

The sickness studied by us in Egypt appears to be similar to that affection called false rabies, which was in 1902 recorded in Hungary by Aryesky, and in 1912, in Brazil by Carini. It may also be compared to the affection recorded by Bouffard in French West-Africa, and which was considered by the latter as a rabies not transmissible to man.

Therefore, I think it advisable that anti-rabic laboratories should before all, especially in certain regions, look for negri bodies in making their diagnosis for rabies, and in doubtful cases, guinea pigs should be inoculated with blood of suspected animals in order to differentiate false rabies from the true one.

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*Paper No. 36.*

### VETERINARY PROBLEMS IN NATIVE AREAS.

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#### 1. INTRODUCTION.

It is generally accepted that the eradication of stock diseases is a far more difficult problem in South Africa than in European countries. For this many factors can be held responsible, one of them being the presence of the native stock owner.

In this short article it is intended to discuss briefly the conditions and circumstances which surround the ownership of live stock by natives and which render disease-control more difficult than in purely European-occupied territory.

#### 2. NATIVE AREAS.

In the Union the accepted native policy is one of segregation, but up to now this policy has not been applied very strictly nor very generally. Although there are large tracts of country which have been set aside for native occupation, there are still thousands of natives who reside in European territory; here they occupy European-owned farms on a tenancy basis or have purchased their own properties. Unfortunately, many of these natives live on farms situated right in the centre of areas that are occupied by Europeans. Moreover, the proclaimed native areas or locations are not situated together in one part of the Union, but are scattered throughout three Provinces.

In the large native areas, such as the Transkei and Zululand, the natives are under tribal control, and consequently much better disciplined and more easily controlled. Here the native chiefs have a great deal of influence which, if used correctly, can be of great assistance to veterinary administration.

In the small scattered native communities the position is different, tribal control being almost absent; there may be local headmen, but their influence is usually not very great. It is in such circumstances, especially when it concerns native families living on private farms, that the greatest obstacles to successful veterinary administration are encountered.

Some native areas, e.g. Zululand, are situated in very rough mountainous country, which is not easily accessible to our inspectors, and where stock can be concealed with the greatest ease.

### 3. NATIVE CUSTOMS.

The African native is essentially a pastoralist and, generally speaking, cattle constitute his sole wealth and means of exchange.

His requirements in the way of cash transactions are small and any money earned by him is usually employed for the purpose of acquiring further stock, especially cattle.

Very often the native's standing in the community is judged by the number of his cattle and he is notoriously reluctant to part with any of his cattle, excepting, perhaps, for the purpose of securing a wife or wives, under the so-called "lobolo" or marriage custom. Unfortunately, in this custom it is the *quantity* and not the *quality* of the cattle that is the main consideration, and hence there is no encouragement to the native to improve the quality of his live stock. The result of all this is that native areas become greatly overstocked with an inferior class of animal. Overstocking gives rise to weakness and poverty which again make the application of veterinary eradication measures a difficult and unenviable task.

The "lobolo" system also gives rise to many difficulties, especially so in the case of scattered native communities; the bride may have to be fetched from some distant location, and before this can be done the native has to deliver the required number of cattle to the bride's parents. This leads to illicit removal in areas where, owing to the prevalence of disease, severe restrictions have to be imposed on the movements of cattle. There is no doubt that in this way diseases like East Coast fever are often spread to clean parts of the country.

### 4. CLASS OF STOCK.

In most parts of the Union native stock is of very poor quality. Cattle provide his principal means of exchange and barter, and, as we have seen previously, it is quantity and not quality that is of value in the lobolo custom. Another factor which accounts for the poor quality of cattle is in-breeding; castration of bull calves is long delayed or neglected altogether by the native owner, with the result that one commonly sees a disproportionate number of very inferior bulls among the native herds.

A good illustration of the native's reluctance to part with his cattle is seen in cases where a disease, like East Coast fever, breaks out among his herd; slaughter, with compensation, may be suggested, but it is rare to find a native to agree to such a proposal; almost invariably his answer would be that he would see them all die rather than be disposed of.

The majority of natives in the Union also keep a few head of small stock, generally inferior kaffir goats and sheep. These animals are not of the same value to the native as his cattle, and, consequently, they are not well looked after. In the Union they may be considered to be the main reservoirs of scab infection.

In some areas, like the Transkei, the natives have been encouraged to go in for a better class of sheep, and there they are certainly beginning to appreciate the economic value of woolled (Merino) sheep. As soon as this stage has been reached, disease eradication becomes a simpler process.

In parts of the country where horsesickness is not prevalent, our natives like keeping a few horses, but they are not in love with either mules or donkeys.

### 5. CONTROL AND MANAGEMENT OF STOCK.

Compared with European stock owners, natives keep a relatively small number of various classes of stock. Since natives normally congregate on farms or in locations, it follows that on a native-occupied farm or location one usually finds a large number of small herds or flocks belonging to a great many owners.

This, again, makes veterinary administration a difficult matter, as our officers have to deal with a large number of owners, some of whom may be absent from home. It often happens that only native women or young natives are left in charge of the stock and in these cases it is no easy matter to ensure the collection for inspection or treatment of all the animals. Some animals may escape inspection or treatment and in this way the disease may remain undiagnosed or untreated.

To overcome these difficulties to some extent, in our Stock Disease Regulations, in respect of some diseases, responsibility is thrown on to the native chief to notify all his subordinates of our inspectors' intended visits and to see that all stock are collected and brought up for inspection.

In spite of this precaution, natives often conceal stock; in the case of cattle, they are very much opposed to young calves being dipped, and to avoid dipping conceal such animals in their huts; sheep and goats infected with scab are often hidden away, the natives being afraid of prosecution under the Stock Diseases Act.

Natives do not like fences and experience has shown that it is of very little use to fence a native area; they very soon break down portions of the fence and use the material for some other purpose. In the absence of fences on native farms or locations it follows that herding is essential, especially at times of the year when there are crops on the lands. In the larger native areas each family is given its own grazing ground, but this cannot be adhered to strictly and inter-mixing of stock is a common occurrence. In any case communal dipping-tanks and water supplies have to be made use of. In the event of disease breaking out at a native kraal, difficulties are, therefore, experienced in demarcating the infected or suspected area, and, consequently, to prevent further spread of the infection, we are forced to place the whole "tank area" under quarantine restrictions. By a "tank area" is meant that portion of the location from which all cattle come to the same dipping-tank.

### 6. NATIVE IGNORANCE AND PREJUDICE.

Ignorance and prejudice on the part of native owners also handicap very seriously any veterinary measures that have to be taken. Very few of them understand the nature and causation of an infectious disease and, consequently, do not appreciate its seriousness.

Cases of illness or death will go unreported, unless or until they have been made to understand or to feel that the law of the country demands reports of such cases.

Unfortunately, also, many natives will consume the meat of animals that have died of disease; the results may be serious in the event of the animal having died of a disease like anthrax, and, as a matter of fact, the prevalence of anthrax in native territories must be ascribed largely to this.

When it has been stated that natives take very little notice of a fatal disease in their stock, it will be understood that they are hardly likely to interest themselves in non-fatal complaints. As a rule, therefore, scab in kaffir sheep or goats will go unobserved and unreported; the same remarks apply, even more forcibly, to mange in horses and pigs.

On account of his ignorance, the native has no faith whatever in such veterinary measures as regular dipping of cattle for the eradication of ticks. During recent years he has certainly been made to appreciate the benefits of dipping, but, even so, he would discontinue dipping his cattle as soon as compulsion was removed. The same remarks would, of course, also apply to some European stock-owners.

The benefits to be derived from other veterinary preventive methods, such as inoculation against anthrax, are understood and appreciated even less by the individual native, who will not bestir himself to get his animals inoculated.

#### 7. DISEASE PROBLEMS IN NATIVE AREAS.

These have already received brief reference. The major infectious diseases still prevalent in native areas and causing considerable difficulty in their eradication, are the following:—

- (a) East Coast fever; (b) scab in sheep; (c) mange in equines, goats and pigs; (d) anthrax.

It is considered necessary to submit a few further remarks on the eradication measures employed in connection with these diseases in native areas.

(a) *East Coast fever* has been discussed fully in another article to be submitted to Conference. The peculiar conditions enumerated above will explain to some extent the reasons why considerable difficulty has been experienced in the eradication of the disease from native areas. Owing to the large number of owners, some of whom are ignorant, careless or dishonest, there is not complete control over all cattle, diagnoses are missed, illicit movements take place, and in this way the persistence of the disease can be accounted for. Good progress in the eradication campaign has, however, been made, and it is hoped to make still better progress during the next few years.

We are anxious to extend the slaughter policy in connection with this disease, but owing to native prejudice against the disposal of his cattle, a great deal of opposition is anticipated in native areas.

(b) Scab in sheep has also been discussed in another article and reference made to the persistence of the disease in native areas.

It is now proposed to tackle this problem seriously, and it is hoped that even in native areas we shall see the end of scab within the next two or three years.

The greatest difficulty in these areas is to ensure that all the sheep are brought up for inspection and dipping. To overcome the difficulty a special plan of campaign has to be organized. The only way to do this is to declare simultaneous compulsory dipping of all small stock at least once a year and to have sufficient staff available, not only to inspect and dip the stock, but also to see that all stock are collected and none left behind in native kraals, huts or other places of concealment.

(c) *Mange* in equines and pigs has not yet received serious attention. But goat scab (sarcoptic mange) has been dealt with in the same way as sheep scab. One of the reasons why more progress has not been made in the eradication of goat scab is that the sarcoptic infection has been kept alive on horses and pigs.

To eradicate the disease in horses, dipping at certain intervals will have to be considered, since hand-dressing of clinically affected animals alone is not likely to lead to success. Owing to the difficulty of dipping pigs, and their low value in native areas, slaughter of well-developed cases is indicated.

(d) *Anthrax* is very prevalent in some native areas, and I have already pointed out that one of the main reasons is the cutting open of carcasses of animals that have died of the disease.

For controlling the disease the only thing to do is to enforce compulsory annual inoculation of all susceptible animals in the infected areas. A start has already been made with this and thousands of animals have been inoculated annually during the past few years. It is hoped to organize the work of our staff in such a way that all the necessary assistance will be available to carry out the inoculations at certain times of the year.

It should be stated that the Union Government makes free issues of anthrax vaccine to all stock-owners in the Union, and, as far as possible, allows its inspectors to assist with the inoculations, also free of charge. In the case of native owners, it stands to reason that the work of inoculation has to be done for them.

With an efficient free vaccine and other Government assistance, there is no reason why anthrax should not be kept under perfect control in the Union and eventually eradicated.

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*Paper No. 37.*

### VETERINARY PROBLEMS OF THE AFRICAN NATIVE.

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In the note which I submit for the information of delegates attending the Conference, I propose to give only a résumé of the very wide problem which confronts those who are, in any way, engaged in the education of the native of Africa. The issues are so great that it would be quite impossible to treat the subject fully in a paper of this description.

2. The native of Africa is essentially a pastoral individual. In many tribes, cattle constitute the sole wealth of the individual and the community, and in Northern Rhodesia there is a strong prejudice against offering for sale more animals than will suffice to bring in funds to meet immediate requirements. The number sold is increasing year by year in proportion to the wants of the owners. One of the results of civilization is to cause a desire amongst natives for many things of which, formerly, they were unaware. Whether all the commodities which are now available are for the ultimate benefit of the native is a debatable point, but the fact remains that the average individual will go to great lengths to obtain them.