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SOUTHERN RHODESIA.

THE TSETSE POSITION IN THE CHIRUNDU  
AREA.  
SEPTEMBER 1956 - DECEMBER 1957.

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Introduction.

The following is a summary of information relating to the tsetse position in the Chirundu area which has been collected since the writing of my first report on the area in August 1956. Since that time visits have been made as frequently as possible to the area and the fly rounds traversed. The tsetse referred to is *G. morsitans* unless it is specifically stated otherwise.

Data from the Fly Rounds and Traverses.

The set fly rounds and traverses in the area are: -

(a) The Mensa Pan Fly Round

A foot traverse of 22 stations at 100 yard intervals passing through pan fringing vegetation, *Combretum* thicket and mopane woodland.

1956					
Catch					
	O.M.	O.F.	Y.M.	Y.F.	Total
Jun	3	2		1	6
Jul	11		1		12
Aug	9	4			13
Sep	33	9	4	4	50
Oct	29	19	2	2	52
Nov	45		2	3	45
Dec	3			1	4

1957					
Catch					
	O.M.	O.F.	Y.M.	Y.F.	Total
Jan	4	1			5
Feb	3		1		4
Mar	5		1	1	7
Apr	15			2	17
May					
Jun	12		1	5	18
Jul					
Aug	12	3	2	5	22
Sep					
Oct					

- (b) Nyakasanga to Mensa Pan car Traverse along the road. 11 stations at approximately 1 mile intervals. Passing mainly through mopane and Combretum thicket.

1956					
Catch					
	G.M.	O.F.	Y.M.	Y.F.	Total
Oct	69	52	16	7	144
Nov	44	25	4	9	82
Dec	4	3			7
1957					
Jan	8	9	1		18
Feb	5	2	1		8
Mar	6	5	1		12
Apr	56	12	6	3	77
May					
Jun	99	48	3	4	154
Jul					
Aug	226	132	11	14	387
Sep					
Oct					
Nov					
Dec				1	1

Table 2

- (c) Mensa Pan to Chirundu. Car traverse with 12 stations at approximately 1 mile intervals. Passing mainly through mopane woodland with some Combretum thicket. Catches are shown in Table 3 below.

1956					
Catch.					
	O.M.	O.F.	Y.M.	Y.F.	Total
Oct	127	99	5	2	233
Nov	62	13	5	8	88
Dec	35	22	2	1	60
1957					
Jan	62	27	12	8	109
Feb	30	6	5	4	45
Mar	67	27	6	9	109
Apr	150	42	19	5	218
May					
Jun	137	69	22	8	236
Jul					
Aug	217	99	20	22	358
Sep					
Oct					
Nov					
Dec	2				2

Table 3.

#### Catches at Chirundu Gate

Traffic travelling northwards through the fly belt passes through a control gate at Chirundu Bridge. Catches at this gate were as shown in Table 4 below.

	1956			1957		
	M.	F.	T.	M.	F.	T.
Jan	25	11	36	22	5	27
Feb	21	11	32	68	28	96
Mar	19	5	24	20	22	42
Apr	19	1	20	81	40	121
May	10	2	12	93	46	139
Jun	16	11	27	143	68	211
Jul	39	32	71	99	90	189
Aug	72	71	143	104	123	232
Sep	73	71	144	138	131	279
Oct	110	86	196	85	114	199
Nov	66	49	115	24	12	36
Dec	29	16	45	4	3	7

Table 4.

The carriage of *G.morsitans* on cars during the last few years is shown in Table 5 below.

Year	Total cars	Total Flies	Flies /100 cars.
1954	7726	1012	13.9
1955	13804	688	4.9
1956	15038	285	1.8
1957	16575	571	3.5

Table 5

(Annual totals are from October 1st to September 31st each year)

### DISCUSSION

From the figures given above it is evident that the availability of *G.morsitans* in the Chirundu area has undergone great changes during 1957, reaching the highest recorded level in August but dropping to the lowest recorded level by December

A sharp decline in the availability of *G.morsitans* is normally expected when the mopane flushes following the onset of the first rains. In 1957 the rains were late with the result that the mopane woodland did not flush in the Chirundu area until the beginning of December. Although the fly rounds were not done between August and December it is evident from the catches of *G. morsitans* at the Chirundu Fly Gate (Table 4) that the initial great decline in availability took place between October and November and was complete by December.

The reasons for the exceptional decline in 1957 cannot be determined with any certainty on the available evidence but meteorological records suggest that 1957 was a hotter year than the average in the Chirundu Area. Table 6 below shows the monthly mean maximum and minimum and absolute maximum temperatures at Chirundu from August to December 1957 as compared with average at Chirundu over 8 years (1943 - 1950).

	Mean Max		Abs. Max.		Mean Max.	
	Av	1957	Av	1957		
Aug	87.2	87.5	94	96	56.9	67.6
Sept	94.1	95.8	103	102	66.2	68.6
Oct	100.0	100.2	107	106	73.5	74.8
Nov	96.6	101.1	107	109	74.3	76.2
Dec	92.5	91.1	102	105	71.9	72.6

Table 6

Monthly mean maximum and minimum and absolute maximum temperatures at Chirundu during 1957 compared with the average for those months.