

TANGANYIKA NOTES AND RECORDS

— No. 30 —

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EDITORIAL

Subscribers will note that we have changed our printers and that we are now taking advertisements. It was inconvenient having the journal printed and published in Nairobi, and we have now made arrangements for it to be printed in Dar es Salaam by the "Tanganyika Standard." It is hoped that this will result in future issues appearing on time, but subscribers will appreciate that we cannot go to press unless we have the necessary material. It is thought that there are many potential contributors amongst of the Society, and they are again urged to put pen to paper.

It has been decided to take advertisements rather than to increase the price of the journal. The Editorial Board is confident that this decision will meet with the approval of the majority of subscribers and merely wishes to add that care will be taken to see that no advertisements will appear of a kind likely to offend.

The attention of subscribers is drawn to the note on page 111 about the Photographic Group which has been formed.

EAST AFRICAN INSTITUTE OF SOCIAL RESEARCH

Members will be interested to know that the East African Institute of Social Research which has been projected since 1948 has been established at Makerere College under the Directorship of Dr. Audrey Richards. Work will be carried out in Kenya, Uganda, Tanganyika, and Zanzibar and will include sociological, linguistic, economic, legal and psychological studies.

It is intended that the new Institute should carry out work of the type already undertaken by the Rhodes-Livingstone Institute which was established at Livingstone in 1938 and which has a research programme covering Northern Rhodesia, Southern Rhodesia and Nyasaland under the Directorship of Dr. Elizabeth Colson. A similar West African Institute of Social and Economic Research will be established at Ibadan College in Nigeria when Professor Hamilton Whyte takes up his appointment as Director there.

The East African Institute of Social Research will be closely associated with Makerere College and will report annually to the Council of that College as well as to the Colonial Social Science Research Council of the Colonial Office. It has, however, its own staff, who will not be engaged on teaching duties, and an independent programme of research.

It is hoped that the Institute will fulfill the following functions:—

- (a) **The establishment of a centre of African and mainly East African Studies** for the extension of our knowledge of the cultures

and languages of the peoples of East Africa and of their present day reactions to modern political, economic and educational policies.

- (b) The conduct of field studies both of an ethnographic and specialist character.
- (c) The organisation of experiments in research methods.
- (d) The organisation of studies of administrative importance on behalf of the Government.
- (e) The training and assistance of research workers.
- (f) The publication of the results of the researches made.

The following sociologists are now operating in Tanganyika or will soon commence operations:—

Mr. J. Tyler, amongst the Zinza of the Biharamulo and Geita districts.

Mr. and Mrs. Scherer, amongst the Ha in the Kasulu and Kibondo districts.

Mrs. Reining amongst the Haya in the Bukoba district.

The first conference of fellows and associates of the East African Institute or Social Research took place at Makerere College, Kampala, the head-quarters of the Institute, from December 17th to December 23rd, 1950. The conference was attended by the following:—

Mr. Lloyd Fallers (Busoga); Mrs. Chave Fallers; Dr. Jeanne Fisher (Kikuyu); Mr. Philip Gulliver (Turkana and Karamojong); Mrs. Gulliver; Professor E. Hoyt (Fulbright fellowship); Dr. Jarques Maquet (I.R.S.A.C.—Banyaruanda); Mr. John Middleton (Lugbara); Mr. Mulira (Research Officer in linguistics, E.A.I.S.R.); Mr. Philip Powesland (Lecturer in Economics, Makerere College); Mr. Cyril Sofer and Mrs. Rhona Sofer (Jinja Survey); Mr. Aidan Southall (Alur); Mr. Brian Taylor (Butoro); Mr. J. W. Tyler (Zinza); Mr. Edward Winter and Mrs. Winter (Bwamba-Konjo); Mr. Wilfred Whiteley (Government anthropologist, Tanganyika—Makua); together with the Director, Dr. Audrey Richards (Buganda); the Secretary (Miss J. M. Fortt); Dr. A. N. Tucker; and Mrs. E. M. Chilver (Secretary of the Colonial Social Science Research Council).

Papers were read on "Field methods and field situations" in which each individual field worker described briefly the characteristics of their areas, the object of their research and the methods they felt to be appropriate for such a study. Professor Hoyt and Mr. Philip Powesland contributed papers from an economic point of view. A preliminary discussion followed on a scheme for the comparative study of African political systems in present day East Africa.

It is proposed to hold such conferences twice yearly.

PHOTOGRAPHIC GROUP

A photographic group has been formed within the Society for the benefit of members interested in photography. It is hoped that support for this innovation will be received as much from those who have had little experience in photography as from those who are experts.

If adequate support is obtained it is proposed to carry out the following programme:—

1. On the first Wednesday in each month at 5.30 p.m. in the Museum Reading Room an informal meeting will be held.
2. On the third Wednesday in each month at 6.30 p.m. a lecture will be given if lecturers can be obtained.
3. A small permanent exhibit will be displayed by the group in the Museum. It is hoped to change this monthly.
4. Darkroom facilities already available in the Museum to be improved.
5. Periodicals, such as "The Amateur Photographer" to be made available in the Museum Reading Room.

At the first informal meeting held on Wednesday, 3rd January, there was an encouraging attendance of over forty members and guests. Matters of general interest were discussed, and eleven new members were obtained.

The first lecture given on Wednesday, 17th January was also well supported. A demonstration contact printing was given by a member and various members of the audience were given an opportunity to make prints themselves. The next lecture, given on 21st February, was on colour photography, and consisted largely of the projection by various members of 35 mm Kodachrome colour slides. Among those shewn were a series of slides taken by a member whilst on leave in U.S.A. and includes some particularly impressive views in colour of the Grand Canyon of Colorado.

Exhibits prepared by members have been on view in the Museum, including a series of postcard Leica enlargements illustrating the ascent of Kilimanjaro and its crater. Exhibits of interest, however small, from members up-country will be gratefully received. If such members have difficulty in preparing adequate prints or enlargements, the members in Dar es Salaam will be pleased to help them out. Members should not assume that a high standard of photography is necessarily required for exhibition purposes so long as the subject matter is of interest to the Society.

The Museum authorities have kindly permitted a room equipped with running water to be used as a darkroom. At present the room is insufficiently light-tight to be used until dusk and help from members to improve the present facilities is much needed.

It is appreciated that at present it is difficult for up-country members to gain much from the formation of this group, but it may be possible to commence a circulating portfolio of photographs and items of interest. Suggestions from up-country members in this respect will be welcomed.

Now that it has been shewn that the formation of this group receives considerable support, it is proposed to form a sub-committee and secretary to ensure its continued success. Meanwhile any members who cannot attend the meetings are asked to get in touch with Miss A. Booker, the Honorary Secretary, P.O. Box 511, or Mr. G. L. Boedeker, P.O. Box 805, Dar es Salaam.

It is hoped that eventually other groups will be formed for members interested in other branches of the Society's activities.

KILOMBERO*

By R. K. M. Battye.

To the ordinary traveller in the plains of East Africa river crossings often present an appearance that is at once both repugnant and lacking in interest. The water is usually dirty, the banks steep, muddy and covered with long grass; it is with some anxiety that at such places one's vehicle is eased down through the mud or sand on to the ferry and with a corresponding feeling of relief that it regains without mishap the road on the far side. It is not often that one has the opportunity to explore the reaches on either side of such crossings, yet when the chance does occur one is soon privileged to realize that within a few miles is hidden a very great wealth of interest and natural beauty.

I find myself one winter morning encamped at such a place. The day is Sunday and I decide to spend it as best I may investigating what the river and its grass-hidden banks do hold.

From its upper reaches in Ubena to its junction with the Msolwa the drop in the Kilombero is small and, as may be expected, there are many ox-bows in its course. The land on both banks is liable to heavy flooding during the months of April, May and June, with marshes and swamps persisting in its vicinity throughout the dry season. Hundreds of square miles of the valley are accordingly covered with high elephant grass but the marshes, as they slowly evaporate in the dry winter months, grow a shorter variety. It is on these that anything from the smallest wading bird to elephant may be seen, while the dried mud banks, the few trees thereon and the long grass behind provide a home for many other varieties of bird and animal life.

Let me take the reader in a dugout canoe for a day on the Kilombero.

The canoe is skilfully hollowed out from a single tree-trunk. It is about thirty feet in length and of sufficient width to contain a small camp chair. It is propelled by two Wandamba paddlers in the stern and one with a bamboo pole in the prow. In the bottom of the canoe lies a water bottle and food for the day; close to hand is a .375 magnum rifle and round one's neck hang a pair of Zeiss binoculars. The sun, already risen, is an orange orb low in the sky ahead and a wraith-like mist is rising from the pellucid waters. All is ready and off we go.

A clanging scream is heard; we look to the left and see a very striking bird, the fish eagle (*cuncuma vocifer*) taking off from an almost leafless tree. Its white foreparts and tail, black wings and the rich chestnut-bronze of its belly and coverts glint in the orange sunlight as it wings its way upstream.

A movement on a mud-bank catches the eye as a pair of wattled plover (*afribix senegallus lateralis*) dart hesitantly over the damp, caked mud. They are the largest of the African plovers, fawn-grey in colour, with a splash of white on the crown. The lemon-yellow wattles beside the base of their bills make them conspicuous against the dun background.

A finger of muddy sand stretches well out into the river at the next corner and a number of whitish birds can be seen busily procuring their breakfasts. The glasses reveal six spoonbill (*platalea alba*), three sacred

ibis (**threskiornis aethiopicus**) and one hadada (**hagadashia hagadash**) in close proximity. The spoonbill are weaving their bills through the shallow water in search of delicacies from the ouse, the ibis peck fastidiously at something they have found while the hadada, not normally a waterside bird, eyes the passing canoe. A few skimmers (**rhynchops flavirostris**) squat on the end of the sand-spit and become air-borne as we approach, their scarlet, projecting lower mandibles cutting the water in search of algae as they shear away across the river.

Half an hour's quiet paddling down-stream brings us to a short-grassed area of semi-inundated ground behind a low bank. In the shallows and on the bank rest about a hundred brown and fawn Egyptian geese (**alopochen aegyptiacus**); among them we notice four spur-winged geese (**plectropterus gambensis**), while behind, their heads and necks only at first showing up above the bank, we count thirty-nine crowned crane (**balearica regulorum**). As we approach, the whole bevy of these beautiful, gregarious birds comes into view. Some turn to watch our canoe while others cut capers to their companions and take no notice, their delicate, white cheeks and black velvety top-knots, from behind which radiate bunches of straw-like quills, bobbing oddly against a background of coarse elephant-grass.

Relatively insignificant, though in themselves birds of no mean grace and beauty, several jacana (**actophilornis africanus**) trot urgently hither and thither over the lilies and weeds in the swamp; and a pair of blacksmith plover (**hoplopterus armatus**), forming a flank guard to the other birds, run over the dry ground on one side, their ringing metallic call, an 'anvil chorus' giving a belated and in any case unnecessary warning of our approach.

Onward glides the canoe. The tableau of beauty fades out of sight round a bend. The sun climbs in the sky and the day grows hotter. Presently another tableau opens up before us; one of peace, of contentment, of monstrous composure, of immobile dentured masks, of baleful glances, as twelve crocodile basking on mudbanks and in shallow water, in all their saurian ugliness, come into view together.

One or two slide into the water; another receiving dental treatment from an egret closes his mouth; others, to use a colloquialism, don't even bat an eyelid, and we're now within eighty yards. I settle down in the bottom of the canoe, stop the paddling and we glide silently forward on the current. A large crocodile is lying broadside on, his neck a goodly target. He raises his head as though in two minds about taking to the water, but before he has decided what to do I have fired; his neck is broken and except for one or two convulsive shakes of the head and a slow opening and clanging to of his jaws he makes no movement. All his friends have forsaken him and we thrust the canoe ashore. His eyes which are closed give no reaction to a poke from the bamboo pole. The steel tape is brought forth and he is found to measure 12 ft. 3 ins., a good average size for this river but by no means the largest. We remove the skin from the neck and underside. Perhaps one day when tanned it will make some acceptable handbag, a cover for the rifle or case for the bioculars.

This disturbance does not seem to have worried four pelican (**pelicanus roseus**) which are cruising about near the far bank; or a solitary goliath heron (**ardea goliath**) which has been standing mu'ely interested also on the other side. He is a handsome bird, the largest species of heron in the world, with a striking colour-pattern of slate on the back, rufous head and neck and rich maroon underneath.

It is past midday; we draw into the bank for lunch. Later, in a burst of energy and much to the surprise of the Wandamba canoe boys, I climb an almost leafless 'sausage' tree. As I clamber up the view opens out over the surrounding grassland and gradually the whole width of the valley appears below me. I perch among the top-most branches forty feet from the ground and from there, through the glasses, am able to obtain a birds-eye view of the river and its grassy valley for many miles. I am visited first of all by one of the bee-eaters which have their homes in holes along the river banks, and then by three white-necked raven (*corvultur albicollis*) who greet me with a croak as they fly slowly past. But I hardly notice them for now four elephants' backs, heads and flapping ears have appeared in the grass not six hundred yards away across the river. I watch them for perhaps half an hour before they disappear into the obscurity of a depression in which grows more than usually long grass. In addition to two more elephant, distant about a mile, I can pick out a pair of puku (*adenota vardoni*) and two wild pig; they, like the waders, prefer the damp short-grassed areas in the early afternoon.

But the shadows are no longer vertical. We have several miles to paddle against the current. It is time to start back. I come down to earth. Keeping close into the edge where the water is slackest we push our way upstream. The gentle lapping of the water under the prow and the rhythmical rubbing of the bamboo pole against the canoe side have a distressingly soporific effect at this post-prandial hour. I glance towards the scene of the recent crocodile episode as we approach that bend. The vicinity of the corps is crowded with long-legged birds and as we get closer we see that many of them are making a meal off the carcass! The birds are mostly marabou (*leptoptilos crumeniferus*) easily recognizable by their dark, slaty backs, white under-parts, huge, yellow, dagger-like bills and almost bald heads. Their ugliness is accentuated by a pink pouch of skin in front of the neck, and some of these have become inflated. Judging by the manner in which these birds have devoured most of the crocodile's corpse it is evident that their habits are no less repulsive than their appearance.

Standing a little apart by himself, conscious perhaps of belonging to one of the more aristocratic branches of the stork family, is a saddle-bill or African jabiru (*ephippiorhynchus senegalensis*). He is the only one of his species present; a huge, handsome bird, the largest of all the storks, he presents a striking pattern in black and white with red legs and a scarlet bill having a black band round its centre and a yellow 'saddle' overlying its base. As we approach the bank he and some of his cousins take to the air—a truly impressive sight as their huge black-and-white wings beat up and down before they begin to soar grandly on the immense expanse of these limbs. Their flight compels admiration and one soon forgets their repulsive habits and appearance when on the ground.

Many hippopotamus inhabit the Kilombero and we are constantly passing these amphibious monsters. They spend the daytime in the water and the nights browsing on the riparian vegetation, though some travel further afield and enjoy more toothsome fare in the 'shambas' cultivated by the Wandamba and Wapogoro tribes. When a hippo surfaces, which he does nearly every two minutes, he expels his lungful of stale air with great vigour through his nostrils, sending up a shower of spray and making a noise like a Suffolk Punch sneezing. He flicks the water off his ears, gazes about for a few seconds, takes a deep breath, then down he goes again for another two minutes.

It is always amusing trying to anticipate where he will come up next so that the glasses may be focussed on him for as long as possible. Sometimes hippo will surface unpleasantly close to a canoe, and a playful attempt to upset it is not uncommon. Such action cannot, however, be regarded as playful by the occupants of the canoe, who, remembering the other inhabitants of the river, take a pretty dim view of such behaviour. Hippo are hunted remorselessly with long spears by the Wandamba who relish their meat and fat, so it is not surprising that they are either very shy of men and boats during the day-time, or else actively hostile.

Afternoon lengthens into early evening. Many birds are about. Most of them we have already seen including the hammerkop (*scopus umbretta*). Here is one of these sepia, heron-like birds not ten yards from us, looking for frogs along the water's edge. The thick crest projecting behind his head seems to add weight and purpose to every jab his sharp bill makes into the shallow water. Not far away, growing out of the steep bank, is a large tree: in a fork of the lower branches is a gigantic nest built of sticks and grass plastered together with mud. A round hole low down to one side leads to the central chamber. It is a hammerkop's nest and has probably been used for several generations. There is a local superstition that should anyone be foolish enough to pull down one of these nests his own house will undoubtedly be destroyed by fire within a year!

I have no desire to put this superstition to the test but think the nest warrants a closer inspection. We accordingly push the canoe ashore a furlong or so ahead where the bank is somewhat lower and the ground more open, intending to force our way through the dense, high grass, along the top of the bank back to the tree. All goes well for a hundred yards as we follow a hippo 'tunnel' that winds through the grass in roughly the right direction. Presently we are obliged to leave this as it bears too far inland. We push our way through the grass in single file for another fifty yards when we hear, above the sound of our own noisy progress, a loud swishing, crackling, thrusting noise. This is accompanied intermittently by low munchings and an occasional hiss like an engine letting off steam. We stop and listen. I quietly replace the soft-nose cartridges in the rifle with solids and the four of us whisper 'tembo' (elephant) simultaneously. We press back towards the bank—it is impossible to do so quietly—and as we turn an elephant's head, facing us not thirty yards away, appears for a moment above the grass. We push on noisily, making no attempt to be quiet, and the elephant, by now quite certain of our presence, lets out a shrill and what at close quarters sounds the most terrifying scream. We regain the open and race across the last fifty yards of short turf that separates us from the canoe, reaching it just before the elephant emerges from the long grass behind us. There he stands for a moment, trunk raised trying to catch our wind, ears spread out like giant lotus leaves at right angles to his head, massive tusks black with age thrust belligerently forward and one raised front foot swinging menacingly too and fro, evidently bent on mischief.

The three boys scramble into the canoe while I cover them from a firm stance on the bank. What we have done to upset him I know not but evidently we're not wanted, for the elephant lets out another scream and lurches forward towards the canoe. The time has evidently come to take defensive as opposed to evasive action and that pair of tusks will in any case make a not unworthy trophy. There is no time for us to push out from the bank into deep water where with the aid of the current we might evade his onslaught, so, not wishing to risk unsteady shots from a wobbling canoe, I fire from the bank.

He drops to a frontal head shot before he has advanced five yards, but the bullet evidently misses the brain as he slowly rises into a sitting position. I dart along the bank for a few yards the better to get at him from the flank, and as he regains his feet drop him once more with a shot where I think the heart should be. He rolls over on to his side, his flanks heaving, trunk never still, until from close quarters I place a third bullet in the brain through the back of his neck, which finally settles him.

I look round: the canoe is in mid-stream fifty yards away, the paddlers battling bravely against the current!

Two hours later we have a fine symmetrical pair of tusks in the canoe.

The sun has now set. The Iringa escarpment to the west shows up in black relief against the opalescent sky. The colours are reflected in the glassy surface of the river to our front: the blue-black velvet of night creeps up behind us. Some way ahead a hippo breaks the surface close in to the side, he lumbers up the bank, stands pensively for a moment then disappears into the grass.

An owl glides silently out of the fish eagle's tree. A night-jar's vibrant 'chirrup' echoes over the water; lesser 'chirrups' from crepuscular insects keep the air in constant vibration and bull-frogs maintain a croaking commentary from the swamps. A bat flits across the moon as night descends on the Kilombero.

*This article has already appeared in "The Field" and is reprinted by courtesy of its editor.—Ed.

LAKE MANYARA.

The phenomenon of a salt crust which disappears as it is approached.

By J. H. Harris.

INTRODUCTORY.

Lake Manyara is about $28\frac{1}{2}$ miles long and 10 miles wide at its widest. Its northern tip is at latitude $3^{\circ} 25'S$ and longitude $35^{\circ} 22'E$. It lies at an elevation of 3,180 feet with its major axis roughly N-S and is visible from the Great North Road and the Makuyuni-Oldeani Road. The lake is full of brackish water during the rains, when it covers an area of about 166 sq. miles to a depth of not more than about 6 ft. Usually by September it has dried up with the exception of pools at the northern and southern ends and salt lagoons in the centre of the west bank. In years following poor rains the southern end is quite dry. This was the case in October 1948. On 15th November, during the course of a flight over the salt lakes, the lake was observed by the writer to be already completely flooded except for a narrow lateral ridge in the centre. On the same day Eyassi and Balangida were still dry. Travellers on the roads skirting the lake have remarked the glistening, white appearance of the lake-bed when dry. This has given rise to the impression that there should be a vast sheet of salt or salts available for exploitation. A few tons of crust (possibly up to six) are collected annually by natives from the southern end. The crust is largely sodium carbonate, much contaminated with earthy material and grey in colour. It is sent to Dodoma and marketed to the Wagogo who incorporate it in their snuff. The wholesale price in 1948 was Shs. 22/- per 100 kg.

It was to investigate the possibilities of a large area of exploitable salt-crust that this reconnaissance was undertaken in October 1948.

GEOGRAPHICAL NOTES. (1) (7)

The lake is bounded on the west by the sheer Rift Wall rising generally 2,000 feet, in places more. The rocks are gneisses etc. of the Basement Complex except at the northern end where they consist of young volcanics. At the foot of this escarpment, the lake shore varies in width from nothing at the hot springs to a few miles of forested alluvium, widest where the annual rivers have formed fans or deltas. At the northern end a perennial river, the Mto wa Mbu, ("Mosquito River"), previously re-inforced by the perennial Kiruruma, flows from the "country of giant craters" strongly into the lake and forms a permanent lagoon, brackish on its southern shore as evidenced by the line of flamingoes which make it their habitat.

On the 10th October, 1948 the Kiruruma river was flowing at a rate of possibly 35 cusecs. At the road-bridge there is a picturesque cascade of fresh water (222 parts per million, total dissolved solids) in a pleasant, tree-shaded spot. The temperature of the water at 13.55 hours was $22^{\circ}C$, the air temperature being $31^{\circ}C$ in the shade. A portion of this cascade is diverted by a furrow and serves to drive an overshot water wheel at a grain-mill nearby, the tail-race from which discharges into the Mto wa Mbu. On the rocks in the cascade a growth of red-brown algae was noted.

Another small river at the north but further east forms a swamp only. The northern and north-westerly shores are thickly forested and abound with big game and tsetse fly, which are also well in evidence all down the western shore.

The hot springs, which are centrally located, issue from below a mass of large boulders immediately at the foot of the escarpment. There are a score or so of springs. They join to form three streams which make a salt marsh near the rocks and three salt lagoons further out.

To the south-west a number of perennial streams flow into the lake and form a marshy area and, in years of good rains, a lagoon. There is European farming activity in this section.

To the south is the peculiar country of Umbugwe, (5) evidently at one time a part of the lake bottom. It is completely flat and barren. The villages of the Wambugwe, the resident tribe, now fast dying out, are low-built, hollow squares with flat, mud roofs. There are a few doum palms, little water and no grass. During the day the entire surroundings are obscured by mirages and the unwary traveller caught in this bottom can easily be lost. In the evenings during the dry season the easterly winds sweep blinding clouds of dust across the lake and the up-draught against the escarpment carries the dust thousands of feet up in the air. Viewed from the Great North Road this phenomenon appears as if it might originate from a row of smoking volcanoes.

At Mwadukani in Umbugwe there are fresh-water wells at a shallow depth (*vide infra*). To the south of this, at Mbugwe Roman Catholic Mission, the basement rocks outcrop again and there is a deposit of a limestone, from blocks of which the mission has been built.

The Wambugwe withdrew into their peculiar country, it is said, as a protection against the Masai. Marauders would indeed find difficulty in locating their victims in this land of mirages and would themselves be seen a long way off. The Wambugwe take their cattle away over to the foot of the escarpment for food and water and bring them back at night. They plant their crops there too, or to the south of Lake Sereri. Umbugwe is merely their dormitory.

On the east the lake shore rises slowly into the Masai Steppe, the eastern wall of the Rift being ill-defined. Middle Pleistocene lake deposits have been discovered here by LEAKEY and described by KENT (13). To the south-east lies Lake Sereri, dry in the dry season and reputed to have contained salt or soda at one time.

In the language of the Wambugwe (3), Lake Manyara is called Lawa ya Mweri ("The Lake of the West") in contradistinction to Lawa ya Sereri (Lake Sereri) (9) (Lake Burungi) (7) ("The Lake of the East"). The two must have been joined at one time. "Manyara" is a Masai description, not for the lake but in general for a lake-shore region.

To the north is an open plain with recent calcareous rocks and nodules. This must also have been part of a lake bottom at one time. Ostriches abound.

PREVIOUS EXPLORATION.

The earliest description is that of BAUMANN (2) who marched through Umbugwe, after a pitched battle with the then-hostile natives, in 1892 and then up the western side of the lake, reaching the hot springs on the 10th March, 1892. The sample of water collected by him on that date was very similar to that collected by the present writer except that the latter was lower in chloride and sulphate (see Appendix I). BAUMANN noted a temperature of 80°C in the hot springs. (Compare the readings on the 8th October, 1948 of from 42°C to 72°C). He described the ground of Umbugwe as salty and the water in rainponds as undrinkable (see Appendix I for analysis of ground water, 11th October, 1948; quite drinkable). He says:—“The lake itself seems in parts as if it were frozen because of the glittering salt layers which lie on the sand-banks.” On the 11th March, 1892 he reached the northern end of the lake and noted a thick, muddy, grey-white salt deposit.

The lake is also described by UHLIG (3) who says:—“All around the edge of the lake the ground is covered with snow-white salt crust. The vegetation around the lake is very poor, especially on the eastern shore. Here the rainfall is barely 20 inches”. The rainfall, as noted from records at Mbulu, is still the same at the present day.

STROMER von REICHENBACH (6) gives a description of the terrain based on BAUMANN'S observations, and comments that it seems unlikely that Lake Manyara and Lake Natron were at one time connected, owing to the difference in levels.

GAGEL gives some description of the salts (4) and considers them worthless as a source of salt or soda. An excellent description of the lake and its environs is given by WATERMEYER and ELLIOTT. (10).

COMMUNICATIONS AND ITINERARY.

Mbugwe (Mwadukani), where there are a Mission and a Rest House, is reached by a track 2 miles long leading west off the Great North Road at a great baobab tree 25 miles from Babati. The main road on this stretch is notable for atrocious corrugations. From Mbugwe a road leads to the farms to the south-west of the lake but thence the route north is impassable, except on foot. When the lake is dry it is possible to take motor vehicles right up the eastern fringe of the lake on the lake bottom. Indeed this practice is much favoured by many local people as preferable to driving on the main road. With a suitable vehicle it is sometimes possible to drive E-W across the lake when dry. (10). From the north, hunting roads run down the western shore from Mto wa Mbu on the Makunyuni-Oldeani Road but, in order to get very far, bridging is necessary for the river crossings. The leaders of hunting safaris are careful to remove their bridges when they leave the area so the ordinary traveller is barred from passing unless he becomes a bridge-builder himself. If one can pass the main rivers a suitable vehicle can be driven with due care down the lake bottom on the western shore as far as the hot springs.

The writer was equipped only with a small car so the approach to the hot springs was made by driving from Babati, where there is a good rest-house, westwards through Dareda (7) or Ndareda (9) to the northern tip of

Lake Balangida, (7) (8) (9) up the escarpment via Dongabesh to Mbulu, and thence north and east to Endabash. (9). Here the car was left and the journey continued on foot with the aid of porters and guided by Mr. G. T. Fourie and an Mbulu chief, Ama s/o Batana, down the much dissected south side of the Endabash gorge (Dawasch) (1) to the shore of the lake and thence south to the springs. On this journey it is necessary to carry fresh water and be very wary of elephant, rhino and buffalo, with which several encounters were experienced. After examining the springs and the lake bottom the return journey on foot (this time up the north side of the Endabash gorge, a steep but easier climb) to the car was made. Thence the route followed was northwards to Karatu and east to Makuyuni, (9) a good view of the lake being obtained from the top of the Rift Wall. Thence south and west to Mbugwe and up the eastern part of the floor of the lake to Mfulu wa Magadi whence the natives collect a very small amount of soda. The return to Dodoma was made via Mbugwe and Babati.

THE SALT CRUST.

The earlier explorers mentioned a ring of white salt crust round the lake and a muddy salt deposit at the northern end. BAUMANN collected specimens from the northern and southern ends. A small native trade in soda persists to this day. The striking shimmering white appearance of the lake bottom in the dry season, which, viewed from the highways, gives the impression of an immense deposit of salts, had not, however, been previously investigated. The first close view obtained by the writer was indeed most encouraging. Descending the Endabash gorge an impressive panorama was disclosed at a point 500 feet above the lake bottom where a cleft in the Rift Wall presented a view of two-thirds of the lake. The northern lagoon was out of sight but just south of it the whole bottom of the lake for about half its length might well have been covered with snow. South of this appeared a brown, sandy patch and beyond that could be seen the salt lagoon surrounded by a white border. The source of the springs was out of sight. There appeared to be half a mile between the main crust and the border of the lagoon. During the hot midday as one walked southward along the lake shore at a slight elevation above the lake bottom, the glaring, white appearance persisted, until the hot springs were reached. From there the appearance of the lake bottom was somewhat different.

Three salt lagoons were visible. The largest, which is also the most northerly, had a dark wet patch around it, on the 8th October, 1948, surrounded by a white encrustation which was red-brown with algae where it was wet. There then appeared to be a gap of brown, sandy bottom followed by a white area filling the rest of the lake northwards. From this viewpoint the brown gap looked about a mile or perhaps a mile and a half wide. After sampling the hot springs the writer, accompanied by the Mbulu chief, walked out on to the lake bottom, skirted the lagoon and made for the white area. The white crust round the lagoon was found to be papery-thin. When the brown area was reached, widely-scattered small efflorescences of salts were found, like worm-casts, each a few grams in weight. On continuing the approach to the white area it was, however, astonishing to discover that actually it did not exist. The white area was merely an appearance. The further one walked towards it, the further it receded. There was nothing there.

On questioning, the Mbulu, who had lived in the area for over 40 years and had crossed the lake on foot from north to south and east to west, agreed that there was no large white deposit. Before his time, small collections of salt and soda had been made by natives at the northern end of the lake but according to him, the only source of soda now was at the southern end.

Returning at dusk to the hot springs the writer noted the white appearance apparently following him back. Closer inspection showed that the brown gap mentioned above was a damp patch beyond the white border of the lagoon. The white appearance now occupied the area noted as brown sand dotted with efflorescences. On arrival at the vantage point of the hot springs just before sunset the lake bottom re-appeared as a sheet of glistening white!

As soon as the sun set the white disappeared and the lake bottom became a uniform brown. At dawn the next day it appeared grey and, as the sun rose, it became whiter until, by mid-morning, the glaring, white "salt crust" had returned to the view.

As an explanation of this extraordinary phenomenon, the theory advanced by the writer is that the sandy lake bottom is impregnated with salts, from the facets of which the light of the sun is reflected whitely. The reflected light is made more intense by the fluorescence of the salts in ultra-violet light, as noted by tests with a screened mercury-arc lamp on returning to the laboratories. The reflections and fluorescence are dispersed by the heat haze and give rise to the amazing snowy appearance which suggests a continuous thick salt crust.

WATERMEYER and ELLIOTT (10) must have been thus deceived (op. cit. p. 63); but their "two-inch crust of alkaline crystals and dried algae" must have been only impregnated sand. Had it been crust it would have been harder and compact.

This appearance was again much in evidence from the vantage point north of the lake where the Oldeani-Makuyuni Road drops over the edge of the escarpment on the way down to the Kiruruma River bridge and Mto wa Mbu. It shows up south of a black, damp border beyond the line of flamingoes (*vide supra*).

In search of the source of the small known annual production of soda a visit was paid to Mwadukani and the services obtained of an Mbukwe guide. The route indicated was traversable by the writer's small car at that date and led through Kaiti (7) north to Mfulu wa Magadi. This is the point, shown better on the older map (1) where the "Hufu-wadja" enters the lake from the east. The track can be seen running south through "Ngeti" to "Kothersheim". Actually the writer drove well out on to the lake bottom to avoid the numerous "Mfulu" (the local word for riverbed). The lake bottom here at the southern end is sandy and no white appearance is to be noted.

A few scattered pieces only of sandy, grey soda-crust were found. The guide volunteered the information that the whole of that season's crop had already been collected. There might have been a little more further north but this was doubtful.

The Indian trader at Mwadukani, who purchases the crop and forwards it to Dodoma, confirmed the guide's statement and said that, at the most, 6 tons per annum were collected.

Nowhere could the rim of white salt around the lake, mentioned by earlier writers, be detected.

THE HOT SPRINGS.

During this reconnaissance special attention was paid to the hot springs, since it was evident that the major portion of the supply of salts to the lake must come from this source, the rivers which feed the lake from north, west, south and, to a lesser extent, east being comparatively fresh.

Here, again, the quantity of salts involved is small. The strongest flow is the most northerly, where about 5,000 gallons per hour flow into the salt lagoon. A sample of this flow on the 8th October, 1948 contained only between 2,000 and 2,200 parts per million of total dissolved solids. A typical analysis is given in **Appendix I**. From this source, then, a mere 450 tons of salts per annum enters the lake. This quantity might perhaps be doubled if the flow of all the springs be taken in consideration.

As previously mentioned, the hot springs issue from below a collection of boulders of crystalline rocks at the foot of the escarpment. WATERMEYER and ELLIOTT (10) mention that the hot springs mark the junction between gneiss and volcanics but the observations of the present writer do not confirm this. Basement rocks were noted on both sides of the Endabash, 4 miles to the north of the hot springs. The junction must be further north than this. The main game track crosses the springs and caution is necessary in working here. The author's party was surprised by a galloping buffalo while taking temperatures in the narrow strip of ground between the rocks and the salt marsh and again before dawn the following morning by a herd of elephant which, apparently to avoid walking through the salt springs, had chosen an ill-defined path through the boulders above, where the camp had been precariously pitched to avoid, as it was thought, such a contingency. Two buffalos which must have been scared off the narrow track were found bogged down and dead in the salt marsh.

When the hot springs issue, their temperature was as high as 72°C, but variations down to 35°C were noted in the seventeen readings taken at accessible points. Their course to the marsh is marked by deposits of salts and a growth of red algae. The smell of sulphuretted hydrogen is to be noted but it is more marked in some places than in others. No fish were found in the vicinity.

Northwards from the hot springs there is a short open stretch of bouldery shore; then a big patch of shade trees in which it is inadvisable to camp because of tsetse and elephant. North again is an open stretch followed by the forest at the foot of the Endabash through which a well-defined track has been beaten by the game.

At this point fresh water can be obtained from a spring which issues from the escarpment (total solids around 400 parts per million, see **Appendix I**) but it may be necessary first to chase away a herd of elephant if, as was the case on this occasion, their normal pools in the course of the Endabash are dry.

ECONOMIC POSSIBILITIES.

It seems clear that the economic potential of the lake is very low. The rim of salt around the lake which existed at one time is no longer in evidence. Presumably it has all been collected. There is no more salt or soda available at the northern end. The small efflorescences of soda on the east are cropped annually and amount to a very small figure, almost certainly under 10 tons.

From the writer's own observations, a crop of small efflorescences not as rich in soda as those from Umbugwe could be obtained over a wide area of lake bottom southwards from the north lagoon, but foot or specially-devised motor-transport would be necessary to collect it during the short season of the year when the bottom is dry. The total tonnage available in this way might reach three or four thousand tons. A full examination of the lake bottom would be necessary in order to confirm this. Naturally it is uncertain that, after the first crop had been removed, the regeneration by efflorescence would be of the same order. A reduction could be expected. It seems certain, however, that the cost of collection would render the enterprise uneconomic.

There remain two possibilities. First that the sub-surface of the lake bottom is sufficiently rich in salts to render extraction a feasible proposition. The present writer considers this unlikely but, again, detailed pitting would be necessary before a definite conclusion could be reached. Second, that it may be possible to treat the brine in the lake, when it is flooded, by pumping it to evaporating ponds for treatment during the dry season (see **Appendix I**, analysis No. 3).

However, the salts are a mixture of chlorides, sulphates and carbonates, chiefly the last, so that a complex process would be necessary for the extraction of common salt and, eventually, other economic salts for which, however, there is no market at present.

Finally the rate of regeneration of the salts is apparently very low so that the life of any large-scale operation would be limited.

At Babati, Mbulu, Oldeani and Mto wa Mbu the salt offered for sale is a sea salt imported via Arusha from Aden.

ACKNOWLEDGMENTS.

The author desires to express thanks, for valuable advice and comment, to Mr. J. A. Stevens, who accompanied him on this reconnaissance; to Mr. G. T. Fourie, who suggested the route down the Endabash and whose cool-headedness saved the party from grave danger; to Ama s/o Batana for information of local conditions, to Mr. R. C. H. Risley, District Officer, Mbulu, who made the services of Mr. Fourie available and to his wife who accompanied the party and provided translations of old German records.

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APPENDIX I

Chemical Analyses.

- Hot springs, Lake Manyara, 8th October, 1948(12)
- Hot springs, Lake Manyara, 10th March, 1892 (2), temperature 80°C
- Water of Lake Manyara, 10th March, 1892 (2)
- Water from spring at foot of escarpment near Endabash River, 8th October, 1948 (12)
- Water from Kiruruma River, 10th October, 1948 (12)
- Water from 2-3ft. depth, Mwadukani (7), 11th October, 1948 (12)

		Parts per million					
		1	2	3	4	5	6
Total dissolved solids	...	2205.2	2230	—	—	222.0	—
Silica	...	98.4	—	—	28.8	61.4	25.2
Oxides of iron, alumina, etc. (R2O3)	...	9.3	—	—	16.4	1.5	12.0
Calcium sulphate	...	7.3	—	—	7.2	7.3	26.2
Sodium chloride	...	388.9	620	4800	74.2	13.2	42.9
Sodium sulphate	...	45.1	110	530	44.4	4.6	249.9
Sodium carbonate	...	1505.2	1500	12040	50.1	38.5	72.3
Potassium carbonate	...	15.3	—	—	—	—	13.7
Calcium carbonate	...	8.0	—	—	122.0	—	358.0
Magnesium carbonate	...	11.3	—	—	51.0	43.7	63.9
Organic and undetermined	...	116.4	—	—	53.5	51.8	—
Potassium sulphate	...	—	—	240	—	—	—
Sodium phosphate	...	—	—	120	—	—	—
Sodium sulphide	...	—	—	trace	—	—	—

7. Salt crust, Lake Manyara, north end, 11th March, 1892 (2)
8. — ditto —(4)
9. Crude soda from south end of Lake Manyara (2)
10. Salt earth from Lake Sereri (9) (Lake Burungi) (7) (2)

				Per cent			
				7	8	9	10
Sodium chloride	...	...	...	39.64	59.5	5.38	2.31
Sodium sulphate	...	...	...	1.31	22.7	20.46	4.05
Sodium carbonate	...	...	...	10.48	13.1	48.63	12.92
Sodium phosphate	...	...	...	0.40	traces	0.34	—
Clay and sand	...	...	...	48.17	—	25.19	80.72
				100.00	95.3	100.00	100.0

APPENDIX II

Compass bearings.

The following are rough prismatic compass bearings:—

Date:—8th October, 1948.

From northmost hot spring to Wembe (7)	...	...	...	...	149.
" " " " " Lolkisali	...	...	...	...	106.5
" " " " " Olmerera (1)	...	...	...	...	5.
—ditto— to N.W. limit of northerly salt lagoon	...	...	...	...	39.5
—ditto— to S. " " " "	...	...	...	...	107.
—ditto— to N. " " southerly " "	...	...	...	...	129.

Date:—11th October, 1948.

From Mfulu wa Magadi to Wembe	...	...	...	...	173
" " " " " Olmerera	...	...	...	...	335.5
" " " " " Hot springs (estimated)	...	...	...	...	318.

APPENDIX III

Fluorine Detection.

It was pointed out by Mr. J. A. Stevens that, since local presence of fluorine in drinking water gives rise to fluorosis in teeth, observation of local inhabitants will give a qualitative indication of the presence of fluorine. The degree of mottling can even be used as a rough quantitative estimation. Fluorine was thus detected in the waters of the plateau around Endabash.

NOTES ON THE BIRDS OF THE NGARA DISTRICT

By L. A. Haldane.

INTRODUCTION

The following notes are the fruit of three years' residence in the Ngara District, which borders on the Belgian territories of Ruanda and Urundi, a part of Africa which seems to have been neglected ornithologically. The numerous calls of duty have prevented any but a superficial survey of bird life in the district and have hindered systematic observation, but much of my time was spent in touring and, except for certain areas along the Ruvuvu river and parts of the uninhabited bush, I have visited the whole district at most seasons of the year. This paper may at least provide some more scientifically-minded successor with a basis from which to work. I am most grateful to Mr. R. E. Moreau for his kindness in reading this paper in draft and for his suggestions and comments, particularly those on palaearctic migrants, and to Mr. J. G. Williams of the Coryndon Museum for identifying the specimens I collected.

In Part I a description of the situation, vegetation and climate of the District is followed by a short general account of the birds, their habitats, population, breeding and human relationships, economic and social. Part II comprises a list of all the birds seen by me, their English, native and scientific names, with brief notes on their local occurrence, numbers and habits, and some of the tales or superstitions with which the natives surround them. Part III contains four short bird stories collected locally.

PART I

Situation, Vegetation and Climate

The District has an area of 1,045 square miles and lies between parallels 30° 24' and 31° 5' East and 2° 21' and 3° South. A third of the area is taken up by the Chiefdom of Bugufi and the remainder by Busubi.

Bugufi, a prolongation of the Urundi Highlands, consists of a Y-shaped ridge rising to just under 6,000 feet a.s.l. with extensive views to the south-east over the Busubi plateau to Nyamagoma and the mountains about Kibondo while to the north-west beyond the mist-filled valleys of Ruanda six or seven of the volcanoes near Lake Kivu can be seen on a clear day. The main ridge of mountain grassland was once covered with thorn bush which has been removed by the increasing population; and now bananas, fig trees, coffee and fields of annual crops, mostly millet, beans and potatoes, together with numerous small plantations of wattle and eucalyptus form islands in a sea of grass. The outer edges of the ridge fall away in rocky scarps or steep boulder-strewn slopes to open bush country which begins at rather over 5,000 feet. At 4,300 feet the Kagera and Ruvuvu rivers form the northern boundary with Ruanda and the south-eastern boundary with the Biharamulo District and Busubi. The Kagera flows through a wide papyrus swamp sparsely dotted with forested islands, the Ruvuvu is bordered by a narrow fringe of evergreen forest broken here and there by small grassy plains which become flooded in April. The two rivers unite at the north-eastern tip of the district just above the Rusumo Falls.

There are numerous perennial springs breaking from the flanks of the ridges and these unite to form streams flowing through swamps; these were formerly papyrus-filled but now, as a result of intensive dry-season cultivation, most of them support only reeds and coarse grasses in the rains.

The Chiefdom of Busubi to the south-east, which is in many ways similar to parts of Ankole, consists of a considerable plateau gently tilted from a terminal ridge at 6,000 feet a.s.l. in the south to 4,500 feet in the north. This plateau is much riven by valleys, many of them steep and deep, and is interrupted by occasional higher ridges; the bottoms of many of these valleys are filled with papyrus and fringed with evergreen thicket or forest though open grassy valleys also occur. These swamps are much less cultivated than in Bugufi, the population being less than a third as dense, and the swamp vegetation is well able to hold its own. The main effect of human occupation has been on the moderate bush which covers most of the country. The people are of a peregrine habit, the least set-back is attributed to the ill-wishing of neighbours and results in a move to another village. The consequence has been a widespread removal of all useful trees from the bush and a countryside littered with abandoned homes and fields with scrubby bushes, rank weeds and grasses and occasional fig trees and bananas to mark the site. The temporary nature of their occupation means that only a few of the trees are felled and sufficient are left to give cover to the Tsetse fly which has spread widely in recent years.

The comparatively short grass of the higher south is replaced over the greater part of the country by a cover of very tall dense grasses, whether in the open or under light woodland; the fierce fires occasioned by its burning help to nibble away at what remains of evergreen forest or thicket.

In the east and south the plateau breaks sharply down to tsetse bush similar to that which stretches almost without interruption through the Biharamulo District to the shores of Lake Victoria, and to the Mwerusi Valley, a hot depression between the mountains of Busubi and Kibondo, rather arid and covered with a stunted but persistent fleshy-leafed bush except where the impermeable soil pours its water into shallow grassy valleys. This is the only part of the district draining into Lake Tanganyika, the remainder being part of the Lake Victoria system.

The average annual rainfall at Ngara in Bugufi is 40 inches, ranging from 53 inches in 1946/47 to 29 inches in 1942/43. The rainfall in Busubi is believed to be about five inches a year less though this is not borne out by the few years' records available. The soil is more gravelly in Busubi and rainfall at any particular point is erratic so that for a given rainfall there is probably less water available for the plant. The rains begin in September or October, lessen slightly in January and February and resume again from March until May. December, February, March and May all average over four inches, November over five and April over seven. At Ngara rains fall on an average 133 days in the year and there are many overcast days so that the earth remains moist for a large part of the year. June to August is generally rainless though sometimes heavy showers occur; these are not as welcome as might be supposed since they presage poor early rains. Hailstorms are not infrequent while in Bugufi lightning is often fatal to man and beast.

The temperature is moderate with cool, sometimes cold, nights. The daily variations in temperature mask the seasonal but June and July are generally colder with morning mists and September, October, February and March the hottest. It can be very hot in the sun but the air is generally cool, the maximum shade temperature for the month does not vary from 75°, nor the minimum from 56°, by more than a few degrees throughout the year; the lowest ground temperature recorded on the top of the ridge was 43°F. With the sky overcast and a stiff breeze blowing it can be decidedly chilly, but at the same time of day climbing up one of the steep rocky scarps with the sun on one's back it can be distressingly hot.

Avifauna

General—The birds of the district are prevalently East African, as its position would lead one to expect; there is no barrier to the east and the typical Tanganyika "bush" only gradually thins out to the grasslands of the western borders. Kivu and the Congo are however not far to the west and the following species found in Ngara reflect this:—

Erranornis albicauda
Buphagus africanus
Othyphantes stuhlmanni
Melanopteryx nigerrima

Musophaga rossae
Crinifer zonurus
Alseonax aquaticus
Platysteira cyanea

A collection of the more obscure birds of the evergreen forest might add considerably to this list. The few species collected from different parts of the District (mostly Sunbirds) seem to show racial affinities with the east rather than the west.

Habitats:—There are seven main types of country found in Ngara.

1. Mountain grassland at 5,500 to 6,000 feet a.s.l. in Bugufi and southern Busubi, often boulder-strewn, and supporting such birds as Pipits, Larks, Long-claw, Warblers, Bunting, Malachite Sunbird, and the Sooty Chat. It is burned over in the dry season and produces a plentiful crop of wild flowers. It is broken up here and there by fields of annual crops, by numerous small plantations of wattle and eucalyptus which are unattractive to birds and by blocks of.

2. Banana and coffee plantations interspersed with groups of fig trees and the scattered homesteads of the peasant farmers. These holdings are frequently allowed to become very overgrown when they provide shelter similar to that of the evergreen thickets of a lower elevation. Unpruned coffee bushes are a favourite site for the nests of Finches and Canaries. Thrush, Robin, Bulbuls and the Double-toothed Barbet are plentiful here, while Arnott's Chat and the Red-faced Barbet occur where there are fig-trees and Wagtail, Sparrow and Firefinch round the huts.

3. Rocky bluffs appear at the edge of several of the ridges and provide a home for Cliff-Chat, White-necked Raven and Speckled Pigeon.

4. Moderate bush or woodland of varying density consisting of unprofitable twisted deciduous trees fifteen to twenty feet tall with a strong grass carpet covers most of the district below 5,500 feet. It is burned through each year and is unexciting.

5. Riverine evergreen forest and thickets at 5,000 to 4,300 feet occur along the rivers, the edges of swamps and some of the streams and water-courses. For the most part these strips of evergreen vegetation are very narrow except in a few favoured places where several valleys unite at one point. These latter would probably repay closer investigation; there are a number of Bulbuls and Flycatchers in them which are hard to distinguish in momentary glimpses.

6. Valley bottoms with perennial streams. Some of these have been drained leaving rectangles of comparatively dry land between the ditches where Herons, Storks, Ibis, Ducks and Geese can be found feeding. Elsewhere the streams run through grassy meadows or are choked in thick papyrus swamps where the dense vegetation and uncertain footholds make observation difficult except for the Blue-headed Coucal spreading out on a papyrus "mop" or calling from some tangle.

7. The Mwerusi Valley and the low-altitude bush at just over 4,000 feet. This area has affinities more with the south and east than with the rest of the district. The black-faced Plantain-Eater and the Southern Carmine Bee-eater occur there and the tubby Swamp Flycatcher, which are absent from the rest of Ngara.

Migration and Population. There is a distinct paucity of palaearctic migrants, only 7 or 8 species having been noted, and these not in any great numbers. Some of the plainer birds may have escaped observation but such birds as *Lanius minor*, *L. collurio* or *L. cristatus* can hardly have been entirely missed over three seasons had they been there. It would be interesting to know if this is typical of western Tanganyika or whether Ngara merely happens to be in a pocket between two streams of migration.

In general, although I have noted a fair variety of birds, it is surprising how many have been seen only once or twice and how many of the remainder, though often widespread, are not present in any great numbers; Doves, Warblers, Widow-birds, Finches etc. are of course plentiful in parts but, except in particularly favoured places or at certain seasons, the impression is that there is room for many more birds than there are. Birds of the bush country especially seem poorly represented, one can walk for miles with hardly sight or sound of a bird and without meeting the bird parties which are so typical of some areas; bird parties seem conspicuous by their absence. Again I have often in the evening walked along a stream supporting an aura of insects without there being so much as a single swallow to enjoy the feast. Whether the birds of prey, which are numerous and unmolested by man, are responsible or whether it is some defect in the vegetation, either in providing food or nesting sites at a critical time I do not know. It is notable how many more birds are to be found in an arid desolate thorn-bush than in a type of country which on the face of it is more inviting. It is not altogether a case of easier observation I think.

Breeding:—I have not been able to get much data on breeding seasons but from a tabulation of such facts as I have it seems that the main breeding season follows the rains from October to June, the effects of the rains outlasting them. October, November, January and March to June have produced the largest number of birds with eggs or nestlings. Doves continue into July and are followed in August and September by Kites and other birds of prey. Notes on individual birds will be found in Part II.

Human relationships, Economic:—That the peasantry consider bird-scaring an intolerable imposition and hardly ever spend any time on it indicates that the depredations of birds are not very serious in Ngara, though the people are no doubt helped to their conclusion by natural indolence. That is not to say that there are not plenty of birds to reap what others have sown. Large parties of Crowned Crane work havoc in the potato and bean fields and Bishops etc. are a menace to rice in the Mwerusi valley. Partridges and Doves do small-scale but persistent damage to millet, Mousebirds to beans, Crows to groundnuts, birds of prey to chickens and other small stock, while various birds were made the excuse for the total failure of the sunflower crop in Busubi one year. The unfortunate domestic fowl itself tied up all day by the leg or its claws cut off when the beans are sprouting. Weavers, which are so often responsible for serious losses to ripening crops, are comparatively scarce. Stuhlmann's and Golden Weavers are ubiquitous but nowhere very numerous and the only colonial weaver is the Black-headed, which again is sparsely distributed.

Birds whose activities are beneficial to man are a more difficult problem as their work is less self-evident. Certainly when there is a plague of any particular insect there seldom seems a bird at hand to whom they are palatable. The caterpillar of a small potato-defoliating *Acraea* appeared perfectly unmolested. Even with those which we are prone to condemn it is likely that

"There is some soul of goodness in things evil,
Would men observingly distil it out"

and conversely the virtuous are not always all they seem.

Birds do not seem to be much an article of diet though several ways are used to trap them and, from time to time, a Partridge or Guinea fowl may be bought in the market for the third of the price of a skinny cock.

Human relationships—Social:—The people of Ngara have a firm belief in witchcraft, both good and bad, and soothsaying is a profitable occupation. One of the main tools of the trade is the liver and other viscera of birds, the markings on them being used to prognosticate the future and expound the past. Some birds are more used for this than others and notes of this appear in Part II. That most commonly used, as being the easiest to procure, is the domestic chicken (Inkoko), so much so that they never have time to multiply and fowls are at a premium. Besides this professional work each man is his own augur on the alert for birds of good-or-ill omen alighting on his house, crossing the path or calling by day or by night. Many birds and their nests or eggs are taboo and various misfortunes are supposed to follow any interference with them. This has its disadvantages when the bird is, for example, the Crowned Crane which is most destructive of crops, and it was perhaps a sign of the times when last year the Native Authority shotgun was in great demand for the reduction of the excessive numbers of this bird.

As is to be expected in a primitive community only the most obvious birds, or those of economic or social significance, appear to have names, there is much vague lumping and many people seem ignorant of even the commoner birds. About fifty names are sufficiently well authenticated for inclusion in Part II where they appear after the English name, and I have

another thirty or so which I have been unable to pin down. The language is Rundi with insignificant variations, though the people prefer to call it Hangaza or Subi according as to whether they live in Bugufi or Busubi.

PART II

For convenience the order followed is that in Sclater & Jackson's **Birds of Kenya and Uganda**. Except where specimens have been collected and identified (distinguished by an asterisk) or where sub-specific differences are clearly observable in the field only binomials have been used.

AFRICAN DARTER

Anhinga rufa

Along the Ruvuvu river but not very common.

BLACK-HEADED HERON, Nmusikina

Ardea melanocephala

Usually solitary though a pair was noted in March. Common throughout the district but more noticeable in Bugufi in the valley bottom cultivation, the cultivated flanks of the ridges or perched on the grass huts. The latter is reputed to be most unfortunate, presaging at least a compulsory move if not the burning of the hut or the death of its owner. Certainly the owner of one house on which I saw this bird standing shortly afterwards found himself on a charge of murder, though he got off in the end. To kill one of these birds is also disastrous, making one's wife barren and leading to the rapid demise of the children.

FURPLE HERON

Pyrherodia purpurea

In papyrus swamps in Busubi though not often revealing itself.

GREAT WHITE EGRET

Casmerodius albus

Once in a marshy valley in Bugufi.

CATTLE EGRET, Inyange

Bubulcus ibis

Parties only occasionally seen in Busubi. Locally known as the king of birds, possible due to its association with cattle which formerly all belonged to the Chief.

SQUACCO HERON

Ardeola ralloides

Only seen once, on sweet potatoes in a swamp in Busubi.

LITTLE BITTERN

Ixobrychus minutus

Single birds flushed from reed beds in December.

HAMMERHEAD***Scopus umbretta bannermani***

Occasionally single birds and twice in September parties of four. Not very common and I saw no nests. I was never able to get a satisfactory local name for this bird and there appear to be no tales told of it.

WHITE STORK, Amatarangabo***Ciconia ciconia***

Though I did not myself see any of these birds they are well known to the natives who say they come in December and show that it is time to plant millet. "Amatarangabo" is a plural indicating that they come in flocks. The singular "Itarangabo" is used for a generally solitary white Stork such as the Wood Ibis.

BLACK STORK***Ciconia nigra***

A small flock of what from European description seem to have been this bird was reported on grassland in south western Bugufi in early January. Confirmation of this would be interesting.

AFRICAN WOOLLY-NECKED STORK***Dissoura episcopus microscelis***

A single bird was noted circling above the Ruvuvu river in April.

ABDIM'S STORK***Sphenorhynchus abdimii***

March, October and November in considerable flocks.

YELLOW-BILLED STORK, Itarangabo***Ibis ibis***

Common singly or in twos and threes in the drainage channels of the valley-bottom cultivation. A flock of sixty or more on marshy grassland by the Ruvuvu in September.

SACRED IBIS***Threskiornis aethiopicus***

A common inhabitant of valley-bottom cultivation, generally singly though parties of 6 to 15 noted in successive Augusts.

NILE VALLEY HADADA, Inyanana***Hagedashia hagedash***

Along streams and marshes, usually singly, sometimes parties of four.

YELLOW-BILLED DUCK***Anas undulata***

Fairly plentiful in valley bottoms.

WHITE-FACED TREE-DUCK***Dendrocygna viduata***

In boundary swamp, not common.

FULVOUS TREE-DUCK***Dendrocygna fulva***

Boundary swamp.

SPURWING GOOSE, Igisapfu***Plectopterus gambensis***

Common in the valley-bottom cultivation singly or in twos and fours. In mid-February an adult was seen with about 12 young goslings; she made off up the road feigning an injured wing. Other small goslings were brought in in April, they were not fully adult by the end of the year. Youngish birds when kept and fattened for a few weeks made excellent eating. "Igisapfu" covers ducks and geese generally.

WHITE-HEADED VULTURE, Malele***Trigonoceps occipitalis***

Vultures are not very common, only once was a considerable gathering seen, too far away for identification. The present species was noted on several occasions, generally in threes, and twice in the roadway discussing a rather dry looking bone. The name "Malele" may be connected with "-lele"—high up, on high.

AFRICAN HOBBY***Falco cuvieri***

In the Mwerusi valley in March a party of twenty or more of these birds were circling and diving above a patch of low bush, the attraction being a rise of flying ants. In the air with them were various Swallows and European Bee-eaters while the bushes round were twittering with an assortment of small birds all taking their toll. On the nest itself an Augu Buz-zard was picking off the ants as they emerged; he soon went off and his place was taken by a small buck which licked them off with evident relish.

Single birds infrequently in Busubi.

SOOTY FALCON***Falco concolor***

Perched on a tree in Busubi in a patch of grassland flattened by cattle. A description noted at the time seemed nearer this bird than *F. ardosiaceus*.

FALCONS***Falco* spp.**

Falcons and Kestrels are not uncommon especially in the more open country. Included were, I think *F. peregrinus*, *F. tinnunculus* and *F. cuvieri*.

AFRICAN KITE, Agacha
Milvus migrans

Large parties in March and August particularly in the evenings when they circled about the eucalyptus trees. A pair built in the fork of a tall eucalyptus near the office in August and were sitting during early September for two successive years.

BLACK-SHOULDERED KITE
Elanus caeruleus

Sparsely throughout the district.

VERREAUX'S EAGLE, Impungu
Aquila verreauxi

Seen twice in the western Busubi planing over Nshiri Hill. The natives state that they come from the uninhabited hills of western Biharamulo, but nobody seemed to know anything about their nesting. They reputedly trap them from time to time when they take to raiding small livestock, using a kid as bait.

TAWNY EAGLE, Ikinyamwanira
Aquila rapax

Noted several times in Busubi. "Ikinyamwanira" covers most of the brown Eagles.

WAHLBERG'S EAGLE
Aquila wahlbergi

Several shot for chicken-stealing.

MARTIAL EAGLE, Ikizu
Polemaetus bellicosus

Not uncommon, took one of my White Leghorns.

LONG-CRESTED EAGLE, Samusuli
Lophæetus occipitalis

Very common throughout the district perched on a tree or hut or squealing in the air.

BROWN HARRIER-EAGLE, Ikinyamwanira
Circæetus cinereus

BLACK-BREASTED HARRIER-EAGLE, Ikinyamwanira
Circæetus pectoralis

Not uncommon.

BATELEUR, Inghona
Terathopius ecaudatus

Common, said by the natives to nest in July and August and a nest high up in the fork of a *Stereulia*-like tree in a wooded valley was indicated as its nest. If you see it flapping and calling you know a friend will die while its calling above a house is a sure sign that the owner will die; I suspect some confusion with the Augu Buzzard.

FISH-EAGLE***Cuncuma vocifer***

Only seen once, on a tree bordering the Ruvuvu. The Vulturine Fish-Eagle (***Gypohierax angolensis***), breeding at Biharamulo, seems quite absent from the district though there are suitable places for it.

AUGUR BUZZARD, Igisiga***Buteo rufofuscus***

Common, and the black variety is also plentiful. In mid-March a bird was sitting on a nest on the lateral branch of a eucalyptus, about 30 feet up. There was a colony of occupied ***Sitagra nigriceps*** nests in the branches round about. This was one of the few times when any sort of symbiosis was noted in connection with birds' nests in Ngara. The absence of wasps' nests near the nests of Finches, etc. which is such a feature of eastern Tanganyika was particularly noticeable. There seemed to be no wasps of the right kind.

BANDED GOSHAWK***Astur badius***

Busubi.

GABAR GOSHAWK***Melierax gabar***

Mostly on trees between open country and streams.

PALLID HARRIER***Circus macrourus***

Common in the season. Earliest 16/10, latest 23/3.

EUROPEAN MARSH-HARRIER***Circus aeruginosus***

Busubi in March.

AFRICAN HARRIER-HAWK***Gymnogenys typicus***

Chiefly in Bugufi where it is frequently seen perched on a tree or walking over newly turned soil in search of food. It was also noted attacking Weaver nests.

BUTTON-QUAIL***Turnix* sp.**

Common in grassland.

COQUI FRANCOLIN, Inkwale***Francolinus coqui***

Widespread in grassy areas but not very common.

VERMICULATED FRANCOLIN, Inkwale***Pternistis cranchii***

Very common throughout the district, not much of a flier. If you flush this bird and it calls when you are going to visit a friend you will be sure to find him out. To meet one perched on the house presages great misfortune.

HELMET GUINEAFOWL, Inkhang
Numida mitrata

Rather local. Threes from February to April, later in larger parties especially in bean plots by the edge of papyrus swamps in the early morning.

RED-KNOBBED COOT, Ichoga
Fulica cristata

Rarely in ditches in valley bottoms. There are not sufficient permanent stretches of water to attract the Rails and Crakes. The annual flood-ponds along the Ruvuvu are of too short duration to allow suitable vegetation to establish itself.

PETERS' FINFOOT
Podica senegalensis

A pair were seen once on the Ruvuvu swimming out to the centre of the river; there they turned and half-swam, half flew, finishing with a dive, back to the shelter of the trees overhanging the bank.

GOLDEN-CRESTED CRANE, Umusambi
Balearica regulorum gibbericeps

The tale goes that some princesses went to draw water at a stream but were caught in an eclipse and changed into birds, their call being the cry of the maidens as they go to their wedding. To kill the birds or interfere with their nests is taboo and will result in the death of one's children, or at least in their growing up to resemble the Old Man of Dunblane. They have however become so numerous and destructive to crops, large flocks soon working havoc in the bean fields, that the people of Bugufi have at last started to wage war on them, superstitions or no, but little difference was noticeable by the time I left.

Nesting in the swamps in April and May.

BLACK-BELLIED BUSTARD, Ikigendamwonyovu
Lissotis melanogaster

Infrequently on open grassland in Bugufi.

CROWNED PLOVER
Stephanibyx coronatus

Occasional parties on burnt grassland.

WATTLED PLOVER
Afribyx senegallus

Usually in pairs where short grass is sprouting.

COMMON SANDPIPER, Akaroyi
Actitis hypoleucos

Earliest 27/9, latest 12/3. A single bird was usually to be found on one of the ferry canoes, and dispersedly elsewhere.

GREEN SANDPIPER
Tringa ochropus

Twice in April in a wet ditch by the side of the road.

HEUGLIN'S COURSER
Rhinoptilus cinctus

Two birds seen on short turf of open downland in south western Bugufi. They did not move far when disturbed.

WATER OIKKOP
Burhinus vermiculatus

Once flushed from the banks of the Ruvuvu river.

SPECKLED PIGEON, Ruhugugu
Columba guinea

Usually in pairs though once a party of about thirty were seen to rise from a field. A pair made irregular visits to the house at Ngara and one January started making a nest of twigs in the bottom corner of a sloping shelf under the eaves, but nothing came of it.

RED-EYED DOVE, Inuma
Streptopelia semitorquata

Sitting, no eggs, on 20/6, 5 ft. up in a thickly leaved orange tree; in other years young were being fed in a **Poinsiana** in July. I have been admonished that one must always kill a pair or the relicit pines away.

RING-NECKED DOVE, Inuma
Streptopelia capicola

Often on ripening millet.

CAPE LAUGHING DOVE
Stigmatopelia senegalus

Plentiful throughout the district at all altitudes.

TAMBOURINE DOVE
Tympanistria tympanistria

Along wooded watercourses, but not very common.

BLUE-SPOTTED WOOD-DOVE
Turtur afer

Common in bush country, banana groves etc.

GREEN PIGEON, Inhunguru
Vinago calva

Common, especially in Busubi where fig trees marking the sites of old settlements are widely scattered. In Bugufi they are less certain in their appearances. On 19/6 a bird was sitting on eggs on the usual slight platform of twigs about fifteen feet up in a leafy fig tree.

If this bird enters a house it presages a death while if it alights on your shoulder you will die within the year. I cannot think that this is a sedious cause of mortality.

CUCKOO
Cuculus canorus

Twice in October in the same stretch of orchard bush in western Busubi, but more frequently throughout the district from February until April. I do not know whether these were European or African birds.

RED-CHESTED CUCKOO, Syalwaturu
Cuculus solitarius

Very insistent in the wattle trees at Ngara in January and February, but also seen and heard in March, April and November. Supposed to indicate that the eleusine crop will soon be ready.

JACOBIN CRESTED CUCKOO
Clamator jacobinus

Not uncommon from December till April.

STRIPE-CHESTED CUCKOO
Clamator cafer

Seen twice in western Busubi in December working over liana-festooned trees bordering a stream.

EMERALD CUCKOO
Chrysococcyx cupreus

A few birds seen in Busubi

DIDRIC CUCKOO
Lampromorpha caprius

More plentiful in February and April in well-wooded bush in Busubi.

KLAAS' CUCKOO
Lampromorpha klaasi

Seldom seen.

BLUE-HEADED COUCAL, Igikukwe
Centropus monachus

Common in the papyrus swamps,

WHITE-BROWED COUCAL, Ikibiribiri
Centropus superciliosus

Common.

PURPLE-CRESTED LOURIE
Gallirex porphyreolophus

Single birds and small parties in low altitude bush. Not very numerous.

CONGO VIOLET PLANTAIN-EATER
Musophaga rossae

Not infrequent in gallery forest along the Ruvuvu and elsewhere where there are clumps of large fig or similar trees. Generally in pairs, raucous or loudly bubbly.

ABYSSINIAN GREY PLANTAIN-EATER
Crinifer zonurus

Not uncommon in pairs and parties in light woodland bordering the Ruvuvu.

BLACK-FACED PLANTAIN-EATER
Gymnoschizorhis leopoldi

Only seen in the open bush of the Mwerusi valley, generally singly.

BROWN PARROT
Poicephalus meyeri

Common in the bush country of Busubi. Surprisingly little known to the natives who seem to have no name for it.

RED-HEADED LOVEBIRD
Agapornis pullaria

Pairs quite common in eastern Busubi in May and June when the millet is ripening. None were found nesting but one morning in January a pair were seen copulating on a branch in a wooded valley in central Busubi at about 4,500 feet. Unlike their usual behaviour they were perfectly silent for the twenty minutes or so that they were under observation.

LILAC-BREASTED ROLLER
Coracias caudatus

Single birds in bush country from time to time.

BROAD-BILLED ROLLER
Eurystomus afer

Rarely in the fly-bush of eastern Busubi.

PIED KINGFISHER
Ceryle rudis

Occasionally along the Ruvuvu and larger tributaries.

GREY-HEADED KINGFISHER***Halcyon leucocephala***

Widely distributed in open woodland but not numerous.

STRIPED KINGFISHER***Halcyon chelicuti chelicuti***

Infrequently in Busubi.

EUROPEAN BEE-EATER***Merops apiaster***

Arrives in September in fairly large parties which break up and remain until March or April. Earliest 22/9, latest 14/4.

MADAGASCAR BEE-EATER***Merops superciliosus***

Two small parties seen, once in September and once in March. On both occasions they were rather distant and they may have been *M. persicus*.

SOUTHERN CARMINE BEE-EATER***Merops nubicus nubicoides***

In the Mwerusi Valley at least as far north as the Keza-Biharamulo road, about 2° 47' South. Singly or in pairs; in fine plumage in August. Earliest 21/6, latest 25/8.

LITTLE BEE-EATER***Melittophagus pusillus***

Fairly plentiful singly or in pairs hawking from small bushes in open country. In this district I have never seen parties of five or six perched side by side on a sagging branch which are such a feature of some areas. A nest hole in a sandy bank five feet above the river was being regularly visited by a bird during the afternoon of 24/8.

CINNAMON BEE-EATER***Melittophagus lafresnayi***

A few were nearly always to be seen hawking from the tall trees of gallery forest by the Mumwendo ferry over the Ruvuvu, less certainly along most wooded watercourses. On 7/10 a pair seemed to be feeding young. One would fly up from the branch on which a pair were resting, catch an insect which it passed to the other who then dived into the hole with it, re-appearing soon after often with an unidentifiable object in its bill. This was repeated until a lorry crossed the river. The hole was about 18 inches above the bottom of a road drain and consequently barely above ground level.

GREY HORNBILL***Lophoceros nasutus***

Common in Busubi, their piping double whistle was very noticeable in western Busubi in December and served me as an alarm clock.

CROWNED HORNBILL
Lophoceros melanoleucos

Occasionally in Busubi in the vicinity of larger trees and near the Russumo Falls in Bugufi.

GROUND HORNBILL, Ikigungimukwa
Bucorvus cafer

In open grassland in Busubi, generally in threes.

AFRICAN HOOPOE
Upupa africana

Certain points along the main road through Busubi were much frequented by this bird. Their numbers were considerably augmented in June, particularly in 1947, though nearly all singles.

EAST AFRICAN WOOD-HOOPOE
Phoeniculus purpureus

Busubi. Distinctly local and preferring well-grown bush.

EAST AFRICAN SCIMITAR-BILL
Rhinopomastus cyanomelas

Commoner and more widespread than the preceding species and usually in twos or threes.

AFRICAN BARN-OWL, Igihuna
Tyto alba

Found only twice in deserted buildings. Native lore has it that they are wizard's familiars and that a death follows their calling outside a house.

OWL, Intsinduzi
? Bubo africanus

I have not seen or heard this bird in Ngara but it is well known to the natives who believe that its call at night is even more fatal than the Barn Owl's, presaging widespread death in the village, or the death of the head of a family at least.

PENNANT-WING NIGHTJAR
Cosmetornis vexillarius

Appears in breeding dress in late August or September. A bird would be seen at the same time and place for two or three days and then move on. Earliest 25/8, latest 21/9.

WHITE-RUMPED SWIFT, Inhamba
Micropus caffer

Rather uncertain in its appearances which were often heralded by from two to six of them dashing into the sitting-room where they would circle round until forcibly driven out. At the end of September a pair took over the old nest of a Red-rumped Swallow. The nest was broken down on 4/10 and two partly incubated eggs found.

PALM SWIFT
Cypsiurus parvus

Flying round palms in a swamp in Busubi.

SPECKLED COLY, Umusuli
Colius striatus

Very common throughout the district. Apart from fruit they have a bad habit of eating young bean plants down to the ground and are altogether most unwelcome in the garden. On 18/10 a nest with two young and an egg were pulled out of an unpruned coffee bush. Young were being fed in May.

NARINA TROGAN
Apaloderma narina

Once in gallery forest along the Ruvuvu.

RED-FACED BARBET
Lybius rubrifacies

Common in Busubi and in the lower parts of Bugufi wherever clumps of fig trees are found. Its habits are similar to those of the Black-billed Barbet (**L. guifsobalito**) a harsh "haw-hawing" with throat inflated, and bill in line with the body, bobbing up and down, and generally reminiscent of the Wood Hoopoe.

DOUBLE-TOOTHED BARBET
Lybius bidentatus

Not uncommon in bananas, figs and riverine forest and rarely in open country. Call a throaty rattle or a cawing "Kak, kak!"

SPOTTED-FLANKED BARBET
Tricholaema lacrymosum

In Busubi, generally in the neighbourhood of fig trees. Early in December a party of four were in and out of a hole twenty feet up in a dead tree.

GOLDEN-RUMPED TINKER-BIRD
Pogoniulus bilineatus ?jacksoni (Sarpe)*

In tall flat-topped Acacias along the Ruvuvu and elsewhere in Busubi.

SCALY HONEY-GUIDE, Urushegu
Indicator variegatus

Busubi, not common.

NUBIAN WOODPECKER, Ndodozi, Inghomangwa
Campethera nubica

Busubi woodlands. The two native names cover all the Woodpeckers and are derived from words meaning "to tap".

LITTLE SPOTTED WOODPECKER***Campethera cailliauti*****UGANDA SPOTTED WOODPECKER*****Dendropicos poecilolaemus***

The commonest.

BEARDED WOODPECKER***Thripias namaquus***

Fairly plentiful in Busubi.

OLIVE WOODPECKER***Mesopicos griseocephalus***

Appeared from time to time on Wattle and Eucalyptus trees round Ngara itself. Not seen at lower elevations.

RED-NAPED LARK***Mirafrja africana***

Fairly widespread in open country.

AFRICAN PIED WAGTAIL, Inyamanza***Motacilla aguimp***

Very common throughout the district. About 25 of these birds gathered one evening just before dark on the bare earth round my camp in the Mwerusi valley which they used as a dancing floor, running here and there in small parties, calling, flying up into the surrounding bushes and down again to coalesce in the ball. This bird is sometimes known as the King and is strictly taboo. Its liking for living near huts is reflected in the idea that when a man is looking for a new house-site it will run before him to show him the best place.

YELLOW WAGTAIL***Budytes flavus***

Occasionally in Busubi between October and March in open country.

YELLOW-THROATED LONG-CLAW, Gungele***Macronyx croceus***

Common in open grassland. Native lore asserts that meddling with the nest of this bird, as also with those of several other ground-nesting birds, results in the fingers becoming wrinkled and the nails dropping off.

JARDINE'S BABBLER, Ibijwagajwaga***Turdoides jardinei***

Plentiful throughout the district. The native name is a plural.

BLACK-FACED BABBLER, Ibijwagajwaga***Turdoides melanops***

As plentiful as the preceding species in the lower areas but not apparently coming above 5,500 feet. A party of this bird and its congener were seen feeding together on the road, but on being disturbed each flew to a different side of the track.

YELLOW-VENTED BULBUL
Pycnonotus tricolor

In thickets and forest along streams and swamps in Busubi.

YELLOW-THROATED BULBUL
Atimastillas flavicollis

Quite plentiful in well-wooded areas along streams.

SPOTTED FLYCATCHER
Muscicapa striata

Earliest 19/10, latest 29/4.

SWAMP FLYCATCHER
Alseonax aquaticus

Although conditions appear to be favourable to this bird I have only seen it once, a pair by an open pool along the frontier stream in the Mwerusi Valley.

PALE FLYCATCHER
Bradornis pallidus

Common in bush country, especially in Busubi.

BLACK FLYCATCHER
Melaenornis edolioides

Throughout the district but chiefly in well-wooded parts of Western Busubi.

CHINSPOT FLYCATCHER
Batis molitor

BLACK-HEADED FLYCATCHER
Batis minor

BROWN-THROATED WATTLE-EYE
Platysteira cyanea

In thickets and forests along watercourses.

WHITE-TAILED BLUE FLYCATCHER
Erannornis albicauda

In fig trees round the camp at Bugarama in Busubi. It came down from the trees one morning and spent some while hopping about the verandah wall.

PARADISE FLYCATCHER, Umusuli
Tchitreia viridis

Occasionally met with at the edges of evergreen thickets. A pair at Ngara nested in the long shoots of a coppiced Mulberry hedge early in April 1948 but the rim of the nest was at such an angle the birds had to abandon it. Perhaps the same pair then built in the same hedge but close to the back verandah where there was a constant coming and a going, the young hatching on 5/5. In 1949 a nest was built in nearly the same place near the verandah, eggs being laid on 10th and 11th March, both hatched but by 4/4 there was only one bird left, the nest was trodden down to a flat platform and the single inhabitant, plainly the child of its parents, took up all the available space so that had the other remained it would have found little enough accommodation. The survivor flew on 5/4 over a month earlier than in the previous year. Both while brooding and feeding the male was much more nervous at the nest than the female.

OLIVE THRUSH
Turdus olivaceus

In Bugufi mainly in the denser banana groves.

CLIFF CHAT
Thamnolea cinnamomeiventris

Locally on some of the rocky scraps bordering the Bugufi uplands. Not common.

ARNOTT'S CHAT, Ikivironzi
Thamnolea arnotti

More often where fig trees and native huts are found together than in the uninhabited bush. At Keza in Busubi on 9/2 a nest with young was found between the elephant-grass framework and the grass thatch of the resthouse roof, more usually they use natural holes in the fig trees. A month later two young were being fed on the open ground before the camp, neither had any white on the crown or throat and they looked like smaller versions of the Sooty Chat. Even by December the white was not fully developed. They are tame and confiding and make a pleasant addition to nearly all the camps.

SOOTY CHAT, Ikivironzi
Myrmecocichla nigra

Common in grassland and open bush country.

STONECHAT
Saxicola torquata

Common in open country.

HEUGLIN'S ROBIN, Inyomviye
Cossypha heuglini

Its favourite haunt is extensive and neglected banana groves but it is widespread throughout the district. Much calling in the middle of the day

is said to presage rain and the people take the opportunity to bring in their washing off the bushes. A pair were resident among the bushes and eucalyptus of the garden but I was never able to find their nest.

RED-CAPPED ROBIN

Cossypha natalensis

In the undergrowth along the Ruvuvu where the receding waters had left a gap between the foliage and the ground.

KENYA ROBIN

Cossypha caffra

Rarely in thickets in Busubi.

SCRUB ROBIN

Erythropygia hartlaubi

In grassland with scattered trees and bushes in Busubi. An attractive song and sometimes much tailfanning. Some may have been *E. zambesiana* but the Scrub-Robins are not very immediately identifiable in the field as they jitter so.

GREY-CAPPED SWAMP WARBLER

Eminia lepid.

In dense thickets along the Ruvuvu.

CROMBEC

Sylvietta whytii

Not uncommon in Busubi.

YELLOW-BELLIED EREMOMELA

Eremomela griseoflava

In bush country in Busubi. A soft twittering call.

DUSKY-FACED WARBLER

Eremomela scotops

More plentiful than the preceding frequently working over trees near rest houses.

GREY-BACKED BUSH-WARBLER

Camaroptera brevicaudata

In thickets along the Ruvuvu.

MOUSTACHE WARBLER

Melocichla mentalis

In coarse grasses in valley bottoms in Busubi. Most noticeable in December.

WHITE-CHINNED LONG-TAIL***Prinia leucopogon***

Fairly common in bush and scrub along streams.

EUROPEAN SWALLOW, Inhamba***Hirundo rustica***

Noticeable on their southward journey in the first half of October. Returning early April.

ANGOLA SWALLOW***Hirundo angolensis***

The common resident Swallow of the district, nesting in verandahs, under open sheds, overhanging rockfaces etc. Two broods between October and February with possibly a third in April or May. First eggs laid on 12/11/47, 28/1/48, 26/10/48, 31/1/49, hatching on sixteenth day from date of last egg. Young flew 16 to 20 days after hatching. One bird was usually lost from the nest when half-fledged.

The feathers of these birds, burned and pounded, are said to bring great relief when applied to a broken shin.

GREY-RUMPED SWALLOW***Hirundo griseopyga***

Not uncommon in open grassy valleys in Busubi but only noted in June and August.

WIRE-TAILED SWALLOW***Hirundo smithii***

Only seen once, down by the edge of the Ruvuvu river.

RED-RUMPED SWALLOW***Hirundo rufula***

Quite a common bird round Ngara but less so in Busubi.

Building nests in verandahs (and sitting-rooms if allowed) usually building its own nest from scratch but sometimes adding to the nest of the Angola Swallow. In the absence of the Smaller Striped Swallow this bird's nests are taken over by the White-rumped Swift.

MOSQUE SWALLOW***Hirundo senegalensis***

Fairly common in Busubi in pairs and small parties.

SMALLER STRIPED SWALLOW***Hirundo abyssinica***

This bird is hardly ever seen in the district except in the Mwerusi valley and I have not found them nesting even there.

BANDED SAND-MARTIN
Riparia cincta

Resting on rocks in open grassland in southern Bugufi.

WHITE-HEADED ROUGHWING
Psaldiprocne albiceps

Common throughout the district but especially along the Ruvuvu.

BLACK CUCKOO-SHRIKE
Campephaga flava

In flat-topped thorns bordering Busubi swamps. Males mainly with the yellow shoulder patch, but all-black ones may have been overlooked.

WHITE-BREASTED CUCKOO-SHRIKE
Coracina pectoralis

Once in bush country near the Ruvuvu.

FORK-TAILED DRONGO
Dicrurus adsimilis

Common throughout the district except for open grasslands.

GREY HELMET-SHRIKE
Prionops poliocephala

Parties infrequently met in woodlands of western Busubi.

BRUBRU SHRIKE
Nilaus afer

In well-wooded areas along streams, not common.

EAST AFRICAN FISCAL, Igisigi
Lanius collaris humeralis* Stanley

Common, particularly in Bugufi; it is tiresome in the garden in that it allows no other bird to remain at peace. There was no evidence of impaling but the birds round Ngara, both immature and adult, were melodious songsters. A common phrase was roughly "Tikikwuye" or "Tiki tiki kwuye", the "tiki" part being clicked and the "kwuye" whistled. With this they would start off a short burst of warbler-like notes with none of the harshness associated with their usual offensive call. The effect was more tuneful than the sounds generally emitted by African birds and its source puzzled me for the first few times. The top of a lemon tree or a small juniper was the favourite stance from which to sing; singing was intermittent throughout the year.

GREY-BACKED FISCAL
Lanius excubatorius

Common throughout the bush country.

MACKINNON'S GREY SHRIKE***Lanius mackinnoni***

Throughout the district but less common than the preceding and preferring flat-topped Acacia along swamp sides. Usually singly and less noisy and assertive than the Grey-backed.

BOUBOU SHRIKE, Igisigi***Leniarius ferrugineus***

Generally distributed in thickets throughout the district. It has also made itself at home among the Eucalyptus and Microcarpa trees at Ngara where its vigorous call is often the only sound to break the silence. The commonest call is three rather sharp notes uttered by one bird and acknowledged by the second with a single rounder, more bell-like note though infrequently four notes are answered by four. Calling off and on throughout the year except perhaps at the height of the dry season.

PUFFBACK SHRIKE***Dryoscopus gambensis***

Rarely in Busubi.

BLACK-HEADED TCHAGRA***Tchagra senegala*****BROWN-HEADED TCHAGRA, Ninamoyi.*****Tchagra australis***

Plentiful

BLACKCAP TCHAGRA***Antichromis minutus***

In coarse grasses of the valley bottoms.

SULPHUR-BREASTED BUSH-SHRIKE***Chlorophoneus sulfureopectus***

In flat-topped Thorns. Not plentiful.

BLACK TIT***Parus niger***

Common particularly in Busubi in open bush.

GOLDEN ORIOLE***Oriolus oriolus***

March.

SOUTH AFRICAN GOLDEN ORIOLE***Oriolus auratus***

From time to time.

BLACK-HEADED ORIOLE
Oriolus monachus

Fairly plentiful throughout the district.

PIED CROW, Igihona
Corvus albus

Rather intermittent in its appearances except in the Mwerusi valley where it is always to be found.

WHITE-NECKED RAVEN, Igikona
Corvultur albicollis

Mainly in Bugufi where the rocky scarps provide suitable quarters.

VIOLET-BACKED STARLING, Umunoga
Cinnyricinclus leucogaster

Fairly plentiful in Busubi for most of the year.

BLUE-EARED GLOSSY STARLING Umunoga
Lamprocolius chalybaeus

SPLENDID GLOSSY STARLING
Lamprocolius splendidus

Feeding young with white gape mid-December.

RUPPELL'S LONG-TAILED GLOSSY STARLING
Lamprotornis purpureopterus

Common in Busubi.

YELLOW-BILLED OXPECKER, Ishwima
Buphagus africanus

In Busubi it is rare to see a herd of cattle without one or two or more often a party of these birds; in Bugufi they are less common and their numbers vary considerably from year to year. They do not seem to worry cattle whose coats are in good condition but undoubtedly aggravate existing sores. The natives dislike them as they say they disturb the cattle which stop eating to dislodge them, but no action is taken beyond a half-hearted 'shoo'. They are occasionally found on sheep but goats will not tolerate them. The present species extends to the extreme east of the district; along the Biharamulo-Kahama road I have only seen the eastern Red-billed bird. Whether the two overlap on buffalo and buck in the intervening twenty miles of tsetse bush I have not discovered.

It is noticeable that while it is possible to approach close to this bird while it is actually among the cattle it becomes very much wilder in the bush.

GREEN WHITE-EYE
Zosterous virens

In riverline thickets.

MALACHITE SUNBIRD, Umononi
Nectarinia famosa cupreonitens* Shelley

Appears erratically on mountain grassland in Bugufi particularly favouring a red globular thistle. "Umunoni" covers all the Sunbirds.

BRONZY SUNBIRD
Nectarinia kilimensis kilimensis* Shelley

Very common throughout the district with the exception of the Mwerusi valley, but mainly in Bugufi. Breeding from January to May. In January and March a female regularly visited cobwebs in the office apparently removing the dead insects though the actual cobweb would seem a more natural attraction. One nest in an acanthus bush near a swamp was only four feet from the ground.

COPPERY SUNBIRD
Cinnyris cupreus septentrionalis* Vincent

Throughout the district.

MARIQUA SUNBIRD
Cinnyris mariquensis suahelicus* Reich

In light bush, not very common.

BUFF-BREASTED SUNBIRD
Cinnyris venustus igneiventris* Reich

The commonest Sunbird in the district. Several collected were intermediate with ***C. v. falkensteini***.

LESSER DOUBLE-COLLARED SUNBIRD
Cinnyris chalapbaeus

What I believe was a race of this bird was often seen at the Mumwendo ferry over the Ruvuvu but as it was rather restless and preferred the upper surface of dense thorny tangles I was never able to get a shot with any hope of retrieving a specimen. On 23/1 a pair were nesting at the edge of a creeper-covered tree overhanging the roadway, about 13 feet from the ground but only a very few above the heads of the people standing in lorries underneath. The nest was the usual ragged structure at the end of a drooping liane and had a slight porch. The occupied nest of ***Anthreptes collaris*** was about three feet away in the same tree.

SCARLET-CHESTED SUNBIRD
Chalcomitra senegalensis lamperti* (Reich)

Throughout the district, chiefly in Busubi. Some males had a few metallic feathers on the under wing coverts or metallic "shoulder" patches.

GREEN-HEADED SUNBIRD
Cyanomitra verticalis viridisplendens* (Reich)

Along well-wooded watercourses, partial to banana groves.

COLLARED SUNBIRD***Anthreptes collaris ugandae* van Som***

In well-wooded areas, nesting in January and April.

VIOLET-BACKED SUNBIRD***Anthreptes longuemarei***

Only seen twice at Bugarama in western Busubi, pairs.

GREY SPARROW, Ikijoli***Passer griseus***

Nesting in hole in rotted roof-beam, between mud-wall and thatch and in hole in fig tree; April and June.

STUHLMANN'S WEAVER***Othyphantes stuhlmanni***

The commonest weaver-bird in the district, nesting from November to March, frequently in *Acanthus* bushes.

BLACK-BILLED WEAVER***Heterhyphantes melanogaster***

In Mid-March a pair of these birds were building a spherical nest of coarse grasses or reeds with a two-inch spout on the end of a thorn spray in a little swamp at the edge of the Ruvuvu.

VIEILLOT'S BLACK WEAVER***Melanopteryx nigerrima***

Occasional single birds seen. In early May three males were seen entering and leaving nest distinguishable from those of the *Sitagra nigriceps* colony among which they were. Bugufi and Busubi.

YELLOW-COLLARED WEAVER***Sitagra capitalis***

Widely distributed but nowhere common. Usually nesting singly in clumps of elephant grass or once in an isolated papyrus head.

BLACK-HEADED WEAVER***Sitagra nigriceps***

Widespread. Nested at the top of some very tall eucalyptus trees in a valley-bottom at Ngara until these were cut down when they had to content themselves with the flat-topped thorn trees which is their usual site throughout the district.

Icteropsis pelzeni**SLENDER-BILLED WEAVER**

Doubtfully in Busubi.

SPECTACLED WEAVER
Hyphanturgus ocularius

Nesting along streams and rivers, not common.

BLACK-NECKED WEAVER
Hyphanturgus nigricollis

Usually found nest-building on thorn sprays in overflow swamps by the Ruvuvu in February and March alongside the Black-billed Weaver. In the off season occasionally in forest strips.

GOLDEN WEAVER, Iseke
Xanthophilus xanthops

The commonest weaver after Stuhlmann's. An energetic nest builder, a bird in the garden had two, if not three, in building at one and the same time in a group of *Microcarpa* trees; their habit of defoliating the branch for two or three feet above the nest is inelegant.

GROSBEAK WEAVER
Amblyospiza albifrons

Infrequently in Busubi.

RED-WINGED ANAPLECTES
Anaplectes melanotis

In Acacia country in lower Bugufi and western Busubi, not common.

CARDINAL DIOCH
Quelea cardinalis

Plentiful in long grassland in early 1949. Not seen in previous years.

FIRE-CROWNED BISHOP, Nyamarungu, Ubururuma
Euplectes hordacea

Commonest in the Mwerusi valley where they are very destructive; in plumage from January to June. "Nyamarungu" refers to the males in breeding dress. "Ubururuma" covers flocks of bishops, finches, whydahs etc. in out-of-season plumage and these are used for soothsaying.

YELLOW BISHOP
Euplectes capensis

Assume breeding dress rather earlier than the preceding.

RED-SHOULDERED WIDOW-BIRD, Serakahama
Urabrachya axillaris

Common in the swamps. They begin to assume breeding dress in October and most of them have moulted by June.

CUT-THROAT WHYDAH
Coliuspasser ardens

BRONZE MANNIKIN, Ifundi
Spermestes cucullatus

Nesting January, February, May. "Ifundi" covers all the small finches. The fingers of those who meddle with their nests may be expected to drop off, or at least the nails will become cracked and turn black "so that even soap will not clean them". As many of the finches are partial to nesting in coffee bushes it may be supposed that coffee culture does not progress with the rapidity its introducers hoped for.

BLACK AND WHITE MANNIKIN
Spermestes bicolor

Once in Busubi at the edge of a papyrus swamp.

MELBA FINCH
Pytilia melba

Widely distributed, nesting November and January in an *Erythrina* tree and the old thatch of a rest house.

RUDDY WAXBILL
Lagonosticta rubricata

RED-BILLED FIRE-FINCH
Lagonosticta senegalensis

Nesting regularly and almost continuously in coils of rope, old pots etc. on the verandah. Nest chiefly straw and string, unlined, 3 or 4 eggs. Very regular attendants at the bird bath.

COMMON WAXBILL
Estrilda astrild

In coarse grasses near streams or ponds in Busubi.

BLACK-CROWNED WAXBILL
Estrilda nonnula

This attractively marked bird is very common throughout the district except the Mwerusi valley.

ROSY-FLANKED WAXBILL
Estrilda paludicola

Parties in coarse grasses by swamps and streams in Busubi.

RED-CHEEKED CORDON-BLEU
Uraeginthus bengalus

Pairs seemed attached to most camps

INDIGO BIRD
Hypochera ultramarina

In plumage January to June, frequently in the chicken-run.

PIN-TAILED WHYDAH
Vidua macroura

In plumage November to May.

PARADISE WHYDAH
Steganura paradisea

The low country of eastern Busubi and the Mwerusi valley.

YELLOW-FRONTED CANARY
Serinus mozambicus

Common throughout the district. Nesting in January.

CITRIL
Spinus citrinelloides

Fairly often in Busubi. Some may have been *Serinus capistratus*

CINNAMON-BREASTED ROCK-BUNTING
Fringillaria tahapisi

Quite common on boulder-strewn grassy slopes.

PART III

THE CATTLE EGRET

Once upon a time there was a great famine in the land and water was impossible to find for the springs and rivers had all dried up, so that many people died because they could find nothing to eat or drink. When the king saw that the country was being burned up and that he would have nobody to rule if all his subjects died he summoned all the people who were still alive, and he called also the birds and animals and insects.

When everybody was gathered together he asked them: "What shall we do now? Are we all to end by dying since there is nowhere else we can move to? If there is anyone who can provide us with water I will make him the king of his kind, whether he be a man, an animal, a bird or an insect, it is all the same." When the king had finished his speech none of the men or animals answered anything, but the birds said: "We will try, and if we fail we shall be no worse off than we are now."

The small birds tried first. The Wagtail pecked away at the rocky ground with his beak and said to himself: "I will peck, peck until clear water flows and then I shall be King of the Birds." But he found no water and he broke his bill. After him the Crow came but he was no more successful than his companion, and he broke his bill and went away in his turn.

All the birds saw that it was useless except one, the Cattle Egret, and he said: "I will try and if all is well we shall be saved, if not we shall die and there's an end." And he began to try saying: "I will peck, peck, peck until clear water comes, we shall be saved, and I shall be king of the birds." After he had said this he brought out a lump of mud on his beak; when the king and people saw this they came running to eat the mud. But the Egret drove them away and he went on pecking saying: "I will peck, peck, peck until clear water comes out, we shall be saved and I shall be king of the birds." And this time he brought up a lump of mud dripping with water. At that the king and the people and the animals and the birds all came running up, but the Egret drove them away a second time. Again a third time he pecked away at the ground saying: "I will peck, peck, peck until clear water comes, we shall be saved and I shall be king of the birds", and this third time as he finished speaking a fountain of clear water sprang up. The king and the people and the animals and the birds all came pressing up to throw themselves in the fountain to drink and revive themselves, but the Egret drove them off and began to drink, and he drank until he was full and then he rested.

The Egret then turned to the king and said: "A promise is a promise. what will you do for me now?", but the king replied: "Do not worry, wait until I have drunk some water and got strength enough to give my commands for you who have saved me and all these creatures." The Egret said: "Very well, drink then." And the King drank and rested and drank again until he had drunk his fill; and then the king told the people to drink and the people and the animals and the birds all drank until they were bursting. Then the king said: "White bird who has saved me and all these men and beasts, should I carry you on my shoulder, or what is it that you wish?" and he asked each group what they should do for their saviour. Then the Hare said: "Let him be above us all and be our king, this is the answer of the animals." The King said: "You have heard what the Hare said, but he is only one, what do the rest think? When we gathered together first there were four groups, men, animals, birds and insects, what do the others say?" And the Hare jumped up and said: "Ha! ha! are you still counting the insects, they were all dead before ever the Egret started?" Then the birds said: "Let him be our king, we have no more to say." And the people said: "Let him have whatever he asks for," so the Egret replied: "Just let me have some cattle, I do not want to rule." The Hare jumped up again saying: "What senseless silly things you ask for, you could have been king of Creation and you only ask for some cattle. What a stupid fellow you are!" But the Egret answered: "A man is a man, for a bird to pretend to be one is foolish. Do you whom I have just saved begin to taunt me?" And the Hare was silent and could think of nothing to say.

The king then said to the Egret: "I will give you the cattle which you ask for, and you may eat their meat and drink their milk, and because of your whiteness you shall be king of all the birds of this country. Egret, because of your purity you shall be blessed by God, and you and your children shall increase and flourish for ever; So be it."

And to this day you may see Egrets in the pastures with their cattle, playing and feeding beside them.

THE EGRET AND THE RAVEN

Once upon a time a Raven and an Egret were great friends and it seemed impossible to them that either could do the other harm so that they even laid their eggs in the same nest. It came about that one day the Egret went to look for food and when she came back to the nest she found that the Raven had gone away taking the Egret's children with her. The Egret wondered how ever she would get her children back and she did not know what to do. But finally she thought to herself; It is no good sitting here crying, I will go out into the country and ask in every place if anybody has seen the Raven taking my children away with her.

And she went out and asked here and there, and at last she was told that her children, as white as herself, had been taken to the king; and she went on asking the way which they had taken. When she came to where the king was holding his court she came to the king and asked him: Sir, have you seen the black Raven who has a white patch on her neck and is as fat as an elephant and who has taken my children from me, my children who are as white as I?" And the king replied: "I have seen her with two children as white as you, but I cannot give them to you until you have made a case and proved to me that they are indeed yours." The Egret said she was quite ready for a trial, so the king called the Raven and told them: "I will give you one test only, the one who passes this test shall have these children here and the one who fails shall have the children which remain in the nest. Now the test is this: to fill this jar with tears." The Raven began to cry and cry but not a single tear could she shed. The Egret then started to cry and she filled the jar with tears in a moment. When it was seen that the Raven was lying the Egret was given her children. The Raven went away to see to her own children who were still in the nest, but when she got there she found that they had died of hunger because of her stupidity and neglect.

THE EGRET AND THE WAGTAIL

Once upon a time there was a great famine, the sun shone unceasingly and the streams dried up so that there was no water for the birds to drink, to whichever stream they went they found it dried up. So they held a meeting and went to a great rock where they were wont to drink, and they agreed that whoever could strike the rock with his beak until water flowed out should be king of the birds, for until that time they had had no king.

Then one of them came forward saying: "Ndodole, ndodole ninabon'amazi alaje nzoba ndumwami wa nyoni" which means, "I will tap, tap, tap until water comes out, then I shall be king of the birds." He tapped the rock but nothing happened, then each bird took his turn at striking the rock, but none of them could make any water come forth, they only crumpled their beaks. Finally only the Egret was left and he came to the rock and said: "I will tap, tap, tap until water comes out, then I shall be

king of the birds." Then he tapped at the rock and a little water came out, so he struck it again a second time so that the water gushed out. The birds all came and drank and the Egret poured water over those which had died and they came to life again. All the birds which had drunk the water hailed the Egret and said that he should be their king, and he was so.

Now one day the Egret was resting in his house when the Thunder came and took his spear. The Egret wondered how he was to get it back again but could think of no way. So he called all the birds together and told them that the Thunder had taken his spear, but none of them could find anything to say. So the Egret asked the Dove: "If I send you to the Thunder what will you say?" and the Dove replied: "I will say, 'Ndagaguza gugu, ndagaguza gugu,'" but the Egret said: "Be off you senseless fellow." Then he asked the Kite, but he had nothing to say; then he chose the Wagtail and asked him: "If I send you to the Thunder what will you say?" and the Wagtail answered: "I will go and tell the Thunder to give up the Egret's spear." The Egret said; "You are the one to go, set off now." The Wagtail ascended to the house of the Thunder and stood by the gateposts at the entrance to the enclosure and called: "Thunder, give the Egret back his spear." But the Thunder's people came and killed the Wagtail and threw him down. The Wagtail came back a second time and called: "Thunder, give the Egret back his spear." So they killed him again and burned him until only ashes remained and they threw the ashes into the sea. But the Wagtail returned a third time and called "Thunder, give the Egret back his spear." So this time they told the Thunder he had better give the Egret back his spear and they gave it to the Wagtail who brought it to the Egret. The Wagtail related all the trials he had undergone to recover the spear, and he was made King of the birds.

THE COCK AND THE KITE

Once upon a time a Cock and a Kite were great friends. One year there was a great famine and the Cock went into another country to look for food. After he had come back he happened to be standing on one leg with the other tucked under his wing when his friend the Kite met him and greeted him and asked how he had fared. The Cock told him that in that country there was plenty of food but one must cut off a leg and sell it before one could buy anything to eat. So the Kite ran off to his wife and told her to cut off one of his legs that he might go and buy food like his friend the Cock. His wife did as she was bid, but the Kite found that he could neither walk nor fly. As he was hobbling about he saw the Cock standing with both feet on the ground. Then he realised how his friend had deceived him and the Kite became the Cock's greatest enemy, and he and his children have been so from that day to this.

PAGES FROM A TANGANYIKA GAME RANGER'S NOTE BOOK: II

By C. J. P. Ionides

Training African Elephant Control Scouts

The chief difficulty in training Africans to hunt elephant with rifles is that of overcoming their preconceived ideas. We engage the sons of the "Wa-Rumba" (old hunters who killed elephant with muzzle-loaders), when these are available, on the principle that it is easier to train a hunter to shoot with a rifle than it is to train a marksman to be a hunter. For this reason ex-Police and ex-K.A.R. askaris are not normally engaged unless they have had hunting experience. These "Wa-Rumba" hunted their elephant in the manner best suited to the weapons they employed. The muzzle-loader is not a weapon of precision and has little power of penetration. It is unlikely to be effective in stopping the charge of an elephant. Therefore the system used in hunting in the old days was as follows:

A gang of from six to ten or a dozen men went out, all armed with muzzle-loaders. They tracked their elephant until they came up with him, or with them if there was a herd. Two or three men then went forward and fired a volley at an animal. Immediately they had fired they retreated under cover of the smoke and then reloaded. If the elephant made off, two or three more rushed after him and fired at him. They also retreated to reload after firing, while a third party continued the battle. By this time the first party, having reloaded, were ready to fire a second volley, and so they went on till the beast fell. If the first two volleys failed to disable or partially disable the quarry, it probably made off at full speed and escaped, since little effort was usually made to finish off a wounded beast. If the elephant charged, the party scattered and ran and, though one was sometimes caught, they usually escaped through their nimbleness.

When training such men to use a .404 rifle, it is very difficult to teach them that they are now armed with a weapon of precision and penetration which is powerful enough to kill, stop, or turn a charging elephant if aimed straight, in all but the most exceptional cases. We impress upon them that the best way to deal with a charging elephant is to stand steady and to keep on placing carefully aimed shots. They have to be taught that it is a disgrace to cut and run and leave an unarmed guide to be killed, though they usually learn this at once and such incidents are rare. They are also told that it is the first shot that counts, that with a .404 rifle a carefully placed heart or brain shot will finish the business at once, and that, if an animal is only wounded, they must follow it up and finish it off, and that they must not fire at a second animal until the first one fired at is dead.

Their chief failing is haste and carelessness in following up a wounded animal, which they often do at the double, which may lead to trouble if the beast ambushes them, or if another elephant waits behind to make trouble, a not uncommon occurrence.

Another failing which has led to a number of accidents is that of trying to escape by running away when charged from close range, instead of using their rifles.

A third failing, particularly among the new recruits, is over-keenness, which leads them to fire at, and often wound without killing, several elephants out of a herd, instead of concentrating on the one first fired at till it is dead.

In spite of these tendencies, we have some very fine elephant hunters among the scouts and some of our youngsters show great promise.

The African as a Sportsman and Naturalist

by C. J. P. Ionides

To the African in his village meat is a rare luxury and the local hunters pursue their quarry for the purpose of obtaining it. In this pursuit they use any method which is likely to be successful, including game pits, snares, platforms over waterholes, and in some cases will surround a herd and fire the grass so that the animals are speared as they try to escape. In this way, they take the same attitude to the game as the European takes to a beast led to the slaughter to supply a meat diet, so that their interest in an animal's habits is usually confined to the knowledge required to secure it.

Among Game Scouts and other hunters who are employed for reasons other than the mere supply of as much meat as possible, I have found much sportsmanship, interest in natural history, and fondness for wild life.

Most Game Scouts, a large proportion of whom are Mohammedans and so do not eat elephant, are far keener to be employed in hunting these animals for the sport, excitement, dangers, and difficulties to be overcome than they are to be employed in killing antelope, though they can live on meat when doing so.

My own followers, who have been with me when hunting real rarities such as Bongo, Nyala, Mountain Bushbuck, Gorilla, etc., take a real pride, and show much keenness in looking for a good specimen, though the hunt for the single beast may last for months during which time no meat may be shot. They delight in studying the habits of the quarry during its pursuit and show great patience in trying to surmount the difficulties involved.

In studying nature, many of them are very careful and accurate, though others, usually of less ability, sometimes make very wild statements just as is the case with some Europeans.

Even in the study of the smaller creatures such as birds and reptiles, I have found that my followers become very keen and knowledgeable. They are most interested in snakes in spite of the original aversion which nearly all of them have for these creatures, cheerfully help me to catch even the largest and most dangerous species, and no doubt would catch them by themselves if I permitted them to do so; indeed on more than one occasion a porter has come beaming in with a large Mamba, so that I have had to issue the strictest orders against it, with threats of condign punishment for disobedience, in order to stop a practice certain to end sooner or later in a fatality. Both porters and villagers assist me by collecting the smaller species alive, and soon get to know the rarer ones which are wanted. My own staff become very fond of my snake pets, help me to feed them, and often take them out to caress them.

I have also noticed that many scouts strongly disapprove of unsporting methods of hunting, quite appreciate that the real fun is overcoming difficulties, and despise the adoption of easier but unfair methods.

As regards their "humanitarianism", though it must be admitted that many are very callous, this is by no means always the case, and many are as unwilling to witness suffering as any European.

These are the results of my own observation and experience. The experience of others may or may not be otherwise.

A Case of Mamba bite

At about 3 p.m. on the 6th of June, 1949, when camped at Njawala about 4 hours outside Masasi Boma, news was brought to me that a large snake had been found in a mango tree near a hut a few minutes walk from my camp. I went there with my orderly and some porters and found that there was a nice "Black" Mamba (*Dendroaspis Polylepis*) in the top of the tree.

I first tried to noose it by tying two long poles together and making a noose at the end of them, but this method proved too clumsy. I then climbed into the lower part of the tree and tried to reach it with my ordinary snake stick, which is about six feet long, but as the Mamba began showing signs of excitement, darting the tongue in and out, and spreading a modified hood, I decided that this was too risky.

I then instructed half a dozen porters to cut very long poles and to surround the tree at a safe distance. We then started pelting the snake with small sticks, with the result that it started coming down out of the tree. I tried twice to noose it on the way down but each time it avoided the noose. As its head and the fore part of the body came to the ground we ran in and held it down with our poles and my snake stick and only about a foot of the head and neck was free. By this time the mamba was very excited and was biting everything it could reach.

I had handed over my stick to my orderly, taken my spare stick and began trying to noose the head of the snake when suddenly a looker-on, one of my other porters who had no share in the business, ran in and put out his hand to catch the head. I shouted to him to take his hand away, which he did, and I then noosed the mamba's head and we put her into a bag, having found that it was a female about eight feet in length. While doing this, one of the porters remarked that the man who had put out his hand had been bitten. We quickly tied up the mamba in the bag, put the bag into a box, nailed the box down, and rushed back to camp.

We found that the man had received a full bite on the thumb, which had been delivered so quickly that I had not even known that he had been bitten.

We tied a tourniquet on his arm and got out a syringe and 40 c.c. of Antivenine supplied by the Institute of Medical Research, Johannesburg. By this time the man complained of dizziness and partial blindness and seemed to be more or less prostrated. We injected 5 c.c. in the forearm of the bitten hand, 5 c.c. in the same upper arm and 30 c.c. in the buttocks. My orderly and I each had our own technique for injecting, he pressing

the point of the needle on to the man's skin, which was incredibly tough, until it bent like a foil in fencing before penetrating, and I delivering a short arm jab with the needle. On being asked which he preferred, the victim said that one was as bad as the other.

Within a few minutes of receiving the injections the symptoms disappeared, and when the tourniquet had been removed (after about twenty minutes) the man appeared to be normal except for a swollen hand.

I had sent a Game Scout on a bicycle to ask the District Commissioner, Masasi, for a car to take the patient into hospital and Mr. Hamilton very kindly came out himself. By the time he had arrived, however, the man was obviously out of all danger and said that he preferred to continue the safari and in a couple of days he was carrying his load again. (I pointed out to him that, if he ever did such a foolish thing again in my presence, a mamba bite would be nothing to what he would get from me.)

This snake went by air to the London Zoo, where she arrived in good condition and, I hope, is still alive and flourishing.

More Superstitions Connected with Animals

The BUNDI (Verreaux' Eagle Owl—*Bubo lacteus*) is a bird of ill omen. When one of these owls settles on the roof of a hut and grunts it has probably been sent by a wizard to bring misfortune on the inmates.

It is very unlucky to meet a Bird Snake (*thelotornis kirtlandii capensis*) on the ground and anyone doing so is likely to suffer a bereavement shortly afterwards. These snakes are considered very dangerous by some people, who assert that they will thrust their sharp heads through the body of anyone who annoys them. Actually they are harmless to men.

The meat of a crow is considered to be deadly poison.

Shameleons are considered to be very poisonous. Some people say that it is their breath, some that it is their bite (they have no teeth), and some that it is their claws. This applies in the Southern Province to Meller's Giant Chameleon *chameleo melleri*, and to *Chameleo dileuis dilepis*, also a large chameleon though smaller than the former, but not to the Dwarf Chameleon (*Brookesia Brachyura* Subsp.) as far as I know.

Actually of course chameleons are entirely harmless.

In some places, such as TAWI in the Rufiji District for example, striped or spotted animals such as Eland, Kudu, and Bushbuck are *mwiko* (forbidden), and the people will not touch them or eat their flesh, since, should they do so, they fear that they themselves will come out in stripes or spots.

Among the Wapogoro, some hunters believe that it is unlucky to look at the growing nerve in an elephant's tusk and, when this nerve is being taken out, they will turn away their heads to avoid seeing it.

The Makonde snake "fundis" believe that their snake-bite "dawa" is only effective if they never kill a snake, and would become ineffective should they do so.

At a certain village in Kilwa District there existed some years ago a sort of university for wizards from which a young would-be wizard could graduate after passing certain unpleasant exams, one of which involved digging up a dead body and performing various rites with the hand. Among other items in the curriculum, the student was taught how to guard his home by placing a long stick over the door, which would allow a thief to enter the house but would turn into a snake, coil itself round him, and hold him prisoner when he tried to leave it.



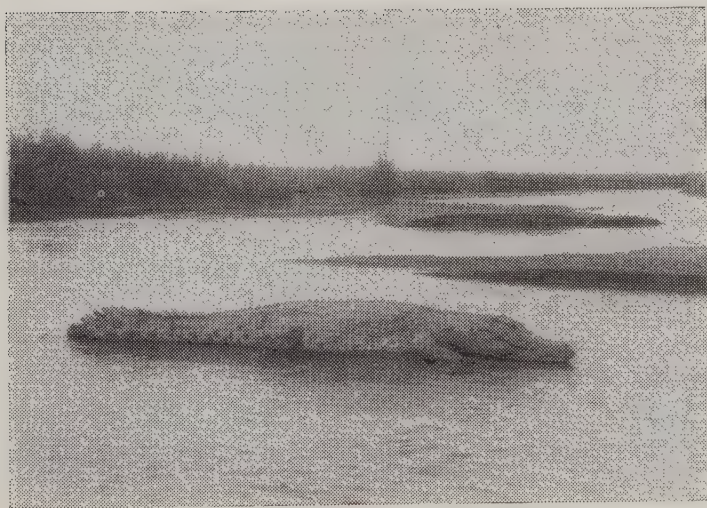
Ndamba hippo hunters



The grave of Ngaonalupambe



....."he rolls over on to his side"



"Sandbanks"!

PLACE NAMES IN THE LAKE PROVINCE

by H. Cory and M. M. Masalu

with a preface by Charles Whybrow

A number of contributions have appeared from time to time in *Tanganyika Notes and Records* concerning the meaning of the name Dar es Salaam, but none of our language experts or anthropologists has so far told us anything about those other names which look so intriguing on the map but whose meanings are usually so inexplicable to the passing "foreigner"

The following essay deals with the place-names of a few defined areas of the Lake Province. The Government Anthropologist is responsible for the notes referring to Sukumaland proper, while M. M. Masalu, Supervisor of Schools for Mwanza, Geita and Bukerewe Districts, chose as his field of work Zinza, Kerewe, Longo and Kara.

The elucidation of the place-names of any but the smallest area can never be completed, if only for the reason that the meanings of many are hopelessly hidden in the mists of antiquity. The present writers have selected only a few names from each District or area as an initial effort, mainly in the hope that not only in the Lake Province but in other parts of Tanganyika this article may cause other interested people, especially Africans, to take up the study of the place-names of their own neighbourhoods.* There is a lot of history and folklore to be learned in the process.

Before I try to give a short explanation of the linguistic side of the place-name meanings which are the subject of this essay, I must warn would-be students of one dangerous pitfall into which I have often fallen. In the absence of confirmation, it is by no means safe to assume that the same place-name has the same etymology and meaning in different places. The root of a place-name should only be accepted as a sufficiently probable interpretation if local people can give a plausible explanation of the connection between the meaning of the root of the word and the place-name in question.

In Sukumaland as in other parts of East Africa we find a good many names of Swahili rather than local derivation. The most noticeable of these seem connected with trees, and especially with the sycamore-fig, *mkuyu*, and the baobab, *mbuyu* (*Adansonia digitata*). Thus we find *Makuyu* as a place near Thika in Kenya and *Mkuyuni* as a village some three miles south of Mwanza on the Tabora road. The latter takes its name from the number of wild figs to be seen there, and especially from one immense tree of which one long branch forms a shady arch across the road. *Mlangali*, *Milangali* and *Malanzali* are all derived from the Swahili name of the candelabra Euphorbia, but there does not seem to be a place with any of these names in the Lake Province.

A place-name ending in *-ni* may at once be suspected of Swahili origin, the *-ni*, of course, being the common locative suffix. As examples we have *Mkuyuni* ("Place of the Figtree") mentioned in the preceding paragraph and *Pambani*, a large Indian-owned estate in north-west Kwimba where there is, as might be expected, a cotton ginnery.

We find that in Sukumaland and the neighbouring areas it is more important to look for prefixes than suffixes when splitting a place-name into parts in order to find its meaning. In many cases these prefixes may be those of the ordinary substantive classes of the local language, such as **m-**, **mu-** or **mw-**, **mi-**, **ki-**, **ka-**, (or its plural **shi-**), **i-**, **li-**, **ma-** and so on. As an example we have **Mihama**, a small village near Mwanza, from **mhama**, a borassus palm.

Locative prefixes are very common. The first to be noticed is **nya-**, either by itself or with another prefix before it. It appears large in Unyamwezi on every map and in **Unyamhamda**, one of the Mwanza chiefdoms. It stands by itself as a prefix in **Nyakato**, which is the name of a sub-chiefdom in Bukoba District and also of a village a few miles from Mwanza on the Musoma road. In the latter case **kato** means small; hence **Nyakato** means "a small village". In Kikerewe, **Kato** is the name given to one of a pair of twins, corresponding with the Sukuma and Nyamwezi **Doto**, brother of **Kulwa**. **Nyakato** in Kikerewe would thus mean "Kato's village". In Bukoba, **Kato** may be either one of a pair of twins (the other is **Ishengoma**) or a dugout canoe. The canoe may be either for navigation or for making local beer.

The **nya-** prefix may elide with a following vowel, so that we get **Nyegezi**, a chiefdom near Mwanza, and, still more distorted, **Negezi**, the capital of Busiha chiefdom in Shinyanga. Sometimes the **nya-** prefix may precede a noun prefix, as in **Nyakasahenge**, a village in Ukerewe. The root meaning here would be Sahenge.

Where a place-name is derived from a verb, we usually find that there is a prefix **i-**, that the terminal **-a** becomes **-o**, and that the applicative form of the verb is used, for instance, **Isamilo** from **sama**.

Perhaps the commonest locative prefix is **Bu-**, which is much the same as the Swahili **U-**. The latter commonly means a country of some size, but the Lake Province **Bu-** (which is found in several languages) has a rather wider interpretation. For instance, it is found in the name of a large chiefdom such as **Buchosa** in the tribal area of **Buzinza** (the Swahili **Uzinza**), and again in the small "parishes" of **Bwiru** (i.e. Buwiru) and Bukandwe, both near Mwanza. There is a **Buhama** on Kome Island which means "The place of the borassus palms" and may be compared with the **Mihama** village near Mwanza, mentioned above.

A number of place-names which doubtless at one time had the **Bu-** prefix are shown on modern maps as beginning with the Swahili **U-**. For instance, the island of Ukara is locally known as **Bukara**, and Ukerewe should be **Bukerebe**. **Busukuma** is a small chiefdom in the extreme north of Sukumaland, and it means "The Northern Country", exactly the same as the Swahili-ized Usukuma which was originally applied to Sukumaland by the Tabora traders who named it as being a country to the north of Unyamwezi. In their own tongue the Wasukuma call the whole of their great country **Bugwe** (note the **Bu-** prefix) and themselves the **Bagwe**. To them, the Banyamwezi are literally the people of the West, who live in such parts as eastern Kahama which lies to the west of Sukumaland. The real Basukuma live only in Mwanza District in the north of Bugwe. Those in South Bugwe, i.e. Shinyanga, are **Badakama**, the people of the South.

Lu- is a place-name prefix of somewhat doubtful validity. It is probably an ordinary noun class-prefix though quite common in place-names, e.g. **Luchiri**, **Luwondo** or **Lubondo**, **Lubaga**, and is found farther west as **Ru-**, as in **Rukora** and **Rubondo** in Biharamulo and **Rubungo** and **Rubafu** in Bukoba.

A Sukuma locative prefix corresponding to the Swahili **kwa** is **gwa-**. It seems to be attached to topographical features rather than to villages or areas. For instance, a large granite mass near Mwanza, of the type known to geographers as a bornhardt, is called, because of its shape, **Gwanzozu**, the Swahili **Kwa Ndovu**, or the Elephant Rock, which is a highly appropriate name. This **Gwa-** prefix would seem to be the same as **Ngwa-** and **Ng'wa-** which are commonly found in Eastern Sukumaland.

The hinterland of the southern half of Lake Victoria has, over the last three or four hundred years, been overrun or invaded, whether peacefully or in war, by many tribes, and probably all of them have left their influence in place-names, just as in England we find place-names derived from the Celtic, Roman, Saxon and Norman invaders' tongues. It is quite probable that some Sukuma place-names were found by the people whom we now call wasukuma when they first came to the country. Of such names we can hardly hope now to find the meanings. But we may easily be led into thinking that they are modern Sukuma because they have Sukuma locative prefixes. Many of the present rulers come from immigrant tribes or clans, such as Hinda. Hima and Tusi, and they have not unnaturally left their influence. It would not be surprising, for instance, to find them giving names in their own language to their principal villages or the spots where they bury their dead.

*And send their findings to me.—Ed.

I. SUKUMA CHIEFDOMS.

1. MWANZA.

MWANZA

- District, chiefdom and township.
They took their name from the area in which is now situated the Mwanza township.
This name appears sometimes also inland; perhaps an emigrant from Mwanza called his new domicile in Kwimba or Magu by the name of his original birthplace. The area was originally called "BUCHWEKA" which is a Zinza word and means "to die out without heir". Zinza fishermen came from the opposite side of Smith Sound at certain seasons without taking their families with them. The inland people began, when traffic became more frequently, to say "TWAJA KU BA NYANZA"—"let us go to the place at the Lake" shortened "TWAJA NG'WANZA" and mispronounced by avoidance of the strange Sukuma NG' consonant **Mwanza**.

- NYANZA** — Lake (Victoria Nyanza)
Nyanza is one of the words which is common to most Bantu languages N.J.v. Wermelo* mentions nyanza, nyanja, nyasa, as one of the words which allow the conclusion as to the original home of the Bantu-speaking people before their diaspora, namely in the region of the great central African lakes.
Another source has it that the place name is derived from "NG'WANZA" meaning woman's woman-friend and thus means the town of the many women. I rather think that this is a good example for the rule that etymology should never follow the method of following similar sound.
- LUKUBANIJA** — The present chief.
- KUBANIJA (v)** to surpass, to be first
There were many candidates for the chieftainship amongst whom the electors chose the present chief.
- ILEMBERA** — Native Authority Headquarters
- LEMERA (v)** to conquer
Near this place Ntemi Ikongo repulsed and defeated an invading force of Wataturu people belonging to the Hamitic language group.
- KIRUMBA** — Parish and part of Mwanza township.
- MRUMBA** tree (*Ficus* sp)
- *N.J. v. Wermelo: "Early Bantu Ethnography from a Philological point of view"
Africa, Vol. III. No. 1.
- Many trees of this species grew in this area.
- BWUIRU** — Parish and name of Secondary School and N.A. school.
- BWUIRU** The country of the Bairu. The subdued peasant agriculturists in Ankole were originally thus named. The chief Muhaya, the founder of the ruling family, called his subjects by this name, probably because he came from the West and was of Hamitic origin.
- MAKONGORO** — Parish and part of Mwanza township.
It is called after a former chief.
- MAKONGORO** 1). the movable door
Makongoro is the name for the movable door which closes huts at night.

After several victories over his enemies in tribal wars the chief adopted this name. As the strong door stops any enemy from entering his land.

2). implements, weapons.

The chief adopted this name after a victory in which he collected many of the enemies' weapons.

- ISAMILO** — Parish and part of Mwanza township.
- SAMA (v)** To migrate
- ISAMILO** Place to which a move is made.
Originally no one was living in this area; it was thus named when people began to settle there.
- NYAKATO** — Trading centre.

Place of similar name in Bukoba (secondary school).
- KATO** is a haya word and is the name used for the younger of twins.
- BUGALIKA** — Parish
- IGANIKA** to think of
The first settler in the area was Kayange; he cleared the bush, built his house but did not remain for long in his new home. He moved to another country (Zinza?)
There he began to remember the old place and finally he returned to it. When he had settled down again he called the area Bugalika—the place to be remembered.
- PASIA(I)NSI** — Teacher's Training Centre.
The word is derived from the German "Pass eins" meaning pass No. 1. The German soldiers in 1916 distinguished three passes leading to the township; The road from Ilemera passed through the first one and the whole region was called Pasia(i)nsi.
- IHALE** — Sisal Factory and Ginnery
- MHALE** — Shrub (*Ricinus communis*)

2. BUKUMBI.

- IKUMBI** — hidden place(?)
No satisfactory explanation available.
Perhaps called after a man Nkumbi, a member of royal family, at the time of its conquest of the area. The family came from the South.

- IDETEMIA** — N.A. Headquarters.
- TETEMA (v)** to tremble.
The name was chosen by the former chief Antonio for the area of the courthouse, to indicate that persons to be called to Court should not take matters too easy.
This name also exists in Ufipa and chief Antonio imported it from there.
- FULO** — Seat of the old Nyanza Federation's Appeal Court. This Court originally held its meetings in the parish Fulo in the chiefdom of Nyamhandu, and when the court was moved to Fulo it took the name with it.
- USAGARA** — Trading Centre.
- SAGALALA (v)** to lie down on the back
It was originally a place of dense bush, and very popular with loving couples. The place was called **BUSAGALALA**. When traders, mostly Indians, opened up their shops there they called the place Usagara, a name which they knew; because the name of the biggest German import company was "Usagara Company".
- LAGANIDA KAMUGA**
or
NAGANIDA
- 1). Mission Station of White Fathers
2). Ginnery
- LAGANIDA** is a synonym of Busalu, the name of the special beads worn by chiefs and **banang'oma** (hereditary courtiers).
There is a story that a cooking pot filled with such beads was unearthed in the area. When the White Fathers arrived in the area Kamunga allotted them a plot near the place where the pot with beads had been found and which was called Naganida.
The name of the Mission station is not derived from the beads of a rosary, as some people tried to explain the name of the place.
- 1) **NYASHISHI** — Trading centre
or
- 2) **KALOLE**
- 1) **NSHISHI** Tree (*Tamarindus indica* L.)
- 2) **LOLA (v)** to look, to look at
An Arab arrived at this place prior to the arrival of Europeans, and brought with him a mirror. This was a great attraction to many people who had never seen such a thing and who went to the little Arab shop to have a look at their faces.

- FELA** — Railway station.
- BUHWELA** was the original name of Bukumbi prior to the arrival of the ruling dynasty, who immigrated from Ufipa via Buha. Some people think it is a Fipa word(?)
There exists a Sukuma word ku-HWELA (v)—cry of a guinea fowl.
- 3. BUSUKUMA.**
- SUKUMA** — North.
It is the common tribal name for all people living in the area between Smith Sound and the Mbalangeti river and from Shinyanga to Lake Victoria. This name probably came into general use after it had been used first by the people living in the South; i.e. by the Nyamwezi people who are therefore called Dakama (South) by the Sukuma. Why one chiefdom especially was called Busukuma is not known.
The inhabitants of this chiefdom have a special explanation for the word; they say that the name is derived from Sukumala—to squat on one's heels. When the first arrivals in the area were met by visitors from their homeland and were asked where they now lived, one of them answered, Nasukumala ho- I settle down there.
- KISESA** — Native Authority headquarters.
- SESA (v)** to put out, to put into the open.
The headquarters are situated on top of a ridge and can be seen from the distance.
- NYANGUGE** — Trading Centre.
- GUGANA** To pull against each other.
The spot was a meeting place for the inhabitants of the area and at one time when there were two rival candidates for the post of subchief, the decision was taken here after very prolonged arguments.
- KAYENZE** — Trading Centre.
- LUYENZE** The end of a snake's tail.
The place is situated on the end of a narrow peninsula. This name appears also in other areas of the Lake shore.
- BUJOLA** — Parish.
- Jola** To strangle.
It is related that at one time several murders occurred in the area. The victims were found strangled with a rope.

4. **BEDA.**

- IBEDA** (v) to sit alone
The country was overgrown with dense bush and the first settlers felt very lonely.
- NYABALAGWA** — Native Administration Headquarters.
It is called after the first settler in this area.
- LAGA** To send away
- BALAGWA** The people who have been sent away
The first settlers were perhaps exiles.
- NYANHAMA** — Parish
- KWITAMATAMA** (v) To live distant from each other.
For a long time this area remained scantily populated.

5. **NYAMHANDA.**

- LIANDIKIRA** (v) — To stand up in the characteristic position of a herdsman, with one leg bent and resting against the other.
- HANDA** (v) To add strength.
- FULO** — Parish and former seat of Nyanza Appeal Court.
- IFULA** (v) To rest.
There were a few big trees on the top of the ridge under which travellers liked to rest.
- NYANDELELYA** — Trading Centre.
- NDELELYA** manure
Cattle were led from far to drink in a pond near this place and thus the soil in the area was manured.

6. **IWANDA.**

- IBANDA** (v) — To hide.
The dense bush of the area gave shelter to fugitives at the time of tribal wars.
- SODOKA** — Ruling chief
- SODOKA** rinderpest
- SODOKA** (v) to proceed step by step slowly but surely (in hunting).
The name is given to the disease because it spreads slowly but reaches every remote corner.
When Sodoka was born the country suffered under an epidemic of this disease.

LUMOGA	— Native Authority headquarters.
MOGOKA (v)	to get drowned while bathing
MOGA (v)	to bath There is a very rocky area in which water collects on several spots. It happened that children went into one of these little ponds for a bath and got drowned.
MKORANI	— Trading Centre
MKOLA	Tree (<i>Azelia quanzensis</i>)
KOLA (v)	To tire This tree grows very slowly it looks like it would be too tired to grow (! ?)
IHAYABUYAGA	— Parish
HAYA	To talk
BUYAGA	Senseless, rubbish At a time there lived a few men in the area who were addicted to bhang-smoking and showed the symptoms of this vice. The neighbours invented the name for their parish.

7. **NYEGEZI**

or

NEGEZI

or

NEGEJI

GEZI	— Cleverness (No further proof available)
MAHANDE	— Present chief
MAHANDE	The Chaff of corn left after milling.

8. **UJASHI.**

UJASHI	— Hunting ground
or	
JAHALA (v)	— To combine and become strong (?)
KISABO	— Residence. Native Authority headquarters.
KISABO	— 'A' calabash It is related that the first settlers after a few years had to fetch water in calabashes from a distance.

9. **BURIMA.**

LIMA (v)	--- To cultivate.
IGOKELO	--- Native Authority headquarters.
GOKA (v)	— To be ashamed when found out. The name is new and refers to the seat of the court, formerly the parish was called Bashi.
MISUNGWI	— Trading centre.
MSUNGWI	— Tree (<i>Vitex</i> sp). The tree name is derived from NG'WA (v)—to drink, to suck: the fruits are eat- able.
MWAMANGA	— Parish
MANGA	— Diviner. A famous diviner lived in the area.
UKILIGURU	— Agricultural Training Centre.
IGULU	— Sky, (very high place).
KILA (v)	— To surpass. A hill surpassing surrounding hills in height.
KIKUNGU	— Parish.
IKUNGU	— Uninhabited wilds.
MBARIKA	— Name of Southern area of Burima.
MBARIKA	— Swahili name of plant (<i>Ricinus communis</i> — castor-oil plant).

USEGA FEDERATION.

Name imported from Ufipa via Burima.

10. **NASA.**

NASUKA (v)	— To pierce
KAPONGO	— Present chief.
PONGOLA (v)	— To break bones into pieces.
NYASHIMO or KALOLE	— Native Authority headquarters.

NANSIMO — Place in Ukerewe from where the name has been imported. (Shima (v)—to thank in Kisukuma) (Sima (v)—to thank in Kikerewe).

LOLA — To look
All the place names containing the root "lola", are given to places such as buildings on hill tops or to an isolated hill itself.
The name Kalole in Nasa is comparatively new. In 1920 one Musikula was akida of Nasa (official in system of direct rule); he was a man from Buganda who built a big house there, which became a landmark for a short time.

NYANKALALA — Ginnery.
It was originally the name of the stream passing the ginnery.

Kalala (v) — to sharpen a tool
The noise of the river in flood is compared with that made by sharpening a tool.

11. **MASANZA I.**

SANZAGA (v) nti — to cut trees

^{or}
SANZA (v) — to meet

LUPEMBA — The present chief
His full name is "Lupemba ngorole"

PEMBA — to burn

NGOROLO — the fence of a cattle kraal
The chief received this name because at the time of his birth so many cattle died during an epidemic of rinderpest that the fences of the kraals were used as fuel, since they had become useless.

KILOLELI — Native Authority headquarters.

LOLA (v) — to look
See "KALOLE" in Nasa chiefdom No. 10.
The courthouse as well as the residence of the chief are on top of a hill overlooking flat country.

12. **MASANZA.**

BAHEBE — Present chief

HEBA (v) — to defeat

KALEMERA — Native Authority headquarters.

LEMERA (v) — To conquer

13. SHINYANGA.

- INYANGA — Plant (**Jatropha Curcas**)
This plant was conspicuous in the area.

14. MONDO.

- IMONDO — Tree (**Entandrophragma** sp.)
A very big tree of this species stands in the parish Ikondo.
- USHITEREJA — Native Authority headquarters.
- SHITEREJA (v) — To live close to each other.
- CHAGATI — Present chief
- KAGATI — In the middle
Mondo is in the middle of the chiefdoms Seke, Mwadui and Chigoku.
- BULAHU — Trading Centre.
- LAHA (v) — To run away
The people fled into the dense bush there when Masai raided the country.

15. SIHA.

The original name was Siya which is the name of the ruling dynasty.

- NEGEZI — Native Authority headquarters.
See chiefdom No. 7
- KIDAHHA — Present chief
- DAHHA (v) — To scoop
The name means—the collector of riches.
- KOLANDOTO — Mission station and famous hospital
- MKOLA — Tree (*Azilia* sp)
- NDOTO — Wet
See Mkorani chiefdom No. 6
- IBADAKULI — Native Authority School
- BADHA (v) — To catch, to seize
- KULI — Lizard

- KIPATAKULI** — **The lizard-catcher**
 A name given to one or more of the larger raptorial birds, such as **MELIERAX** spp.—the goshawks and **Buteo Rufofuscus Augur**—the Augur Buzzard. These birds do catch a good many lizards and they have a habit of perching on some prominent place, the top of a baobab tree or some rock. It seems possible that Ibadakuli might take its name from the bird, which might have become quite a landmark.

16. **BUSULE.**

- SULA (v)** — **To inspect**
 Mola, the first Siha ruler of the area and the husband of Giti had many traps here and went frequently to this country to inspect them.
- SALAMBA** — **The present chief**
- SALAMBA** — **A small bell**
- IGALAMIA** — **Native Authority headquarters.**
- GALAMIA (v)** — **To stop, obstruct**
 The chief Nkandi of Kahama used to interfere in the internal quarrels of the various Siha chiefs. During one of these tribal feuds his advance was checked on this spot.

17. **BUDUHE.** (unexplained)

- KISHAPU** — **Native Authority headquarters.**
 The only explanation available was that the word is not of Sukuma origin.
- SHOKA** — **The present chief**
- SHOKA (v)** — **To return**
 On the day of his birth Ng'wanangwa Koki **returned** from a journey to the coast and Shoka's father celebrated this event by naming the newly-born child Shoka.
- NG'AMAGEMBE** — **Mission station**
 The pioneer who first settled in the area was called Magembe (Igembe-hoe)
- MHUNZE** — **Trading Centre**
- MHUNZE** — **Name of a tree**
- SHAGIHILU** — **Cotton store. A trading centre**

HILU	—	Twilight
SHA (v)	—	To grind
		There were many lions in this area and the people said therefore that it was necessary to finish preparing the meal before it grew dark.
ILULA	—	Mission station
ILULA	—	Tree (<i>Acacia</i> sp.)
SUNGANHOLO	—	Parish
SUNGA	—	
NHOLO	—	In this area many people were killed by Masai who lay there in ambush; therefore the people who had to pass through it did so with great fear for their life.

18. SAMUYE.

The name of the first chief was Samuye, who was a vassal of the chiefs of Busanda. His successor was MASALI who defeated the chief of Busanda and conquered a part of the country. He made himself independent from the Busanda chiefs and chose to call his chiefdom after the first chief Samuye.

ISELA	—	Parish
SELA (v)	—	To flow
		In a war between Mtemi Masali and Ntemi Subi of Bukune a great number of people died in this area and blood was shed like water.
SESEKO	—	Parish
SESEKA (v)	—	To be full and overflowing
		This parish is situated on the edge of the Mhumbu stream which often inundates parts of the parish.

19. MAGU.

MAGU (v)	—	To show strength
		It refers to a war which was then called Bulugu (there were many feuds in the area) and Sima. After the victory the area became known as Magu.
KAHANGARA	—	Trading Centre, former residence of chief and Native Authority school

KU-HANGARA	— Obstruct, resist
NYALIKUNGU	— Trading Centre
IKUNGU	— Dense bush
SIMIYU	— River
ISHIME	— Deep hole

20. **BUSMAO.**

SUMA (v)	— to forage
NYAMBITI	— Trading centre
MBITI	— spotted hyaena
MANTALE	— Railway Station
ITALE	— Large flat-topped rock
BUNGULWĀ	— Chief's residence
NGULA (n)	— Red soil (of the Masai)
NGULA (v)	— To skim something such as leaves from the surface of water. The men ruling there were selected among many candidates.
KOLOMIJI	— Native Authority school, dispensary and sub chiefdom
MKOLOMIJE(?)	Tree
IBINDO	— Native Authority school, dispensary and sub chiefdom
KU BINDA	— Put between the legs (cloth etc.) To hide
IBINDO	— The outside circle of Msonge where many things are hidden On the place of subchiefdom an Ntemi built a huge msonge (hut) with a very big encircling gangway.

II. **ZINZA.**21. **BUCHOSA.**

TOSA (v)	— To arrive (Zinza)
TOKOSA (v)	— To have to arrive This was the place of the chief's residence and his subjects had to go there to pay their respects.

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- RUKAKAZA** — The chief
- KAKAZA (v)** — To invade
- KOME ISLAND** —
- KOMA (v)** — To knock
 There is a place on the island with a rock which sounds like a drum when it is beaten. Originally the island's name was CHANA which means a small thing, a little child. The island is the little child of the mainland. One day a member of the royal family, (the Bahinda of Hamitic origin) passed the rock and disappeared swallowed by the spirit of the family which had ruled in the country before the arrival of the Bahinda. Since the disappearance of this Mhinda no member of this family dares to venture into the region of this rock.
- BUHAMA** -- Port of Kome, island
- MUHAMA** — Tree (*Borassus flabellifer*)
 Kome island was populated by people from Bukerewe. They called the place of their landing Bukindo (see Bukerewe). The Zinza called the area NYACHISANSA because the Masansa tree grew there in great numbers. The Zinza did not stick to their name but adopted that of the Kere-we; they called the place BUCHINDU, because the Zinza have difficulty in pronouncing the Kerewe "Ki". The area became very populated and the Zinza headman in charge of the village adopted for himself the name Buchindu. When he died it was necessary to find another name for the place because it is taboo for the Zinza to pronounce the name of a person who has died. The people chose the name BUHAMA.
- NYAKARIRO** — Ginnery, Native Authority Centre
- KARIRO** — fire
- NYA** — At, on
 It was the custom of a Hinda ruler to give a part of his country to each of his sons as sub-chief. Long long ago a son rebelled against his father and swore that he would set fire to all the villages of his father; he succeeded in burning down one village at the Lake shore and the place was then called Nyakariro. The son was soon defeated and had no time to burn down other villages.

22. **KARUMO.** (Chieftdom)

- MRUMO** — Peninsula
During tribal feuds the losing party often escaped into the peninsula because of the rocky mountains there which offered good protection. Finally this part of the country gave its name to the chieftdom itself.
- NYAMAHONA** — Former Agricultural station
The correct spelling is NYAMAHUNA
- HUNA** — Owl
There were many owls in the thicket there.
- JUMA ISLAND** —
ZUMA (v) — To use provoking language
The inhabitants of this island were haughty to a degree and easily became provocative to the inhabitants of the opposite coast because they knew that it would be difficult for anyone to come over and fight them on their island.
- NYAMAZUGO** — Trading centre, intermediate court.
- MAZUGO** — Small bells.
There lived craftsmen who made these bells; they were LONGO and they found iron-stone in the hills of the area.
- KATUNGULU** — Trading centre
- TUNDURA (v)** — To roar like a lion
The place of lion roaring.
- NYANTAKUBWA** — Mission school of White Fathers
- KUBWA (v)** — To be surrounded
There were many lions in this area and hunters of game were afraid to go round this hill
- GEITA** — Gold Mine, Seat of Adm. District
- KETA (v)** — Kill
("AKABANGA AKA KETA"—This hill kills)
On the top of the hill is a spring in a very deep well. There was a time when persons sentenced to death were thrown into this well by the rulers of the country.

III. **BUKEREWE.**23. **BUKEREWE.**

Island and chieftdom north-east of Mwanza. One of the SESE Islands in the northern part of Lake Victoria has the name.

- RUKUMBUZYA** — The present chief
- KUMBUZYA (v)** — To mourn
If it happened to parents that many of their children died, they become extremely solicitous of a surviving child. Former chief Gabriel Rukum-luko, father of RUKUMBUZYA, lost many children and therefore gave this name to his son who became his successor. After his enthronement the chief chose the name MWINAMILA.
? INAMIRA—to bend and to look down at the people on a lower level. There were several relatives who wished to become chief. When finally he won, he chose this name.
- NANSIO** — Port & Trading Centre
- NSYO** — Small grind stone
- SYA** — To grind
The women living in the vicinity assembled at the flat rock near the port to grind their corn.
- BUKONGO** — District Office
- KONGO** — Beer prepared by first roasting the corn (mainly maize or millet). The place was famous for the excellence of its beer.
- BUKINDO** — Residence of chief
- ENKINDA** --- Leaf of the Borassus palm (Muhama)
The first residence of the Hinda chief was built in Iramba opposite the Ukerewe island on a place where there were plenty of these palms. Wherever residences were built for the chiefs the place was called KUKINDO (see also Buhama of Buchosa). The name MUKINDU is more often used for Phoenix palm.
- KAGUNGULI** — Roman Catholic Mission and big school
- KAGUNGULI** — Cliff, elevated place on a flat hill
- GUNGA (v)** — To lift.
- MRUTUNGURU** — Ginnery of the White Fathers
- MTUNGURU** — Tree (*Dychrostachis glomerata*)
This tree grows well in the area
- BUKONYC** — Intermediate court, dispensary and Native Authority school
- MIKONYO** — Plant near water
This plant is very common in the area

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- KAZIRANKANDA** — African Inland Mission
- ZIRA (v) — To put under taboo
- NKANDA — Hide prepared as a garment
It is the place where it was taboo to wear hides as garment.
- NAFUBA — Island, south-east of Ukerewe
- FUBA (v) — To knot
The inhabitants were considered backward by the Ukerewe people. They were tied to tradition and against progress.
- NANSIMO** — Intermediate court, dispensary
- SIMA (v) — To think
Tradition has it that, when the first rulers brought good rain to the area, the people were extremely thankful and therefore obedient to them.
- RUGEZI** — Ferry between Ukerewe island and the mainland.
- GERA (v) — To trickle
Formerly the water in the channel was very shallow and the island was invaded by Kuria and Taturu, people, who took away stock. Elephants crossed over to Ukerewe and the last of these was killed in 1928. The channel was deepened in 1914/5 for the passage of craft.
- IRAMBA** — The part of the Bukerewe chiefdom which is situated on the main land. The ruling family, the Wasiranga, arrived there first.
- RAMBA (v) — Lick up with the tongue
At one time many people died here and the neighbours said "this place licks the people up like one licks up the rest of food in a plate."
- IV. **BUKARA.**
24. **BUKARA.**
- UKARA** — Island and chiefdom north of Ukerewe
- KARA — Ancient, it implies also the meaning of backward. This name the inhabitants received from their neighbours. They call themselves WAREKI and the island IREKI!
A traditional version has it that the first immigrants into this island came from KANYEN-GEREKO in Bukoba District, the inhabitants of which are called BAKARA.

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|-----------------|--|
| BUKIKO | — Residence of chief, dispensary, Native Authority |
| RUKIKO | — Ganda word
It is used widely on the shores of Lake Victoria
and means court. |
| NYAMANGA | — Roman Catholic Mission and school |
| MIMANGA | — Ribs of a vessel
This place was covered by a forest and the Kerewe
people liked to go there to collect building mate-
rial for their boats. |
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SWAHILI EPIC LITERATURE

LYNDON HARRIES

The Swahili people are unique among the Bantu of East Africa in possessing an heritage of written literature of considerable range and antiquity. The earliest reasonably authentic examples consist of *mashairi*, song-poems, attributed to Liongo Fumo, prince of Ozi, c. A.D. 1150-1200. Many of the well-known *mashairi* were impromptu compositions of the minstrels who vied with one another at the song-tourneys. Reference is made to these poets in an old fragment:

'Wambao Ndiswi malenga, / wakizinga na fakhari,
Wenye ndao ya kutunga, / kujitia ushairi.'

'We are minstrels', so they say,—with swagger as they strut along,
And proud they are to rime, if they can rime themselves into a song.

The canons by which verse was judged were (a) the apt and precise choice of words, (b) perfection of rime, and (c) perfection of metrical technique. Usually the *mashairi* were not committed to writing until after their public performance, sometimes years after, and only such prizes as had won public approval were, as a rule, preserved in manuscript. Another type of poem was, however, set down in writing in the first instance with a view to public performance. This was the long *utendi* (plural, *tendi*; also in Zanzibar dialect, *utenzi*, pl. *tenzi*), an 'act', play, or epic, which was intended to be sung aloud by one or more to a musical accompaniment and before an audience. Steere, who compared the musical setting of such works to Gregorian chants, stated that a musical score was sometimes prepared, but none has found its way into the hands of European scholars.

Scholars like Werner, Steere, and Buttner have transcribed a few *tendi* from the adapted form of Arabic script used in writing Swahili poetry into the Roman script, but the number of works edited by Europeans has been small compared to the amount of material that is known to exist. The number of manuscripts of any one poem is, of course, very small, and these are usually variant editions by poets of differing merit and ability. It is usual for the same copy to be borrowed by Swahili relations and friends, and since the *tendi* are still in use for public performance the owners are naturally slow to part with any manuscript to a European. Before doing so the relations may have to be consulted.

All the more reason then for welcoming two important additions to our store of Swahili literature. The first is the collection of Hichens manuscripts acquired by the Library of the School of Oriental and African Studies. For these Hichens was indebted to Sheikh Mbarak Ali Hinawy, the Liwali of Mombasa, who has made a special study of the history and authorship of Swahili poems. Although no copies of long *tendi* are included in this collection, it contains much useful general material relating to Swahili poetry and some valuable manuscript copies of *mashairi*. The second is the work of a European scholar, Dr. Ernst Dammann of Hamburg University, *Dichtungen in der Lamu-Mundart des Suaheli*, Hamburg, 1940. This book has not yet received any notice in this country, but it is the best

collection of **tendi** that has ever been published. It contains seven long **tendi** with a very reliable translation, and the poets responsible for the work, men like Muhammad (Kijuma) Abubakar bin 'Umar al-Nakariy, are poets of the best Swahili tradition.

Hichens attempted the difficult task of trying to find the origin of the **tendi**, but his conclusions are not very reliable. He suggests that the themes were borrowed from Arabic works read or intoned in the mosques at Maulidi or Mauludi, the birthday celebrations of the Prophet. This in itself is not likely, because on the night of Maulidi the Praises of the Prophet are sung and these bear no relation to the themes of the **tendi**. Hichens's suggestion that the Arabic works recited then were such well-known anthologies as the Assemblies of Hariri, the Hamasa, and the Kitāb ul Aghani, is certainly wide of the mark. These again bear no relation to the **tendi**, and in any case would never be heard in the mosques on Maulidi. It is not possible to trace, at least in classical Arabic poetry, any source relating either to the Praises or to the **tendi**. It is true that, in the classical period, and for that matter in the Koran itself, one may find general references to what is the usual theme of popular **tendi**, e.g. in Ibn Hisham's 'Sirat al-Nabi' we read of the Miraj, i.e. the Ascension of the Prophet into Heaven, which is also the subject of a long **utendi** of 660 verses in Dammann's collection. Nevertheless no classical Arabic work can be quoted as the direct source of Swahili **tendi**.

We have to look to the post-classical period of Arabic poetry for any possible sources, and this is borne out by an examination of the form of the Swahili verse. Hichens observed that the Swahili poets adopted the form of verse 'known to the Arabs' as **tasmit** (Ar. -). The truth is that this verse-form was not used by the Arabian poets of the classical period. Although Freytag gives an early date for the appearance of the **tasmit**, it is generally considered that examples of poetry in the **tasmit**-form reputed to belong to the early classical period are not genuine. It is significant here that any direct sources quoted by Dammann are from manuscripts dating from the end of the eighteenth and the beginning of the seventeenth centuries.

Certainly no long Swahili poem now extant appears to date earlier than the seventeenth century, before which time religious and heroic epics were composed in long-measure, i.e. with more vocalized syllables than the **tasmit** provides for. A number of short **tendi** are probably of a much earlier date, but these are clearly original compositions inspired by an actual event in Swahili history, for example, the song of the women of Manda when 'Umar I sacked their town and took them captive to Pate, circa A.D. 1339. There is always the possibility, of course, that even when parallel legends can be quoted from Arabian sources, the Swahili version may be an original composition based upon traditional matter which has no doubt undergone considerable modification reached by Professor Werner in her edition of the short **utendi**, called an **Hadithi** (story) of Miqdad and Mayasa. Although an exhaustive examination of the Arabic manuscripts dealing with Miqdad had been made, not one of them corresponded with the Swahili poem. Nevertheless, it is safe to say that most Swahili **tendi** have some direct source in Arabic literature, but it is the literature of 'the dispersion', and research would have to be made into popular Arabic verse in such regions as the Hadhramaut and the Persian Gulf before any satisfactory conclusions could be reached.

Swahili verse is scanned in **mizami** or **vipimo**, that is, in the measure of the number of **harufi** or vocalized syllables to the **kipande** or line. There are many examples of verse in 6, 8, and 11-**mizami**, and most of the long **tendi** are written in 8-**mizami**. Swahili scribes follow the Arabian method by writing the verse in two lines, each medially divided. The divisions or rests are called **vituo**. These rime together, while the terminal rime of each verse is the same throughout the poem.

European scholars have considered that rime in Swahili verse is 'predominantly to the eye. Steere, for example, asserted in 1869 that 'in all cases the rime is to the eye more than to the ear, as all the final syllables being unaccented, the prominent sounds often destroy the feeling of the rime'. This opinion has been repeated even by those who fail to make an exact transcription from the adapted form of Arabic script in which the poems are originally written. Hichens goes to the opposite extreme, however, in maintaining that there is no such thing as an eye-rime in Swahili verse. The truth is more likely to be that Swahili rime in the **tendi** is both to the eye and to the ear.

When the professional scribes write in the acknowledged manuscript form, all the riming line-ends terminate with a kind of literary flourish. This may be nothing more than a calligraphic ornament, but another important factor shows that the scribes had at least some intention of making the rime appeal to the eye. This lies in the necessity for transcribing every letter from the original manuscript. For example, the initial letter of a rimed terminal syllable may be one of the following:

alif , wau , 'aini , or hamza .

When these letters stand between two vowels they are usually, but quite erroneously, omitted in European printed texts. They are always written in the original Swahili script, where their omission would offend the most elementary rules of Swahili orthography and calligraphy. For this reason it is not possible to transcribe Swahili script into the 'Standard' script of the Inter-Territorial Language Committee, which was adopted without regard to established literary practice. The retention of such letters is often essential to the perfection of the rime-pattern, for example:

Swahili	'Standard'
<i>Hawawezi kukimbiya</i>	<i>Hawawezi kukimbia</i>
<i>Kutembeya ni mamoya</i>	<i>Kutemba ni mamoja</i>
<i>Ukapata na kuliya</i>	<i>Ukapata na kulia.</i>

The rime here is in-**ya**, and it might be contended that for practical purposes one could as well print 'kukimbia' and 'kulia'. But the rime is respondent with a contiguous rime, in this case the rime in **mamoya**. In this word the -y- is a functioning consonant, the equivalent of -j- in Southern Swahili. Thus it cannot be omitted, and to present the riming sequence the -y- should be retained throughout

At the same time, the rime was meant to appeal to the ear as well. Quite obviously this is not so easily demonstrable from any examination of the texts. Although in spoken speech the stress is usually on the penultimate syllable, it is important to remember that these poems were not meant to be spoken, but to be sung or intoned. Was the final syllable or rime stressed by the minstrels when they sang the **tendi**?

In 1945 at Mikindani I had the good fortune to be present at the rendering of a well-known **utendi**, *Ras-il-Ghuli*, a work of more than 5,000 verses, dealing with the adventures of the Four Companions of the Prophet in avenging a Muslim woman whose ten children had been slain by an unbelieving king of a Yemen. The opportunity had been granted me of examining the text beforehand, and so I was able to observe closely the actual rendering, and there can be no doubt that the rimes were stressed in a manner not possible if the verses had been spoken and not sung. At times, the rime was only too clearly meant for the ear. This in itself, of course, is in the Arabian tradition, and it would be true to say that it applies, not only to **tendi**, but to most of the **mashairi** as well.

The themes of Swahili **tendi** are, of course, common to all national epic literature,—bravery, romance, tragedy, and history. The Swahili have names for the different types of **tendi**, e.g. **Utendi wa ushujaa** (bravery), **Utendi wa hekima** (philosophy). All have a deep religious inspiration, strongly Islamic, and most begin with verses praising God and His Prophet. Most of the long **tendi**, of more than 600 verses, have no real historical basis, but are concerned with romantic legends in which real characters from Islamic history (usually the immediate relatives and followers of the Prophet) are the principal characters. The nearest parallel in English literature is perhaps Malory's **Morte D'Arthur**, and the spirit of these Swahili epics can be expressed in the words of one of our own poets who himself wrote one of the earliest epic poems in our language:

O goodly usage of those antique times.
In which the sword was servant unto right;
When not for malice and contentious crimes,
But all for praise, and proof of manly might,
The martiall brood accustomed to fight.

(Spenser, **Faerie Queene**, III. i. 13.)

The 'martiall brood' in Swahili epic literature are the followers of the Prophet, but they are naturalized on African soil. Just as Spenser drew for incident upon foreign sources and yet wrote a truly national poem, so also the Swahili poets north of Mombasa have created a national literature from sources that are foreign to the Bantu. Many of the descriptive passages bear a distinctly African character and, while the influence of Arabic is deep, the grammatical context of the **tendi** remains distinctly Bantu. It is a literary heritage of which the Swahili may well be proud and which it must be their and our pride to cherish before it is lost.

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(i)	Utendi wa	Herkali	Utendi wa	Ayubu
	" "	Sufiyani	" "	Isipani
	" "	Amuri	" "	Shufaku
	" "	Miraj	" "	Ayesha
	" "	Fatuma	" "	Isa
	" "	Abdurrahman	" "	Al-Akida
	" "	Mwana Kupona	" "	Mkonumbi
	" "	Nasra wa-Arabu	" "	Ras-il-Ghuli
	" "	Siri li-Asirari	" "	Katawafu
(ii)	Utendi wa	Ngamia na Paa	Utendi wa	Sheikh Ali
	" "	Hasina	" "	Liongo Fumo
	" "	Barasisi	" "	Wajeremani W
	" "	Mikidadi	" "	Kozi na Ndiwa

N.B. The second group are sometimes called Hadithi, but have the same form as the tendi.

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THE NECESSITY CO-ORDINATION OF ECONOMIC AND POLITICAL DEVELOPMENT.

by Hans Cory.

Several sociological research organizations have been inaugurated during the last two or three years and many research projects put forward, often with recommendations for priority of certain items. During the same period a great number of local development plans have passed the preparatory stage and are now being put into practice. A powerful drive for development is noticeable everywhere, with the final aim of elevating the standard of living of each individual considerably. The proposals for research projects to which priority is attached show that priorities have been determined mainly by considerations of economic importance; in other words the projects are intended to serve mainly economic development plans.

Judging by personal experience I do not consider that development plans can be successful unless, at the same time, the political education of the people progresses proportionately. Further I believe that if economic success were to be achieved it would at once endanger the normal and smooth running of Government machinery, unless accompanied by far-reaching political reforms.

It would be unfair to forget or to belittle the many efforts of idealistic reformers in the past, but the fact remains that economic progress over a period of many years has been dishearteningly slow. I take as an example the widespread and continuous efforts in agriculture and husbandry which have been made by the relevant departments with very little success. It might have been expected that the Africans would react at once to teachings which not only promised them a sure and immediate profit but which proved it to them by successful experiments. But almost everywhere the response has been phlegmatic.

The explanations usually offered for this lack of success have been depreciatory of the African: lack of literacy and education, inherent conservatism, a suspicious attitude, inborn laziness, instability or simple stupidity have been mentioned. No one can deny that these factors exist, but anyone living in Africa must also say that many examples of achievement within the circle of native institutions can be found to contradict the above assertions. Better founded explanations have also been given, such as lack of demand for consumer goods, a dislike of growing rich beyond the average, superstitious fear and the ease with which the minimum of livelihood is obtained.

All these arguments have their justification to a certain extent but they present only a one-sided view. An equal or even more decisive cause lies in the ignorance and fundamental strangeness which prevails between Europeans and Africans, between teachers and pupils. The teacher knows only the lessons but not his pupil; he knows only the school but not the pupil's home life. And the "pupils" are adults, citizens of a community, leaders and protectors of families, subjects of an indigenous authority which shows one face to the teacher and one to the pupil.

The African's home surroundings, which naturally more than any other factor determine his attitude to any outside influence, are not taken

sufficiently into consideration when plans or schemes for development are designed. The target is always known, the starting point seldom. The consequences are to be seen in the results—which are almost disappointing. The central Government when considering, for instance, the necessity for more secondary schools or for mechanisation of field cultivation, makes scant provision for the consequences of these quick and far-reaching advances on the life and outlook of the individual. Thus the great pressure which a higher culture exercises on a lower one, when they come into contact, is deliberately split into uneven elements of development.

One most important aspect of the home life of the African is the political right of the individual to enjoy security within the community. Originally in this territory the commoner enjoyed a considerable degree of control over his autocratic ruler, usually exercised by some type of corporate body of elders. (The cases of absence of control or of absence of ruler can be considered as exceptions.) This control, of which the Europeans—at least so it seems—were not cognisant, has deteriorated quickly and thoroughly during the last 40 years. The times when it existed, however, are not so far distant that the people have completely forgotten them; usually the old system survived the impact of modern influences in a degenerate and inarticulate form. The consequence is that these rudimentary features may either convey to a community the idea of reviving old rights in a modern form or they may provoke radical tendencies because the degeneration of old political rights is now felt very deeply under present trends infiltrating from outside.

The mistake has been that the “official” political set-up, as it has developed in contact with the European Colonial Power has not taken into consideration original institutions which, though often very vague and haphazard, constituted the peoples’ political rights. The few reforms of recent date hardly count if they are seen in perspective against the whole process.

There is a danger growing from day to day. The adult “pupil” is not capable of enjoying the lessons, or of believing in their necessity, nor does he see any reason for trusting the assertion that everything is planned and done in his own interest while he notices that he is supposed to remain the hand-clapping simpleton at home. No one can call such a world well ordered even if food and clothing are improving from day to day. In other words the African must be given a well-measured dose of political emancipation together with the development of his country’s natural resources.

If the necessity for the co-ordination of these two great movements is not realized in good time a dangerous gap will open up between the quickly improving standard of living and a political evolution which only exists on paper but the demand for which must naturally be growing. People whose standard of living includes better education, higher morals, a finer sense of justice and unconditional respect, for human rights cannot be expected to remain in and be satisfied with an order of things which served well (or not) a very unsophisticated community.

Already the gap is becoming noticeable where, under economically favourable circumstances, the people live far beyond the traditional African level. Since it is our acknowledged aim to develop all parts of the country, the tension is bound to become widespread. The absurd situation will then arise in which the Administration of the country can only continue to function without difficulty because our costly efforts in economic development

are **not** successful. At present the best helper of the Central Government and the Native Authority is the fact that the greater number of Africans still live as they lived 50 years ago. If it were otherwise the Administration would be faced with complications of a very serious nature and would be left with very little time to solve them. The people would show their dissatisfaction with the political order in ways which could not be misunderstood. In accordance with our own ideas, which acknowledge the strong predominance of economic issues above all others, we at once take all precautions if rains are bad and famine is threatening; but we are slow to realize the immense danger of political starvation.

This danger, originating in material progress, is one side of the imminent conflict; another danger comes from intellectual progress. *) We open wide the doors to Western Culture without reservation to those Africans who have arrived at a certain standard of learning. It would, in fact, be impossible under the present development of the means of communication, press, wireless, aeroplane, and under the influence of our own quickly changing minds, to hide or distort any aspect of European life. These Africans hear and learn of the European revolutions, fought for the rights of man, they also—either here or in Europe—come into contact with the European mind which at the moment has a strong trend towards equalization. When these young men—and their influence on the older educated generation is strong—begin to consider their home situation, they find nothing upon which they could start to build up their self-governing paradise. There is no public forum from which they can discuss reforms and demand them. Thus they are pressed into political secret societies and on to the top of shaky soap boxes from which they address, without a sense of responsibility, the political “analphabets”—the people. It is not difficult to plant in fields which are lying fallow the weed of uncritical and subversive sentiments. Thus the dangers of material progress are greatly enhanced by the comparatively small numbers of educated Africans who are inevitably radical if they are not apathetic.

The present colonial policy shows a realization of this dilemma and its danger, and instructions have been issued that the people must be given political representation. To dictate a policy is one thing, to provide the means for its execution is another.

Now the economic drive is really only an intensification of existing methods, which can be studied easily by a walk through the fields and a stop at the cattle kraal. But to find those still existing elements of political significance which can be used for building up reforms of communities needs difficult and penetrating study. This difference constitutes the real reason for the comparatively much greater speed of the drive for economic development.

The preliminary step in the direction of political reform implies difficulties which can only be solved by our own clear understanding that we must gain knowledge before we can reform, because it is almost an axiom that reforms will only be successful if it is possible to use existing tribal institutions (the cases where none exist are comparatively rare) and adapt them to meet modern requirements. There are many variations in tribal

*It is not the purpose of this essay to criticize the speed or extent of progress in any sphere; what I wish to show is the danger of preference for progress in a certain sphere and of disregard of a sense of proportion.

structure among the polyglot Tanganyika tribes. It will therefore be necessary to consider a priority list of those whose tribal structure must be studied first, because reforms are there most urgent.

In accordance with present colonial policy political reforms have been inaugurated in all provinces and a regular progress report is tendered by each Provincial Commissioner. Whatever may be the merits of any one scheme, exact definitions and enumerations of functions of councils on the various levels are not given, nor are any methods mentioned by which these reforms may be supervised after having been introduced, i.e. what precautions are recommended to guarantee their permanence.

Although the Native Authority may seem to be in agreement with political reforms and may pretend to understand their necessity, there can be little doubt that they all, chiefs and subordinate native authorities alike, prefer the status quo. How could it be otherwise? Tradition in authority declines to share, it may be willing to delegate.

The reforms themselves all follow the same pattern. They foresee the creation of corporate bodies to which they allot consultative duties and probably a few sharply defined rights. The members of these councils, whether chosen or appointed, are men who are extremely parochial in their outlook, although they are no fools as far as their own little world is concerned. But they possess no conception of anything outside their traditional sphere; their main characteristic quality as councillors is caution bordering on mental cowardice. We know it all—the “**karibu lakini mbali kidogo**”.* This cowardice is not disgraceful; it is justified by the powerful influence of superstitious beliefs and by the experience that the risk of responsibility stands in no proportion to its rewards.

The political life of a parish centres round the headman, who as a benevolent autocrat chooses the subjects which he likes to discuss with his sub-headmen, a few friends and relatives. The common villager has a vague idea of what is going on and is usually told what he has to do in order to avoid punishment. Discussions on a broader basis are restricted to parish affairs. The more the problems of recent years have multiplied and their impact become felt, the more incomprehensible the whole movement and atmosphere have become for the commoner. What should he think for instance, when he hears that his chief has flown to Iringa to attend a Territorial Cattle Board? And now on top of all this upheaval, for him the caprices of superior beings, he himself is called upon to appear. Now the commoner is pulled out of his hole and dragged forward from his corner. If there is to be any hope that the representatives of the people will play their part, they must be given teaching, security, belief in continuity and finally public spirit. It has already been mentioned that under European influence African political life has not developed naturally. One side of it has been pushed ahead and the other side allowed to degenerate. I repeat that it would be absolutely wrong to presume that this has been done deliberately by the central Government. But as it has happened and we now realize that it has happened it is our moral duty to have patience and not to despair of the final success of our educational efforts.

Almost the most important thing now required is security. The councillors of the different levels are given controlling and consultative auth-

*Near, but still a little far away”—said on safari in answer to an enquiry about how far away one's zeal is.—Ed.

crity. They are told to be men, to get on with the job and not to be afraid to tell their village headmen or their chief what they think is wrong and needs improvement— and then they are left alone. Is it necessary to explain what unavoidably happens? The responsibility of the reformer is terrible. With his good will and his impressive conviction of the soundness of his lessons he is endangering the well-being of those who follow his teachings best. This is no exaggeration if one knows the code of retaliation unquenchably written in the African mind.

It cannot be expected that the administrative staff, already overburdened without further new duties, can undertake the full-time task of supervising the effective running of the new machinery. Thus the order for political reform is like a fascinating title on the cover of a book, but the pages remain blank except for a number of ink blots caused by a few hasty would-be writers.

If it is acknowledged that the co-ordination of economic and political progress is a fundamental requirement, it becomes obvious that a fallacious constitution implies more danger than none at all. The Central Government will experience endless trouble if the first great move in the direction of political emancipation for the African fails. (This does not mean that success will exclude trouble, but it may postpone major trouble, if trouble there must be.)

What then is to be done?

Firstly, clearly to perceive the situation and its implications is the greatest help in overcoming all difficulties. If it becomes a commonplace in the minds of all men enjoying authority that, while a large market is a good thing, an efficiently working parish council is an even better one, many things will be given their right place in planning and estimates.

Secondly, the creation of the post of "political officers" is essential. Just as it has been found necessary in order to guarantee the success of development schemes to create an organization of teams, development officers and field officers, so it must be considered an obligatory measure to have supervising officers for political development schemes.

Thirdly, every plan for political reform should not only consider a list of priorities but also the possibilities of execution and supervision.

The prognosis, even if the introduction of reforms should take place under ideal conditions, and if the schemes, the timing and the supervision should all be faultless, is not optimistic. Political infancy will last many years and there will be areas where the state of infancy is never passed. But why should African communities in a comparatively short time accomplish what so many European countries have failed to do through centuries of trial and error?

Let us remember that the way of living of one race cannot be definitely designed by another, especially under a regime where the element of freedom is the decisive factor.

NOTE.

**THE GRAVE OF NGAONALUPEMBE, CHIEF OF THE
WAHEHE AREA 1800—1820.**

One of the interesting customs of the Wahehe, of Iringa District, Southern Highlands Province, was the care and reverence with which their hereditary Chiefs were buried and their graves maintained. The photograph below (kindly supplied by Mr. W. Joergens) shows the grave of a former Chief, who died in 1820, called Ngaonalupembe, who is particularly remembered for his ability to beget innumerable children. It is situated at Uieling'ombe, Iwawa, the former seat of the Uhehe chiefdom.

As can be seen from the photograph, taken in 1930, the grave is well kept, and is surrounded by perennially green trees. All members of the royal family have carefully kept and situated graves, but the hallmarks of a chief's burial ground are the elephant tusks which circle it, the two largest of which are placed at his head. (Only two tusks are shown in the photo, the rest have been stolen). No other member but that of a ruling chief is entitled to this mark of distinction.

The grave of a Chief plays, or did play, an important part in the ancestor worship cult of the Wahehe. These days the ritual attached to them has apparently fallen into disuse. The belief in former times, particularly in relation to Ngaonalupembe, due, probably, to his prodigious prolificness, is in the ability of the spirit of former chiefs to bring rain. The grave, in a season when the rains threatened to fail, or after a year of drought, became a sacrificial grove. Here, in order to enlist the aid of the spirit of the departed ruler in propitiation of the Rain-Maker, a completely black bull and ram were sacrificed. It is interesting to note that, as far as can be ascertained, though 1949 was one of the worst years in the memory of many old men as regards rain, no such sacrifices took place.

The chief's grave was also of particular significance to the members of the royal family. When any pressing difficulty, such as the severe illness of a favourite child, or some complex internal emotional conflict, had seemingly no solution without supernatural aid, the member or members of the royal family concerned would go and place a jar of native beer between the two largest elephant tusks, in the hope that the spirit of their ancestor would succour them in their troubles. This offering was always placed in its appointed position at dusk. Next morning after the sun had risen the jar was inspected and if the level of the beer had dropped there was much rejoicing, for the spirit of their ancestor was deemed to have heard their prayers and by drinking expressed his willingness to help them solve their difficulties. This also has fallen into disuse as, to-day, the popular belief is that the level of the beer decreases, not due to the thirsty spirit, but to evaporation.'

This note's main interest is perhaps the illustration of the rapidity with which old beliefs and rituals are being abandoned for modern and scientific explanation.*

*Descriptions of instances to the contrary, which must be numerous, would be welcomed for publication as Notes.—Ed.

PICTORIAL

A PICTORIAL DESCRIPTION

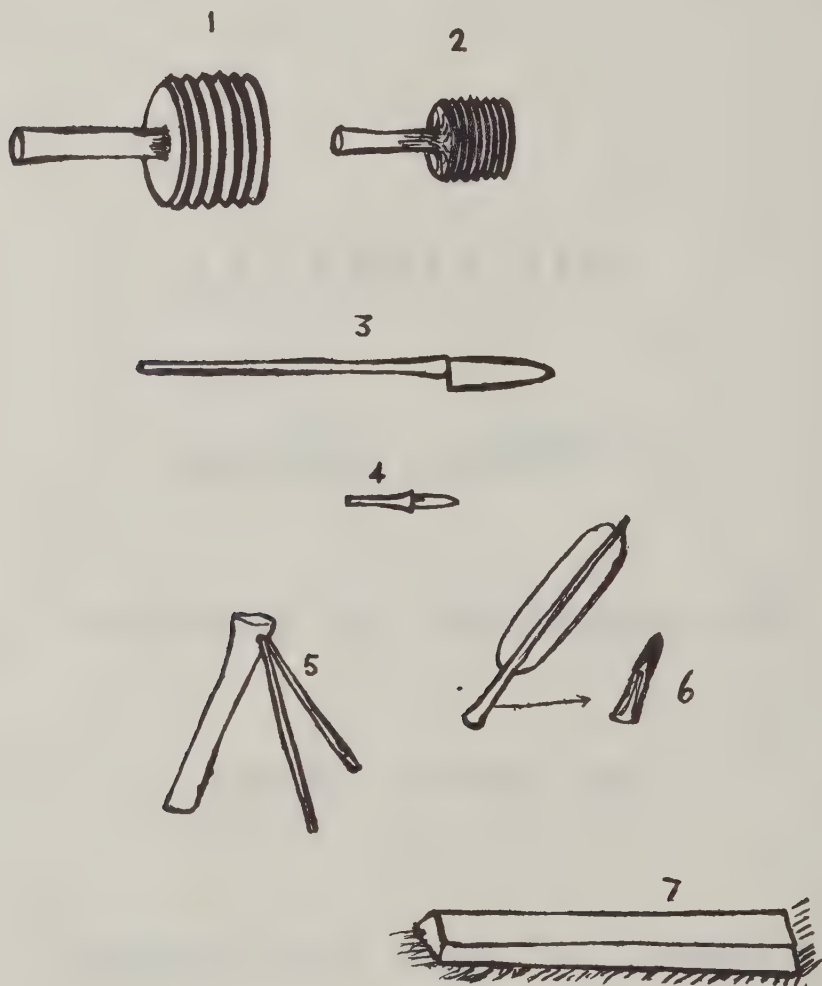
OF

THE MANUFACTURE OF BARKCLOTH

IN

THE BUKOBA DISTRICT

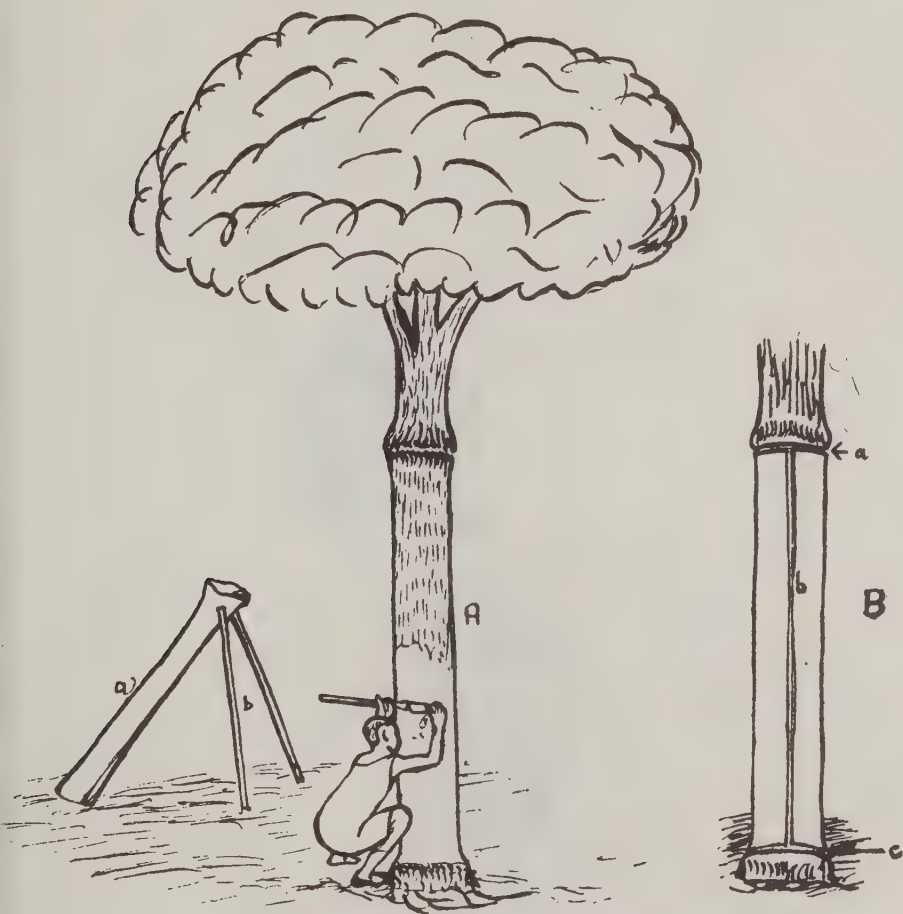
Prepared by Edward George Kimwani



The Preparation of Barkcloth Step by step.

Instruments used in the preparation of bark cloth:—

1. Large beater with wide ridges.
2. Small beater with narrow ridges for softening the bark.
3. Blade for scraping the outer layer of the bark and for removing the bark.
4. Knife for cutting away parts of the barkcloth not required.
5. "Steps" for climbing.
6. Mid rib of banana leaf adapted to stripping the bark from the trunk.
7. A plank or block of wood in the yard on which the cloth is pounded.



1. Shaping off the outer bark.

- A. a tree is having the outer bark scraped off. The workman starts at the bottom scrapping upwards. Behind him are native "steps" (a) is a banana stem (b) are poles inserted in the stem. The workman sits on this when scrapping the upper bark.
- B. Bark scraped ready for removal from the trunk.
 - a. The first cut.
 - b. Split from top to bottom. From this the workman begins to strip the bark with the aid of the mid rib of banana leaf.
 - c. The last cut before stripping the bark.



2. Removing the bark.

When he wishes to remove the bark he must begin at the bottom and work upwards. When he has finished within reach he must get on his "steps" so as to strip the higher bark. He works round the whole trunk. When the bark is removed from the tree the workman is ready to roll it up.



3. He begins to roll it up.

After being rolled up it is taken to be scorched by fire. It is scorched for two reasons.

- (a) To melt the sap in the bark so that it does not adhere to the beater and also to make the bark softer and able to stretch when beaten.
- (b) To whiten the bark. The singed side is lighter than the other one, which remains coffee-coloured.

The side to be scorched is the side next to the trunk, which has more sap in it and has not been scraped.

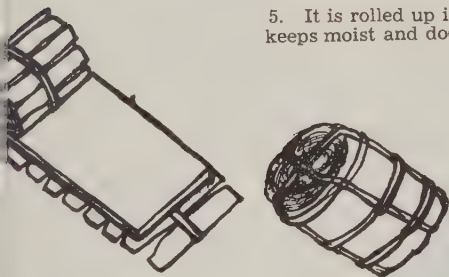


4. The bark is singed.

This is done in the back yard.

- a. The bark is laid on the grass
- b. On the bark, all over it, are spread dry banana leaves.
- c. Fire is put to the dry leaves and the bark is scorched from one end to the other.
- d. The workman cleans away all ashes and dirt following the fire as it goes from one end to the other: he does not wait for the scorching to be completed before he begins to clean.
- e. When the scorching is completed the bark cloth is cleaned again to remove all charring. It is then taken to be rolled up in green banana leaves.

5. It is rolled up in green banana leaves so that the bark cloth keeps moist and does not dry up and thus fetch a poor price.



Here it is, rolled up. After being tied up with rope it is put in the house till the morrow, when it will be pounded.



6. Pounding the bark.

The old man in the banda beating the bark.

This old man gets up early, at 6 a.m., to go to his back yard to beat the mark.

At 9 a.m. the bark is now bark cloth.

It is spread out in the sun to dry for half an hour. At 9.30 a.m. it is again taken and pounded, to make it still wider. Then the 7th stage begins.



7. Stretching.

From 9.30 to 10.30 a.m.

Two or three men can join in this task.

The old man takes the beater with wide ridges and beats the cloth to stretch it. Before he begins pounding he straightens out the cloth in front of him, takes the part nearest to him, folds it, and then beats the fold from one end to the other. He folds it again and then beats it all over.

He turns it, folds it and beats it perhaps twice or as many as five times and then unfolds it to take it out in the sun to dry a little. It is stretched out and fixed with stones.



8. Spread out in the sun.

It remains in the sun for half an hour and then comes the ninth stage.

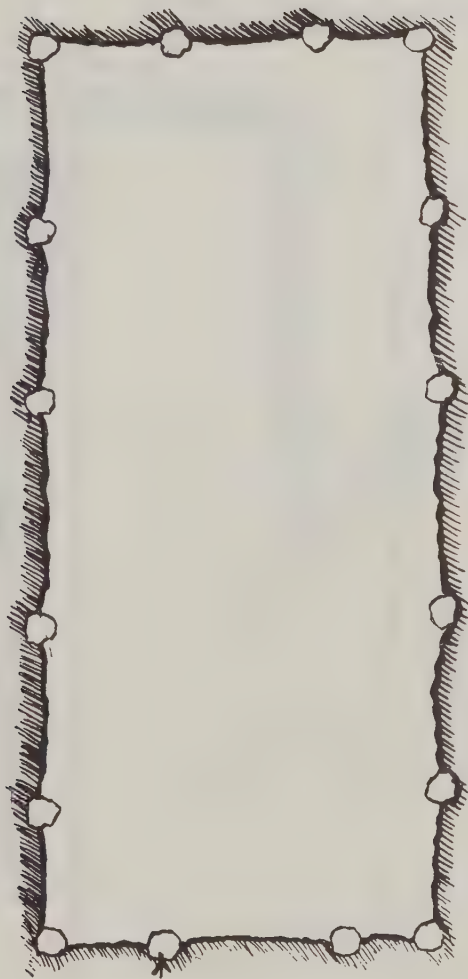


9. **The softening.**

Here are two men helping each other to soften the cloth.

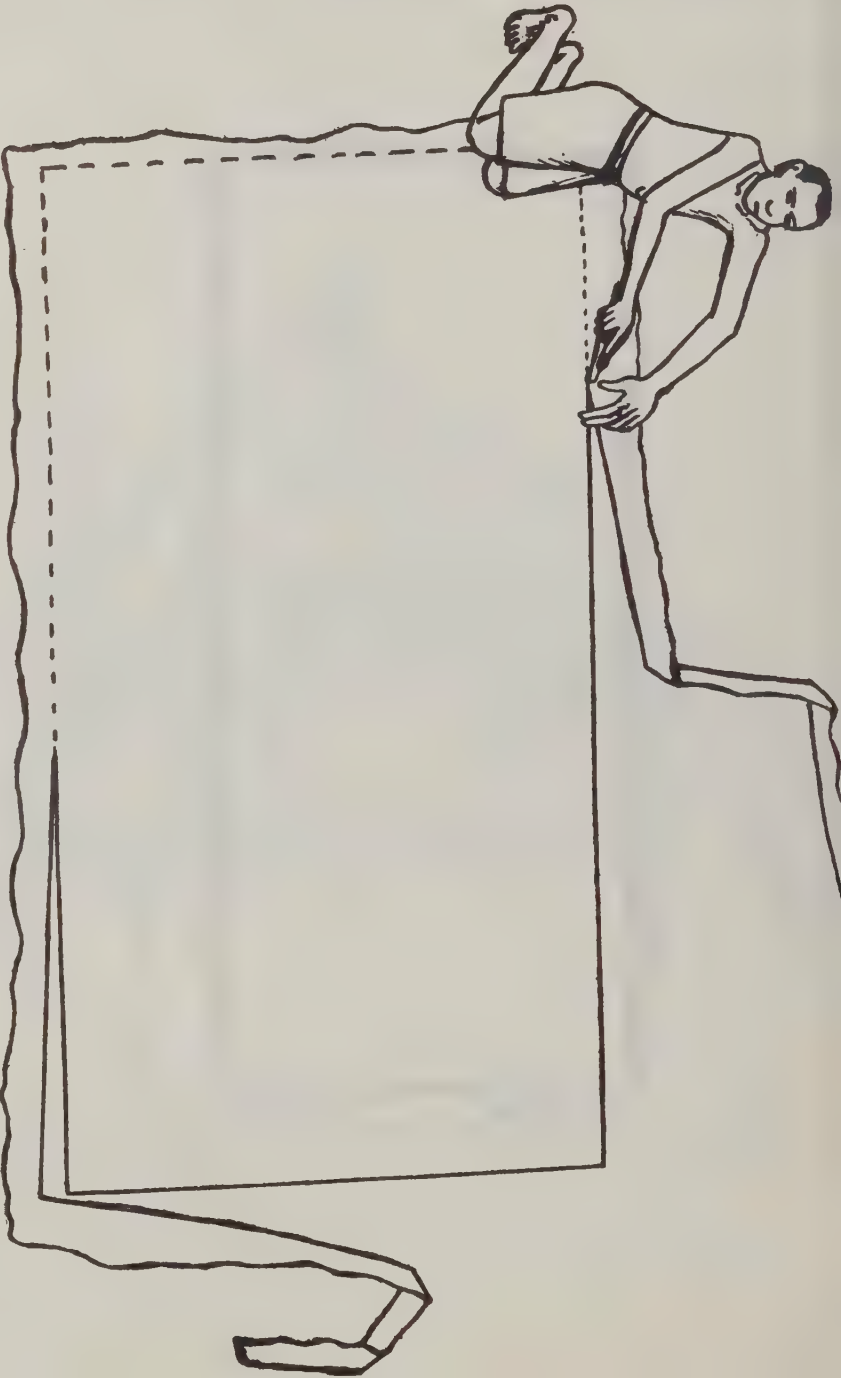
They use the beater with narrow ridges and very small teeth.

This is the end of the pounding process. In this work (which is like ironing) up to five people can take part, according to the breadth of the cloth. This work takes from 11 a.m. to 1 p.m.



10. **The last drying.**

After the softening the cloth is again stretched out and fixed with stones. It is put out 5 or 6 times so as to get thoroughly dry and so that its colours, coffee and while, becoming shiny. After a few days it is trimmed to remove corners.



i. The cutting. Here the cloth is thoroughly dry. The rough edges are being trimmed preparatory to decorating it. The cutting is done on a plank of wood. The left hand holds the cloth and the right holds the knife.



12. The decoration.

After choosing the pattern this man has begun the decoration. This is done in the back yard so that the sun may dry the colouring quickly.

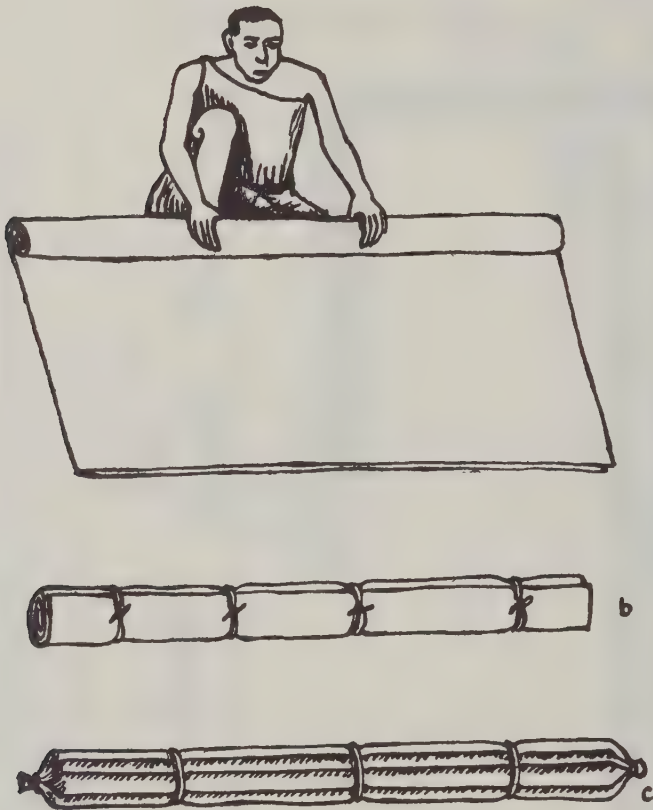
How to decorate.

- a. The tool (b) is held in the left hand against the cloth.
- b. With finger of the right hand colour is taken from the vessel and smeared between the spaces in the tool (b).

The tool is then moved to the next space and so on till the work is finished.

Colour.

The colour is a mixture of two things: leaves containing a black dye and potter's clay in a liquid state. When the workman puts the colour on the cloth it looks just like potter's clay. But when the clay dries it is shaken off and the black colour remains.



13. End of the work.

After the decoration and the removal of the slay the clay the cloth is divided in two like book and folded up.

- a. He is rolling it up ready for packing.
- b. He has tied it up ready for packing in dry pieces of banana stems to prevent its getting dirty.
- c. It is covered up and will be sent to a safe place available for use when required.

