

OP.23730.639.01(2)



TANGANYIKA TERRITORY  
GAME PRESERVATION DEPARTMENT

Annual Report  
1933



1-19 S. P. TEARE

1934  
DAR ES SALAAM  
PRINTED BY THE GOVERNMENT PRINTER  
*Price Shs. 1/-*

GAME RECORDS FOR 1933.

A sable antelope with horns measuring 46 inches in length and 19 inches from tip to tip was shot in the Tabora District by a visiting sportsman from India. A second sable head was picked up in the Lindi Province which measured 45 inches and 8½ inches. The latter is a very fine symmetrical trophy and now occupies a corner of the Game Office. Several good average greater kudu heads were obtained, including one which measured 58½ inches round the curve and 42 inches in a straight line; heads measuring 57 inches and 55½ inches are also worthy of mention. A cheetah measuring 7 feet 9 inches between paws was also bagged.

As usual the Serengeti has produced numbers of good lions. It is gratifying to be able to record that many visitors now prefer to kill their lions outside the Closed Reserve, where there is no likelihood of the animals having posed for photographic purposes.

NUMBER OF ELEPHANTS IN TANGANYIKA.

In the annual report for 1932 it was stated that an attempt would be made to ascertain the number of elephants if not for the whole Territory at least in those districts in which the increased staff would enable a census to be made. In view of the comparatively short time since the increased staff has been available, the dense bush and the enormous areas under each Temporary Ranger's control, it has been almost impossible for them to arrive at anything but very approximate figures for their ranges.

The majority of elephant are confined to the southern part of the Territory, which consists of the Lindi and Eastern provinces, the latter including the old Mahenge Province which has always been recognized as an elephant stronghold. The Ranger for the Lindi Province has been stationed there for the past two and a half years; the estimate given by him can therefore be assumed to be as accurate as can be obtained. The same can be said for the Ranger in charge of the districts of Kilosa, Kiberege, Morogoro and part of Mahenge. These districts form part of the Eastern Province.

It is considered that there are 5,500 elephants in the Lindi Province, 6,500 in Kilosa, Kiberege, Morogoro and part of the Mahenge District, and a further 19,000 in the Rufiji District, Southern Mahenge and the remaining six provinces, making a total altogether of 31,000 elephants for the Territory. But this is undoubtedly a very conservative estimate.

POACHING.

*By Europeans.*—With the exception of game being shot occasionally by non-licence holders usually for the purpose of feeding native labourers or of licence holders over-shooting for the same purpose, nothing has occurred throughout the year to lead one to suspect that organized or illicit hunting for profit ever takes place.

*By Natives.*—Returns for the year show an increase in the amount of ivory and rhinoceros horn brought in as "found," particularly in the Central and Iringa provinces. As little cultivation protection is undertaken in these areas the increase cannot be accounted for by the subsequent death of animals which have been wounded by game scouts and one must conclude to the activities of native hunters. The fact that bullets from muzzle loaders are frequently found in dead animals lends support to this conclusion.

It is to be expected that natives, whose activities in killing game for food have not been interfered with by Government, should have overdone it in certain places and it is to be hoped that, with the supervision now given to game areas, hunting, other than for legitimate requirements for food or for the protection of crops, That it does not at present go entirely unpunished may be seen from the next paragraph. *Will cease*

BREACHES OF GAME LAWS.

*Details of Offences under the Game Preservation Ordinance and Regulations during 1933.*

| Offence  | No. charged | No. discharged | No. convicted |
|--|-------------|----------------|---------------|
| Shooting game in Game Reserves (Sec. 4) ...  | 31          | —              | 31            |
| Hunting game without licence (Sec. 5 (1) ) ...   | 26          | 9              | 17            |
| Shooting of young animals (Sec. 6) ...   | 1           | 1              | —             |
| Illegal possession of Government trophies, ivory, rhino horns, etc. (Sec. 19 (1) ) ... | 22          | 2              | 20            |
| Using car to hunt game (Regn. 3 (2) ) ...  | 1           | —              | 1             |
| Unexplained possession of game meat or trophies (Sec. 22 (1) ) ...                     | 31          | 4              | 27            |
| Total ...  | 112         | 16             | 96            |

Convictions were obtained against two Europeans, three Goans and 91 Natives.

*Details of Additional Offences under the Game Preservation Regulations during 1933.*

| Hunting game by means of poison, traps, pitfalls, snares, bows and arrows ... | No. charged | No. discharged | No. convicted |
|---|-------------|----------------|---------------|
| ... ..  | 20          | 2              | 18            |

Those convicted were all natives.

CULTIVATION PROTECTION.

*Elephant.*—The greater part of the year's work has been devoted to cultivation protection.

In the years 1923-26, when elephant licences were cheap and ivory dear, no less than 1,793 licences were issued. There were also Governor's Licences to kill a fixed number of cultivation-raiding elephant on the tusk-for-tusk basis, i.e. one tusk to Government and one to the hunter. Unfortunately the instructions that only elephant in the vicinity of cultivation could be hunted were not always followed, as elephants carrying heavier ivory were easily obtained by hunting further afield. It soon became evident that herds, owing to continual harrying in uninhabited parts, were moving to the vicinity of cultivation and increasing the number of raiders.

In 1925 elephant control was taken over by this department under salaried European and native hunters, who had no other interest than to deal with actual raiding elephant. In 1927 when the cost of an elephant licence was increased from £22 10s. for three elephants to £50 for two (with, of course, the cost of a full licence added in each case), and the value of ivory dropped, the decrease in the number of elephant licences issued was considerable. With the exception of a few elephant shot annually by licence holders, practically the only elephants killed since then have been shot under departmental supervision and solely in defence of cultivation.

Some of the individual averages are exceptional, one scout in the Mahenge range averaging 1.40 rounds per elephant for forty elephants. A scout in the Lindi range averaged 2.7 rounds for thirty-four elephants while another scout in the same range averaged 2.4 for twenty-five elephants.

The great difficulty we have to contend with is to obtain the right type of scout as we are able to offer only a very low rate of pay.

*Rifles.*—The Vicker's .404 magazine rifle has been the only weapon in use on elephant throughout the year. It is the same type of rifle with which we armed the scouts in 1929, except that a few minor alterations have been made. It has again proved itself an ideal weapon and capable of standing up to rough usage.

For hippopotami and soft-skinned game, .303 rifles have been in use partly to save the wear and tear on the high velocity .404s and also because the .303 is a suitable weapon for the job. As the majority of hippopotami are killed with a brain shot any small bore rifle, provided it is accurate and has good penetration, is suitable.

#### IVORY.

##### *Average weight of ivory, shot and found.*—

By licence holders 52.36lb. per tusk.

By Game Staff 15.66 „ „

Found Ivory 15.94 „ „

*Heaviest tusks obtained during the year.*—Found Ivory, 120lb. and 107lb. Tanga Province; 84lb. and 76lb. Lindi Province; 78lb. and 68lb. Central Province; 72lb. and 72lb. Northern Province.

Shot by Game Staff, 84lb. and 85lb. Lindi Province.

#### MIGRATION OF GAME IN THE SERENGETI AREA.

Migrations of game are governed entirely by water and grazing; therefore in an average year one can count on finding the game out on the plains after the first rains have forced up the green grass, probably about the end of January or even a little earlier. Vast numbers, one might almost say hundreds of thousands, of wildebeest and zebra will be seen with almost the same number of Thomson's gazelle, each different species grazing apart, so that one sees masses first of wildebeest then of zebra and further on of Thomson's gazelle. A few of each of the other species, however, will always be noticed mixed up with every herd.

Giraffe, topi, Coke's hartebeest, eland and Grant's gazelle will also be seen but not in nearly such large numbers; these animals prefer the scattered bush on the edges of the plains. Such animals as pala, roan and reedbuck remain very much in the same locality throughout the year, and only an odd animal will venture on to the plains.

The time to find lions on the plains is during the migrations when they follow the enormous herds and in the daytime will be seen near the peacefully grazing game. Hyenas and jackals are abundant and follow the herds to finish up the remains of lion kills and also to attack sick animals and those weak from calving. Young calves that have just been dropped are a favourite food.

As the early rains dry up and both water and grazing become scarce the herds split up and return to the bush country and neighbourhood of the more permanent waters. Later on, as the heavy rains set in and the green grass springs up again the herds leave the bush country for the plains and remain

there as long as grazing and water are available, approximately until June or July.

While the migration is taking place it is most interesting to watch the game continually moving in one direction. Their formation, particularly that of the wildebeest, reminds one of the movements of an army. From a point on the plains one can see wildebeest moving in a gigantic semicircle from the horizon on the west to as far as the eye can see on the east. In the vicinity of these concentration of gnu, a dull honking sound is heard which continues day and night.

Observations extending over a number of years by the Game Ranger, Serengeti (Captain Moore, v.c.) show that the migration on to the plain is not so marked as the migration off, as the latter being in the open, can be seen over a large extent. Animals concentrated in the west move to the Subiti, Semu, Simiyu and Duma rivers and to the Complete Reserve, those in the north move to the Grumeti and Mara rivers and to the vicinity of the Kenya Border, and in a few days the plains become quite empty.

In February and March, 1930, owing to the excessive rainfall, the grass was knee deep in most parts and water plentiful. Game was to be seen in countless thousands, and it was in this year that Captain Moore, whilst accompanying a safari, drove through almost thirty miles of wildebeest. Sir Geoffrey Archer who has had much experience of game, was present and pronounced it an incredible sight.

Captain Moore has often watched wildebeest on the move, they string out and, heads down, keep going until they reach their destination. Other game collect in herds and gradually make their way to the plains, pausing *en route* for a few days, if grazing permits, and then moving on.

#### EXTRACTS FROM GAME RANGERS' REPORTS.

##### *Captain Minnery, M.C., D.C.M., M.M. (Northern Range).*

"In April, while I was feeding two lions on the Serengeti, one lioness walked towards a tree about two hundred yards away and much to my surprise sprang up into the tree like a cat. It then posed for me and I was able to expose a hundred feet of film from a distance of twenty feet.

"One day I noticed some vultures swooping down, so walked over and found the carcass of a zebra with an arrow sticking in it. That night the carcass was left out to attract lions for photographic purposes. In the morning when I visited the place, I found that lions had been there but would not touch the meat, although that portion in which the poisoned arrow was sticking had been cut out.

"Two native children (sisters) aged from about seven to eleven were attacked on separate occasions by a lone baboon near Machame, on the slopes of Kilimanjaro. The attacks were made in broad daylight and about ten days apart.

"The protection given to greater kudu in the Moshi and Arusha districts was timely. The herd at Nanyuki is now reported to contain three good bulls, about twenty cows and some calves.

"Returns show that the trade in found ivory in this range is on the increase. The average weight of 21lb. per tusk is in itself sufficient to show that youngish elephant are being killed.

"In our southern area rhinoceros are becoming scarce and the greatest care is necessary if we are to prevent this happening in the Northern Province.

"The scheme for the protection of cotton from rhinoceros in the Pare Range, Same District, has proved very effective and no complaints were received in 1933, the two scouts posted for duty having been able to deal with the situation. I should remark here that the value of their work in horn, apart from the assistance rendered, is approximately Shs. 3,500/-. It is hoped that it will not be necessary in the coming year to kill anything like the number accounted for in 1933."

*Mr. Arundell, M.C. (Mahenge Range).*

"During the latter part of October an elephant bull calf was captured, its mother having been shot. The first night we camped in the Chitikuli Forest, and the calf trumpeted loudly throughout the night, bringing several other elephants around my camp. The second day we frequently passed fresh elephant droppings but to my surprise the calf took no notice of them at all. On the third day we passed quite close to a herd of elephant and again the calf took no notice.

"In March some natives came to my camp to report that a crocodile was holding up natives on the main Kilosa-Mahenge Road, between Kidodi and the Ruaha River. I immediately proceeded to the spot and, sure enough, there was the crocodile lying across the road. It was duly despatched and with the aid of fourteen natives dragged to my camp, a distance of two and half miles."

*Mr. Harvey (Masasi Range).*

"On two occasions I have watched elephant crossing the Rufiji River between Jumbe Swera's village and Masagula, on the border between Liwale and the Selous Reserve. The water was so deep that the animals were entirely submerged, but they managed to keep the tips of their trunks above water.

"Two scouts walking in the dry river bed of the Kipireri Stream saw the hind legs of a warthog protruding from the river bank; on investigation they found that they could not pull it out. The river bed was dry and apparently the warthog in his search for water got into an elephant waterhole with fatal results.

"Hippopotamus bulls fight continually and are nearly always covered with great gashes; the younger bulls particularly are often terribly lacerated. At Litule, Rovuma, two fully grown bulls fought to death, one dying the same day and the other on the following day. Hippo on occasions will travel many miles on dry land for the purpose of crossing from one river to another. I have followed their tracks for well over twenty miles. They are able also to swim at a great pace under water, much faster than the average canoe can travel.

"Wounded hippopotami, whether suffering from bullet wounds or gashes from fighting, nearly always leave the water and lie up in thick grass or reeds nearby, probably to get away from the fishes which nibble their wounds. I have seen hundreds of mudfish around the body of a freshly shot hippopotamus.

"Comparatively few people have been killed by lions during this year, I know of only ten deaths. On several occasions I have come across droppings composed almost entirely of green grass and on one occasion the lion had also vomited.

"On many occasions during the year I have fed crocodiles with lumps and strips of hippo meat; they swallow big, roundish pieces with ease but

have a certain amount of trouble with long strips, which they can only swallow by tossing into the air and catching them endways as they come down. When catching meat or fish in this manner a loud 'clop' is made as the jaws come together, and such noises may be heard at night near any crocodile-infested river (a sound not to be confused with the loud, sucking 'clops' of mudfish).

"On three occasions I have climbed quietly into the branches of big trees overhanging the Rovuma River and watched them lying on the sandy river-bed, under the water with their jaws wide open waiting for fish to swim into their mouths. I saw several swim into the trap, then the jaws were closed immediately and the fish apparently swallowed under water. On one occasion only did the crocodile rise to the surface to swallow, the reason being that the fish was a big one and was caught sideways. In their efforts to catch fish there was much disturbance of the sand and stones on the river-bed, and I think this is undoubtedly the reason why stones and sand are found in crocodiles' stomachs.

"I have shot many which have had their tails and toes bitten off, undoubtedly done in fighting amongst themselves. Crocodiles are cannibals and invariably eat one which has been shot.

"They must have a good sense of smell under water, for on many occasions after I have shot hippo scores of crocodiles have appeared from downstream, many of them coming from a considerable distance.

"Crocodiles cannot bite through the tough hides of freshly killed hippo, but begin on the softer parts. It is interesting to watch their frantic efforts to tear bits from the tough hide. After gripping with their jaws they lash their tails furiously round and round, without avail."

*Mr. Gabbutt (Rufiji Range).*

Mr. Gabbutt reports the existence in the Rufiji District of a herd of elephant which is apparently suffering from some form of ivory disease. Some of the herd have deformed or very small tusks and a large percentage are single tuskers or tuskless. He states that he has seen the herd on several occasions and that they are undoubtedly savage.

"A cow elephant was shot which had less than three feet of trunk. It appeared that a bullet of some kind, probably from a muzzle-loader many years ago, was the original cause of a wound. The wound had healed and the animal was in excellent condition. Unfortunately, I did not notice the shortness of the trunk until she was dead, so that I missed the opportunity of seeing how she fed herself. The stub of trunk was too short to curl up and put food into her mouth. Her knees showed signs of constant kneeling, which she would have had to do even to drink. One scout killed a bull elephant that had apparently been shot and left for dead many years ago, as the tail had been cut off. The stump was completely healed over.

"Baboon and pig poisoning operations have been carried out with some success, but it is difficult to state how many have died as, after taking poison, they clear off into the thick bush to die.

"The Rufiji District contains large numbers of lions and leopards whose main food supply consists of baboons and pigs. Other game, with the exception of elephant, buffalo and hippopotami, are not plentiful, therefore if this season's campaign is really successful there is the possibility that the carnivora may turn to raiding native villages for stock or even become man-eaters. It is a situation which will need very careful watching."

*Mr. F. J. Miller, Honorary Game Ranger.*

The following notes by Mr. Miller on the fauna of Kilimanjaro area are of interest:—

"Travelling by way of Marangu no signs of game occurred until well into the forest, when the spoor of numerous elephant were noted as far as Bismarck's hut at 9,000 feet. No signs of elephant were observed above 11,000 feet.

"Numerous herds of eland were to be seen on the higher slopes above the forest, ranging in numbers from three to twelve. On no occasion was more than one bull ever seen with the herd. The majority of the cows had calves at foot, so evidently the breeding season is September. There is no doubt that the eland here are the same species as elsewhere in the Territory, although a very fine bull observed at close quarters had longer hair under the belly than usual, he was very dark in the forequarters and reddish in the hind-quarters, the frontal tuft being very pronounced.

"Eland climb to 16,000 feet and even more. Being curious as to what they did so high up away from all vegetation, I followed their spoor and then discovered deposits of soda under ledges of the rocks. It was evident they used the deposits as salt-licks.

"A pair of duiker antelope were observed at 10,000 feet. They were greyish, with tufts on the frontal bone.

"Several pairs of klipspringer were seen up to 13,000 feet.

"Bushpig and warthog were noticed up to 10,000 to 11,000 feet.

"A pair of the rare Abbott's duiker were observed in a swampy patch below Johannes' hut at 9,000 feet. A further pair were also noted at the extreme lower edge of the forest belt at 4,500 feet.

"Red-wing, partridge and forest spur-fowl were found up to 10,000 feet and, somewhat lower down, a few quail. A huge eagle was seen to be circling the highest pinnacles of Mawenzi.

"At 17,000 feet a number of dead Cape canaries were found on the rocks, evidently a tragedy of migration."

*Captain Hewlett, Honorary Game Ranger.*

Captain Hewlett states that he had recently to destroy a rhinoceros which was causing damage to a water-furrow. Upon examination he found an arrow broken off in its head, just below the right eye.

On one occasion, just as he was about to cross the Kikuletwa River, he noticed a large crocodile on the opposite bank which took to the river and, as he thought, drifted away downstream. When half way across, he was surprised to see the crocodile swimming towards him; luckily it was swimming against the current so he had time to shoot it. It was an exceptionally large one for that river, measuring almost eighteen feet.

Captain Hewlett also reports having seen a black cheetah, and states that a shooting party which visited him some three months ago also saw one. On both occasions the animal was seen in broad daylight.

#### ALTERATIONS IN RESERVES.

*Lake Rukwa Closed Reserve.*—The boundaries are now as follows: A straight line in south-easterly direction from the place marked Uleia on Map E3 of the 1:300,000 series to the height marked Nangunda; thence the top of the escarpment in a south-easterly direction as far as the height marked Mputwa; thence a straight line southwards to a point on the Songwe River five miles

in a straight line from the point where this river enters Lake Rukwa; thence a line running parallel to and five miles from the shore of Lake Rukwa until it meets the Kikamba River near the point of commencement; thence a straight line to the commencing point, Uleia.

*Northern Railway Reserve (Pare District).*—The boundaries are now as follows: From Same railway station past the north end of the Kwakoko Hill; thence to the hill Kitamule; thence a straight line to the escarpment, crossing the Panguni River at Marango-Opuni; thence along the base of the hills forming the western wall of the Pangani Valley as far as the Tunda River; thence a straight line to the footbridge at Muhesa; thence along the Pangani River to its bend near Mabirioni Hill; thence in a straight line in a westerly direction to Kilometre 190 on the Tanga-Moshi Railway; thence along the Tanga Railway from Kilometre 190 to Same Railway Station.

*Serengeti Complete Reserve* now closed for prospecting and mining.

*Pienaar's Height* declared open for hunting and shooting.

The part of the Moshi District to the west of the Kikafu River which was closed for wildebeest and Thompson's gazelle is now open for shooting.

#### CAPTURE OF WILD ANIMALS FOR EXPORT.

The following wild animals were captured and exported during 1933:—6 giraffes, 18 zebras, 2 ostriches, 3 wildebeest, 10 baboons and 15 monkeys.

A licence to capture wild animals may be issued subject to certain conditions, one of which is that all animals are supplied solely to such zoological gardens and institutes as may be approved by the Game Warden.

#### GAME BIRDS, DUCK AND GEESE.

Francolins, greater and lesser bustards, sand-grouse and guinea fowl (three varieties, the common of which are plentiful) are numerous, but their scarcity in the vicinity of roads is becoming very noticeable.

Many varieties of duck and geese are to be found in the numerous inland lakes and watercourses. A close season for their protection has been in force from the 15th March to 15th June for the past fifteen years.

Observations now show that this period is not applicable to the whole of the Territory, as in certain districts the breeding season varies. Information is being compiled which will enable steps to be taken to remedy the situation.

#### HONORARY GAME RANGERS.

The following gentlemen were appointed in 1933:—

1. G. G. Rushby, Esq. ... .. Mbeya.
2. A. S. Johnston, Esq. ... .. "
3. A. A. Willis, Esq. ... .. Mwanza.
4. Captain J. H. R. Hewlett ... .. Moshi.
5. J. T. Rodger, Esq. ... .. Morogoro.

#### *Already Appointed.*

6. Brig.-General L. B. Boyd-Moss, C.M.G., D.S.O. Arusha.
7. Major J. S. K. Wells, C.B.E., M.L.C. ... .. Tukuyu.
8. Major F. E. Bradstock, D.S.O., M.C. ... .. Ngonja, Lushoto.
9. J. A. Fawdry, Esq. ... .. Mwanza.
10. B. E. Fraying, Esq. ... .. Dar es Salaam.
11. Colonel C. L. R. Gray ... .. Arusha.

APPENDIX III.

Table showing details of Game Licences issued during the last four years.

|  | 1930   | 1931   | 1932   | 1933        |
|--|--------|--------|--------|-------------|
| Visitor's Full ... .. @ £75 ...                          | 34     | 23     | 24     | 25          |
| .. Temporary ... .. @ £10 ...                            | 44     | 31     | 35     | 24          |
| Resident's Full ... .. @ £15 ...                         | 92     | 62     | 61     | 49          |
| .. Temporary ... .. @ £ 3 ...                            | 29     | 22     | 30     | 23          |
| .. Minor ... .. @ £ 4 ...                                | 496    | 380    | 332    | 273         |
| .. Professional  |        |        |        |             |
| Hunter's @ £10 ...                                       | 20     | 14     | 10     | 13          |
| Non-Resident's Professional                              |        |        |        |             |
| Hunter's ... .. @ £10 ...                                | —      | —      | 6      | 10          |
| 1st Elephant Licence ... .. @ £20 ...                    | 49     | 26     | 27     | 37          |
| 2nd Elephant Licence ... .. @ £30 ...                    | 31     | 6      | 7      | 11          |
| Giraffe ... .. @ £7 10s. ...                             | 3      | —      | 2      | 1           |
| Rhinoceros in Northern                                   |        |        |        |             |
| Province @ £7 10s. ...                                   | 13     | 10     | 14     | 4           |
| Trophy Dealer's ... .. @ £10 ...                         | 6      | 4      | 1      | 1           |
| Game Meat Dealer's ... .. @ £ 2 ...                      | —      | —      | 1      | —           |
| Bird Licences ... .. @ Shs. 5/- ...                      | —      | 192    | 456    | 512         |
| Governor's Licences* ... Free ...                        | —      | 61     | 72     | 56          |
| Governor's Licences for Scientific Purposes ... Free ... | —      | —      | —      | 9           |
| Total Revenue ...  | £8,551 | £5,713 | £5,885 | £5,864 10s. |

\*Issued by Provincial Commissioners for supplying meat to road parties.

APPENDIX IV.  
Number and weight of tusks, rhinoceros horn, hippopotami teeth and the  
Provinces from which they have been obtained.

| PROVINCE       | ELEPHANT      |                |                                  | HIPPOPOTAMI   |                |                                  | RHINOCEROS    |                |                                  |        |
|----------------|---------------|----------------|----------------------------------|---------------|----------------|----------------------------------|---------------|----------------|----------------------------------|--------|
|                | Shot<br>Tusks | Weight<br>lbs. | Found<br>Tusks<br>Weight<br>lbs. | Shot<br>Teeth | Weight<br>lbs. | Found<br>Teeth<br>Weight<br>lbs. | Shot<br>Horns | Weight<br>lbs. | Found<br>Horns<br>Weight<br>lbs. |        |
| 1. Lindi...    | 1,463         | 22,649-15      | 232                              | 2,020         | 1,044-1        | 220                              | —             | —              | 2                                | 1-5    |
| 2. Eastern     | 1,665         | 26,393-2       | 252                              | 8,489         | 4,174-4        | 1,913                            | 14            | 29-4           | 2                                | 9-8    |
| 3. Iringa      | 199           | 2,645-4        | 78                               | —             | —              | —                                | —             | —              | —                                | —      |
| 4. Central     | 16            | 287            | 173                              | —             | —              | —                                | 2             | 7-7            | 131                              | 505-2  |
| 5. Western     | —             | —              | —                                | —             | —              | —                                | —             | —              | —                                | 8      |
| 6. Lake        | 9             | 153            | 11                               | 86            | 54             | —                                | —             | —              | 2                                | —      |
| 7. Northern    | 19            | 496-15         | 58                               | —             | —              | 8                                | 20            | 75-12          | 14                               | 73-4   |
| 8. Tanga       | 25            | 547-2          | 7                                | 18            | 7-4            | —                                | 38            | 115-12         | 51                               | 187-14 |
| Total for 1933 | 3,396         | 53,172-6       | 811                              | 10,613        | 5,279-9        | 2,141                            | 74            | 228-3          | 233                              | 879-9  |