

Article 158

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THE TSETSE FLY

Tsetse flies are found only in tropical Africa. In Rhodesia we have four species of which two, Glossina morsitans and G.pallidipes, are widely distributed within the Zambezi Valley between Binga in the west and the Mazoe river in Darwin district in the east and the other two, G.brevipalpis and G.austeni are restricted to the Chipinga region of the international border. Until recently G.morsitans and G.pallidipes did occur in the Gona-re-Zhou game reserve region in the South East Lowveld but they have been eliminated as a result of control operations.

Basically all species of tsetse are similar, being built on the same lines. When alive and at rest they are easily recognised: the abdomen is completely hidden by the wings which fold one over the other like a pair of closed scissors and project well beyond the tip of the abdomen. The length of a tsetse fly, measured without the proboscis, but including the wings, is between 6 and 16 mm. The overall colour is dark brown or yellowish brown, often with smoky wings. Some species have abdomens with black bands, interrupted down the median line, on a yellowish orange background, but in general tsetse are inconspicuous insects which merge into their surroundings.

Tsetse feed solely on mammalian, reptilian or avian blood.

Tsetse are of considerable economic importance in Africa. They are responsible for the transmission of a unicellular blood parasite called a trypanosome to domestic stock, which causes a usually fatal disease, (unless treated with drugs), commonly known as nagana. The parasite can also cause a disease in man called "sleeping sickness" which fortunately is very rare in the Rhodesian fly belts. Because of the disease caused in stock Rhodesia spends in the order of \$1 500 000 annually in controlling tsetse flies. Methods used include selective removal of game animals, the object of which is to starve the tsetse by removing the favoured food hosts of the insect and the application of residual insecticides to the dry season resting and refuge sites of the fly. The only aspects of Government's activities in the control of the fly which the general public might see in travelling within or in close proximity to the flybelts would be (1) traffic control points, either gates or deflying chambers, where vehicles, cyclists and pedestrians are inspected in order to reduce the carriage of tsetse by traffic from flybelts into tsetse free country and (2) game fences which are erected to control movement of game animals. Infections of the disease, nagana, contracted by stock depastured near the perimeter of the flybelts are cured by a single injection of a very efficient drug. It is of interest that the Rhodesian Veterinary Department inspects 400 000 head of cattle on a regular basis in order to ensure minimal loss of stock due to the disease.

In conclusion it is noteworthy that Rhodesia is making reasonable progress in controlling the tsetse fly problem with a total of 20 720 km² (8 000 square miles) of country having been wrested from the hold of this insect during the past eight years.

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