HERPETOLOGICAL NOTES.

PART I.—SYSTEMATIC.

INCLUDING THE DESCRIPTION OF ONE NEW SPECIES.

By H. A. LONGMAN.

CARETTOCHELYS INSCULPTA, Ramsay.*

Whilst working through a number of duplicate Chelonian specimens, a dusty carapace and plastron were discovered in inner recesses of old shelves. On cleaning and examination these proved to be the rare *Carettochelys insculpta*, Ramsay, first described from the Fly River, British New Guinea. For the reception of this monotypic tortoise, the family Carettochelyidæ was established by Boulenger,†

Our carapace is 49.5 centimetres in length, and is thus somewhat larger than the type. With the exception of the position of neural plates it agrees well with Ramsay's description. In our specimen the first neural plate is separated from the second by a distance of 8 mm. Plates two, three, and four are joined, and the two former are apparently bisected by a transverse line, scarcely so deep as an ordinary suture, which gives them a divided appearance. Thus it would be almost correct to speak of eight neural plates and not six. Plate four just reaches number five by means of a lanceolate strip. A space of 8 mm. separates plates five and six. The plastron has been sawn away from the carapace and thus the sutures between them are somewhat disturbed, but although the right and left sides are not symmetrical there are no signs of intermarginals.

As the Museum was indebted to His Excellency the Governor of Queensland, Sir William MacGregor, for a large proportion of specimens received from New Guinea, his attention was directed to this specimen. To our gratification Sir William at once remembered it, courteously giving the information that it had not been secured in the Fly River but in the Morehead River. Should complete specimens come to hand, it may be that the union of the neural plates is accompanied by other distinct features, and this large Chelonian from the Morehead may thus be entitled to specific rank. Reg. No. Q.M. J13/902.

^{*} Ramsay, Proc. Linn. Soc. N.S.W. (2) i (1886), p. 158.

[†] Boulenger, Ann. & Mag. N. H. (5) xix, 1887, p. 171.

ASPIDITES COLLARIS, new species.

From Mr. E. A. Bignell, Avondale Station, viâ Cunnamulla, the Queensland Museum received in March, 1913, a specimen which differs so markedly from all described Australian Boidæ that new specific rank has been given to it under the above name.

Rostral slightly broader than deep, the portion visible from above about one-third as long as its distance from the frontal; internasals one-third longer than broad, shorter than the anterior præfrontals which are as long as the loreal region. Posterior præfrontals broader than long, separated from each other by a small azygous shield. Frontal as long as broad, somewhat narrower posteriorly, almost pentagonal, broader than the supraoculars. Parietal region broken up into small shields, of which two are as large as the internasals. Two subequal loreals. Three præoculars, the lowest of which is exceedingly small, and three or four postoculars. Thirteen upper labials, seventh entering the eye, third largest; nineteen or twenty lower labials, the nine anterior being longer and narrower. Mental shield small; a deep mental groove. Scales on middle of body 64; near vent 40; the two series on each side nearest the ventrals are enlarged. Ventrals 303; anal entire; subcaudals 52, of which the first and two of the last are divided.

Colouration: Light brown above, darker in the vertebral region, with irregular hair-brown bands, often anastomosing on the sides. Ventrals and spaces between bands on sides dirty white; anterior ventrals dark-clouded. A wide white band extends over the occiput, and the whole of the under surface of the head is pure white. The supraoculars, the adjoining postocular, and two small parietal scales are glossy black, as is also the rostral shield, but the area between these is again white, though not so markedly so as the upper and lower labials, the under surface of the head, and the occipital region. The frontal is also dark-clouded on its posterior surface.

Total length 620 millim.; tail 58. Reg. No. Q.M. J13/944.

The question arises whether the white markings on the head do not represent a variation to be found in juvenile forms of Aspidites ramsayi, Macleay, but the writer has no knowledge of such marked divergence from adult colouration in any of the Australian Boidæ. In the Horn Expedition report* there is noted an Aspidites melanocephalus, the head of which was uniform pale brown. Apart from this striking colouration, the structural differences separating our snake from A. ramsayi, as redescribed by E. R. Waite,† are but slight.

^{*} Horn Expedition, Part II. (Lucas & Frost), 1896, p. 147.

[†] Proc. Lin. Soc. N.S.W., 1894, vol. 9, p. 715, pl. 50.

HERBERTOPHIS PLUMBEUS, Macleay.

During the Queensland Government's Expedition to Bellenden-Ker Range in 1889, four specimens of this snake were secured for the Museum. In the official report the species was referred to, under Macleay's name, as "A nocturnal snake peculiar to the Herberton district, in which it is common." As there seems to be an element of doubt as to whether this snake should be included as a Stegonotus, a careful examination has been made of the specimens. There are 13 or 14 maxillary teeth which exhibit the characteristic dentition of Stegonotus modestus as figured by Boulenger in the B.M.C. i., p. 364. The front teeth are the smallest. An increase in size may be noted towards the middle; then is apparent a break which would easually be looked upon as a diastema, but close examination reveals the presence of two very much smaller teeth. The penultimate and two preceding teeth are the largest in the series, the final tooth being again smaller. In his description of Lielaphis (Stegonotus) modestus, Günther remarks: "It is not rarely doubtful whether the dentition of a specimen should be considered diagranterian or syncranterian; but it is never lycodont." The same remarks apply in general to the specimens under consideration. Stegonotus muelleri, the type specimen of Duméril and Bibron, was described by them as diacranterian. Thus the question arises as to whether the genus Lielaphis, instituted by Günther,* should not more rightly be considered the correct appellation. But in the earlier of the two articles quoted Günther refers to the teeth as "subequal, in small number." The later description of Lielaphis modestus indicates the variation in size of maxillary teeth which is characteristic of our specimens, and which is appropriated and figured for the genus Stegonotus by Boulenger. As a normally syncranterian dentition may very readily appear to be diacranterian, some considerable latitude must be allowed on Duméril and Bibron's description. Thus it seems correct to the writer to substantiate Boulenger's query and definitely place Macleay's species as Stegonotus plumbeus.

A few other remarks may be made on our specimens. Only the fourth and fifth labials enter the eye, and the angle of the third fails to reach so far. The number of ventral scales varies from 210 to 218, and the subcaudals, which are in pairs, from 78 to 85, though one, which is obviously damaged, has but 61. In colouration and otherwise in lepidosis, our specimens agree with Macleay's description.

STEGONOTUS MODESTUS, Schleg.

In the Queensland Museum there is a specimen, bearing this name, received from Torres Strait. The dentition and colouration are apparently

^{*} P.Z.S., 1863., p 59, & 1877, p. 129.

characteristic, but the body scales are arranged in 15 instead of 17 series. In other respects the lepidosis is as described.

PSEUDECHIS WILESMITHII, De Vis.*

Amended description and note on affinity with P. scutellatus, Peters.— The type specimen named as above is one of the longest Australian venomous snakes yet received by the Queensland Museum. Its length (body removed from skin) is no less than 2,215 mm., of which the tail is 340 mm. Owing to extraction of the venom glands, the head is in a somewhat damaged condition. The rostral was originally described as being one-fourth longer than broad, whereas the breadth is slightly in excess of the length. On one side only are there two præoculars, and there are but six upper labials. On the left side the lower anterior temporal is wedged in between the fifth and sixth labials forming the seventh shield noted by De Vis. The lower angle of this shield fails to reach the gape on the right-hand side. There are three lower labials in contact with the anterior chin-shields. The diameter of the eye slightly exceeds the distance from the mouth, but owing to the state of the head the proportion cannot be obtained with accuracy. With these necessary emendations, the specimen demonstrates so close an alliance with P. scutellatus, Peters, that the writer doubts the wisdom of separating them. It may be noted, however, that the frontal is slightly wider than either of the supraoculars, and is but one and a-half times as long as broad. On each side the posterior nasal is separated from the præocular by a space of 2 mm. In a specimen of P. scutellatus, received from Mr. W. H. Edwards, Colosseum, North Coast line, Queensland, the frontal is also slightly wider than either of the supraoculars, but its length is almost twice the breadth. In colouration both examples are brown, one being darker than the other. The lighter colour on the snout and sides of the head is noticeable in each.

^{*} De Vis, Annals Queensland Museum, No. 10, 1911, p. 25. Peters, Mon. Berl. Ac., 1867, p. 710. Boulenger, B.M.C. Snakes, iii, 1896, pr 331.

PART II.—ETHOLOGICAL.

By H. A. LONGMAN.

Although the scientific worker is hopelessly handicapped by the vividly imaginative journalist when snake stories are told, yet occasionally there are noticed incidents startling enough in their way. During the cooler months a young and lithe Diemenia psammophis, Schleg., popularly known as a whipsnake, usually retired under a piece of bark placed in its case, and it was only to be tempted out on warm and sunny days. On one such occasion a small skink lizard was introduced, and the snake commenced a lively chase. The lizard ran under the bark and on reaching the other side scampered back over the top, closely pursued by the snake. Again the lizard entered the bark tunnel, through which the tail of the snake was rapidly disappearing, making a spurt to keep up with the main body. The snake darted for the lizard, missed it, and then seized its own retreating tail about two inches from the tip. With characteristic pertinacity it held on, and apparently the classic episode of a snake swallowing itself was to be attempted. It was not until the snake was taken out of its case and forcibly handled that it let go, there being apparently no distinction to the ophidian palate between its own flesh and that of its favourite lizard.

The introduction of a Frilled Lizard, Chlamydosaurus kingii, Gray, to a vivarium containing three Green Tree Snakes, Dendrophis punctulatus, Grav. resulted in a pretty display of reptilian characteristics. The former was previously inert and slow of movement. One of the snakes raised its head and neck in order to examine the newcomer. Then the lizard suddenly rushed across the vivarium and stood facing the snake, its frill expanded to the maximum and its mouth widely open. In its eyes was the light of battle, and its head moved slowly from side to side as if working up a violent rage. In this position it remained for over three minutes. The snake, too, did its utmost to make itself look formidable. Its scales were distended and the underlying pattern of peacockblue was visible throughout the body. Both creatures were transformed. Two quick rushes were made by the lizard, but the marvellous agility of the snake and the old wood and débris around enabled it to escape. Not until some time after the snake had securely hidden itself did the lizard resume its usual peaceful appearance.

The under colouring of peacock-blue is very noticeable in Green Tree Snakes when they take an unusually large meal. Although unaided by venom or constricting power, these snakes succeed in overcoming and eating skink lizards of a diameter exceeding themselves. Swift and agile in the chase, they are very tenacious of their prey, and when once a grip is taken it is seldom that they leave go, notwithstanding severe bites from a lizard. Should a skink be

seized in the middle of the body, the snake's jaws gradually work along until the head is reached. These snakes are also fond of frogs and small birds. Our specimens thrive well in captivity.

Remarkable changes of colour are sometimes exhibited by the common Jew or Bearded Lizard, Amphibolurus barbatus, Gray. Specimens which are normally brownish grey and in which the characteristic colour markings are not very conspicuous are quite transfigured when angry. The whole of the head and gular tissues capable of distension (the "bearded" portion) become quite black. This chameleon-like change extends even to the ends of the prickles. With the yellow mouth wide agape and the surrounding black, the little reptile looks quite dangerous as it faces its supposed foes. When the excitement has subsided it regains its ordinary colouring in a short time, and the black complexion of anger is a thing of the past. Older specimens, especially males, are permanently darker, and the series of five or six pairs of lighter spots on each side of the vertebral line are by no means so noticeable as in the young.

In captivity the Bearded and Frilled Lizards feed freely on grass-hoppers, beetles, cockroaches, and similar insects. Moths and butterflies are also taken, and a big spider is not always disdained. A glass jar containing cockroaches was often placed inside the case, and the lizards tried to bite through the glass, and seemed never to learn the lesson of its transparent impregnability. In their native element these lizards must destroy large quantities of grasshoppers and other pests, and it is unfortunate that so few farmers are aware of this. At present they are considered fair prey for the dogs or are ruthlessly killed with a stick. The Frilled Lizard is a bizarre and harmless animal possessing several unique characteristics which have been described at great length, and it is now by no means common. Efforts are being made to encourage its protection in Southern Queensland.

The Australian Black Snake, *Pseudechis porphyriacus*, Shaw, must be included with those venomous reptiles which enjoy an occasional cannibalistic meal. In order to provide temporary accommodation, a large specimen of *Diemenia psammophis*, Schleg., was placed in a small vivarium with a Black Snake nearly twice as large. For two days the two lived amicably together, but on the following day the Diemenia disappeared into the interior of its comrade.

R. L. Ditmars, who has placed on record many valuable observations on the feeding habits of snakes, states that members of the Australian genera Pseudechis, Diemenia, and Brachyaspis prefer small mammals and birds to other food, adding: "None could be coaxed to take batrachians, which appeared quite foreign to their diet."* So far as the common Black Snake is concerned our experience is at variance with Ditmars' notes, for this species prefers frogs to any other food. In captivity it feeds regularly on the commoner species of batrachians, and these constitute the food which is most abundant in the swampy localities where this snake is generally found. Possibly Australian snakes have a prejudice against American frogs.

The writer has some doubt as to the truth of the popular notion that a snake is easily killed. When a reptile succeeds in crawling away after having received a smart blow on the back, the would-be slayer almost invariably assumes that it has "crawled away to die." But in many cases, unless wounded in the cardiac region, it is more likely that it recovers. Several remarkable instances have come to our personal knowledge in which snakes have subsequently recovered although they had received so severe a blow that the posterior half of the body seemed limp and lifeless. In one case a Carpet Snake, Python variegatus, Gray, was encountered at night in a fowlhouse after it had devoured a small fowl. It was stunned by a hard blow; its ventral surface was cut open and the fowl extracted, and the snake was then left for dead. Next morning it was not to be seen, and three days later it was found, still alive, under a heap of wood a hundred yards away, and was finally despatched. Those who have had occasion to obtain specimens of the larger venomous snakes in Australia (particularly Pseudechis porphyriacus) will readily realise that country residents prefer to kill a snake "two or three times over," and thus preclude all possibility of a resurrection. Among our own experiences the case of a small Diemenia psammophis may be given as an instance of tenacity. When placing this specimen over six months ago in a small vivarium, it sprung upwards before the lid could be properly closed, with the result that the cover fell on its back about one-third from the head. For some weeks after this the whole of its body posterior to the injured part was incapable of motion. During two periods of ecdysis the snake was unable to free itself behind this part, and the epidermis had to be removed by the writer. The disruption of the vertebræ was so marked as to be conspicuous on the dorsal surface. Notwithstanding this, the snake gradually recovered the use of its posterior part. It is now lively and healthy, and will often take three or four small lizards in succession and eat them with surprising speed.

^{*} Zoologica, New York Zool. Soc., vol. i, No. 2, p. 226.



Longman, H A. 1913. "Herpetological notes. 1. Systematic. Including the description of one new species. Part 11. Ethological." *Memoirs of the Queensland Museum* 2, 39–45.

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