLEY.

The/

The bait not taken by the rats was carefully collected, and removed next morning.

It must be assumed that in the rubbish dump, dockyard and Stanley Improvement Works, and Magazine Valley quite a number of rats were destroyed.

It would be well to repeat this campaign in six months. A publicity campaign should be begun well beforehand. Meanwhile the Sanitary Inspector should continue to bait from time to time places suspected, or known to harbour rats.

James Moir
Principal Medical Officer.

No.

MINUTE.

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

9. 10. 19 29.

From N.M.O.

To

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.


Submitted.

- (i) The next rat week takes place in April '30.
 - (ii) That notice of this be given in the Penguin from time to time.
 - (iii) That Red Squills (Liquid Extract) be purchased for this purpose.
- Recently you circulated a pamphlet on Red Squills as a Rat poison.

I am conversant with this work, & know that Red Squills is very efficacious.

James Ross.

(4)



RAT WEEK.

The attention of the public is invited to the next anti-rat campaign which is to take place in April, 1930. For a whole week in that month the Government will do everything possible through the Health Department and the Sanitary Inspector to destroy rats. This is in the Public interest and therefore it is the duty of the Public to assist in every possible way. Remember that the law places the onus of rats and mice destruction on owners and occupiers of premises. Now is the time to order rat traps, and rat poison. The best poison is red squills, as it does not harm other animals. The liquid extract, or powdered form of red squills (*Urginea Maritima*) may be obtained without trouble from any firm which supplies chemicals.

GOVERNMENT HOUSE,
STALLEY.

22nd April, 1930.

FAULKLAND ISLANDS.

No. 71.

My Lord,

I have the honour to enclose herewith copies of the "Penguin" containing a special supplement in connection with the rat campaign which may interest Your Lordship.

I have the honour to be,

My Lord,

Your Lordship's most
obedient humble servant,

ARNOLD HODSON.

THE RIGHT HONOURABLE
LORD PASSFIELD OF PASSFIELD CORNER, P.C.,
SECRETARY OF STATE FOR THE COLONIES.

No.

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

MINUTE.

499/76

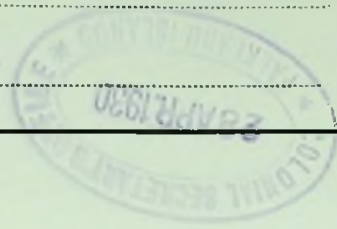
(14)

28th April, 1930.

From The Principal Medical Officer, To

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.



ANTI-RAT CAMPAIGN.

1. A movement against rats was executed between the dates 22nd and 25th April, 1930.
2. Publicity.
 - (a) Notice of the campaign was published in the "Penguin" and also a Special Supplement with instructions on how to catch rats. The public were invited to co-operate.
 - (b) The campaign was broadcast on two occasions. Again the public were invited to co-operate.
3. Method of Attack.
 - (a) On the 22nd and 23rd those places suspected of harbouring rats, i.e. rubbish dump on foreshore etc., were baited with non-poisoned baits. All the baits were taken almost immediately.
 - (b) On the 24th 250 poisoned baits were placed on and about the rubbish dump, sanitary jetty etc. On the 25th it was found that all the baits except five were taken. These five remaining baits were disposed of in a suitable manner.
4. Result. It must be assumed that there is a large number of rats in and about the foreshore. Many must have been destroyed. It is recommended that the Sanitary Inspector continue to bait the dump from time to time.

James Moit.
Principal Medical Officer.

No. _____

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

MINUTE.

24th Nov. 1930.

From P. M. O.

To

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

Anti-Rat Campaign.

- 18th & 19th Nov. the Sanitary Inspector baited all rubbish dumps & Sanitary Jetty.
- 20th No baits laid.
- 21st 1110 poison baits put down.
- 22nd Only 5 baits remained untaken. It must be assumed that rats are numerous, & that quite a number have been poisoned. Many half grown rats were observed before poison was put down.

The Sanitary inspector will put down poison baits on 26th Nov. again.

J. Lunn Mori.

No.

MINUTE.

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

28th Nov. 1930.

From P. M. O.

To

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

Anti-Rat Campaign.

On the 26th Nov. 1930, after due notice published, 385 baits for rats were laid. These baits were poisoned. On 27th Nov. 1930 it was found that 351 of these baits had been consumed.

One must presume that a large number of rats has been accounted for by poison.

It is proposed that early in January another attack be made on the rats in the rubbish dumps, sanitary filth & dockyard.

J. James Moir.

17

No.

MINUTE.

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

17th January, 1931.

~~From~~
To

~~From~~ The Principal Medical Officer.

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

I have to report that on 15th January the Sanitary Inspector put down 314 poisoned baits on various rubbish dumps along the foreshore.

These were all taken but 21.

I think that the rat poison is deteriorating and that a stock should be kept by the Sanitary Inspector, and renewed from time to time.

J. Inner Mow.
Principal Medical Officer.



MEMO.

Departmental Number.

From..... *P. M. O.*Date..... *25/9/31*To..... *Hon. Col. Selby.**Rat week.*Reference
Numbers.

Between 21st & 26th Sept. 1931 a Rat week was held.

Publicity:- By means of Broadcast Services, & the Penguin publicity was given to the Intention to hold a Rat week, & the Public was invited to co-operate. Also attention was drawn to the Penalty for harbouring rats & mice.

23rd Sept all the likely spots in, & about rubbish dumps were baited with non poisonous baits.

24th Sept. no baits put down.

25th Sept. Rubbish dumps, vicinity baited with poison baits.

In all 535 poison baits put down.

East Rubbish dumps 410 baits

West Rubbish dumps 125 baits.

26th Sept. Two baits remained at East dumps, & 15 baits at West dumps.

The remaining poison baits

were carefully disposed of.

Credit is due to Mr. J. Hooley, Chief Constable, for the manner in which the backing of the dumps was carried out.

It is submitted that a large number of rats was destroyed. Dead ones have been observed in several places.

Submitted that this campaign be repeated in say one month's time.

J. James Mow.

FALKLAND ISLANDS.

C.S. No.....

MINUTE PAPER.

Departmental Number.

From..... S.M.O.

XV

Date. 22/1/34

To..... Hon. Col. Secy

POISONING OF RATS.

Reference Numbers.

On 18/1/34 poisoned baits were laid by the S. I. in, & about various rubbish dumps along the foreshore. Of 303 baits put down only 15 remained on the morning of 19/1/34.

It is reasonable to assume from this that rats are still very numerous.

Poisoned baits should, after an interval, be again distributed over the dumps.

J. James Mori.

499/26

No. _____

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

MINUTE.

23-8-1934.

From S.M.O.

To

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

I have to report that on 22-8-34 the Sanitary Inspector put down about 500 baits for rats on the foreshore & other suitable places. The poison used was "Red Squills". He reports today that about two-thirds of the baits have been taken. The remaining baits were put out of the way, chiefly into rat holes. He reports that the rat population along the foreshore seems to have decreased of late.

J. Innes Mow.

MINUTE.

No. _____

8th March, 19 35.

To ~~From~~

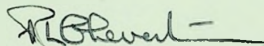
~~To~~ From Senior Medical Officer

THE COLONIAL SECRETARY,

Stanley.

Stanley, Falkland Islands.

I should like to see any minute paper there may exist on rats and rat destruction.



Senior Medical Officer.

22

No.

MINUTE.

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

28th September, 19 35.

170m

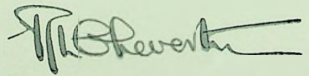
From, Senior Medical Officer,

THE COLONIAL SECRETARY,

Stanley.

Stanley, Falkland Islands.

I have the honour to report that on Thursday the 26th September, 220 poisonous baits were laid in connection with rat extermination, on the rubbish dump at the east end of the town and on the premises of the Sanitary jetty. These places were visited again on the 27th September, and it is estimated that 193 baits have been taken.



Senior Medical Officer.

Minute

Chief Tenorale.

Is anything being done

regarding the information

The Turkish dump to the west of the Bungalows is alive with the

Vermin and early and energetic

measures are required to reduce the

numbers.

MCH

17. 4. 59.

from last night

on. approx 22. 5 laid 573 personnel lists

on rubbish dump. I will bring to the notice of the Com. 5. m. 0. for another laying of poison this week.

M.H.

18. 4. 59

246

NOTES ON RAT CONTROL METHODS FOR THE BRITISH COLONIES

1. During the War a large amount of research work on rodent control has been carried out in Great Britain by the Bureau of Animal Population, Oxford University, working for the Agricultural Research Council. The main results up to March 1944 have been embodied in the attached simple manual of instruction on "The extermination of rats and mice", which is being adopted for general issue by the Ministry of Food to urban Local Authorities, and also by various branches of the Services. It is recommended that this manual should be studied before the following additional notes are considered.
2. The poison baiting methods described make it now possible for moderately well trained operators to obtain very high kills of rats, - usually 85-100% on first treatments, and frequently as high on second treatments, and with quite small danger to human beings and other animals. They are being used by the Pests Officers of War Agricultural Committees throughout England, by operators in various urban areas, and by the Port of London Health Authority, and the scientific records now include both numerous measured tests on individual rat colonies and several histories of large-scale block control.
3. Although the difficulties of directly applying pest control methods suitable for Great Britain to different conditions in the Colonies (themselves highly diverse) are fully realized, there is good ground for believing that the general principles will be found applicable to rats all over the world. In this connection, some parallel investigations by American workers in the equatorial conditions of Hawaii provide valuable confirmation: these are referred to later.
4. Hitherto, rat control all over the world has chiefly been done by laying poison baits, often elaborate mixtures of ingredients, without much attention to reliability of the poison supplies, and without exact measurements of the efficiency of the baiting operation.
5. Four chief advances have been made during the War. In practical control work:
 - (a) The use of prebaiting with plain bait for several days before poison is added.
 - (b) The correct sequence of baits in successive treatments, so as to reduce the effects of bait shyness in survivors.
 In research work, directed to improvements in practical control:
 - (c) The standardization of poison supplies and bait formulae, and simplification of the latter.
 - (d) The development of plain baiting before and after poisoning, as a scientific field "census" method, by which the population change - i.e. the degree of success of the operation, can be measured objectively.

These points are somewhat amplified below. The question of suitable bait bases, other than those at present used in Britain, is discussed in paragraph 11: it is a very important one, which will require some further research.

6. Prebaiting. The two chief advantages of this method are that (a) it overcomes the suspicion of rats towards newly placed bait, and induces them to feed eagerly upon it (b) it allows time for rats to be drawn in from surrounding areas. Field tests have proved the superiority of prebaiting over the "direct poison baiting" method commonly used. There is a subsidiary advantage of prebaiting, in giving a clear idea of the points at which poisoning need be done.
7. Prebaiting in the tropics. In temperate countries, and probably in many types of warmer climates during dry seasons, the methods given in the manual can be applied without change. But wet tropical conditions require a brief consideration.
- (a) The method of prebaiting has been independently studied in the sugarcane growing areas of Hawaii, where conditions are tropical and oceanic. The results were very successful (see R.M. Doty (1938)).
- (b) The only special modification required was the protection of baits from heavy rains, by laying them in tin trays covered with sheets of tin bent into a half-cylinder. In Mauritius and in Java, sections of bamboo have been used as bait containers.
- (c) Whatever method is used, some allowance must be made for the shyness which many rats show towards new objects placed in their environment. Experience may show that it is necessary to have bait containers or covers in position for some days (baited) before the main operation is begun.
- (d) In many countries, there will be no need to protect the baits from rain, at any rate in the dry season.
8. Poisons. Zinc phosphide is a standard product, but other poisons vary greatly in toxicity and sometimes in palatability according to the source and grade. Thus arsenic oxide ("arsenic") toxicity usually increases with the fineness of its texture, and the cruder grades may be strongly acid; barium carbonate may be processed or natural, and may contain impurities unpalatable to rats; red squill powder varies according to the season of collection and the method of treatment and drying. It is therefore extremely important to arrange for supplies that correspond with the specifications now adopted by the Ministry of Supply. The formulae for poison baits assume the use of such standard grades of rat poisons.
9. Measurements of efficiency. The efficiency of baits and baiting systems is now measured during research and testing by an objective "census", more especially by using the amount of plain bait consumed by field rat colonies as a measure of their size. The procedure most commonly followed now is to place surplus dry wheat baits and measure the quantity eaten each night until it reaches a peak. The wheat census prebaits are then discontinued and an independent prebaiting and poisoning operation is carried out. After this the wheat census is repeated at the original points, and the ratio between the two census measurements represents approximately the percentage kill. It is not possible here to go into the details of this method, save in its use, and the results which are contained in a number of reports to the Government. The point is that efficiency has become scientifically ascertainable, and the testing methods could be applied to conditions in various Colonies (see D. Chitty (1942)).

10. Baiting sequences. The old "direct poison baiting" system frequently left large residual populations of rats difficult to bait. Although the residues left after prebaiting are much smaller, they present similar difficulties. It has now been proved that such rats will frequently refuse a further dose of the same poison in any base, or even a new poison in the same bait base. Although much remains to be discovered about bait shyness in rats, we already know enough to recommend that both the poison and the base should be changed at each treatment.

11. Bait bases (a) The three bait bases widely used in Britain (sausage rusk, bread-mash and sugar-meal) may not be available in all Colonies, or if they are, may not be entirely suitable to all tropical conditions. At the same time, at least two standard bases will be needed.

(b) Apart from supply questions and possible variations in their qualities, wet baits like sausage rusk and bread mash are liable to go mouldy or sour very quickly. The extent to which they would be used in tropical countries must be the subject of further research there.

(c) It is suggested that soaked wheat (wheat steeped in cold water overnight and the water then thoroughly drained off) would be the best one for general use in all conditions. (It is omitted from the manual itself, owing to the supply and rationing difficulties in Britain).

(d) The best poison to use on soaked wheat is 5% zinc phosphide. Red squill powder and barium carbonate should not be used with it.

(e) The best second bait base for tropical use must be determined by research. Meanwhile, it is suggested that various simple baits should be tried locally, with the following considerations in mind:

1. A choice test should be done first, with measured heaps of several bases placed at each point, and their relative positions changed round each day. The quantities eaten will give some idea of the preferences of the rats.
2. A rat eats more of a wet than of a dry bait, the difference being about equal to the difference in water content. Thus the consumption of sausage rusk mixed with an equal weight of water is about twice that of dry wheat. Allowance must be made for this.
3. Poisons should be used in the following proportions: zinc phosphide at 5% in any base; arsenic at 10% in wet mashes, 15% dry meal baits; barium carbonate at 20%, in wet mashes only; red squill at 10%, in wet mashes only.

12. Poison bait boxes. Beside the reasons given in paragraph 7(a) for using covered bait points in the field, the danger to children, animals and birds may sometimes make it desirable to use special box or pipe containers, as described in the manual of instructions. The containers mentioned there are only partially effective in excluding poultry, and not completely safe for children and animals. The Bureau has designed a type of baiting box, called "PB" ("protected poison point"), which excludes all domestic mammals and birds, but not rats and mice. Supplies of PBs are scarce in Britain at present, but the Agricultural Research Council, holding the patent, is in a

position to great diseases to manufacture, (as is now being done by a firm in South Africa). PJs are suitable for use in many places both out of doors and indoors. Under wet conditions (especially in census tests) the lid should be covered with a good overlap of tarpaper, and the whole container raised half an inch off the ground on pebbles. Standard instructions for PJs should be supplied by the manufacturer. PJs have the advantage of protecting prebait, so that they have an important use even if the poison is red squill. They have the disadvantage of usually causing a lag of some days before rats approach the baits, and there are the difficulties of supplies and extra expense.

References.

- Chitty, B. (1942). "A relative census method for brown rats (Rattus norvegicus).", *Nature*, London, 150 : 59-60.
- Doty, R.E. (1938). "The prebaited feeding station method of rat control." *Hawaiian Planters Record*, 42 : 39-76.

Bureau of Animal Population.

5th May, 1944.

210

MINISTRY OF FOOD

**EXTERMINATION
OF
RATS AND MICE**

FOREWORD

This pamphlet, on the extermination of rats and mice, was prepared by Mr. Charles Elton, Director of the Bureau of Animal Population, University of Oxford, and his staff, under the ægis of the Agricultural Research Council, in consultation with Mr. H. R. Hewer, the Rodent Control Officer of the Ministry of Food, Mr. A. D. Campbell, Chief Advisory Officer on Destructive Pests, Department of Agriculture for Scotland, and Mr. C. D. Hornby, Technical Adviser for Land Pests Destruction of the Ministry of Agriculture and Fisheries.

The pamphlet has been written for the use of local authorities, but it will also be of considerable help to others who are experienced in the processing, storage and handling of commodities and have long felt the need of concise and authoritative guidance on modern methods of rodent control.

Ministry of Food,
University College,
Gower Street, W.C.1.

W. McAuley Gracie,
Director of Infestation Control.

August, 1944.

EXTERMINATION OF RATS AND MICE

INTRODUCTION

1. RATS DESTROY FOOD

Rats cause considerable loss of food. An average brown rat eats about an ounce of dry food a day, which does not include what it spoils and wastes by contamination and the gnawing of sacks and cartons. In war-time particularly, the extermination of rats is one important means of conserving food, which they attack at all stages from the growing crop to the storehouse and the table. Rats are attracted to stores, canteens and refuse dumps.

2. RATS LOWER HEALTH AND EFFICIENCY

- (a) **They carry disease.** Rats carry the parasites that cause several diseases in this country, including spirochaetal jaundice, food poisoning, and trichinosis. These are all dangerous infections. Abroad, they spread bubonic plague and some kinds of typhus fever, through the agency of their fleas.
- (b) **They do other damage.** They also injure building structures and equipment, sometimes causing accidents and hold-ups, as when they gnaw through electric insulation. They can become a serious nuisance in canteens and living quarters.

3. RATS CAN BE EXTERMINATED

There are two species of rats in this country, with rather different habits and distribution. *Both can be destroyed by the same poisoning methods.* An extremely high degree of success can be achieved by methods recently developed, provided the instructions given here are carefully followed. The differences between the common brown rat and the "black" or ship rat are described in the Appendix at the end.

OUTLINE OF TREATMENT

4. PLAN OF CAMPAIGN

- (a) The following general plan should be adopted:
 - (1) Complete survey of infested areas.
 - (2) Poison baiting campaign.
 - (3) Follow-up treatment with poison baiting, gassing or trapping.
 - (4) When the population is exterminated, application of rat-proofing measures.
 - (5) Regular inspection and maintenance of control.
- (b) In the first place it is necessary to study the habits of rats and to *make a thorough survey of the sites of infestation.* Rats are mostly active at dusk and at night, but their presence can be confirmed by damage to food and food containers, burrows with freshly excavated earth or smooth worn passages, fresh droppings, regular runways, holes gnawed in woodwork, dark body smears on woodwork or flooring, and footprints. By means of these signs you should find the living-holes of the rat colonies, their feeding places, and the runways between the two. It is extremely important that as much as possible be ascertained about the size and complete distribution of rat colonies *before control operations are begun.*
- (c) When it has been discovered exactly where the rats are living, running and feeding, the strategy of control is to kill them, either in their holes by poison baiting or gassing, or on the runways between their holes and their normal food supply by poison baiting or trapping.
- (d) You should try to organize the campaign simultaneously at all the infested points, otherwise much trouble may be experienced in getting rid of the final remnants.
- (e) The actual control work under 4 (a) above can either be undertaken by your own staff, or by some other agency. *But in any case, the procedure adopted should follow the lines laid down below.*

5. HOW TO PREBAIT AND POISON RATS

Poisoning is by far the quickest and most effective method of killing rats, provided it is properly done. By recent improvements in baiting methods it is usually possible to get a kill of from 80-100% on the first treatment, and a similar success with follow-up treatments. *Here is a summary of how to organize and carry out a poison baiting campaign.* More details are given in the sections referred to: these must be carefully studied.

- Estimate from your survey the number of bait points needed, and from this the amount of supplies and equipment that will have to be used (Sections 6-10).
- Decide on the baiting sequence to be adopted. Usually this will be moist sausage rusk and zinc phosphide followed (if there are any survivors) by sugar-meal and arsenic. (Section 10-12.) If there is a risk of *rat corpse smell in living quarters*, start with sausage rusk and arsenic, instead of zinc phosphide (Section 12(c)).
- Rats are suspicious of new things, and *they must be attracted to eat plain food (the "bait base") placed at fixed visiting points.* This is called prebaiting. Prebaiting draws the rats into the baiting points, and overcomes their first suspicion (Sections 14-18).

Hole baiting (Section 13)

- Place one dessertspoonful of the plain bait (moist sausage rusk) in all occupied holes or other safe places, *on the first and third days.* (Section 6.)
- On the fifth day* place one or two spoonfuls of the *bait base mixed with the poison*, using the bait formula recommended (Section 10).

Container baiting (Section 14)

- Where there is danger to human beings, animals or birds, prebait and poison must be placed in boxes or pipes.
- These containers are placed along rat runs, prebaited and left for one to two weeks or until rats are using them all.
- Four dessertspoonfuls of prebait are placed in each container, every day for five days, and then eight spoonfuls of poison bait on the sixth day.

Surface baiting (Section 15)

- Surface baiting can be done in conjunction with hole baiting (using the same size of baits and days of prebaiting) or with container baiting (using the larger prebaits for five days). If surface baiting alone is being done then the five-day prebaiting system is advised.

Follow-up treatment and maintenance

- If the first treatment does not kill all the rats, they should be prebaited with one of the other bait bases, followed by one of the other poisons. If this in turn leaves any survivors, a third bait or trapping or (for outside infestations only) gassing can be tried (Sections 12, 18 and 19). The second poison treatment should not be done less than a fortnight after the first. Regular maintenance of inspection and control must be kept up. (Section 16.)

Precautions

- The danger attaching to the use of poisons can be avoided by simple precautions; but these precautions are absolutely essential (Section 17.).*

POISONING

N.B.—A poison bait has two parts, the *bait base* and the poison. These materials should be obtained and mixed to the formulae given in Sections 6-11 and used in accordance with the detailed directions in Sections 12-17.

6. BAIT BASES

Moist Baits

Sausage rusk. This is a dry, coarse material looking like ground-up biscuit, used for sausage

filings. It can be obtained from many butchers. It should be of medium grade, not fine like flour. It is moistened with water in the proportion of

Sausage rusk .. 2 parts by volume — 1 part by weight
Water 1 part by volume — 1 part by weight

This makes a crumbly moist bait.

Bread Mash. This is made by softening stale bread in plenty of water, draining off the water, and mashing the bread into a porridge-like consistency. One part by weight of really dry bread makes two or three parts of mash.

Dry Bait

Sugar meal. This is ordinary National flour, mixed with 10% by weight of white castor sugar:
Flour 15 parts by volume — 9 parts by weight
Sugar 1 part by volume or weight.

7. POISONS

There are four poisons, described below in order from the most to the least efficient against rats. At least two of these should be kept in stock, preferably three. Red squill may gradually deteriorate, but the others will keep indefinitely in air-tight containers.

Zinc phosphide. A fine black powder. Used at a concentration of 5% by weight in all baits.

Arsenious oxide ("arsenic"). A fine white powder, to which a small amount of blue or red dye is usually added to conform with safety laws. Used at a concentration of 10% by weight in sausage rusk or bread mash; at 15% in sugar-meal.

Red Squill Powder. A coarse red powder, derived from a Mediterranean bulb, which may at times be in short supply. It has the advantage of being practically harmless to animals other than rodents. Used at 10% by weight, in moist baits only.

Barium carbonate. A white gritty powder. Used at 20% by weight, in bread mash only.

8. ESTIMATING THE AMOUNTS OF BAIT MATERIALS REQUIRED

From your initial survey of the infested area, you will have to estimate the number of bait points required, and from this the total quantity of bait to be mixed each day. In making this estimate, bear in mind that most people put down too few baits for successful results. An estimate of the total amount of material required for the whole job can be worked out with the aid of the following table. This gives roughly the total number of ounces needed for treating *ten holes for three days* on the first, third, and fifth day system; but 25% extra may be required for points receiving double poison baits (see Section 13 (c)). For container baiting, these same total amounts of base and poison will be required for *each container or surface point, for six days.*

QUANTITIES IN OUNCES FOR: 10 HOLES FOR 3 days } i.e. per
or 1 CONTAINER OR SURFACE POINT FOR 6 DAYS } treatment

When using ..	Wt. of plain substances needed		Wt. of one of these poisons needed			
	Base	Sugar	Zinc phosphide	Arsenic	Red squill powder	Barium carbonate
Bread ..	15	—	$\frac{1}{2}$	1	1	2
Sausage rusk ..	15	—	$\frac{1}{2}$	1	1	—
Sugar-meal ..	27	3	$\frac{1}{2}$	1 $\frac{1}{2}$	—	—

9. EQUIPMENT

- (a) *Suitable large tins or buckets for mixing baits*, and smaller tins for measuring out materials. It is very convenient to make some tins holding known weights. *Scales* weighing up to several pounds can usually be obtained temporarily for this purpose. The poisons should be weighed out each time on smaller (e.g. letter) scales.
- (b) One or more *long-handled spoons* for laying baits; consisting of a dessertspoon (not larger) attached to a 2 ft. stick or iron rod. Possibly boxes or pipes as bait containers (see Section 15).
- (c) (It may also be necessary to keep in stock from 10-20 break-back *rat traps* (see Section 19); from 10-50 break-back *mouse traps* (see Section 23); and materials for cyanide gassing (see Section 20).)

10. POISON BAITS

The following selected poison baits will meet all ordinary requirements. They are all given in parts by weight.

1. Zinc phosphide ..	1	2. Arsenic or red squill powder	2
Sausage rusk ..	10	Sausage rusk	9
Water	10	Water	9

In making up sausage rusk *poison baits* (as distinct from plain prebaits) the poison should be mixed with the dry rusk *before the water is added*. All baits should be thoroughly mixed to ensure an even distribution of the poison.

3. Zinc phosphide ..	1	4. Arsenic ..	3
Sugar-meal	19	Sugar-meal ..	17
5. Barium carbonate ..	1	6. Red squill ..	1
Bread mash	4	Bread mash	9

Each of these six poison baits must, of course, only be used after prebaiting with the same bait base.

11. KEEPING QUALITIES OF BAITS

Plain sugar-meal will keep indefinitely, but moist baits (sausage rusk and bread mash) must be made fresh each day, because they soon go mouldy, and this puts off the rats from eating them. Arsenic-sugar-meal can be stored for one week, and zinc phosphide-sugar-meal up to three weeks, without deterioration. But the moist poison baits must be used the day they are mixed.

12. BAITING SEQUENCE

- (a) For a campaign it is necessary to have at your disposal *two quite different baits*, one for the first treatment, and another for a follow-up treatment of any survivors. Rats that survive a poison bait for any reason are usually shy of taking the same bait again, and it is therefore *necessary to change both the poison and the bait base*, unless the treatments are more than three months apart—otherwise many failures will be experienced. It is usually best to start with moist sausage rusk and zinc phosphide (Bait No. 1), and to follow up with sugar-meal and arsenic (Bait No. 4). If poison-baiting is being used again, *the follow-up should not be done less than a fortnight after the first treatment*.
- (b) If a third treatment is necessary within three months, you should, if possible, use barium carbonate or red squill in bread mash. (Bait Nos. 5 and 6.)
- (c) If the infestation includes dwelling rooms so constructed and infested that rats are liable to die in the walls or under the floors, it is advisable to do the entire first treatment with sausage rusk and arsenic (Bait No. 2), and to follow with sugar-meal and zinc phosphide (Bait No. 3) reversing the poison sequence given above. This reduces the chance of serious body smell.
- (d) It is realised that supply difficulties may make it impossible or inconvenient to adopt the exact sequences suggested above, in which case others, though less good, can be used, *provided always that a complete change of bait is made at each treatment* done within three months of the start of the campaign.

13. PLACING BAITS

The baits may be placed either in *holes*; or in *containers* (see Section 15); or on the *surface* (Section 16).

- (a) **Hole-baiting** is an efficient and safe method, provided that the poison baits are laid well inside the holes so as to be inaccessible to human beings, animals or birds. The holes must be carefully blocked in as soon as possible after the night of poisoning.
- (b) Baits should be placed in every occupied ground hole, in holes in stone walls, brickwork or double-boarded walls where there are rats, and in rat runways under heaps of junk or other cover.
- (c) Provided a sufficient number of points are baited, one heaped dessertspoonful at each prebaiting or poisoning should be enough; but two spoonfuls of *poison bait* should be laid at points where the prebaits have been very well taken. *Do not be surprised if there is poison bait left by the rats*; this is an indication that an adequate supply was put down. If all is eaten, it is likely that some rats did not get enough to kill them.
- (d) Sometimes you will have over-estimated the scale or misjudged the distribution of the infestation, and some prebait points will be left untouched. No poison baits need be put down at such points.
- (e) The following system will be found very reliable for hole baiting:
 - Prebait on the first day with plain bait.
 - Leave one day gap.
 - Prebait on third day with plain bait, in the same holes, etc.
 - Leave one day gap.
 - Place poison bait on fifth day, in same holes, etc.
 - Always use the poison in the same base as the prebait.*

14. CONTAINER BAITING

- (a) Container baiting will sometimes be found necessary, where there are not enough suitable holes or safe surface baiting spots. If baiting is done either inside a box with a three-inch hole cut in the side; or in pipes, of which the three-inch diameter kind used for mole-draining (with one end blocked with cement) is very convenient; the container should be placed by a rat hole or on a runway. These containers reduce the danger to human beings, dogs, cats, etc., but are not safe for poultry. The danger for poultry can, however, be much reduced by placing a brick or stone three inches in front of the entrance of the container or by facing the entrance three inches from a wall.
- (b) Because of the suspiciousness of rats towards new objects, the containers should be left down for some time before the main baiting campaign is begun. This period, of a week or more, may be considerably shortened by putting some dry sausage rusk or stale bread scraps in each container. During this time and during the baiting, the containers must be *kept on exactly the same spot*. *Regular prebaiting should be started simultaneously in all the containers*.
- (c) As a rule fewer points are used than if baiting were being done in holes or on the surface. To get the same results *prebaiting should be done for five days continuously*, and poisoning on the sixth. If possible use moist baits for first treatment in containers, putting four spoonfuls of prebait every day, and, on the last day, eight spoonfuls of poison bait, into each container.
- (d) The containers should be thoroughly cleaned after use, allowed to dry and laid by for further operations.

15. SURFACE BAITING

- (a) Where it is safe to do so, baits need not be placed in holes or in containers but can be laid on the surface, e.g. on the floor of a building, or on wall ledges. This is a very quick and convenient method, permitting easy inspection and removal of residues. It is mostly used indoors, in places inaccessible to children and domestic animals and birds.
- (b) Surface baiting can also be combined with hole baiting or with container baiting. If used in conjunction with hole baiting it should be done on the same days and with the quan-

ties recommended for putting down holes. If used in conjunction with containers, the full five days prebaiting and the larger amounts should be used. Bait should not be laid at surface points during the container "lag" period.

- (c) *If surface baiting alone is being done, it is best to use the five days prebaiting system, and size of baits as for containers.*
- (d) Surface baits must be kept away from loose foodstuffs, and residues of poison bait collected and burned as soon as possible after the night of poisoning.

16. MAINTENANCE OF CONTROL

- (a) A careful search of the area for signs of rats should be made at intervals of a month, and all re-infestations dealt with on the principles given above.
- (b) If re-infestation by invasion from fields or premises outside is suspected the co-operation of those responsible should be enlisted.
- (c) It is a common thing to put the blame on one's neighbour as the source of rat infestation. This is usually a wrong accusation, and a permanent solution of the problem can only be reached by a carefully planned block control project in which all parties co-operate.

17. PRECAUTIONS

- (a) All the poisons except red squill are dangerous if eaten accidentally. However, the amount present in small quantities of rat bait is not a serious danger in practice, provided (1) utensils employed for mixing and holding baits are cleaned after use, hands washed, (2) poisons are clearly marked as such and stored in a safe place and stale poison bait disposed of, (3) poison baits are laid well inside holes, surface baits in safe places or at safe times, or else suitable containers used, (4) cats and dogs are shut up or removed or at any rate kept well fed during poisoning, to prevent them eating poisoned rats, (5) all accessible remnants of poison bait are trodden into the holes or cleared up and burned the day after poisoning.
- (b) Moist baits containing zinc phosphide give off small amounts of phosphine gas (which has a strong smell). They must only be mixed in well-ventilated rooms, otherwise there is a danger of cumulative poisoning among people exposed constantly to the gas.
- (c) Poisoned rats dying under wooden floors or in hollow walls, can become a nuisance on account of corpse smell. For this reason it is best in inside jobs of this kind to do first treatments with arsenic, which causes much less corpse smell than other poisons; or the rats should be trapped in such places. In any case, it is better to have the rats dead than alive!

TRAPPING

18. TRAPPING

- (a) *Break-back treadle rat traps* are an inefficient means of tackling large infestations which are best dealt with by poison baiting; but they are often valuable for clearing up small infestations remaining after poison campaigns. They can also be used where the danger of corpse smell is considered not worth the risk of poison baiting. The following method should be used.
- (b) *The traps should be placed at the holes or with the treadle at right angles across the runways, preferably where these are close to a wall or other object.*
- (c) Put down the traps baited, but do not set them until the rats have begun to visit and take the baits. Then set them all at once. Baits can be fish-heads, bread crust, etc. They should be visited daily until they catch no more rats.
- (d) *Gin-traps* (3 or 4-inch steel traps) can also be used effectively, if placed in the runways of the rats, buried in earth or covered with chaff. The best results are obtained if they are set in large numbers. Such traps are hidden, not baited.

- (e) If there is any danger of accidentally trapping other animals or birds, the trap may be laid under a board sloping against the wall. In adopting this device, allowance must be made for a delay of some days before the rats start to run under the boards.

GASSING

- 19. (a) Cyanide gassing is a valuable aid in cleaning up *outside infestations*. (It is highly dangerous, and against the law, to gas inside any building, without the supervision of trained operators and the sanction of a sanitary inspector). The use of cyanide dust in outside rat holes is quite safe if reasonable precautions are taken. It is only efficient to use in solid ground, not in loose rubbish tips, etc., and gassing should never be carried out in rainy weather or in water-logged ground.
- (b) The material usually available is "Cymag." Another, "Cyanogas," may be obtainable abroad. No pump is required; instead, the method of "spooning" the powder should be used. Block in all rat holes. Next day put a *heaped teaspoonful* of this powder into the "spoon" (a small tin wired on to a stick), and tip it out in a heap 1-2 feet down each reopened rat hole. Then block the entrance with turf or a stone covered with earth; tread in firmly but be careful not to cover the powder with earth in doing so.
- (c) The powder makes a small zone of lethal concentration of hydrogen cyanide gas which kills most of the rats as they are digging their way out.
- (d) A certain number of holes may be reopened by the rats, and the process should then be repeated on the reopened holes until all the rats are killed.
- (e) Gassing is especially valuable for cleaning up rat colonies that have become difficult to bait; but as emphasized above, it is only applicable to outside sites such as hedge-banks, solid refuse dumps, etc.
- (f) The chief precautions required are (1) face down wind while spooning, to avoid breathing in the dust or getting it on your clothes, (2) make sure that no moisture gets into the tin during operations; do not put the gas "spoon" into the tin, use the tea spoon as a measure, (3) close the tin very carefully each time you move on to another hole and after use store it in a dry place that is not inhabited.

RAT-PROOFING

20. BUILDINGS

After premises have been completely cleared of rats, they may sometimes be rendered rat-proof by careful attention to the paths by which rats enter and run about inside, though complete rat proofing is almost impossible owing to the paths of entry provided by ordinary human activities. It should be borne clearly in mind that periodic extermination campaigns, especially with poison baits, combined with constant search for the traces of new infestation, form the best insurance against rat damage. This is particularly true of the many places where temporary war-time accommodation has to be used. Shortage of materials and labour will usually place a severe limitation on effective rat-proofing, except in good modern buildings. But the following remedies may often be found practicable:

- (a) Concreting floors and the base of walls and unnecessary spaces where pipes enter buildings and rooms. In this and other proofing work, special attention should be given to corners and points of junction of structural fixtures—the walls with the roof, walls with the floor, and so on.
- (b) Blocking holes with broken glass and concrete.
- (c) Repairing doors, floors or walls that rats have gnawed through, by nailing on sheeting made from old tins.
- (d) Covering gratings in outside walls with a wire mesh of half an inch or less; or with strong metal gauze.

21. STORAGE OF FOOD AND DISPOSAL OF REFUSE

- (a) It is not usually practicable to keep all food stored in rat-proof containers, but a great deal can be done to discourage rats. Food scraps should be swept up and disposed of every day, and no food left unnecessarily exposed at night unless it is placed out of reach.
- (b) Food refuse should be kept in covered metal bins while awaiting disposal and either used for pig food or burnt.
- (c) Rubbish dumps should contain the minimum of waste food; and they should if possible be run on the "controlled tipping" system, i.e. completely covered in with earth and turf.

MICE

22. (a) Break-back traps are the best means of dealing with house mouse infestations, the great thing being to *use a large number at once*. For any reasonably large infestation of house mice, lay twenty to fifty traps, if possible of the type with a flat treadle that the mice can run on to.
- (b) There is no need to prebait the traps for mice. They can be set, baited, on the first night. The best bait is flour or rolled oats scattered over the treadle. If the traps have wire prongs instead of a treadle, make one by fixing a stale crust on to the prongs.
- (c) *The traps should be set at right angles to and against the walls, sacks, or other places where the mice are running, not out in the open.* It must be remembered that mice have a very small radius of movement from their nests, often only a few feet, so that traps should be closely spaced, or moved about to cover the whole area thoroughly. They should be visited daily until they catch no more mice.
- (d) Poison baiting is not an efficient means of killing house mice, unless it is carried out by a specially trained operator.

APPENDIX

THE SPECIES OF RATS

There are two quite different species of rats in this country :

- (a) The common brown rat (*Rattus norvegicus*) is the only one likely to be found in rural districts. It is also common in towns. It is of heavy build, ranging up to 1 lb. or more in weight, has small thick hairy ears and a stout tail shorter than the body. It inhabits burrows in the ground, hedge-banks, corn-ricks, sewers, and all kinds of buildings—more often in the lower storeys. This species, apart from very occasional black varieties, is brown and coarse-furred.
- (b) The other species (*Rattus rattus*), called "black rat" or "ship rat," seldom occurs in rural areas in this country, but is common in many sea-ports and in much of Central London, and has spread to a few inland towns. The colours of the "black" rat are confusing, owing to the existence of three varieties: one entirely black, another entirely brown, and another brown with a light (often yellowish) belly. Sometimes intermediate varieties occur. It is smaller than the brown rat, reaching only half a pound in weight, has larger thin ears and smooth fur, and a very long thin tail, longer than the body. It lives in buildings, and being a skilful climber, often occupies the higher storeys, where it is more likely to become a nuisance in living quarters. It is the common house rat in many warm countries.
- (c) Both these species of rats are now almost world-wide, but the brown rat is the commoner in temperate regions, the black rat in many tropical countries. There are also various kinds of native rats in Africa and the East, which require expert identification. The control of these should also be attempted, where they come in contact with man.

OLIVER STANLEY

Your most obedient, humble servant,

Sir,

I have the honour to be,

I shall be grateful if this information may be brought to the notice of those Departments or individuals concerned in the dependancy under your administration.

These memoranda have been prepared by the Director of the Bureau of Animal Population and his staff under the aegis of the Agricultural Research Council, and provides concise and authoritative guidance on modern methods of rodent control which I have no doubt will prove of value.

(11) A manual on the extermination of rats and mice.

(1) Notes on rat control methods for the British Colonies.

2. I enclose for your information copies of :-

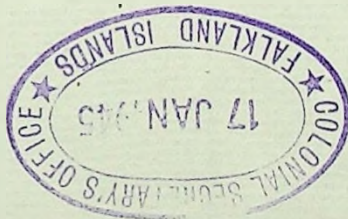
I have the honour to address you on the subject of rodent control, and to inform you that recent research into this important problem has brought fresh knowledge to light and enabled new and improved techniques to be developed.

Sir,

14th November, 1944.

Downing Street,

Colonial Office,



CIRCULAR

24

SAVING TELEGRAM.

From His Excellency the Governor of the Falkland Islands
To the Secretary of State for the Colonies.

Date 19th January, 1945.

No. 2. SAVING.

Red 24

With reference to your Circular despatch of the 14th November, 1944,
I should be grateful if I could be provided with twenty-four copies each
of the notes and manual on rodent control.

GOVERNOR.



FALKLAND IS. REFORM LEAGUE,
STANLEY,
31st JANUARY, 1945.

Sir,

The members of the Reform League beg to place before you a complaint laid before them regarding the deplorable state of the rubbish dump at the east of the Town, it is literally alive with rats, covered with scab, no hair and feeding off carcasses which are dumped there.

The rats are now spreading through the Town at an alarming rate.

After careful consideration the following was passed:

"The rubbish dump should be removed, preferably from the foreshore, and means be found to exterminate rats."

The Reform League feel sure the Government will realize that the matter is one which calls for immediate consideration, and as the result of that consideration this will be disposed with.

Yours faithfully,

[Signature]
Secretary.

The
Hon. Colonial Secretary,
STANLEY.

ack. by Form letter 31/1/45.

499/26.

6th February, 45.

Red 26
Sir,

With reference to your letter of the 31st of January, 1945, I am directed by His Excellency to inform you that the question of rat control has long been a matter of concern to this Government.

2. His Excellency when living in Sullivan House had personal experience of this pest which he certainly did not enjoy. The rats seemed to have moved westwards to the Camp dump and eastwards to the rubbish heap.

3. By the last mail (January, 17th) this Government received from the Secretary of State two important documents on the subject of rodent control.

- (i) Notes on rat control methods for the British Colonies
- (ii) Manual on the extermination of rats and mice.

4. The Secretary of State has been asked to send more copies to enable a concerted attack to be made on these animals, and while these papers are on the way the Government will explore along the lines of the action taken previously.

I have the honour to be,
Sir,
Your obedient servant,

for (Sgd.) L.W. Aldridge
Colonial Secretary.

The Secretary,
Falkland Islands Reform League,
STANLEY.

No. 109/36

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

Copy to Hon. S.M.O.

MINUTE.

34

20th February, 19 45.

To The Chief Constable,

STANLEY.

From The Colonial Secretary,

Stanley, Falkland Islands.

Complaints have been received about the increase of rats in the eastern end of the town and I understand that the Senior Medical Officer has asked you to put down poison in certain places. I should be grateful if you would report to me as soon as you have taken action in the matter.

K. G. BRADLEY
Colonial Secretary.

No. 499/26.

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



MINUTE.

4th March, 1945.

From The Chief Constable,

Stanley, Falkland Islands.

To The Honourable
The Colonial Secretary,
Stanley.

Red 34

With reference to your minute of 20th February, 1945, I have the honour to report that non-poisonous rat baits were laid from the First and Last to the rubbish dump beyond the Agricultural Station on Tuesday, 27th February. On Wednesday 28th it was found that the majority of these baits had been taken.

About 500 poisonous baits were laid on the 1st March, and on the following day it was found that practically all had been taken.

E. Swan
Chief Constable.

FALKLAND ISLANDS REFORM LEAGUE,
STANLEY,
13th March, 1945.



Red 27.

Sir,
With reference to your letter No.499/26 of 6th Feb., which was laid before the members of the Reform League on the 27th Feb., I am instructed to inform you that the members appreciate the latter part of paragraph 4.

Red 26.

The members wish to draw you attention to the omission of a reply to that part of their letter of 21st January, 1945, in connection with the removal of the rubbish dump.

I am further instructed to inform you that the members condemn the making of a rubbish dump on the ground recently purchased by Mr T. Hennah, to the east of Magazine Valley Road, but at the same time they have no objection, and appreciate permission being granted, to the dumping of clean ashes only, for the purpose of making up land.

I am,
Sir,
Yours faithfully,
Hobbs
Secretary.

The
Hon.Colonial Secretary,

STANLEY.

15th March, 45.

Sir,

I have the honour to refer to your letter of the 13th March.

2. As rubbish disposal and sanitation are primarily the concerns of the Board of Health I suggest that you should approach the Board on both the matters in question.

I have the honour to be,

Sir,

Your obedient servant,

K. G. BRADLEY

Colonial Secretary,

The Secretary,
Falkland Islands Reform League,
STANLEY.

Rec 38

COPY.

DESPATCH.

No. 22.

Date 15th May, 1945.

40

Transmitted with the compliments of the Secretary of State for the Governor's information.

Red 25

Reference: Governor's Savingram, No. 2 of
19th January, 1945.

Date	Nature of communication.
------	--------------------------

22 Copies of Booklet:

"Extermination of Rats and Mice".

It is regretted that further copies are not available.

42
File.

18570

3/1/52

Q

I spoke about the increase in the number of rats; these may become a menace and SMO should advise.

We might encourage extermination by offering a reward of 6d. a tail as was done in Lagos during the Plague scare. This introduced into Colonial legislation the

rolling word "deratization"

mc. 4/

Hon. Colonial Secretary.

I agree with the minute of the Hon. Senior Medical Officer in it's entirety.

I regret that from a safety point of view, I cannot agree with Major Aldridge's suggestion, to let the inhabitants have free rat shoots with .22 rifles. I am prepared however to allow certain picked individuals to shoot rats.

Sergeant Norris, during the time that the baiting of the rats was carried out by the police, was able to keep the rat population down satisfactorily, with the addition of a few trusted people with .22 rifles.

I also have to state with regret, that as far as I can ascertain, very little, or no baiting or organised killing has taken place since the matter was taken out of the hands of the police. Hence the increase of the rat population.

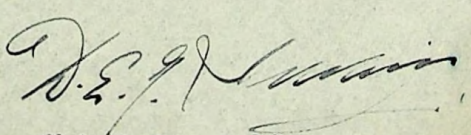
I agree with having a "Rat Week" and leave the amount to be paid per tail to the Board of Health.

I have conferred with the Hon. S.M.C. regarding the bait to be used, and am of the opinion that the poison already ordered will suffice, "Warfarin" being far too expensive.

If instruction in baiting is required by the Rodent Control Officer, I shall be pleased to arrange that he gets all possible assistance from Sergeant Norris.

I am also of the opinion that if the refuse tips were properly levelled periodically, it would assist by lessening the amount of holes in which the rats can hide.

I agree with the Agricultural Officer that the fine ash, properly spread would benefit the camp considerably.


Chief Constable.

1/12/52

The Town Council of Stanley

52

(CONSTITUTED 1947)



Town Council Office,
Town Hall,
Stanley,

20 Feb. 1952.

499/26

[TELEPHONE 117]

The Honourable,
The Colonial Secretary,
Stanley.

Sir,

In view of the apparent increase in numbers the Town Council intends organising a campaign against rats at the rubbish dumps and elsewhere, and in this connection the co-operation of the public will be invited.

I am to ask whether Government would be prepared to assist by paying a bounty on rats destroyed.

I am,

Sir,

Your obedient servant,

W.H.
23/2/52

Karl ...
Town Clerk.

WCS
116 - para 2.
W.H. 25/2/52

499/26.

54

3rd March,

52.

Sir,

52

I am directed to refer to your letter of the 20th February, 1952, regarding the intention of the Town Council to organise a campaign against rates, and to inform you that while Government considers the proposal to pay a bounty on rates destroyed is a very good idea, it nevertheless feels that any such bounty should be paid from Town Council funds.

I am,

Sir,

Your obedient servant,

COLONIAL SECRETARY.

The Town Clerk,
Stanley Town Council,
STANLEY.