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Races of the African Finfoot (Aves, Heliornithidae)

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Until the year 1924 the finfeet of Africa were very often regarded as belonging to two species, a small *Podica senegalensis* and a large *P. petersii*. Then Erwin Stresemann (1924, Jour. Ornith., pp. 96-98) showed that there is only a single species of *Podica* and named a new race, *albipectus*, from the Loango Coast, which appeared to be intermediate in size. As Stresemann pointed out, much of the early confusion was due to the disparity in size between the sexes. Males are so much larger than females that there is little or no overlap between the sexes in any one region. Young males, however, are like females in having a white throat and hence have sometimes been confused with them. Further study of this species has shown that there is an undescribed race in East Africa, named below, and I am also able to add some details to my earlier remarks (1939, Bull. Amer. Mus. Nat. Hist., vol. 75, pp. 35-36) on the races of this species.

The forms to be recognized are as follows:

Podica senegalensis senegalensis (Vieillot)

A small race in which the under parts medially are always whitish even in the fully adult male. The male differs from the female by its gray throat. This form ranges through Upper Guinea to the Niger Delta and thence eastward to the northeastern Belgian Congo and adjacent Uganda. Wing lengths: females, 163-182; males, 186-211.

Podica senegalensis camerunensis Sjöstr

Another small race, perhaps even a trifle smaller than *senegalensis* but differing from it by having the under parts mottled with black or almost solid black. The back, too, is blacker and lacks the white spots present in the nominate race. Wing lengths: females, 152-179; males, 177-212.

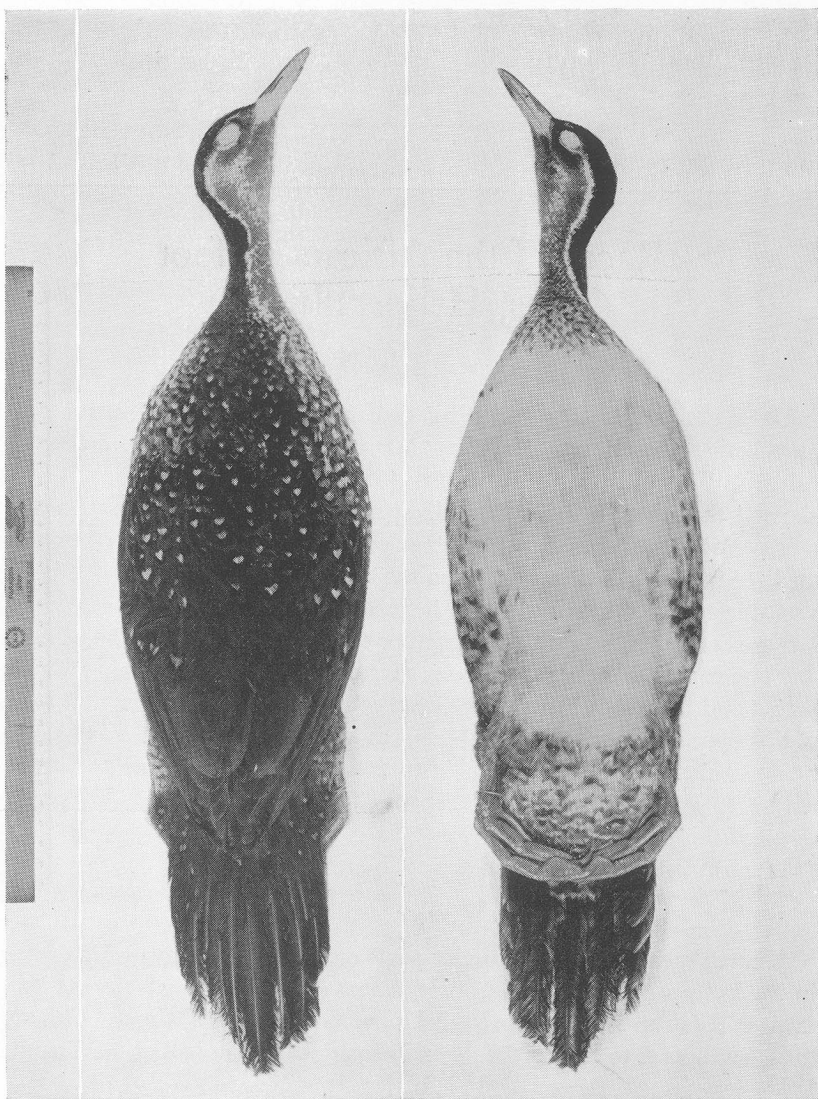


FIG. 1. *Podica senegalensis senegalensis*, male from Avakubi, northeastern Belgian Congo.

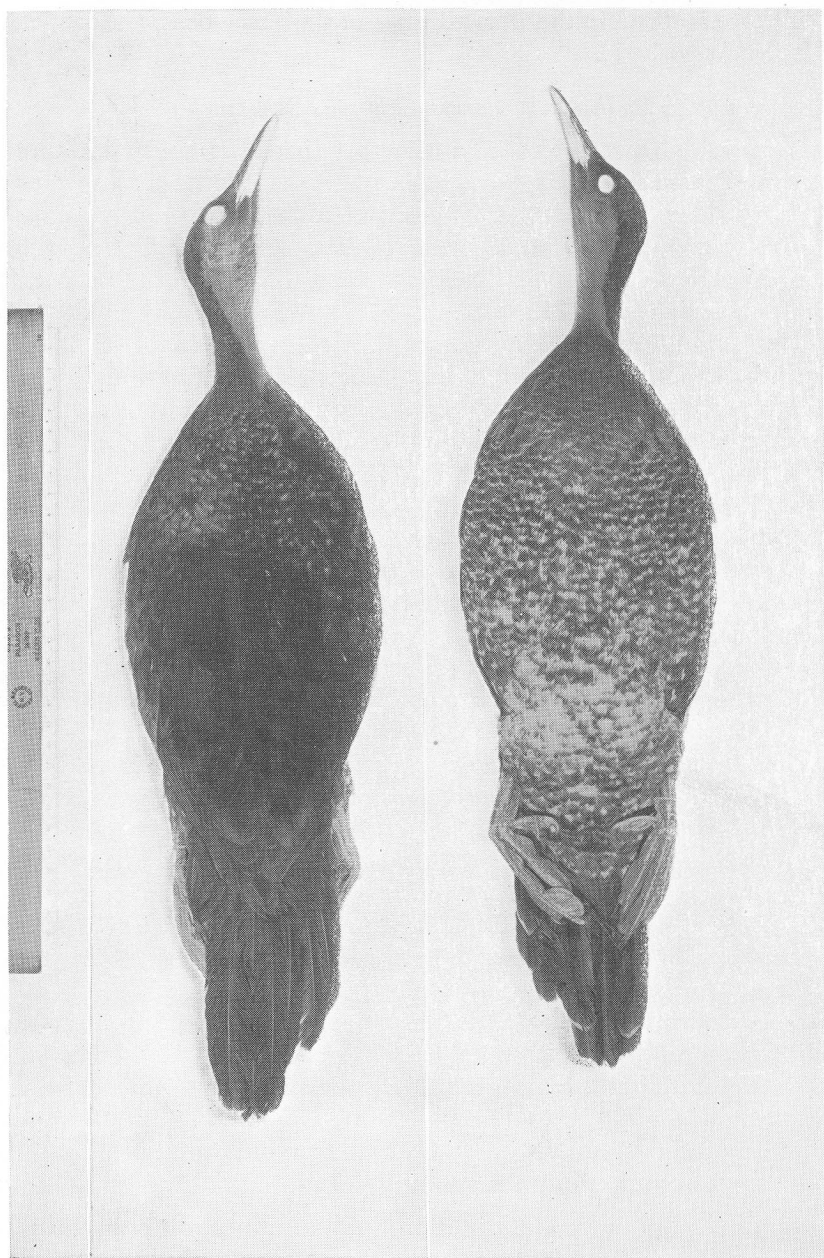


FIG. 2. *Podica senegalensis camerunensis*, male from Lukolela, Congo River, Belgian Congo.

This race is found in the forested parts of the Cameroons, Gaboon, and Upper Congo basin.

Podica senegalensis albipectus Stresemann

Identical with *senegalensis* in color but somewhat larger and hence intermediate in size between *senegalensis* and the following race, *petersii*. The type locality of *albipectus* is the mouth of the Shiloango River on the Loango Coast, 50 or 75 miles north of the mouth of the Congo. Wing lengths of birds from type locality: females, 171–183; male immature, 196; male adults, 203, 215, ?220.

REMARKS: The complete range of *P. s. albipectus* cannot yet be outlined accurately. In the northeastern Congo, along the Ituri, the Bomo-kandi, and the Uelle rivers there are small finfeet which I cannot separate from nominate *senegalensis*. The only example I have seen from Uganda is a female collected by Jackson at Entebbe. In size it agrees with the small birds of the Ituri.

From the Gaboon and Upper Congo southward there is a gradual increase in size, and specimens from East Africa, heretofore referred to *petersii*, are in fact of intermediate dimensions. The type of *P. s. albipectus* was a bird in the Berlin Museum, one of three with wings measuring 171, 178, and 196 mm. None was an adult male, and to me it seems evident that the largest bird was an immature male, the two others females. It is true that Bocage (1881, *Ornithologie d'Angola*, p. 488) described an adult male collected by Lucan and Petit at Insonné on the Shiloango River and gave the wing length as 220 mm. That specimen went supposedly to Lisbon.

Even though I doubted that the Insonné male could have been quite so large, I long ago agreed that there must be a white-breasted race of intermediate size ranging from the Shiloango River eastward to the Kasai District. Adult male specimens were needed to prove this, and for years none was forthcoming. Fortunately Georges Bouet discovered in a part of the old Bouvier Collection acquired by the Museum of La Rochelle another adult male of *albipectus*, collected by Lucan in 1875 at Landana near the mouth of the Shiloango. This specimen has kindly been lent me. Its coloration is similar to the description by Bocage, but its wing measures only 203 mm., the tail about 144 mm. I am therefore convinced that the largest of the Berlin specimens was really a young male.

How far *albipectus* may extend into Angola is not known. Monard (1934, *Arq. Mus. Bocage*, vol. 5, p. 29) recorded two from Kangelá (latitude 15° 17' S., longitude 15° 54' E.), but gave no measurements, and Rudyerd Boulton tells me he saw a finfoot at Capelongo in July,

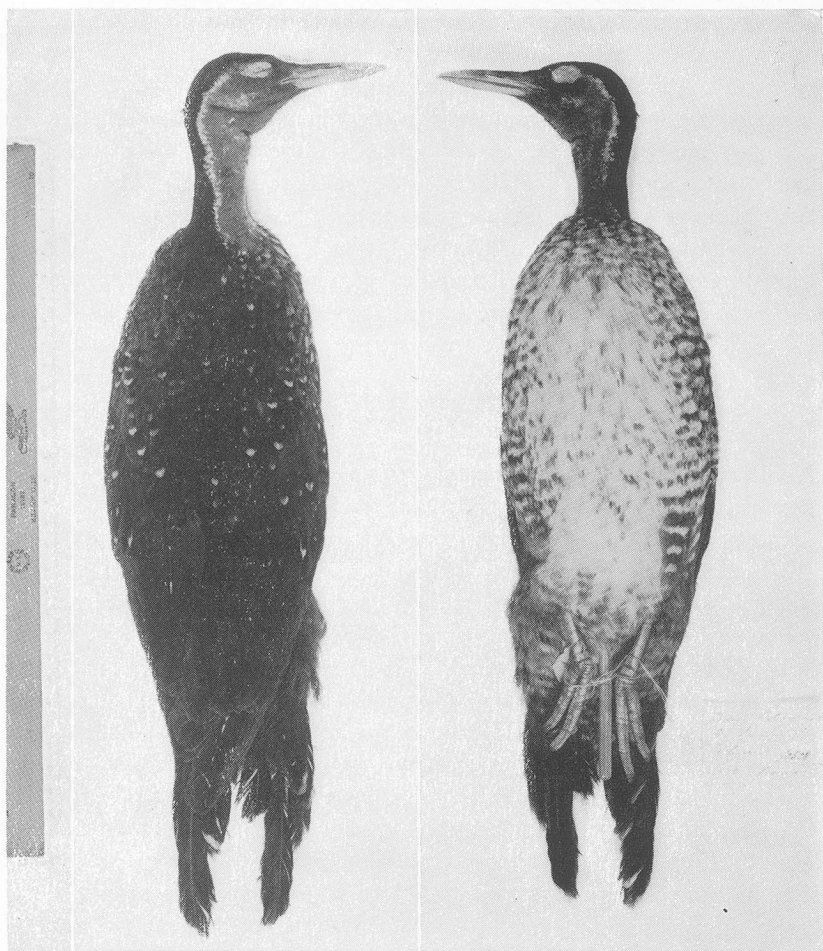


FIG. 3. *Podica senegalensis albipectus*, male from Landana, northeastern coast of Angola.

1925. The range of *albipectus* does extend eastward in the southern Belgian Congo. From Leopoldville I have seen a female with wing 179 mm., but no adult male, so there may be some doubt as to the race. At Kabwe near Luluabourg in the Kasai an adult male was collected for Father G. Windmolders which is not black-breasted but similar to Lucan's male from Landana in every way save that it is a little more blackish where the chest approaches the gray of the fore neck. Its wing measures 215 mm., tail 149 mm. Two females from Luluabourg have wings 181 and 183 mm. long.

Thus the range of *P. s. albipectus* is extended with certainty to Lulua-bourg, some 700 miles to the eastward of Landana, and it may be expected to continue on to the Lualaba River, if not to the vicinity of Lake Tanganyika. Specimens from the Katanga have usually been referred to *P. s. petersii*, but they are certainly not so large as the specimens from eastern Cape Province, Natal, and Zululand. From southeastern to eastern Africa there is a gradual decrease in size, just as there is in the more central and western parts of the continent.

In thus tracing the distribution of white-breasted finfeet across the southern Congo savannas, we have left open the question of whether *albipectus* is, in fact, separable from *senegalensis*. This can better be discussed under the following race.

Podica senegalensis petersii Hartlaub

This race is rather like *senegalensis* and *albipectus* in color but is larger than either. Wing lengths: females, 184–215; males, 220–252.

RANGE: Southeastern Africa from Natal north at least to Mozambique (the type locality); decreasing in size clinally northward.

REMARKS: A mounted bird in the Berlin Museum examined by me is labeled as the type of *Podica mossambica* Peters (1853, Ber. K. Preussischen Akad. Wiss. Berlin, p. 783). Presumably this same specimen was the type of Hartlaub's *Podica petersii*, described the year before (1852, Abhandl. Naturwiss. Ver. Hamburg, vol. 2, pt. 2, p. 62). Peters gave the type locality as "Buio," a locality that has proved puzzling, but we may be sure that Peters collected the specimen somewhere in the vicinity of the lower Zambesi. Some ashy feathers on its throat and fore neck indicate that it is a male still not quite fully adult. Its wing, I find, measures 220 mm., not 270 mm. as stated by Peters. Even in specimens from South Africa the wing seems never to exceed 254 mm. A subadult male in the British Museum from Mozambique has the wing 242; hence it is as large as many individuals from farther south.

The series of measurements which I have made in many museums shows that the size decreases gradually from southeastern Africa to Kenya Colony. It is rather unfortunate that the type of *petersii* came from so far north. But the coloration remains much the same from eastern Cape Province north to Tanganyika Territory, although the wing length in birds from the latter area is about 220–226 mm. for males, and 197, 198 mm. for females.

Despite this difference in size, East African finfeet have thus far always been referred to the race *petersii*, because it seemed impossible to draw any line indicative of rapid change. Adult males from Tanganyika Terri-

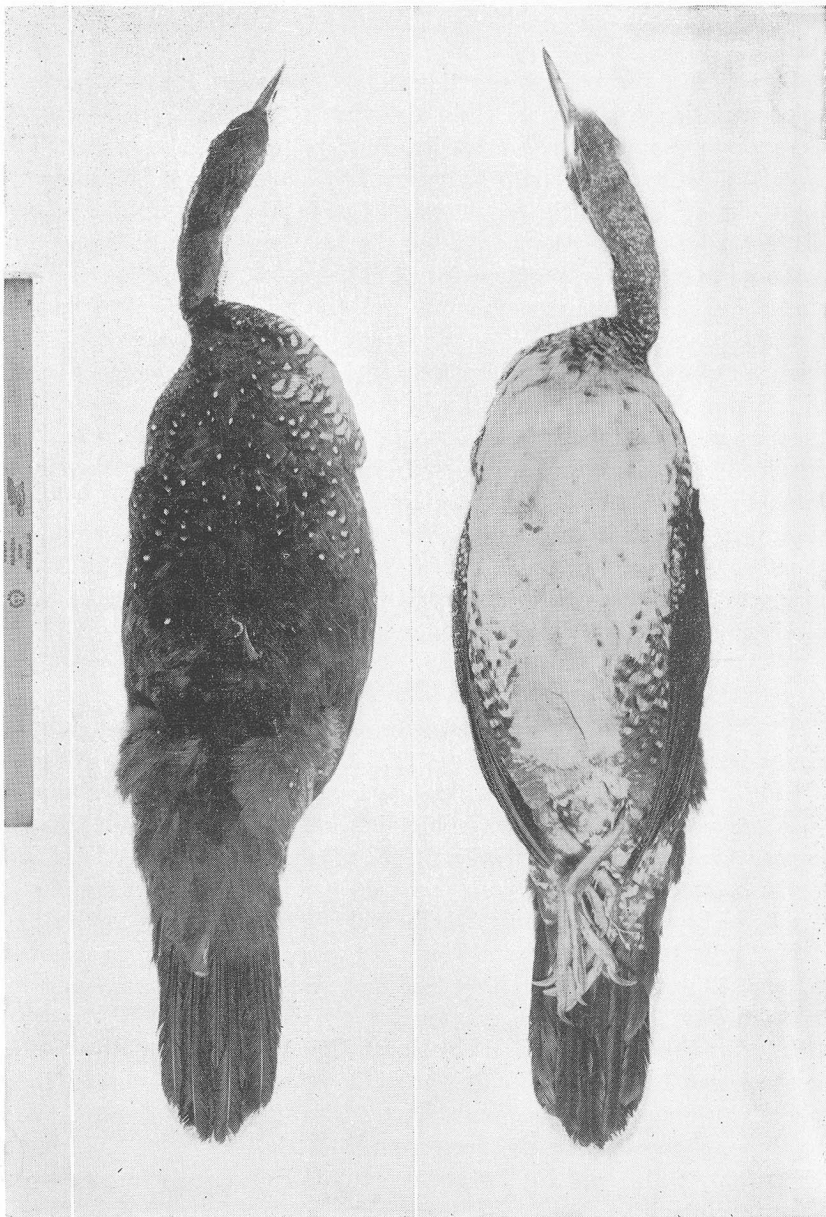


FIG. 4. *Podica senegalensis petersii*, male from Natal. (The bill in this race is very large but is here somewhat foreshortened.)

tory are much the same in color as those of the Katanga and southeastern Africa.

By way of summary, the situation is as follows: finfeet extend without color variation from Upper Guinea eastward through the northeastern Congo into Uganda and Tanganyika Territory and thence southward to Natal and westward again to Angola and the mouth of the Shiloango. In the region of Uganda these light-colored populations are flanked by two distinct color races: *camerunensis* on the west in the Lower Guinea forests, and to the east by the race described below from Kenya Colony. The size difference between *senegalensis* and *petersii* is sufficiently great so that there is no overlap, sex for sex, in wing measurements. It does seem wise to name the middle of this cline and call it *albipectus*, as Stresemann did. Perhaps it is unfortunate that the type locality of *albipectus* is so near the Equator that topotypical *albipectus* seems little larger than *senegalensis* or *camerunensis*. There is still a paucity of specimens from many localities that presumably have birds of intermediate size. Furthermore, since *senegalensis* is apparently isolated from the similarly colored birds found south of the Lower Guinea forests, there is an advantage in recognizing the latter as racially distinct until we know more about the birds of Uganda and about the limits of the following race.

Podica senegalensis somereni, new subspecies

TYPE: Male adult; Chicago Natural History Museum No. 192847; Ruiru River, Kenya Colony; April, 1939.

SUBSPECIFIC CHARACTERS: Head and neck very dusky, much as in *P. s. camerunensis*, with scarcely an indication of the white lateral stripe; upper back blackish, glossed with green and almost unspotted. Chest and flanks spotted and barred with white on a dusky and brown ground; middle of breast and abdomen wholly whitish.

MEASUREMENTS OF TYPE: Wing, 235 mm.; tail, 171 mm.; exposed culmen, 49 mm.; culmen to base, 54.5 mm.; metatarsus, 52 mm.; middle toe with claw, 71 mm.

RANGE: From the highlands of Kenya Colony east of the Rift Valley to the lower Tana River, Witu, and perhaps to the middle Juba River, where van Someren (1930, Jour. East Africa, Uganda Nat. Hist. Soc., no. 35, p. 30) reported a specimen from Dakatch.

REMARKS: Males of *Podica senegalensis* in fully adult plumage from Kenya Colony have thus far been exceedingly scarce in collections. Some years ago my attention was drawn to one such specimen in the Academy of Natural Sciences of Philadelphia, collected by Blayney Percival at Witu, on the coast. Its wing measured 232 mm.; the coloration was sur-

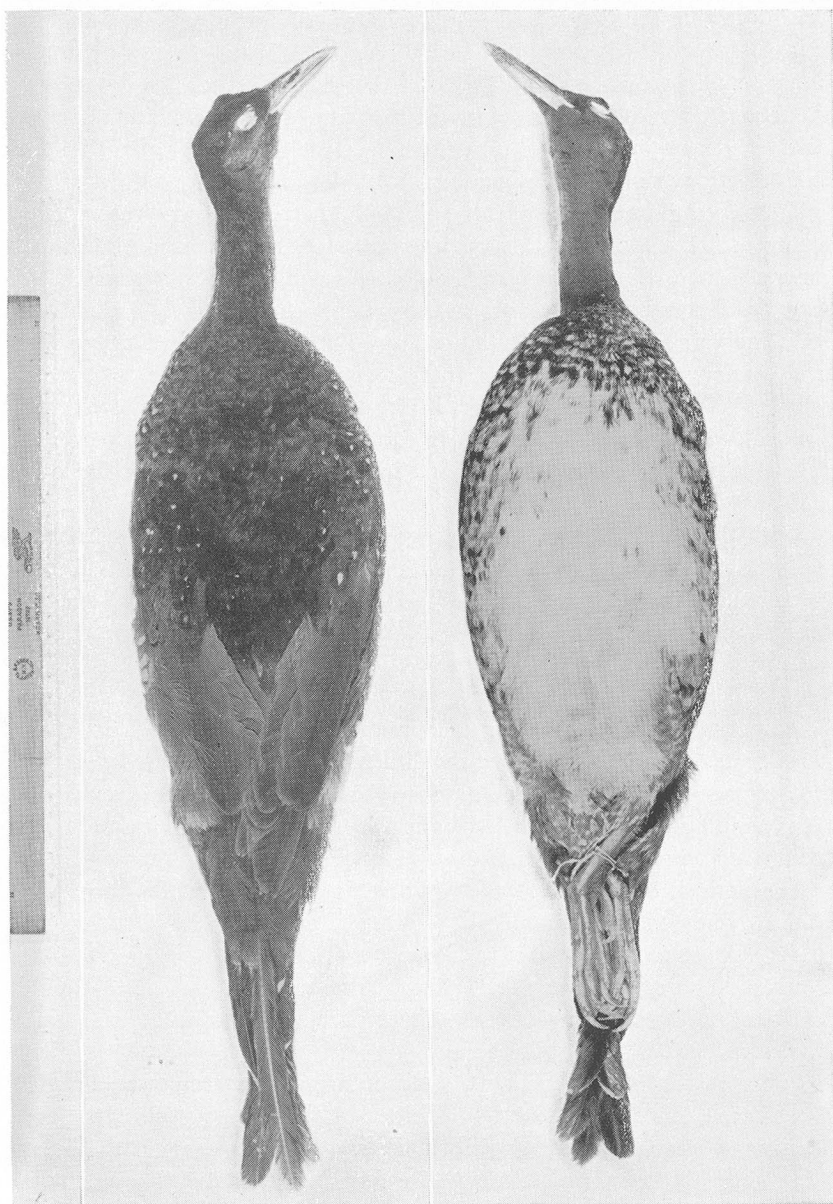


FIG. 5. *Podica senegalensis somereni*, male, type, from Ruiru River, Kenya.

prising in that the throat and fore neck were uniform dark gray without any of the whitish flecking commonly seen in males of *petersii* in similar plumage. Moreover the whitish stripe that usually separates the gray of the fore neck from the glossy brownish black of crown and hind neck was here broken up into a series of whitish speckles, and the gray of the lores met directly with the green-glossed forehead.

Thus the head and neck of this Witu specimen bore a close resemblance to those of the much smaller *camerunensis* of the Cameroon and north central Congo. But the body color was different, much more like that of *petersii*, although the pale spots on the upper back were fewer and smaller.

In the van Someren Collection acquired recently by the Chicago Natural History Museum, I found that there is a similar male collected in April, 1939, on the Ruiru River, in the highlands northeast of Nairobi. The coloration of head and neck is equally dark, the light stripe on the side of neck even more obscured and indicated faintly only on the lower half of the neck.

With the permission of the Chicago Natural History Museum I take pleasure in naming this new race after my good friend Dr. V. G. L. van Someren. As already noted the type is in the Chicago Natural History Museum; I am indebted to Dr. A. L. Rand for permission to describe it.

SUMMARY

With the increased number of specimens now available from many parts of its range, it is clear that the dimensions of *Podica senegalensis* increase gradually from Upper Guinea to the eastward and southward. The disparity in size between the sexes is very marked and must always be considered when the five geographic races are compared.

The darkest of all, *P. s. camerunensis*, is restricted to the Cameroon, Gaboon, and central Congo basin. It is small, approximately equal in size to *P. s. senegalensis*. In Kenya Colony, east of the Rift Valley, there is a race of somewhat larger size, very dark on head and neck, though males do not become black on the under parts. This form is here named *P. s. somereni*.

In the region of the Loango Coast, southern Congo, and (northern?) Angola the increase in size is sufficient to justify a fourth race, with breast and abdomen always whitish, *P. s. albipectus*. Finally the maximum size is reached in South Africa and Mozambique, the habitat of *P. s. petersii*. The latter two are like *senegalensis* in color.