



DESPATCH

EAST AFR. PROT.
38653

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Nov 27 1900

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1909

Letter

Previous Paper

1902
1902
1902

To Genl Secy (W. A. Dept) (for info.) SS Bruce
H.P.
To Genl Secy 13 Jan 10 40/19/09

Conference of Medical & Veterinary Officers

to deal with measures with regard to human and animal typho-zytosis.
Send proceedings (first day) of Conference under presidency of Sir D. Bruce - matter dealt with was Sleeping Sickness & legislation is being introduced on lines...

W. Fiddes

This is all in the right direction
Send the duplicate of the report some to the Royal Society for info - & the original to the Sleeping Sickness Bureau for perusal and return L.F.

H & R

30/11

Interesting

above P. 30

S-R

Subsequent Paper

*Not to be
mailed*

Sleeping Sickness Bureau.

*The Royal Society
Burlington House**London, W.1*

December 20th, 1909.

SIR,

I have the honour to return herewith the Despatch and Enclosure from the Governor of the East Africa Protectorate on the subject of a Conference to concert measures to prevent the spread of Sleeping Sickness. I regret that the words "for parusal and return" had escaped my notice.

I have the honour to be,

Sir,

Your obedient servant,

Arthur G. Bagshaw

DIRECTOR.

The Under Secretary of State,
Colonial Office.



REC
Print 27 NOV 09

GOVERNMENT HOUSE,

Nairobi,

EAST AFRICA PROTECTORATE.

November 4th 1909.

No. 622

(Incl. 1)



My Lord,

Proceedings
410
510

With reference to Your Lordship's despatch No. 245 of the 7th of May last, giving cover to a letter from the Royal Society urging that a Conference of Medical and Veterinary Officers should be convened to collect evidence and devise remedial measures with regard to human and animal trypanosomiasis, I have the honour to report that the desirability of organizing such a Conference had already been recognized and the Conference was held from the 26th to the 29th of April in this year with Sir David Bruce as President.

2. I now have the honour to enclose a copy of the first day's proceedings which related to Sleeping Sickness, and to report that at the next meeting of the Legislative Council a draft Ordinance is being introduced embodying as far as is practicable the recommendations of the Conference.

3.

H.M. PRINCIPAL SECRETARY OF STATE

FOR THE COLONIES,

DOWNING STREET,

LONDON, S.W.

2. No 1519

410-510-29

3. I should be glad if Your Lordship would
cause the Royal Society to be informed in the
sense of this despatch.

I have the honour to be,

Your Lordship's humble

obedient servant,



ACTING GOVERNOR.



First day.

Proceedings of Conference.

58853
27 NOV 09

President Sir David Bruce.

Subject.

Sleeping

Agenda.

1. Opening remarks by President.
2. Statement by Dr. Hodges as to the present condition of affairs regarding Sleeping Sickness in British East Africa.
 - (a) What has been done in regard to treatment.
 - (b) Methods employed to prevent the spread of the disease.
 - (c) Methods employed to stamp out the disease.
 - (d) State of Administration.
 - (e) General results of.
3. Statement by Dr. ... as to Sleeping Sickness in British East Africa.
 - (a) Treatment.
 - (b) Preventive measures.
 - (c) Stamping out measures.
4. Should the Native population be removed from fly area.
5. To what distance from fly area should they be removed.
6. Removal of population from the Islands.
7. Methods of feasibility of such removals.
8. The question of the bringing of Kavirondo labour into the fly belts of British East Africa.
9. The question as to Medical treatment.
10. The policy of concentration camps.

Hon. Secretary.

PROCEEDINGS OF A CONFERENCE HELD AT NAIROBI, EAST AFRICA, ON APRIL 26TH AND 27TH 1909, TO DISCUSS SLEEPING SICKNESS, AND OTHER DISEASES PREVALENT IN THE DISTRICT.

On the invitation of His Excellency the Governor, Sir James Hayes Sadler, K.C.M.G., Vol. Sir David Bruce, F.R.S., Director of the Royal Society's Sleeping Sickness Expedition in Uganda was invited to preside over the conference.

Amongst those invited to attend the conference, the following were present:- Dr. Hodges, F.R.S., Uganda, Dr. Atkinson of Zolo, Lord Belmore, The Marquis Cornwallis, Hon. G.C. Bowring F.R.S., Hon. Col. Montgomery, Commissioner of Lands, Hon. A.C. Hollis, Secretary for Native Affairs, Hon. Capt. Cowie, Mr. Van de Weyer, Mr. Tobley, Provincial Commissioner, Mr. Alsworth F.R.S., Provincial Commissioner, Mr. Percival, Game Warden, Mr. Sheen, Capt. Ridwell, Dr. Ellis, F.R.S. East Africa Protectorate, Mr. Storey, Chief Veterinary Officer, and Acting Director of Agriculture, Mr. A. G. Macdonald, Entomologist, Mr. Edmondson, Veterinary Officer.

The first day's proceedings were devoted to Sleeping Sickness.

The President, in introducing the subject of sleeping sickness, stated that the species of tsetse fly known as *Glossina Palpalis* was under ordinary conditions the only carrier of Sleeping Sickness. It was therefore most essential that the distribution of this fly should be carefully mapped out; for it was by this means alone one could arrive at some idea of the limit of the infected areas, or of where probable extension of Sleeping Sickness might take place. With one

exception viz: - Dourine, all known tropical disease, was transmitted through the agency of some biting insect. The importance, therefore, of mapping out the distribution of all biting flies became increasingly apparent. It was alleged chiefly on the ground of laboratory experiments, that *Glossina Fusca*, *Glossina Palpalis*, *Glossina morsitans*, Mosquitoes and other biting flies might be carriers of sleeping sickness. Under natural conditions, however, *Glossina Palpalis* was probably so much the predominant partner that the others could be left out of account. Recently Dr. Meisner, in charge of the Sleeping Sickness Operations in German East Africa, had demonstrated in the case of *Glossina Palpalis*, a developmental cycle of the parasite in Gambia. He proved that the fly was capable of transmitting infection after a single bite and up to at least six days. The President pointed out that the life of a fly might be anything up to a year or more. Dr. Meisner's experiments since been confirmed in the Sleeping Sickness Laboratory in Uganda. In support of his contention that *Glossina Palpalis* was the sole carrier, he showed by a series of maps how, in Uganda, the distribution of the *Glossina Palpalis* areas coincided exactly with the occurrence of Sleeping Sickness.

The President in concluding his opening address, stated that the fly (*G. Palpalis*), ordinarily speaking, was only to be found within a short distance of the Lake Shore; it did not exist where grass land or bare rock came down to the water's edge, but, on the other hand, it was found where there were clear rivers with sandy banks and requisite

shade. Where papyrus existed the fly was not found.

Dr. Hodges pointed out that where measures for the removal of the inhabitants from contact with *G. Palpalis* could be effectively applied, the death rate had been greatly reduced, and the following figures from the kingdom of Neanda are as follows:

In 1905 there were 8007 deaths recorded.

In 1906 " " 5804 " "

In 1907 " " 3407 " "

In 1908 " " 1730 " "

In comparison with these figures representing the total death rate, he drew attention to the death rate obtaining in the same principality where preventive measures had been much less completely enforced than on the mainland, and where it had not been possible to remove the bulk of the inhabitants from contact with the fly.

	Deaths on the Islands.	Deaths on the Mainland.	Total for mainland and islands combined.
In 1905	3503	4500	8003
In 1906	1719	3585	5304
In 1907	1992	1415	3407
In 1908	1177	553	1730

It must be borne in mind, in comparing these figures that the island population is much smaller than that of the infected mainland.

So far medicinal treatment had proved unsatisfactory. Segregation camps had proved useful in educating the natives regarding the nature of the diseases; for experimental treatment; and in attracting natives to remove out of infected areas. In the management of the camps no force was used.

Should a native run away from his camp he would report to his chief and kept from re-entering the fly area. He always considered the camps adequate for purely defensive purposes. In his opinion there were only two methods by which the disease could be stamped out:-

- (1) By keeping the population away from the fly.
- (2) By destroying the fly.

The latter method was practicable only for the vicinity of townships and for certain limited areas along traffic routes. His experience had shown that in removing people from the Lake Shore, two miles was a safe average distance. The absence of fly from extensive papyrus swamps he attributed to the fact that they were impenetrable for man and beast and formed barriers to the fly's migration and distribution.

He thought it likely that the preventive measures used against Sleeping Sickness in Buganda Kingdom might require to be modified for application in East Africa, and that the difficulty in dealing with the disease might prove greater, since he understood that the conditions were nearly resemble those existing in the Congo and Nile Valley, where the extension of fly inland along numerous rivers caused the fly-free areas in the interior to be more limited in extent and less definitely circumscribed.

He believed that for dealing with Sleeping Sickness in the East Africa Protectorate a special staff of Medical Officers would be needed, whose numbers would depend on the extent of the area infected, on the number of its inhabitants and on the local conditions obtaining in the infected area. Uganda had eight Medical Officers specially dealing with Sleeping Sickness.

Until the discovery of a specific cure suited for

application to large numbers of natives, the only practical means of dealing with the disease was the removal as far as possible of the entire population from contact with the fly. He pointed out the importance not only of removing all infected persons from such contact, but of preventing the return of infected populations to fly-areas until infection has been stamped out among them. He also pointed out with regard to the discovery of Professor Kleins - mentioned by Sir David Hoare - that its bearing on this class of preventive measures was of less significance than might at first appear, because, although the previous supposition that the fly's infectivity lasted only 48 hours was now controverted by the fact that this infectivity might last for 60 days and probably a great many more, it had long been known that infected human beings remained infective for years, and must therefore be kept from contact with fly-areas indefinitely. Professor Kleins' discovery had, however, a very important bearing on other points in connection with Sleeping Sickness, such as the employment of non-infected persons in previously infected fly-areas and the repopulation of infected zones from which the inhabitants had been removed by natives from non-infected districts.

The native chiefs of Uganda had long realized the necessity of removal from infected areas so far as the deporting of their own households was concerned; though for pecuniary reasons they had until lately been inclined to leave their vassals to suffer.

Dr. Milne said that the conditions prevailing in East Africa were similar to those in Uganda, viz, the infected areas lay along the Lake Shore and extended up the various rivers.

Roughly speaking, the population affected was between 30,000 and 40,000. Owing to the fact that, until the present year there were no medical officers detailed for this special work, such information as was known regarding the extent of the spread of the disease had been obtained by rapid surveys of members of the permanent medical staff. That portion of Southern Kivu which was adjacent to the Anglo-German boundary was the only part in which any accurate data had been collected. The fly limit, more particularly along the banks of the rivers Ruja and Majori, had been determined, and, from the results of the investigations among a population of approximately 15,000 people, it would appear that between 7,000 and 8,000 people were infected with trypanosomes. Owing to the necessity of first determining which areas in the Province were fly-free, and capable of supporting an influx of population, it was not until the commencement of this year that a start could be made with the formation of a segregation camp. Acting on the six years' experience of Uganda, no force was used to induce natives to reside in the camp, but an active propaganda towards this end had previously been carried out throughout this district. Patients who came into camp were fed at Government expense, but no special effort was made towards medical treatment, the idea of the camp being to serve mainly as a bait to the sick and so gradually attract their kinsmen and thus depopulate the infected zones. As a small beginning among natives whose intelligence was not equal to the Baganda, the camp had had a fair measure of success. 166 patients had placed themselves under the care of the Medical Officer in charge during the three months it had been established. While in Uganda there were eight Medical Officers engaged specially

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 medical officer at ...

Dr. ... concluded by explaining the distribution of Sleeping Sickness past and present in the Kisumu Province.

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 to clear the rivers of fly.

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The President pointed out that there was an additional reason ...
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 German Sleeping Sickness Agreement bound countries, East
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 camps at the boundary as part of a mutual scheme of
 co-operation.

Mr. Ainsworth, Provincial Commissioner of the Kisumu Province,
 drew the attention of the conference to the fact that
 legislation would be necessary to remove natives from
 infected areas, though he did not think that force would
 be actually required.

Dr. Hodges pointed out how necessary it was in applying such

on Sleeping Sickness works; East Africa is one of them. It is satisfactory to note that, for the coming year, an extra medical officer had been sanctioned.

Dr. Milne concluded by exhibiting a map showing the distribution of Sleeping Sickness past and present in the Kisumu Province.

Lord Delaere urged the necessity of getting out the fly areas. He considered that money should be voted specially for that purpose. He wished to know the reasons for operating operations in East Africa on the same lines as Uganda when Dr. Hodges had stated that the good results obtained from segregation camps were incommensurate with the expense involved. He asked whether it would not be more practicable to clear the rivers of fly.

Dr. Milne, in his reply, stated that the work was entirely a voluntary one, and that the eradication of the fly along these rivers was hopelessly impracticable owing to the labour and expenses involved.

The President pointed out that there was an additional reason for the erection of segregation camps, in that the Anglo-German Sleeping Sickness Agreement bound countries, East Africa Protectorate and German East Africa, to establish camps at the boundary as part of a mutual scheme of co-operation.

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A drastic measure to remain the only one of its kind in the world. As to what should be done with the islands of the Lake, the President suggested that it might be possible to contract for the cutting down of the forest for commercial purposes and clearing the shore, so as to destroy the fly's natural habitat and thus render the islands habitable.

Dr. Hodges, in agreement with the President, laid special stress on the necessity of entering into contracts stipulating for the removal of all undergrowth as well as the commercial timber. If it were necessary to clear the areas immediately after depopulation, Dr. Hodges considered that the risk of infection would be much lessened if the labourers employed worked only in the morning before 11 a.m. and in the evening after 4 p.m., as *Glossina Palpalis* is most active in the daytime between the hours mentioned.

On the question of the removal of the existing restrictions preventing the emigration of Kavirondo labourers East of Nairobi, Lord Delamere pointed out the hardship the present rule entailed on large employers of labour, more particularly in the fibre districts, and the cotton areas of the coast. The Kavirondo was one of the few East African tribes anxious for work. He pointed out that there were hundreds of miles East of Nairobi with neither shade nor water where the *Glossina Palpalis* could not possibly exist.

Dr. Milne quite recognised the hardships entailed by the existing regulations but was averse to their removal until such time as the district into which the Wa-Kavirondo might be drafted had been adequately surveyed for the presence or absence of *Glossina Palpalis*. Up to date, practically the only known portion of the fly-belts in East Africa were those through

through which the Uganda Railway runs. The introduction of Sleeping Sickness to the Coast would be most dangerous in view of the trade with India, Aden and other foreign ports.

The Hon. Mr. Hollis proposed a modification of the existing regulations to allow the Bantu Kavirondo to proceed east of Nairobi, as distinct from the Nilotic ~~tribes~~^{tribes} whom he understood were those only infected with Sleeping Sickness.

Dr. Milne replied that there would be little difficulty in modifying the existing regulations were it not for the fact that it was sometimes impossible to certify that a person was free from the trypanosome and there was always the difficulty of knowing whether the labourer had come from an infected area or not.

Dr. Edgar pointed out that by the examination of land snails, in from 80% to 90% of the infected cases of trypanosomiasis could be demonstrated.

Both Mr. Ainsworth and Mr. Hollis agreed that there would be no difficulty in recognising whether labourers came from infected areas or not as the word Kavirondo was a misnomer the inhabitants of the Province being composed of two distinct tribes, one of Nilotic stock and the other of Bantu. The Nilotic inhabited the lake shores and rivers - the infected zone - while the Bantu section were uninfected and could be easily recognised by their facial and tribal differences.

Dr. Milne agreed that if the engagement of labour was done under the supervision of those competent to judge of their differences, a modification of the present regulations could be entertained.

The President in summing up the discussion stated that he believed

the Glossina Palpalis was the only carrier of Sleeping Sickness but that the opinions of some other authorities differed from . . . He pointed out that in the laboratory Trypanosome Gambiense had been conveyed by Stomoxys and other flies, and also by simple inoculation. He did not . . . this occurred in nature and gave various instances in various of the states . . . He further instanced the fact that the disease had been introduced into the Argentine West Indies and America a number of years ago and developed the disease there but did not spread . . . Was asked by the Government of . . . safety of allowing infected Indians to return home, he did not hesitate to state that in his opinion there was no danger in their doing so.

Dr. Hodge with the President, giving various instances in support. He added that, though some authorities maintain that Sleeping Sickness is carried by tsetse other than Glossina Palpalis, he would not hesitate to sanction the employment of labour recruited from infected populations in areas free from Glossina Palpalis, provided that the route by which the labour was imported into such areas was also free.

Part 3A.

Resolution approved by Conference.

- The Conference resolves that the native population of the islands be removed from the islands.
- That the islands be covered by a fence to be obtained for this purpose.
- That the islands be taken as good as possible and accurately map out the distribution of the various insect flies and biting flies and ticks, and the various diseases connected with them.
- That the English speaking tribes of those parts of the Bay Islands District which remain unaffected may be permitted to be engaged as labourers on the islands.
- That the population of the Islands of Victoria be removed to fly or areas on the mainland.
- That in regard to medical treatment as no drug is now known which will cure Sleeping Sickness no large expenditure of money should be made in this direction at present.
- That it is advisable that one Sleeping Sickness camp be maintained in each Protectorate for the purpose of studying the effects of experimental

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experimental treatment of the
Sickness, and that this plan would
be useful in the future.

Conference should be held
for the purpose of organizing the
the [unclear] [unclear] [unclear]
of [unclear] [unclear] [unclear] [unclear]
[unclear].