

DEPARTMENT OF VETERINARY SERVICES,
XXXXXXXXXXXX
XXXXXXXXXXXX BRANCH.

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REVIEW OF FLY ROUND FIGURES FOR 1960, 1961 & 1962.

REKOMITJIE:

The two "control" flyrounds, Chikwira and Mangerengeri, have been sampled at regular intervals with an ox, as bait since June, 1960. Chikwira is situated partly in open mopane woodland and partly in rather open deciduous thicket. Mangerengeri, on the other hand, situated in riverine thicket, is more characteristic of the dry season habitat of G. morsitans.

The mean total catches for each species of tsetse on each fly round are shown in the tables. The fly rounds were all carried out during the morning over a temperature range, with very few exceptions, between 70 and 80°F.

From Table 1 it would appear that catches of G. morsitans in the mopane vegetation have increased quite considerably over the three years. In the riverine thicket catches were a good deal higher in 1961 than they were in 1960, but 1962 has seen a decrease with the exception of October, the most recent month in which sampling was carried out.

This year the rainfall in this part of the Zambezi valley has been considerably more than in the 1960/61 season and in particular the 9.0 ins. which fell in four days in March, have delayed the drying out of the vegetation in areas which are normally not good habitat for tsetse during the late hot dry season. This probably explains the rather lower catches on Mangerengeri in July, August and September, 1962, since concentration of fly did not take place so early in the year as usual. The G. pallidipes catches in Table 11 show rather the same pattern. Chikwira has shown an increase each year in September and October. Mangerengeri has shown an increase in 1961 and again in 1962 with the exception of July and August. The same explanation for this as given for G. morsitans probably applies.

The apparent increase in tsetse density which these figures show may account to some extent for the rather frequent reports of tsetse flies in various places e.g. Kariba, Chirundu Sugar Estates and Nzou Mine, made by members of the public. I would think that the climatic conditions experienced in the Kariba, Chirundu and Rekomitjie areas of the Zambezi valley this year, in particular the late and heavy rains have caused the increase in density in areas which tsetse normally tend to vacate as the hot dry season advances. However the fly rounds also show an increase in 1961 as compared with 1960, which may be an indication of a general and more widespread advance of fly.

TABLE 1.

BEKOMITJIE OX FLIX ROUNDS.

MEAN TOTAL FLIES.

| | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|-------------------------------------------------------------------------------|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| G. morsitans - Chikwira - mopane woodland and open sinanga - 2,500 yds. | | | | | | | | | | | | |
| 1960 | | | | | | 29 | 29 | 7 | 22 | 5 | - | 7 |
| 1961 | 33 | 10.5 | 11 | 10 | 72 | 86 | 97 | 70 | 109 | 73 | 48 | 94 |
| 1962 | 95 | 195 | 34 | 170 | 188 | 139 | 147 | 193 | 182 | 104 | | |
| G. morsitans - Mangerengeri - semi evergreen alluvial vegetation - 2,000 yds. | | | | | | | | | | | | |
| 1960 | | | | | | 2 | 1 | 12 | 32 | 35 | 51 | 27 |
| 1961 | 35 | 8 | 5 | 3.5 | 4 | 5.5 | 21 | 36 | 109 | 119 | 70 | 33 |
| 1962 | 20 | 40 | 13 | 4 | 32 | 10 | 11 | 13 | 62 | 190 | | |

TABLE 11.

REKONITJIE OX FLY ROUNDS.MEAN TOTAL FLIES.

G. pallidipes - Chikwira - mopane woodland and open sinanga - 2,500 yds.

| | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| 1960 | | | | | | 61 | 10 | 7 | 3 | 0 | 29 | 2 |
| 1961 | 24 | 39 | 34 | 31 | 11 | 31 | 50 | 63 | 94 | 63 | 22 | 32 |
| 1962 | 13 | 15 | 3 | 31 | 42 | 60 | 39 | 40 | 153 | 154 | | |

G. pallidipes - Mangerenseri - semi evergreen alluvial vegetation - 2,000 yds.

| | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| 1960 | | | | | | 95 | 62 | 35 | 4 | 11 | 17 | 2 |
| 1961 | 24 | 3 | 7 | 13 | 39 | 20 | 119 | 146 | 94 | 115 | 23 | 10 |
| 1962 | 39 | 19 | 19 | 17 | 44 | 99 | 65 | 57 | 111 | | | |