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CHANGES OF ADDRESS

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JOTTINGS FROM COBRA CORNER

Dear Member,

The start of a new year sees a change in the Journal, which now comes into line with many other herpetological bulletins with a reduction in size from fooscap to quarto.

This quarter has seen a big increase in the number of American Associate Members, following a report on the H.A.R. in the Philadelphia Herpetological Society Bulletin.

I have included a rather detailed account of a short collecting trip to Kariba Lake in order to give some idea of the conditions a herpetologist may expect to find there. Anyone possessing his own boat would be able to make a marvellous haul by cruising round the tops of submerged trees and gathering the marooned herptiles.

As I gained a lot of interesting data on the Rhodesian Plated Lizards I have compiled an article on this interesting group, our largest lizards with the exception of the two varanids.

I am afraid I must appeal once more for subscriptions for 1959-60 due at the beginning of last month - £1 for full members, 10/- for associates.

Good Hunting,

Donald G. Broadley

Hon. Secretary/ Treasurer,
Herpetological Association of Rhodesia.

Hon. Keeper of Herpetology,
National Museums of Southern Rhodesia.

P.O. Bembesi, Southern Rhodesia.

FURTHER AMENDMENTS TO THE CHECKLIST OF THE SNAKES OF SOUTHERN RHODESIA. By D.G. Broadley, May, 1959.

Leptotyphlops longicauda Largest 234 (212-22) mm. from Kariba Lake.

Lycodonomorphus rufulus mlanjensis
Largest: 700 (575-125) from Nyamaropa.

Meizodon semiornata semiornata (Peters) Semiornate Snake,
Midbody scale rows 21; ventrals 177-187; subcaudals 74-80.
Largest: 465 (357-108) mm. from Kariba Lake.

Thelotornis kirtlandii oatesii
Largest: 1535 (975-560) from Kariba Lake.

Psammophis subtaeniatus subtaeniatus
Largest: 1229 (805-424) mm. from Kariba Lake.

Aparallactus lunulatus lunulatus
Largest: 462 (372-90) mm. from Banket.

KARIBA LAKE - APRIL, 1959....By D.G.Broadley.

On Good Friday, 27th March, I left Bembesi for a short collecting trip to Kariba. I called on Dave Rider at Darwendale. He had recently taken Duberria lutrix rhodesiana there, thus extending the range of this Slug-eater 30 miles further to the west.

On the 28th I reached Sinoia, where I spent three days with Terry Crow. My main objective in the Sinoia area was topotypes of Latastia kidwelli (a synonym of L. johnstoni). Boulenger described this Long-tailed Sand-lizard from Eldorado, 5 miles east of Sinoia, in 1919. This is the only record of the genus south of the Zambezi. We investigated the Eldorado Mine, but drew a blank; a Mozambique Rough-scaled Sand-lizard, shot by Terry, being the only lacertid seen. We also collected along the Hunyani River, where we caught a fine Philothamnus i. irregularis and also encountered Naja nigricollis mossambica. A Vine-Snake (Thelotornis k. oatesii) was found dead. Among the lizards Mabuya g. margaritifer was plentiful, and we also collected Agama kirkii fitzsimonsi, but there was no sign of the equally rupicolous Flat-lizards (Platysaurus). One crevice contained a colony of "House" geckos (Hemidactylus mabouia). Amphibians collected were Fana f. angolensis and Phrynobatrachus natalensis, which we also got at Sinoia Caves. A solitary Phrynobatrachus u. mababiensis was taken on the Hunyani.

On 31st March I arrived at Kariba, where I stayed at the Game Department Camp, sleeping in my Volkswagen Van. Within an hour of my arrival I had two remarkable finds on a small rock outcrop at the edge of the camp. I had seen three of the usual rupicolous lizards - Agama k. fitzsimonsi, Mabuya g. margaritifer and Gerrhosaurus v. validus, when I suddenly spotted in a crevice a specimen of Mabuya damarana, an elegant little bronze skink which I had previously taken only on the Changadzi and Devuli Rivers, over 300 miles to the south-east! I stalked the skink and got a perfect specimen with a noose of fishing line. Then I examined the same fissure further along its length and received a second surprise in the form of a large gecko which I had never seen before! I noosed it and soon got a second. These geckos proved to be Pachydactylus tettensis, described by Loveridge in 1953 from Tete, 350 miles further down the Zambezi. The species was known from only two specimens, the holotype from Tete and a paratype from Lungsole River, S.E.Tanganyika. It differs from all other species of Pachydactylus (except tuberculosis of East Africa) in the preanal pores possessed by the males. I found these geckos to be quite plentiful on small rock outcrops round the Game Camp, but they were very shy of the noose and more difficult to catch than Pachydactylus bibronii, which usually prefers narrower crevices than tettensis.

The next day I worked over the mica-strewn hillsides west of the camp, the undergrowth was very dense and all I got was an Agama hispida armata and a Gerrhosaurus v. validus. The only snake seen was a Stripe-bellied Sand-Snake (Psammophis s. subtaeniatus).

On the morning of 2nd April, Rex Bean, who was in charge of the Game Camp, took me out in his boat and dropped me on Sanyati Island, formerly a large island at the Sanyati-Zambezi confluence, but now reduced to a rocky islet about 80 yards by 40. The place was alive with Water Leguans (Varanus niloticus); from the top of a small rocky hill I looked down on a glade, where two big fellows of 5 or 6 feet prowled stealthily around with flickering tongues, like something left over from the age of dinosaurs. There were probably 20 Varanus on that islet, often several entered the water at once when disturbed.

There were a number of Pachydactylus tettensis among the fissured rocks and as they were doomed I set out to collect the whole colony. They were too wary to noose, so I had to use my .22 revolver with great care at extreme range, in order to hit the geckos with the minimum amount of dust shot required to kill. I got eight geckos and also a series of Mabuya g. margaritifera.

As I approached one end of the island I was just in time to see the blackish tail of a mamba vanish between the rocks. By the time I had followed it up the mamba was several feet up the trunk of a huge tree and I was too late to grab its tail. Sanyati Island was notorious for its mambas, but most of them were probably high up in the many dense trees growing on the islet.

At noon Rex picked me up and dropped me again on a small flat Mopani island. I saw half a dozen Stripe-bellied Sand Snakes and caught one after following it into waist-deep water. Under an overhanging rock I discovered a three-foot puffadder (Bitis a. arietans), which was bagged not without protest! A more interesting find was two Leptotyphlops longicauda found under a log, the larger being a new record for S. Rhodesia, measuring 234 (212-22) mm.

I shot a couple of Gerrhosaurus f. flavigularis, which was plentiful; I also saw a Gerrhosaurus n. nigrolineatus. Sand-lizards were conspicuous by their absence, in fact I failed to get a single lacertid at Kariba.

Tortoises were plentiful in rock crevices close to the waters edge, where they sheltered after swimming ashore. Altogether I collected 14 Kinyxs b. belliana and 4 Testudo pardalis babcocki on the various islands I visited. Most of these I released on the mainland. Rex picked up a large Leopard Tortoise swimming in open water miles from land.

When Rex picked me up he suggested a quick look at a rocky islet nearby. As I landed a 4 foot Spitting Cobra (Naja nigricollis mossambica) glided away, but I siezed it by the tail as it went down a hole and soon bagged it. As I put the bag in the boat I disturbed a Psammophis s. subtaeniatus, which took to the water and climbed a bush at the waters edge. Having lost sight of it we shook the bush and to my surprise a Vine Snake (Thelotornis k. oatesii) appeared a few feet from me. It was soon noosed, followed by the Sand-Snake. As we left the islet a mamba, resting on a branch at water level, raised its head, but as Rex turned the boat for me to noose it the snake dived and vanished among the submerged trees.

On the 3rd I landed on a medium sized island, very flat Mopani with occasional low rock outcrops. I got a series of Gerrhosaurus

v. validus and then I peered under a rock and recognised the yellow-spotted black tail of my first G. major grandis, which I managed to pull out after a struggle and at the cost of much of the skin on my knuckles; I later shot another as it swam across an inlet, this proved to be a record specimen.

I shot a couple of Psammophis s. subtaeniatus, one snake having the upper labials, chin and throat bright vermillion, a colour variant I had not come across before. Then as I stalked a frog there was a swirl in the shallow water, giving me a glimpse of a thick black body, then the head of a six foot Egyptian Cobra (Naja h. haje) appeared above the surface a few yards away. I entered the water with a noose, but every time I got within range the cobra dived and then raised its head further away. It finally swam under a bush in 4 feet of water and I managed to get the noose over its head, but as I tightened the noose the cobra drew back slightly and the rope slid off the snakes snout. The cobra was now really disturbed and headed off for deep water. I saw the head of a large Bush Snake (Philothamnus s. semivariegatus) peering out of a hollow Mopani tree, but it withdrew when approached and could not be reached.

I caught half-grown Tree Leguans (Varanus e. albigularis), one in a hollow tree, the other as it searched for cover on the ground. The only amphibians encountered were Sharp-snouted Frogs (Rana o. oxyrhynchus), a common species in dry country, and numerous juvenile Leopard Toads (Bufo i. regularis) found under stones at the waters edge.

The following day Rex dropped me on a recently formed island two miles west of the Game Camp which was separated from the mainland by a narrow channel a foot deep. I got three more Tete Geckos and this was the only place apart from the Game Camp where I got Mabuya damarana. I also collected Lygodactylus angolensis and Mabuya v. varia.

Rex had seen a couple of mambas here previously, but I only saw the tail of one vanishing into a jumble of rocks. I spent an interesting five minutes stalking a huge Psammophis s. subtaeniatus, resisting the temptation to play safe and make sure of it with a round of dust shot. Eventually it glided between two rocks and I was able to close in unobserved and seize it. It is a new Rhodesian record, just over 4 feet in length.

On Sunday Rex had to take provisions to the main Game Department party, who were engaged on game rescue operations 70 miles up the Lake. I spent the day cataloguing the Game Dept. reptile collection. The most interesting find was a Meizodon s. semiornata, only the second specimen from S. Rhodesia. I also examined another record specimen in the form of a magnificent Thelotornis k. oatesi.

On Monday I was accompanied by Mary Paterson, who was collecting birds and mammals for the National Museum. We landed on a large Mopani island which proved to be the least profitable I had been on. I shot a Sand-Snake and saw only one other snake all day, a half-grown python swimming in deep water.

I caught two more Gerrhosaurus m. grandis as a section of the island went under water and collected a couple of Pachydactylus p. punctatus under logs.

When Rex arrived at 4 o'clock to pick us up he spotted a Thelotornis in a tree at the waters edge and I eventually managed to

noose it. We then spent an hour cruising round isolated trees which had only their topmost branches above water. This yielded two more Stripe-bellied Sand-Snakes, one of which was 4 feet in length and lacked the usual light dorso-lateral stripes. Then came the great moment, coiled loosely in the top of almost submerged tree was a fine 4½ foot Brown Beaked-Snake (Rhamphiophis o. rostratus). When I tried to noose him he took to the water, swam a little way and then paused to watch us with head raised six inches out of the water and neck quite vertical, giving the appearance of a periscope! This was a perfect pose for me to use the noose and he was soon safely bagged. This beautiful snake measures a little over 1300 mm. in total length and is the largest yet recorded from S. Rhodesia. Two more Vine Snakes were next on the list and as we crept up to the second one Rex spotted a little Bark Snake (Hemirhagerrhis n. nototaenia) on a Mopani twig just beside me, this was another species I had not taken before.

The following day we tried another large island, very rocky at one end, but falling away to Mopani bush at the other. Soon after landing I spotted a huge Varanus e. albigularis about 5½ feet in length, but he got down a hole behind a rock before I could reach him. Although I could get a good grip of his tail I was unable to dislodge him, I did catch a small specimen later. Chattering Mopani squirrels failed to reveal any predator, but Mary later saw a fair sized python in the same rocky area. The only snakes I saw were a couple of the ubiquitous Sand-Snakes and a big Naja h. haje which was swimming strongly and heading for deep water.

Lizards were very scarce and I actually used mor ammunition on mammals, obtaining a Dwarf Mongoose, a Mopani Squirrel and an Elephant Shrew for the Museum collection.

Another spell of cruising round the treetops was less profitable than before, the only captures being another Thelotornis and a 7 foot Python sebae coiled in the fork of a big tree just off Sanyati Island.

On the 8th April I went out on a stocking trip up the flooded valley of the Sanyati with the Kariba Fisheries Officer, Rex Adams. We returned in the afternoon, picked up Mary Paterson, and set out on a trip to the Sibilabila Narrows, about 60 miles up the Lake. The hundreds of square miles of Mopani bush will be very interesting when the trees are almost submerged, for many reptiles and small mammals shelter in the numerous hollow Mopani trees. I examined the nearer trees with binoculars, but the only reptiles seen were a Thelotornis and a couple of small Varanus niloticus. We anchored for the night in the middle of the Lake and at sunset were attacked by massed squadrons of mosquitos!

At dawn we pressed on to the Sibilabila Narrows, where Rex gave me the dinghy to explore a couple of small islands. As I neared the shore, I heard a rustle in the grass and turned to see an enormous black Egyptian Cobra enter the water, then swim along the shore. It had to climb over a log and I then realised that it was about eight feet in length. I lost no time in landing and following it up, but I saw no more of this superb specimen. I missed a Psammophis and found the slough of a Dasypeltis scabra, but the only other reptiles seen were a couple of Varanus niloticus and a Leopard Tortoise.

I then rowed around the tops of isolated submerged Mopani trees between the two islands and collected 8 Grey Tree Frogs (Chiro-mantis xerampelina). One one twig I found two Lygodactylus p. picturatus, one a male similar to specimens collected by B.L. Mitchell at Livingstone and the first definite record of this Dwarf Gecko in S. Rhodesia.

On the way back to Kariba I spotted a Philothamnus hoplogaster in the top of a submerged tree and Rex brought the "Sampa" alongside for me to noose it. The snake decided to swim for it and we chased it round the Lake for some time before it attempted to climb up the side of the boat and I was able to noose it.

The next morning I packed up and bid farewell to the Game Dept. staff before setting off for Chirundu. I reached the Otto Beit Bridge in mid-afternoon and crossed into Northern Rhodesia. I shot a male Mabuya g. margaritifer on a sandstone outcrop, but saw no other reptiles except a few Mabuya v. varia.

I recrossed the Zambezi and walked along the south bank, where I collected a couple of Rana o. oxyrhynchus, another male Mabuya g. margaritifer and a Mabuya striata on the base of one of the bridge piers. I spent the night beside a sandstone ridge 5 miles east of Chirundu, where I disturbed a Psammophis s. subtaeniatus the next morning.

On my way back to Sinoia I noted two Bitis a. arietans D.O.R. near Karoi and a number of Gerrhosaurus nigrolineatus basking on the road. I left Sinoia late on Sunday morning and the only reptile seen on the way back to Bembesi was a Causus rhombeatus Darwendale.

THE PLATED LIZARDS OF RHODESIA AND NYASALAND. By D.G. Broadley.

Key to the species of Gerrhosaurus found in Rhodesia and Nyasaland.

1. Ventrals transversely at midbody 12-20.....G.v. validus
 Ventrals transversely at midbody 10.....G. major grandis
 Ventrals transversely at midbody 8.....2
2. Supraciliaries 4; prefrontals broadly in contact; head large and general form robust.....G.n. nigrolineatus
 Supraciliaries 5; prefrontals separated or narrowly in contact; head small and general form slender.....G.f. flavigularis

The Rock or Giant Plated-Lizard (Gerrhosaurus v. validus) is the largest of the African gerrhosaurids. It is restricted to fissured rock outcrops (usually granite) and is abundant throughout the granitic areas of Southern Rhodesia. It occurs in southern Nyasaland, but the only record from Northern Rhodesia is a specimen collected by B.L. Mitchell at Gwembe in the Zambezi valley.

Variation: supraciliaries 5 (rarely 6); dorsal scale rows transversely 28-34, longitudinally 50-58; ventral scale rows transversely 14-18 (rarely 12 or 20), longitudinally 36-45; femoral pores 14-25; lamellae under fourth toe 18-22.

This big lizard is black, with a broad citron yellow dorso-lateral stripe extending from the back of the head towards the base of the tail, often fading out after midbody. The head is speckled

speckled with citron yellow and each dorsal scale has a yellow spot. The flanks are brownish with lighter vertical bars, the throat white, pinkish or orange and the belly dark brown mottled with whitish or pinkish. The yellow markings are more pronounced in juveniles, the flanks are distinctly marked with black and pale yellow vertical bars and the tail is ringed in black and white.

The body and limbs of the gerrhosaurids are completely covered with osteodermal plates underlying the scales. The skeleton reminds one of a suit of armour and a remarkably flexible one at that! As the body armour does not allow for any expansion and contraction there is a deep lateral fold to accommodate a full stomach or developing eggs.

Largest: 681 (275-406) mm. from Zimbabwe, S.R. The largest I collected at Kariba was 670 (270-400) mm., but I missed a much larger specimen when it swam out into deep water and dived among submerged Mopani trees.

These rupicolous lizards are seldom found far from the security of their crevices, when foraging for food their maximum range seems to be about 30 yards and when basking they stay much nearer home. Once they have entered a crevice they are very difficult to dislodge, as they inflate their bodies so that the quinquecarinate dorsal scales get a good grip on the rock. They also cover their bodies with their tails like the Girdled Lizards (Cordylus) and these are shed if roughly handled. A noose is not very effective against adults as it gets chafed and weakened by the rough surface of the rock. I have had more success in shallow crevices by moving the lizard around until I can get a firm grip on a hind foot and then hauling the protesting validus from his retreat.

The numerous validus rendered homeless by the rising waters of Kariba Lake were adapting themselves quite well to the unusual conditions. I rescued several specimens marooned in the topmost branches of submerged Mopani trees. On the islands they kept close to the waters edge and took to the water when disturbed, swimming strongly on the surface or very often diving to the bottom, where they remained motionless, raising their heads above the surface at regular intervals to fill their lungs with air.

I examined the stomach contents of eleven validus collected at Kariba and as these big lizards are mainly vegetarian I do not think the unusual conditions affected their diet to any extent. All but two of the stomachs contained vegetable matter, consisting of large pieces of leaves up to a square inch in area. In most cases giant millipedes had also been swallowed. The only adult which contained no vegetable matter had eaten a most varied meal consisting of one half grown Rock Scorpion (Opisththalmus), one centipede (S. mortisans), one millipede, one spider, some small beetles and a small gecko (probably Pachydactylus p. punctatus)! The only juvenile had eaten a scorpion.

One Matopos specimen I kept for three months on a diet of large chafers, I then sent it to Dr. Walter Rose, who informs me that it is thriving on a vegetarian diet of boiled carrots, bananas and tomatoes. I sent another specimen to John Wood at Fish Hoek Snake Farm, and he reports that it has taken crickets and grapes.

I think that this species is practically omnivorous, taking a wide range of fruits and vegetable matter and supplementing this with any small animal it can catch. The enormous populations found on some granite outcrops could never exist if they were fastidious feeders. I once saw eight adults enter one small fissure in a flat outcrop near Beitbridge, this was in very barren country with hardly any vegetation.

Adult lizards can have few enemies apart from birds of prey. I recovered a juvenile from the stomach of a Vine Snake (Thelotornis kirtlandii oatesii) from Matopos.

Pat Fox found four eggs under a slab of granite near Filabusi, three were broken as he turned over the rock and as these contained young almost ready for hatching he brought the fourth to me. This measured 44X26 mm. and hatched on 16th February. The hatchling remained for 24 hours with its head sticking out of the ruptured shell and as its eyes were closed I thought it was dead. When touched the little lizard popped out of the eggshell and showed a fair turn of speed. This hatchling measured 163 (68-100) mm.

The Southern Greater Plated-Lizard (Gerrhosaurus major grandis) is the least common of the four species dealt with here. In Northern Rhodesia it is known only from the Zambezi Valley in Feira District. The only Nyasaland records are also from the south - Likabula River at the foot of Mlanje Mountain (Loveridge) and Chiromo (Sweeney). Apart from the four specimens I got at Kariba and a fifth in the Game Dept. collection the only record from S. Rhodesia is a specimen taken by Dr. V. FitzSimons near Birchenough Bridge.

Variation: supraciliaries 4-5; dorsal scale rows transversely 18, longitudinally 31-34; ventral scale rows transversely 10, longitudinally 30-34; femoral pores 10-15; lamellae under fourth toe 13-15.

Colour: Head and anterior part of body uniform yellowish brown, scales on flanks and posterior part of body straked with black, tail black with yellow spots. Chin and throat yellow, belly uniform dark brown.

Largest: 480 (235-245) mm. from Kariba Lake, S. Rhodesia.

Loveridge obtained his Nyasaland specimens in a large termitarium. FitzSimons collected his Birchenough Bridge specimen on a small isolated kopje. Three of the Kariba specimens were certainly refugees, but one was under a solitary rock in open Mopani bush, which had a well worn track at the entrance and may well have been his normal retreat.

The only stomach examined contained beetles and millipedes. My Kariba specimens have eaten bananas and one took a large mantis. Loveridge records a Sand-Lizard (Eremias) being eaten by an East African specimen.

The Black-lined Plated-Lizard (Gerrhosaurus n. nigrolineatus) is fairly common throughout the Federation. Its usual habitat is dry open bush country, where it lives in burrows. At Bembesi, where rodents are very scarce, I found nigrolineatus in very short burrows about a foot long with a small chamber at the end, just large enough for the lizard to coil up in. I suspect that these were probably excavated by the lizards themselves, but at Mount Hampden

I dug them out of burrows over a yard long, which were probably taken over from some small mammal. I dug out a fine pair from a termitarium near Mount Hampden.

Variation: supraciliaries 4 (very rarely 5); dorsal scale rows transversely 20-22, longitudinally 56-62; ventral scale rows transversely 8, longitudinally 32-36; femoral pores 14-19; lamellae under fourth toe 15-18.

Colour: Head pale brown, back red-brown or sandy with a vertebral series of black-edged yellow streaks or spots, a sharply defined black-edged yellow dorso-lateral stripe extending from back of head to tip of tail (faint towards tip), flanks bright orange speckled with yellow and brown. Uniform creamy white below.

Largest: 480 (160-320) mm. from Chitala River, Nyasaland.

Diet consists of beetles, grasshoppers, crickets and small millipedes, the gorge themselves on winged termites when they appear at the beginning of the rains.

The Yellow-throated Plated-Lizard (Gerrhosaurus f. flavigularis) is probably the commonest of the gerrhosaurids in Southern Rhodesia and Nyasaland. In Northern Rhodesia the only record is from the Luangwa Valley and although B.L. Mitchell has sent me a long series of nigrolineatus from the Livingstone area, he has so far not taken flavigularis.

In Southern Rhodesia flavigularis and nigrolineatus are usually found together, although flavigularis is more abundant in most areas. It is particularly plentiful along rivers, streams and irrigation furrows, when disturbed it takes to the water, swims along the bank and then emerges to hide in the grass roots or a hole under the bank. On one occasion at Mount Hampden I flushed one which dived into a deep clay pit and although I waited for five minutes or so it did not come to the surface. There was no cover round the edge of the pool.

Variation: supraciliaries 5; dorsal scale rows transversely 20-24, longitudinally 58-63; ventral scale rows transversely 8, longitudinally 32-37; femoral pores 10-17; lamellae under fourth toe 17-20.

Colour: Head and body chestnut brown to olive, a sharply defined black-edged yellow dorso-lateral stripe extending from behind eye to tip of tail (faint towards tip), scales on flanks light brown at base, blackish at tip. Below uniform creamy white, throat may be yellowish.

Largest: 434 (126-308) mm. from Mtimbuka, Nyasaland, but exceeded in body length by a specimen of 138 mm. from Kariba Lake, S.R. A smaller and much more slender form than nigrolineatus.

Diet similar to G.n.nigrolineatus.

NOTES ON THE AMPHIBIA OF SOUTHERN RHODESIA..Part 2.

By Rev. K.Tasman, S.J.

KASSINA SENEGALENSIS (Dumeril & Bibron)

Coming to the frogs and taking them in the order of my notes, There is first, the Senegal Frog. This and the following species belong to the family Rhacophoridae, members of which have a minute additional bone in the joint between the last two phalanges of each digit. K.senegalensis is by no means uncommon, but spends much of

its time hidden from view in holes and burrows and feeds mostly at night. It is a small frog with snout moderately round; toes not webbed; a vertical pupil to eye, as one would expect; skin below granular on posterior half. Throat of male with a roughly oval disc placed longitudinally. This covers the vocal sac, which, when the call is being made, expands forward and also swells out widely on either side through two slits in the throat. The sound, more easily recognised than some and carrying a long way, is, as Mr. Ranger has put it, like the word "boy" or "bwoy" whistled shortly through gathered lips. When it is seen, it can, unlike many others of its kind, be identified with little difficulty by its colour and marking. It is mainly green or greenish-grey above (usually grey-brown in my experience - D.G.B.), along the middle line a dark streak which may come to a point in front and be broader further along; towards each side there is a smaller dark line or row of blotches, some too, maybe, on the thighs and elsewhere; below it is practically uniform white. Length of body about $1\frac{1}{2}$ inches, hind leg about the same. Localities: Driefontein Mission; Musami, Mrewa; Salisbury (Avondale, Emerald Hill); Monte Cassino, Macheke (where it has been heard but not seen).

CHIROMANTIS XERAMPHELINA Peters

The South-eastern Grey Tree-Frog is a widespread species, larger than Kassina; particularly interesting owing to its peculiar habit of depositing its eggs in a ball of froth formed from a mucus-like fluid emitted by the female with the eggs. This "nest" is then suspended from the branches of a tree or bush over water. Tadpoles, when hatched, spend a few days in the ball of aerated foam before dropping out into the water below, where they continue development in the normal way.

Adults have a blunt snout, squared off in front, , large prominent eyes, some small skin glands above, granulation below, small discs on all digits, toes about $\frac{1}{4}$ webbed. The first and second fingers can be opposed, which is noteworthy as not being usual in amphibians and enabling Chiromantis to grip the branch he may be sitting on. Colour grey or greyish-white above, with, perhaps, some dark markings, some dark cross-bars on the legs, belly white, male with a dark throat. Length of body in my specimens not over $2\frac{1}{2}$ ins. but can be up to 3 inches, hind legs slender and probably 1 inch longer than body.

Localities: Empandene, near Plumtree; Fort Victoria road between Gokomere and Driefontein Mission; Mtoko.

LEPTOPELIS BOGAGII (Gunther)

A medium-sized frog, not, it seems, very common. Snout flattened and very definitely rounded, prominent eyes, skin a little roughened on back, granulated on lower surface of body, digits noted as terminating in a large tubercle, but not discs. Colour:- Marbled light and darker brown above or generally light brown, a darker, rather faint and irregular somewhat curved streak towards each side, a dark blotch over nostril and over tympanum, whitish below, forelimbs light brown above. Length of my specimens, body 2 or $2\frac{1}{2}$ inches, hind limbs $\frac{1}{2}$ inch longer.

Localities: Salisbury (Avondale, Emerald Hill).

HYPEROLIUS

Of this genus it must be said that there has been considerable uncertainty and difference of opinion as regards specific characters and distribution. When, as in this case, there can be so much variation in marks and colouring within one well recognised species and even individuals are subject to rapid "chamaeleonic colour changes" (Hewitt), the task of identification is by no means easy, if there are no other obvious points of distinction. Though I have in my time found and handled a good number of specimens here and there, I mention only those that do not seem too doubtfully placed.

HYPEROLIUS MARMORATUS Rapp

The Marbled Sedge or Fush Frog is one of those little frogs that will not seldom be found, after careful inspection, clinging to reeds at the edge of streams and ponds, during wet spells they may be discovered further afield. Difficulty in detecting them will be due to their small size, their camouflage, and their habit of crouching closely to stems of grass or reed, with limbs folded under the body. Toes and fingers end in discs, toes are partially webbed, males have a flat disc on the throat.

Colour: From my knowledge I can only put it as follows - dorsally on a background of yellowish brown, with perhaps a greenish tinge, or light or dark grey, there will be as a rule some three more or less clear longitudinal stripes, legs dotted and striped irregularly with whitish and red, thighs red below. Length: males 28mm. or c. 1.1 inch for the body, hind legs longer by nearly $\frac{1}{2}$ inch, females a little larger.

Localities: Monte Cassino; probably Driefontein and Chilimanzi Reserve.

HYPEROLIUS PUSILLUS (Cope)

A smaller species than H. marmoratus. Colour greyish-brown or green above with some slight speckling, a thin yellow or pale line bordering head and body on each side, legs and underparts pale transparent green. Length of body not more than one inch, in 15 specimens of mine not more than $\frac{3}{4}$ inch, hind limb about 1.1 inch.

Locality: Kutama, Zwimba Reserve. (N.B. The identification of the specimens taken there is not quite certain.)

HYPEROLIUS NASUTUS Gunther

Very similar to foregoing, on upper surface in colouring, which is more or less green, sometimes, but not always with a pale dorso-lateral stripe, digits noted as yellow. Length about the same as H. pusillus.

Locality: Monte Cassino, Macheke.

HERE AND THERE

UMTALI - Dave Blake has recently received the mangled corpse of a Green Mamba (Dendroaspis angusticeps) from the Inyanga Tea Estates, this is the second record for S. Rhodesia. He has also been brought two Bitis g. gabonica (alive) from the same area.

SINOIA - Terry Crow has just had a Chilorhynchis g. gerardi brought in.