

TSETSE FLY OPERATIONS,
P.O. KAROI.

20th December, 1952.

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CHUWORE RIVER: G. PALLIDIPES SURVEY.

The survey party left Magunge on the morning of the 3rd December and proceeded to Mr. Middleton-Stokes beryl and mica mine "Lofty's Luck". This is on the Mvorametchi river, a tributary of the Chuwore. Camp was made here.

On the 4th a short patrol was made from the camp across the hills to the Chuwore river, (we went part of the way by car, see map). In a $2\frac{1}{2}$ mile traverse along the river, walking partly in the river bed and partly along the bank, one non-teneral male G. morsitans was captured. This was the only fly seen.

Early on the 5th we set out on a foot patrol down the river carrying only the barest necessities. The weather looked most uncertain and at one stage we had to take shelter for two hours in a hunter's hut. The patrol kept to the river bed as this was more or less dry, there being only a few small pools, the result of recent rain. At 3.00 p.m. the Saure-Saure pool was reached and here we pitched camp on the bank of the river, (the position given for the Saure-Saure pool on the map - Miami Sheet 2 - is wrong, it is at least 6 - 7 miles further upstream). The distance covered from "Lofty's Luck" to the Saure-Saure pool was approximately eight miles.

One G. morsitans non-teneral male was caught between the main camp and the Saure-Saure, this was taken approximately two miles upstream from the pool.

Just before dark flyboy, Mutemererwa, saw a G. pallidipes in the tent but missed catching it.

Early Saturday morning two flyboys and a hunter were sent upstream to look for G. pallidipes. They carried a screen. The remainder of the party set off downstream and walked for approximately four miles. Eleven G. pallidipes were captured between camp and the point of stopping - 4 non-teneral males, 1 non-teneral female, 1 teneral male, 5 teneral females. These pallidipes came freely to the party, no screen was used. Five of the eleven were taken on a bend in the river where the vegetation is particularly thicketed - here there is a fairly wide alluvial bank. There used to be a kraal called Chipita on this bank but this has long been abandoned and the regeneration on the alluvium has resulted in dense thicket, probably far denser than the original vegetation.

On the return walk to Saure-Saure one teneral male pallidipes was taken.

The boys who went upstream caught no flies nor did they see any.

In the late afternoon the flyboys caught 2 non-teneral

During the night we were awoken by the roar of rushing water and on going to the river bank we were just in time to see a wall of water coming down the river - the Chuwore was in flood. This was the result of heavy rain we had seen falling during the afternoon towards the south.

We broke camp early on the 7th and returned to the main camp at "Lofty's Luck". The going was difficult most of the way, in several places we had to wade the river which was now several feet deep.

On either side of the Chuwore the country is extremely broken and as one gets nearer the escarpment it becomes even more so. The river valley along the section traversed on the 4th is fairly wide and the slope of the hills rising on either side of the river is comparatively gentle, but as one gets further downstream the valley becomes narrower and the hillslopes more steep. At Saure-Saure the hills rise almost sheer from the river bank. Below the Saure-Saure the river valley widens out slightly.

The Saure-Saure pool is a deep hole in the solid rock river bed and into this runs all the water. The water leaves the hole through a cleft in the rock and passes out into the open river again, the bed here is at least 30 feet lower than that where the water flows into the hole. There is permanent water in the Saure-Saure pool.

The vegetation of the hills surrounding the river is mainly a Brachystegia spp. other genera woodland; the trees are rather small. Tree spp. recorded - Brachystegia boehmii, Brachystegia allenii, Burkea africana, Terminalia sp., Diplorhynchus mossambicensis, Crossopterys febrifuga, Schrebera trichoclada, Julbernardia globiflora Shrub spp. recorded:- Flacourtia indica, Randia vestita.

Along the river the vegetation varies from that in the area traversed on the 4th where hillside woodland reaches almost to the river's edge and only odd thicket patches occur, to one where thicket is predominant, though inclined to be broken, e.g., in the Saure-Saure pool area and below, and this gives way not to the ordinary Brachystegia other genera woodland as described above, but to a steep slope vegetation, mainly Brachystegia tamarindoides.

Tree spp. recorded along the river in the area traversed on the 4th other than spp. of the hillside woodland which reaches almost to the river's edge:- Kigelia pinnata, Ziziphus sp., Diospyros mespiliformis, Combretum ternifolium, Ficus sp., Brachystegia tamarindoides (rocky situation), Peltophorum africanum, Lonchocarpus capassa, Trichilia emetica, Markhamia sp., Thicket spp. of the occasional thicket patches:- Diospyros senensis, Dichrostachys glomerata, Lachnopylis oppositifolia, Allophyllus sp., Combretum mossambicense.

Species recorded in the more thicketed vegetation of the Saure-Saure area and below the Saure-Saure:- Tree spp., Markhamia sp., Boscia sp., Cassia sp., Azalia quanzensis, Commiphora mollis, Croton sp., Ficus sp., Brachystegia tamarindoides, Kirkia accuminata, sp 326, Acacia sieberiana, Dalbergia melanoxylon, Strycanos sp. 328, (? stuhlmanna), Lonchocarpus capassa, Thespesia garckeana. Thicket spp.:- Dalbergia glandulosa, Combretum mossambicense.

Sp. 323, Bauhinia sp., Citropsis daweana.

The thicketed rather broken vegetation in the Saure-Saure pool area and presumably it is the same all the way downstream to the escarpment, appears to be most suitable for pallidipes. Above the Saure-Saure the thicket is inclined to be patchy and it is doubtful whether it is sufficient for a permanent habitat. As regards morsitans the Chuwore does not seem to be particularly suitable for this sp. - the habitat is too restricted, the fly would be continually confined to the river and dispersal could only be upstream.

As regards game, a bushbuck was the only animal seen and the only fresh spoor recorded was that of a lone eland. This lack of game and game sign is quite normal though, for at present the game is widely scattered. According to the hunters game animals are fairly numerous during the dry season along the Chuwore. Roan antelope, Sable, Eland, Kudu, Bushbuck, Warthog, Bushpig and Buffalo (a few wandering males and only during June and July), are supposed to occur. Elephant are reported to be numerous at all seasons but only old signs were seen. It is possible that these animals have been upset by the recent shooting of six by Mr. Middleton-Stokes.

On the 8th the party left "Lofty's Luck" and proceeded to Ruesi Vlei near Makuti to check on the recent report of pallidipes from there. Enquiries were made from the gateguard as to exactly where the hunter caught the pallidipes and according to him these were taken not on the vlei but at the junction of the Ruesi and Msingwisi rivers - (it appears that the Ruese does not flow into the Nyacharara river as is shown on the map but into the Msingwisi). The vlei certainly does not seem to be a suitable habitat for pallidipes - the open vlei is bordered by Brachystegia spp. other genera woodland. About a mile downstream though, that is from the point where vlei gives way to river, the vegetation is suitable - evergreen riverine vegetation with both thicket and tall trees. The river here runs through a deep valley, the hills rising steeply on both sides. No flies were seen, though on two occasions while walking through the riverine thicket some members of the party thought they heard a pallidipes flying about.

We broke camp at Ruesi on the morning of the 9th and returned to Magunge.

D.F. Lovemore.