

1815/1/92

DEPARTMENT OF VETERINARY SERVICES,
FEDERAL MINISTRY OF AGRICULTURE,
P.O. BOX 8012, CAUSEWAY,
SALISBURY.
RHODESIA AND NYASALAND.

*As forward
to discussion at next
Tsetse Committee
Chairs etc*

The Secretary,
Federal Ministry of Agriculture.

24th July, 1962.

TSETSE ADVANCE AND ELEPHANT CONTROL.

... I forward herewith an exposition by Mr. Ford of the elephant problem in relation to tsetse and trypanosomiasis control.

You will recall that in the late fifties there was a considerable public outcry over our game elimination measures on our tsetse fronts and at the same time the question was debated in the Federal Assembly. The result of this outcry was an almost clean break from our previous policy of game elimination on our tsetse fronts and the only shooting done was as a fence protection measure. I am convinced that this policy of failing to maintain game free breaks between known tsetse habitat and domestic animals has been a considerable contributory factor to the advance of tsetse on all our fronts.

During this period I pressed for the maintenance of game and cattle free breaks but was unsuccessful. It was decided that reliance should be placed on the use of residual insecticides. I do not condemn the use of them but they are not, in my opinion, sufficient on their own.

The point at issue here is the containment of elephant and their removal from land occupied by man. In the Sabi area elephant movement has, in my opinion, a very important bearing on the unknown focus of tsetse in the vicinity of the Humani and Devuli ranches and again on the rapid build up of trypanosomiasis in the Lone Star herds in the vicinity of the Chiredzi - Lundi junction.

The containment of elephant and other game capable of supporting a fly population is a must if we are to maintain people on land already in occupation. I fully realize that there will be an outcry if we are to adopt a policy of slaughter of natural resources but some method must be devised whereby such resources are maintained and contained within land specifically set aside for the purpose. A considerable sum of money has already been spent in the Chirdezi area and yet as a result of the free movement of elephant the owner of Lone Star is once again faced with a fair sized outbreak of disease.

J. MacKinnon

DIRECTOR OF VETERINARY SERVICES.

MACK/VCS

DEPARTMENT OF VETERINARY SERVICES
TSETSE AND TRYPANOSOMIASIS
CONTROL BRANCH
P.O. BOX 8283, CAUSEWAY.
SALISBURY
SOUTHERN RHODESIA.

21st July, 1962.

The Director of Veterinary Services.

ELEPHANT CONTROL ETC.

When game destruction for tsetse control was in operation, elephant were shot in the Sabi, in Mtoko, in North Urungwe, Sanyati (North East Gokwe) and in the South Sebungwe.

In 1955-6 we killed 122 elephant; in 1956/7, 133; in 1957-8, 54 (when considerable restriction of hunting areas had taken place); in 1958-9, 37; in 1959-60, 12 and in 1960-61, 72. The increase in the last figure reflects a contribution of 43 elephants shot by Wild Life Conservation in a joint operation to protect the Sebungwe fence. It is clear, however, that over the last few years our contribution to elephant control has diminished considerably.

We should be quite clear on why we regard elephants (in particular) as a hindrance to trypanosomiasis control.

(1) They are a favoured food of tsetse, but, because they seldom remain constantly in a confined area, do not normally support permanent populations of tsetse; i.e., in the absence of certain other game it is unlikely that tsetse could survive on elephant alone.

(2) In spite of a great deal of circumstantial evidence nobody has yet proved conclusively that elephant transport tsetse in large numbers over considerable distances. Glasgow, in a recent study concluded, in regard to elephant and buffalo, that "these animals probably caused concentrations (of G. pallidipes) although the manner in which they may do so remains obscure" - that is he could not show that the concentrations observed had been brought to a particular area by passing herds. However, we do know that large slow moving objects attract tsetse flies and carry them for considerable distances and also that elephants may, over long periods, move back and forth over a certain range of territory. Thus, it is difficult to avoid agreeing with the owner of Lone Star that the elephants which move back and forth between the Chuhanja Hills fly belt and the Lundi-Chiredzi junction may well be responsible for bringing morsitans into his land.

(3) But whatever evidence may accumulate to incriminate elephants (or any other game) in disease control, there is another aspect to which we must attach the greatest importance. We control trypanosomiasis in order to grow beef and in the long run we will only establish a beef industry if (a) disease is controlled and (b) pastures are properly managed. In the native areas we have to add (c) if we can also achieve a stable, healthy population of farmers. To both (b) and (c) elephants and other destructive or dangerous game are a menace. With certain animals it may be difficult, as yet, to weigh their destructive effects against their economic value; - e.g. on Humani Ranch impala consume irrigated crops, but 300 are shot annually for ration meat and sale of hides. In this way the cropping of impala becomes part of farming. But it is difficult to see elephant in this role. They are destructive to crops; to the natural vegetation and to structures such as fences. There can be little dispute that their proper place is in various sorts of reserve and that they must be kept there. The Wild Life Conservation Department accepts this. It is particularly important that every assistance towards farm development be given to ranchers and the inhabitants of African lands on the periphery of the fly belts, for it is only by achieving the maximum modification of the natural vegetation that farming activities can assist in control of tsetse. Optimal productive

In short, what must be done is to define the areas in which elephants are to be kept and to take vigorous measures to keep them from the rest of the country. Similar remarks apply to buffalo, but in general buffalo tend to avoid areas under any form of development. It should be noted that destruction of animals on the periphery of the game reserves is not necessarily the answer to the problem. The key to proper control lies in maintaining the animal population of the game areas at levels compatible with their carrying capacities. Populations of wild game must not be allowed to reach densities which compel them to seek food outside their allotted territories.

The areas which are of particular concern at present are:-

- (1) The whole periphery of the Zambezi fly belt from Binga to the Sanyati River. Over part of this line the South Sebungwe game fence is the object of reasonably satisfactory arrangement in that periodically we have been able to call on the Wild Life Conservation Department and the National Parks Department for assistance in protecting the fence. However, west of a line running north from Lubimbi through Lubu to Binga there is severe pressure of elephant on the Batonka lands which form the only tsetse defence against a movement towards Wankie. Equally, at the other end of the fly belt, in Gokwe District, elephant move freely into the new settlement areas of Tare-Gwave, Nemangwe and the Copper Queen Native Purchase Area. These areas should be subjected to suitable operations designed to free them of elephants.
- (2) A cause of some concern is the movement of elephant back and forth across the Sanyati River into the Chenjiri Native Purchase Area, an area cleared of tsetse over ten years ago, which has apparently, very little prospect of settlement.
- (3) North of Urungwe we welcome the presence of the controlled hunting area, in which elephant shooting, if done sufficiently intensively, will tend to prevent elephant incursion into the fly-free areas above the escarpment. However, again, reports of elephant in the farming areas north of Manyangau are disturbing.
- (4) Until 1958 elephant crossing into the Mtoko District from Mozambique were shot by Tsetse Control hunters. The whole of the territorial border in Mtoko District (as well as Inyanga North) is African land either settled or destined to settlement and all is subject to some degree both to elephant and tsetse-fly invasion. There is no room for elephants in this part of the territory.
- (5) Sabi. Here the problem is fairly definite. The Gona-re-Zhou (Ndanga) and Gona-Kudzingwa areas (totalling some 1,340,000 acres) form a game reserve which coincides, to a large extent, with a tsetse belt and is well populated with elephants. In addition there are some 2-300 elephant in the Sangwe-Mkwazine-Devuli area west of the Sabi. It had been the intention of Wild Life Conservation to attempt to drive these animals south into Gona-re-Zhou. This attempt has not succeeded and the elimination of these herds would not only benefit the occupants of the area, but might go far to clearing up the very obscure trypanosomiasis situation around the Turgwe River.

Further south we are now confronted with a renewal of trypanosomiasis on Lone Star Ranch at the junction of the Chiredzi and Lundi. There is no sign of any increase of carriage of tsetse on road traffic, but there is a herd of eighty or more elephant which moves between the southern part of Lone Star and the Gona-re-Zhou fly belt. The owner of Lone Star is reluctant to fence his ranch (a necessary operation if he is to control his cattle properly) while these animals are present. We should press for the implementation of a policy which will prevent elephant moving outside the Gona-re-Zhou and Gona-Kudzingwa.

(J. FORD)