

EASTERN BUREAU No. 37426

C O
 37426

Year of Introduction

(Subject)

and of signature

1905

Live Stock and its Diseases

of Col

Observations on

previous

(Minutes)

Mr. Read

As to page 10 last sent for
 grazing is usually heard of the
 ordinary and in some cases is
 the Board's description falls to
 the ground.

2 Ack with thanks & say a
 copy will be sent to the Comr
 during session as to Bureau
 of grazing bears.

And send copy to the Comr
 with copy of last H. H. H. P.'s
 letter & of our reply, latter part
 requesting him to inform H.
 H. H. P. was 1 to 9 of the

letter. And ask the Comr of Health
to send some specimens of the ticks
referred to in para 4

(One cannot but infer from this
letter that our present veterinary
staff is far from competent as it
cannot properly diagnose Texas
fever and appears to be a
well known pathology)

W.A. 19/10

I have
to present
proposed
letter
written
common
to read
in better
writing
checked
completed

3712

C O
37126
1910 OCT 19 1908

BOARD OF AGRICULTURE AND FISHERIES,
40 WHITEHALL PLACE,
LONDON, S.W.



217

1910 OCT 19 1908

A. 14861/1908

Communication should be addressed to any individual by name, but to the Secretary of the Board of Agriculture and Fisheries, 40 Whitehall Place, London, S.W.

SIR,

I am directed by the Board of Agriculture and Fisheries to advert to Mr. Antrobus's letter of the 4th inst. No. 34107/1908, and, as requested, to make the following observations for the consideration of Mr. Lystellon.

2. In connection with Mr. Mason's memorandum of the 25th August last dated from Nairobi, it seems desirable as the subject is dealt with that the two terms "Tick Fever" and "Redwater" are applied to the same disease; "Tick fever" because it is indefinitely spread by the agency of certain ticks; "Redwater" because the most typical symptom is blood-colouring matter in the urine. These terms have been discarded, in technical literature at least, because they lead to confusion in the lay mind, and because they are generally objectionable. The first is objectionable because other febrile diseases are also carried by ticks, the second is inadvisable since it is, in the minority of cases, that one sees the colour of red urine, and laymen are apt to believe that the animal is suffering from a different disease owing to the absence of the ticks which originated the name. It will prevent confusion if the term "Texas Fever" be used instead of the above two names, since there is decided upon the disease to which "Texas Fever" applies.

3. The Director of Agriculture states in the above-mentioned memorandum his belief that there is little or no Redwater in East Africa, and that under certain conditions ordinary Tick-fever is not very deadly. It will from the above explanation be clear that he

Secretary of State,
Political Office,

W.A. 19/10

...speaking of the disease as the distinct malariae, and it should be explained that cattle born in a Texas-fever country acquire a certain degree of immunity in respect of the disease. Such cattle show the symptoms of red urine - that is to say, symptoms of the advanced stage of the disease. The causal parasite remains in their blood, however, for years, and they infect the ticks which suck upon them. It is in this way that the infection of a pasture is kept up over an indefinite period. When these cattle are submitted to adverse influences such as sudden change of climate, or starvation, or overwork, their natural and acquired forces of resistance, which were formerly powerful enough to hold the parasites in abeyance, are diminished, the parasites gain the upper hand, and the animals die, not necessarily with symptoms of red urine (Redwater), but frequently from breaking up of the blood cells, which gives rise to chronic anaemia. From the statement in question by the Director of Agriculture (to the effect that Redwater is uncommon in Texas-fever benign), it appears that the disease called Texas-fever is behaving in East Africa as it has done in certain other countries, and that variation in the symptoms has resulted in the usage by laymen of different names for the same disease. This would probably explain to every new country, and creates initial difficulties for the scientific investigator when diseases come to be methodically studied.

It is clear from the Memorandum in question of the Director of Agriculture that the disease known as Texas-fever has been known in East Africa for a long time, otherwise it would not be so widely distributed nor would the cattle of the country be so generally diseased; and it is also clear that its wide distribution is due to the movements of these animals which harbour the disease in their blood and infect ticks when they go from one part to another of a tick-infested country.

2

Advertising at this point to that portion of Lord Hindlip's
 report to the Under Secretary of State of the 22nd ult. which cites
 the statement that cattle-dipping has been found most effective in
 West Africa and Rhodesia for the prevention of Tick- fever, I am to
 advise Lord Hindlip be warned that no dip yet prepared has
 been found really effective for the destruction of ticks. It is
 true that arsenical dips are usefully employed to diminish the num-
 ber of ticks on a badly infested pasture. That is to say, one
 collects the ticks from the ground by giving them the opportunity
 of going on to cattle, and one dips the latter in an arsenical bath,
 with the result that a certain number, at least, are destroyed.
 If this dipping were kept up every fifteen days for a number of
 years, and if there were a large number of cattle on the ground, a
 reduction could probably result in the quantity of one species of
 tick (the blue tick) which is a carrier of Texas-fever. This tick,
 however, can never be annihilated by dipping the cattle, because
 it lives on other hosts including birds and vermin. The other
 species of ticks, those, for example, which stay on a host for only
 five days or so, cannot be greatly reduced by dipping, because it is
 impossible without many fatal accidents to dip cattle in a strong
 arsenical bath-frequently enough to catch a large proportion of such
 ticks while on their hosts, and none of the known dips will keep
 ticks off an animal for more than a few hours. For further infor-
 mation on this point Lord Hindlip might be referred to the Report
 of the Agricultural Department of the Transvaal for 1904. Apart
 from these defects in the dipping proposition, however, there are
 other reasons why a farmer in a country like West Africa should not
 be encouraged to the ticks on his farms, although he might attempt
 to reduce their numbers, if they constitute a pest per se. It is
 difficult to expect that even any considerable portion of the area
 of the country will ever be freed from ticks, until the land has
 undergone cultivation, or to expect that the natives will adopt
 systematic dipping of cattle even if the majority of white settlers
 were to do so.

It has been established above that cattle born in a country where Texas fever acquires a high degree of immunity. It is also to be noted that the calf, when this disease does not occur, is almost entirely susceptible adult. It has also been established that the distribution of infected ticks is a very wide one. If, then, a farmer so far reduces the number of infected ticks on his farm, it is highly probable that the stock bred thereon will acquire a robust immunity owing to destruction of the agent which causes the disease. This would probably not be of importance were it a custom to keep cattle on one and the same land until ready for the butcher. Cattle, however, are, in such cases, (used for mail, for draught) and they pasture anywhere and everywhere. It follows from this that many of the cattle bred on such a farm would have the same drawbacks as newly imported animals from Europe; a large number would die of Texas fever if they came in contact with the infected ticks which would be found there. It should never be forgotten that immunity from Texas fever has been acquired at a very early age and should not be lightly tampered with. In this connection the Board of Agriculture may be of interest to Mr. Linton in connection with the methods of artificially immunizing pedigree stock which have been exported from Great Britain to the Colonies have received the sanction of the Board's laboratory, but the question is not sufficiently advanced to enable a practical opinion to be given at the present time.

Mr. Linton's statement that some, at Natalva at an elevation of 1000 feet, suffered from heartwater is one that might be investigated in the British Colonies in Africa, and it would be well to know (1) whether the diagnosis was made by a veterinary officer, since there are other diseases, which are similar to heartwater, and which kill the young calves, (2) whether the calves also die from heartwater

... disease, or whether it is very susceptible, and if they do
 ... difference is that the disease of sheep to which Mr.
 ... refers is not heartwater; and (3) whether it is beyond
 ... the sheep contracted the disease on the high veldt, and
 ... the low country where they were possibly pastured shortly
 ... to Malvasia. The tick which carries heartwater is
 ... one which can easily be identified by its variegated
 ... removed from sheep and
 ... to the Board, it would be possible for their Veteri-
 ... more definite information. These ticks
 ... with full information as to the species of
 ... from which they came, whether from sick or healthy animals,
 ... district.

3. Turning now to the subjects other than Tick-fever raised
 ... Phillip's letter of the 22nd ult., I am to say in connection
 ... his proposal to inoculate cattle against pleuro-pneumonia,
 ... advised that the best method is to use the pure
 ... virus.

4. The question of compulsory dipping of sheep for scab, to
 ... Phillip's proposal, is one which requires very serious
 ... in a country where the human population is a mixed
 ... the official experiences of their
 ... Officer (Mr. S. Stockman) in South Africa may be
 ... action to be taken against that
 ... East Africa. Compulsory dipping in an efficient dip
 ... eradicate sheep-scab, provided that it can be en-
 ... the expensive machinery of administration exists
 ... Mr. Stockman's experience of African natives
 ... can be convinced by practical demon-
 ... his servants, he will see that his
 ... there are chiefs who refuse

to be converted to modern ideas of hygiene, and there are natives seen in small kraals very far distant from the immediate eye of their nominal chief. The latter are exceedingly difficult to police in matters of this kind. If a compulsory dipping law be introduced at the present time, it will probably be obeyed only by the white settlers, who will after a time desire the administration to enforce the law amongst the natives, on the ground that while the law forced the white man to dip his sheep, it gives him no protection against re-infection by the sheep of the natives. Mr. Steekman cannot advise that such legislation should be instituted until such a time as the administration are prepared to enforce it, and to provide the machinery for carrying it out. This would involve the provision of dipping-places in various parts of the country and the organisation of a numerous staff of inspectors.

10. In connection with Lord Hindlip's observations as to the limit of the area of a free grant, the Board are desirous to suggest for consideration whether the acreage might not be more elastic according to the quality of the land and the purpose for which it is suited. For example, a grant of 1000 acres in a well watered district is exceedingly generous, but there are probably worse watered districts which, although suitable for sheep farming are not of much value for crop growing. It is to be presumed that in some of these districts, as is the case in the Transvaal, the land will not carry more than one sheep per three acres. The sheep in the Protectorate are probably kept for wool growing and represent very little value, say 5/- to 10/-, for butchering. At this rate an owner with 1000 acres will have to limit his flock to about 300 sheep, a number which as wool-producers will hardly provide him with a sufficient income to live, if he ^{has} were to confine his efforts to sheep farming.

I am, Sir,
Your obedient Servant,

J. H. Selous
Secretary.

1126

NO
37126

t. A. P.

223



(S)

DRAFT

t. A. P. (No 473)

26th October 1905

A. A. B.

Per

MINUTE

- Mr. ~~White~~ 20 Oct 1905
- Mr. ~~Andrews~~
- Mr. ~~Lucas~~
- Mr. ~~Graham~~
- Mr. ~~W. Chapman~~
- Mr. ~~Hubb of Marlborough~~
- Mr. ~~Lyttelton~~

When the loan to
 was the receipt of your
 def No 473 of the
 29th of Sept. I found
 - measure taken by
 the Director of Agriculture
 on various questions
 relating to Black
 & its success in the
 t. A. P. and to
 transmit to you
 for your own use the
 accompanying copies
 of reports, as noted in
 the margin on the
 subject.

20th Oct 1905
 12th Sept 1905
 and H. H. H. to C. O.
 C. O. to Bd. of Agriculture 4 Oct
 Bd. of Agriculture to C. O. 17 Oct

W. & A. L. 1905 15-04

15. 56 15 * No 343, 002 37126

I should be glad
if you would cause
specimens of the
specimens referred to
in the 7th par. of
the letter from the
Board of Agriculture
to be sent home in
the manner suggested.

You should also
inform Lord Hindleby
who understands
returned to C. G. G. G.
that I have received &
considered his letter of
the 22nd of Sept^r &
you should communicate
to him for 2 to 9
inclusion of the letter
from the Board of
Agriculture, enclosing
the last par. H.
J. H.

7 No. 57126. 8 No. 34109

Contd. after A. G. G. G.
(R. M. G. G. G.)

should at the same time
be informed that I
am carefully considering
the possibility of
having the products
of the Board of Agriculture
sent to the Board of
Agriculture, which, as I fully
perceive the importance
of the question in
reference to the
of the products
of the Board of
Agriculture
I have
I have

p. 50
12

I should be glad
if you would cause
specimens of the
opinions referred to
in the 4th par. of
the letter from the
Board of Agriculture
to be sent home in
the manner suggested.

You should also
inform Lord Hindlip
who, I understand, has
returned to Africa,
that I have received &
considered his letter of
the 22nd of Sept^r &
you should communicate
to him pars 2 to 9
inclusive of the letter
from the Board of
Agriculture, omitting
the last par.

H. H.

7 No. 37/26. & No. 34102

Printed after printing
(H. H. H. H.)

should at the same time
be informed that I have
been carefully considering
the possibility of
having the medals
sent home by
mail to the Board of
Agriculture, which, as I fully
realise the importance
of the question in
the present conditions
of the Post Office

Please

Very truly
yours

P. J. O.
2