the wings buffy white; primaries and secondaries dark slate-colour; flanks and under surface of the wing grey; chest and abdomen white, separated from the grey of the flanks by a series of black feathers; under tail-coverts and thighs white; bill yellow; tarsi olive.

The young differs in having the whole of the crown of the head black; all the upper surface greyish brown; and the under surface

striated with brown and white.

Total length 38 inches; bill 7; wing 19; tail $7\frac{1}{2}$; tarsi 5.

Hab. India and Australia.

Remark.—Having carefully compared examples of this species with the Common Heron of Europe, I find it differs from that bird in being altogether of a larger size, and that the line of the bill, instead of being straight, has an upward tendency; in other respects they are very similar.

4. ON THE HABITS OF MABOUYA AGILIS. By P. H. Gosse.

In the parts of Jamaica with which I am familiar, this pretty, active little Scink is abundant. It is most numerous in the lowlands, and on the gently-sloping hills of moderate elevation that form the characteristic feature of the southern side of that beautiful island. The fences there are largely composed of 'dry-wall,' built of rough unhewn stones, without cement. On these walls the *Mabouya* may be seen crawling, and often lying quite still in the sunshine; when alarmed it darts with lightning-like rapidity into one of the crevices which abound in all parts of such a structure. Indeed it rarely ventures far from some refuge of this kind, and I presume that the facilities for instant retreat afforded by these pervious walls are the chief cause of its preference for them. It is scarcely ever seen on the ground, except when avoiding danger; nor on the trunk or branches of trees or shrubs; but in the concavity of a pinguin leaf (*Bromelia pinguin*) it is occasionally observed to lie, basking in the sun.

The rounded form of the head and body, devoid of projections; the close-lying and glossy scales; the shortness of the legs, bringing the belly flat upon the ground; and its constant habit of resting with the chin on the ground also, give to the Mabouya an aspect very much unlike that of our other common lizards, and cannot fail to remind even the least observant of its affinity with the serpent-tribes. The negroes, in the recognition of this proximity, doubtless, have bestowed upon it the appellation of "Snake's waiting-boy," or more briefly, "Snake-boy." In the parishes of St. Elizabeth's and Westmoreland it is also frequently called the "Woodslave," though in other parts of the island this term seems to be applied to some of the Geckotidæ. From the shortness of its legs results also another resemblance to a snake, for owing to the shortness of the steps, if made only with the legs, it throws the shoulder and the hip forward at each step; and this throwing-out of the sides at different parts alternately produces a wriggling motion, somewhat serpentine in appearance.

The Woodslave is not very easily captured alive: the hair-noose so successfully used in taking our other small lizards I have always

found to fail, if tried on this species; for though it is not difficult to pass the noose over the head (the reptile allowing this so long as its assailant's approaches and motions are deliberate and gentle), it is instantly slipped off again, because there is no sensible contraction behind the occiput, and the scales lie too smoothly to afford the slightest hold. They are too wary and too swift to be caught by the hand. A smart tap with a switch, however, across the shoulders or the back disables them for awhile; but if the blow descend on the tail, that organ instantly separates, with the like brittleness, as in other lizards. Cats not unfrequently catch them.

The form of the scales and the manner of their apposition remind us of the fishes: they are convex above, concave beneath, are slightly attached to the skin, and lap over each other at the edges. The colours of the animal are produced by pigment deposited on the under surface of the scales, which in a scale recently removed is soft, and readily rubbed off: the skin beneath is black. The scales, which are subpentagonal, are marked with a series of regular lines, indented on both surfaces, connected by transverse ones, somewhat like the nervures in the wing of an insect; they lose themselves before they

reach the hinder edge. The pigment is deposited in the centres of the areas formed by the lines. The scales from the back and from the belly are alike; but the postreme two-thirds of the tail are covered, both on the upper and under surfaces, by narrow transverse plates, which do not essentially differ however from

the other scales, except in having a greater number of A scale, magnified.

parallel depressed lines.

The beautiful provision for protecting the eye without impeding vision, shown by the lower (and larger) eyelid having a sort of window, a transparent, glassy, circular plate in its centre, immediately opposite the pupil when the eye is closed, is well-worthy of admiration as an obvious example of creative wisdom and providential care. Habitually darting to and fro in the narrow crevices of walls and heaps of stones, the eyes of the Woodslave, if unprotected, might be continually liable to injurious contusions, while as it feeds on the insects, at least in part, that resort to such situations, undimmed

vision would be essential to it while permeating them.

The Woodslave is viviparous. I first became aware of this fact by the dissection of a specimen killed on the 11th of February, in the abdomen of which were several oval sacs, about half an inch long, composed of a soft, transparent, very tender membrane, which displayed a fœtus within each, far advanced to maturity. And on the 29th of April I killed another female, the abdomen of which was very much dilated: in this specimen I found four young, quite matured, and fully coloured, with a brilliancy indeed superior to that of the adult: they were enveloped in two sacs, but each fœtus was inclosed in its own amnios besides, a very delicate membrane in which it lay coiled up; the vitellus not quite absorbed, but attached by the funis to the belly. There was also a portion of the tail of a fifth fœtus, the body of which had probably been forced from the abdomen of the

parent, through the wound which killed it. The young measured, from the muzzle to anus, $1\frac{4}{10}$ inch; thence to extremity of tail $1\frac{9}{10}$ inch. These two specimens, displaying the contents of the abdomen in situ, are now, with other specimens of both sexes, in the British Museum.

I afterwards found that this fact had not escaped the observation of the indefatigable Robinson; for, on consulting his manuscript volumes in Kingston, I met with the following notes, recorded nearly a century ago:—"No author that I have met with has observed that any animals of the Lizard-kind are viviparous; yet I have by accident discovered that the smooth Snake-lizard of Jamaica brings its young forth alive. Mr. Long having caught one of these alive, tied it all night upon a table with a thread, and in the morning found a young one or two lying near the other, which was a full-grown one. Being at a loss to account for this, as imagining that all the Lizard-kind were oviparous, he called upon me to know my sentiments. It appeared very plain to me that this animal was viviparous; nor does this seem strange to me, when I consider that some of the Serpent-kind are also viviparous, viz. the Viper and Rattle-snake.

"Some time in August 1760, as I was looking over a parcel of preserved lizards, finding amongst the rest one of these Snake-lizards full-grown, with the belly very much distended, in which state they may be often seen,—I took my penknife, and endeavoured to cut the abdomen open, but found it so well defended by a covering of very small hard scales, like those of a fish, that my knife would not enter till I had scraped them away, when opening the abdomen I found two beautiful young ones, about two inches long." (Rob. MSS. iv. 47.)

The stomach is a lengthened sac. In specimens that I examined I found small cockroaches, fragments of crickets, &c., insects which live in heaps of stones. In one specimen I observed a few slender, rather short, intestinal thread-worms, loose among the abdominal viscera.

Sloane's 'Lacerta minor lævis' (tab. 273. fig. 5) is certainly the present species, and is not a bad representation. His description, however, like most of his zoological notes, is full of confusion and error. He says, "This is bigger than the former [which I think to be the female of the Purple-tailed Anolis*], smooth, having a great many brown spots, otherwise much the same [!], laying a very small, white, hard-shelled egg (fig. 6) [which is however the egg of a common little Sphariodactylus], nestling in rotten-holed trees [here he confounds it with Gecko rapicauda, leaping from one bough to another [here with the Anoles]; 'tis very common among old palisades, &c." It is very evident to me that Sloane's zoological notes were but in a slight degree the result of his own observation; he trusted to the loose reports of negroes and others, generally correct of something or other, but very often misapplied, the local names and habits of widely different species being huddled and mingled together in almost inextricable confusion. That fruitful source of error, the application of the same names to different species in different (and

^{*} I hope to describe this species in a future memoir.—P. H. G.

sometimes in the same) localities, to which I have alluded in my 'Birds of Jamaica,' p. 177, against which a naturalist should always be on his guard in a foreign country, appears to have misled our venerable naturalist. Nor does it seem to me disrespectful to the name of that great man thus to expose his mistakes, since I feel able to speak positively, from long-continued and familiar personal observation, and because precision in the narration and application of

facts is of the highest importance in natural science.

I subjoin a description, noted from the living animal. Head, neck and fore-part of back, reddish brown, bronzed; a broad band of black runs from the muzzle on each side, inclosing the eye, and passing down to the hind-leg; this band is bounded, both above and below, by a band of yellowish white, gradually becoming obsolete between the fore- and hind-leg; each of these pale bands is again bounded by a line of black, more or less interrupted or maculate, the superior of which extends along the tail; lower back and tail, greenish brown; whole under-parts greenish white, silvery; upper surface of the limbs and feet black, with pale confluent spots. The whole animal reflects a metallic gloss. There is no appreciable difference in the sexes.

Dimensions of one measured, a gravid female, of rather large size:—Length, muzzle to anus $3\frac{7}{10}$ inches; tail $5\frac{1}{4}$: total nearly 9 inches. Muzzle to eye $\frac{5}{20}$ in.; muzzle to ear $\frac{7}{20}$ in.; muzzle to front of fore-leg $1\frac{2}{10}$ in.; axilla of fore-leg to front of hind-leg 2 in.; fore-

leg, from axilla to tip of claws, $\frac{9}{10}$ in.; hind-leg $1\frac{3}{10}$ in.

This is the only species of *Mabouya* that I found in Jamaica. Is *M. Sloanei* (Dum. et Bib.), which is ascribed to the same island, really distinct?

June 13.—Harpur Gamble, Esq., M.D., in the Chair.

1. Description of Tragelaphus Angasii, Gray, with some Account of its Habits. By George French Angas.

This new and brilliant Antelope, the *Inyala* of the *Amazulu*, appears to be a link between the Koodoo and Boshbok, uniting in itself the markings and characteristic features of both these animals.

The adult male is about 7 ft. 6 in. in total length, and 3 ft. 4 in. high at the shoulder. Though elegant in form, and with much of the grace of the solitary Koodoo, the robust and shaggy aspect of the male bears considerable resemblance to that of the Goat. Legs clean; hoofs pointed and black, with two oval cream-coloured spots in front of each fetlock, immediately above the hoof. Horns 1 ft. 10 in. long, twisted and sublyrate, very similar to those of the Boshbok, but rather more spiral; have sharp polished extremities, of a pale straw-colour; rest of horns brownish black, deeply ridged from the forehead to about half the length of the horn. Prevailing colour grevish black, tinged with purplish brown and ochre; on the neck, flanks, and cheeks, marked with several white stripes like the Koodoo; forehead brilliant sienna-brown, almost approaching to orange; mane black down the neck, and white from the withers to the insertion of the tail. Ears 8 in. long, oval, rufous, tipped with black and fringed inside with white hairs; a pale ochreous circle



Gosse, Philip Henry. 1849. "On the habits of Mabouya agilis." *The Annals and magazine of natural history; zoology, botany, and geology* 3, 307–310.

View This Item Online: https://www.biodiversitylibrary.org/item/71826

Permalink: https://www.biodiversitylibrary.org/partpdf/60284

Holding Institution

University of Toronto - Gerstein Science Information Centre

Sponsored by

University of Toronto

Copyright & Reuse

Copyright Status: NOT IN COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.