

AMERICAN MUSEUM NOVITATES

Number 64

March 29, 1923

59.81,1(729.3)

FOUR NEW LIZARDS FROM BEATA ISLAND, DOMINICAN REPUBLIC

BY G. K. NOBLE

This is the second paper to appear dealing with the results of the "Angelo Heilprin Expedition to the Dominican Republic." While investigating the life history of the Rhinoceros Iguana, *Cyclura cornuta* (Bonnaterre), I spent four days (October 1 to 4 inclusive) on Beata Island off the southwestern coast of the Dominican Republic. As no reptiles had previously been recorded from Beata, I made an effort to secure a representative collection. The four species described below were recognized in the field as distinct from their relatives on the mainland (Dominican Republic).

The four species include only a part of the herpetological fauna of Beata Island. In a subsequent paper I shall discuss the fauna as a whole and compare it with that of the mainland. It may be mentioned here that all the reptiles of the island have been derived from stocks existing today in the arid southwestern part of the Dominican Republic. The species described below are represented in the collection by a series.

Ameiva abbotti,¹ new species

DIAGNOSIS.—A brilliantly colored lizard closely related to *A. chrysolæma*; agreeing with that species in its straight-keeled caudal scales, its four supraoculars, and its ten rows of ventral scales; differing from *A. chrysolæma* in having the prefrontals more broadly in contact, the frontal in contact with the third ocular, or separated by a row of small scales. The preaxial row of antibrachials and the brachials small, femoral pores more than twenty. Differing from *A. chrysolæma* and all other species of the genus in its coloration: dorsal surface of head olive-brown, of body black or very dark brown mottled with black; a series of large spots (1 to 3 mm. in diameter) forming about 12 to 18 longitudinal rows extending from the occiput to the base of the tail; the spots bluish or whitish above, bluish on the sides of the body and bright blue along the periphery of the abdomen; gular region and venter rosy pink; a broad band of black across the throat and chest, fading gradually into the pink of the abdomen. In life the dorsal spots greenish, the lateral ones bright blue in striking contrast to the black ground-tone of the back, the chestnut head and the rosy venter. Young with the distal part of the tail pale clay-color to white.

¹I take pleasure in naming this *Ameiva*, probably the most attractive teiid in the West Indian region, after the naturalist, Dr. W. L. Abbott, whose intimate knowledge of the Dominican Republic contributed greatly to the success of the expedition.

TYPE.—A. M. N. H. No. 24327; adult male; Beata Island, Dominican Republic; October 3, 1922; G. K. Noble.

DESCRIPTION OF TYPE.—Rostral forming an acute angle behind; nostril on the posterior part of anterior nasal; anterior nasals narrowly in contact behind rostral; fronto-nasal as wide as long, broadly in contact with the loreal; prefrontals broadly in contact, their suture nearly half the length of either prefrontal; frontal in contact with the first, second, and third supraoculars of each side; four supraoculars, the last half the size of the first; fronto-parietals separated from the third supraocular by one or two rows of granules; nine supraciliaries on one side, eleven on the other; these separated from the three posterior supraoculars by two rows of granules; the anterior granules enlarged and partly separating the first supraocular from the second; five occipitals, the median larger than the two outer but smaller than the two adjacent scales; two to three rows of post-occipitals; six enlarged upper labials to the middle of the eye, five enlarged lower labials to the same point; between lower labials and chin shields a wedge of small scales extending anteriorly to the postmental. Chin and throat covered with granular scales; of these the largest do not form a band across the middle but form three indistinct patches, the median patch not as extensive as the two lateral ones; collar with three rows of only slightly enlarged scales.

Dorsal scales minute, granular, uniform; ventral scales in ten longitudinal rows (not including the outer row of half size or smaller plates¹) and thirty-six transverse rows; preanal plates in a triangle three rows high and seven scales broad at the base. Antebrachials in one row of large scales and two series of smaller scales on the preaxial side; brachials in three to four rows of small scales, these not larger than the small antibrachials; antibrachials and brachials not forming a continuous series but interrupted by many rows of granules; under side of thighs covered with six or seven series of hexagonal plates, the anterior largest; twenty-one to twenty-two femoral pores on a side; ventral surface of tibia with three rows of plates, the preaxials three times as wide as the postaxials, first (preaxial) toe distinctly shorter than the fifth; forty-two scales around the tail at the fifteenth ring.

Ground-tone above and on the sides black, fading to olive on the neck; head chestnut-olive; sixteen rows of large blue spots extending from neck to groin, five rows of whitish spots of the same size on the hind legs, numerous white spots on the tail; throat and abdomen rosy except where the blue spots encroach upon the periphery; collar chest, and ventral surfaces of the forelegs black; ventral surface of the tail whitish, indistinctly spotted with brown.

Length, 287 mm. (tail reproduced); body, 116 mm.; arm, 44 mm.; leg, 83.5 mm.; head-length, 35 mm.; head-breadth, 19 mm.

Ameiva beatensis, new species

DIAGNOSIS.—Closely related to *Ameiva lineolata* Duméril and Bibron, with which it agrees in its small size, smooth oblique caudal scales, and conspicuously striped dorsum. Distinguished from that species by its different color pattern: only six white stripes in the occipital region, four of these stripes continued to the tip of the snout; appendages and tail much bluer. Adult specimens larger than adult *A.*

¹This method of counting is that employed by Barbour and Noble, 1915, Bull. Mus. Comp. Zool., LIX, pp. 417-479, but not by some others.

lineolata, the outer row of ventral plates much larger than in that species; other less conspicuous differences in the larger anterior chin scales, somewhat different preanals and tibials. In some of these characters, such as the reduction in the number of stripes and the pattern continued to the tip of the snout, this species approaches *A. wetmorei* of Porto Rico.

TYPE.—A. M. N. H. No. 24328; adult male; Beata Island, Dominican Republic; October 3, 1922; G. K. Noble.

DESCRIPTION OF TYPE.—Nostril between two nasals; anterior nasals broadly in contact behind rostral; fronto-nasal broader than long, in contact with the loreal; supraoculars four; frontal in contact with the first three supraoculars; a pair of small fronto-parietals broadly in contact with the third supraocular; five large occipitals and two smaller post-occipitals; the median occipital approximately the same size as the two adjacent ones; two outer occipitals of each side separated from the supraoculars by a row of small scales; seven supraciliaries, the first largest and in contact with the loreal; supraciliaries separated from the supraoculars by a single row of small scales; five supralabials to the middle of the eye, the first in contact with the nasals only; five infralabials to the middle of the eye; a mental, a postmental and five pairs of large chin shields, the first pair fully in contact, the second pair in contact for about one-third their length; between chin shields and infralabials a row of small scales extending as far forward as the loreal; chin and throat covered with small scales, those on the anterior half of the throat twice as large as those on the posterior half; collar with five rows of enlarged scales, the scales of the three medial rows nearly twice as large as the largest throat scales.

Back, sides, and upper surfaces of the limbs covered with numerous small roundish scales, some of these angular, subhexagonal; the medial scales no larger than those immediately adjacent to them; ventral side of the body with eight longitudinal rows of scales and an outer incomplete row; the largest scales of this outer row having one-third to half the area of the abdominal scutes adjacent to them; abdominal scales forming thirty-four transverse rows; preanal plates in a transverse and a longitudinal row, the three medial scales much the largest and forming a triangle, the anterior of these three scales much larger than the two posterior ones; on the lower arm two rows of antibrachials of which the outer is enormous, at least three times as broad as the inner row; on the upper arm two rows of brachials, the anterior series three times as broad as the posterior; brachials and antibrachials forming a continuous series, not interrupted by small scales. Under side of the thigh covered with six rows of scales, the postaxial much smaller than the preaxial, but grading into the latter; fifteen or sixteen femoral pores to each femur; tibial shields in three rows, the second or larger postaxial series from one-third to one-half the size of the enormous scales in the first (preaxial) series; first (preaxial) toe extending not quite as far as the fifth (postaxial) one; scales of the tail smooth, oblique except for the medial series above and below, these median scales wedge-shaped; eighteen scales in the fifteenth ring from the base of the tail.

Ground-tone (in alcohol) jet-black above with a series of narrow white stripes extending from the extreme tip of the snout to about half the length of the tail; nine of these stripes in the pelvic region (not counting the white flanks), these converging anteriorly to form only six across the occiput and sides of the head, and only three anterior to the eye on the top of the head; the medial stripe of the pelvic region disappears at a point not one-third the distance to the anterior legs; the two adjacent

stripes converge just behind the shoulders to form a single stripe, and this stripe disappears just anterior to the shoulders; the two stripes adjacent to this median stripe of the shoulder region converge just anterior to the frontal plate, while the two outer stripes of either side extend to the tip of the snout; ventral surfaces white, tinged with blue; tail and appendages tinged both above and below with bright ultramarine blue.

Length, 177 mm.; body, 57 mm.; arm, 19 mm.; leg, 37 mm.; head-length, 15 mm.; head-breadth, 8.5 mm.

Anolis longitibialis, new species

DIAGNOSIS.—Closely allied to *Anolis cybotes* Cope, from which it differs in its much longer hind limb; its larger dorsal scales; its double series of enlarged medial scales; its supraorbitals separated from the supraorbital semicircular. Its coloration alone is distinctive; the fine penciling of dark brown not found in *A. cybotes*, nor the bright dewlap (which, oddly enough, sometimes retains its color in preservative).

TYPE.—A. M. N. H. No. 24329; adult male; Beata Island, Dominican Republic; October 3, 1922; G. K. Noble.

DESCRIPTION OF TYPE.—Habitus slender; body slightly compressed; head large with sharp canthus; snout broad but not depressed; tibio-tarsal articulation reaching nearly to the ear opening; tail compressed with a dorsal keel of short, pointed, backwardly directed scales; a low nuchal crest.

Head scales mostly smooth, some faintly keeled; four sharply edged canthal scales (not including the first long scale over the eye); one plate of the broad supraorbital semicircles of each side in contact, the other plates separated from their mates of the opposite side by a single row of small scales; supraorbital semicircle separated from the occipital plate by one or two rows of scales; separated from the supraorbitals by one row of small scales. Occipital plate small; about as large as the ear opening; scales of the frontal region small, about as large as supraorbitals; frontal ridge faint; nine enlarged supraorbitals, all distinctly keeled; two rows of scales under the orbit parallel to the labials; five rows between canthal scales and labials at the widest point of the loreal region; six upper and six lower labials to the mid-point of the eye.

Dorsal scales small but larger than in *A. cybotes*; about one-fourth as large as the ventrals, which are smooth or swollen but not keeled, two rows of enlarged scales extending from occiput to caudal crest; a small, but well-defined, fleshy nuchal fold; tail with keeled scales and a low crest; seventeen scales around the tail at its mid-point; two enlarged postanal and one smaller one on either side. Limbs covered with enlarged scales on their postaxial sides, except on the tibia where the enlarged scales cover the ventral surface; a large dewlap extending posteriorly beyond the coracoid region.

Color (in alcohol) pale chocolate-brown above, finely marked with a number of narrow lines of dark brown; of these fine lines, the most conspicuous are one across the occiput, one behind the eye, and several short but longitudinally directed ones on the sides of the body; two or three transverse bars cross the back, the most anterior of which is widened out into a blotch; the dark tone forms about ten ill-defined rings on the tail; ventral surface dirty white, the throat region dusky; expanded dewlap yellowish.

Length, 198 mm.; body, 66 mm.; arm, 33 mm.; leg, 56 mm.; head-length, 23 mm.; head-breadth, 14 mm.

***Leiocephalus beatanus*, new species**

DIAGNOSIS.—Very closely allied to *Leiocephalus barahonensis* Schmidt, from which it differs only slightly in scutation. It possesses one less supraocular than that species, and the medial shields of the snout are proportionately larger, making contacts between the adjacent plates different than those found in *L. barahonensis*. Very different from *L. barahonensis* in its large size and coloration; color pattern somewhat the same in both species, except for the striping; young, unlike the immature *L. barahonensis*, are brown above with four longitudinal stripes of white in addition to the one on the lower flanks, older specimens become iridescent green above and the two median stripes disappear; the bright reddish tail and hind limbs, as well as the cross-banded, not mottled throat, are equally distinctive features; the bright yellow abdomen of the adult male is not found in *L. barahonensis*.

TYPE.—A. M. N. H. No. 24330; adult male; Beata Island, Dominican Republic; October 3, 1922; G. K. Noble.

DESCRIPTION OF TYPE.—Head shields large, ridged; on the crests of these ridges a series of fine sense pores; three scales between the rostral and the first supraocular; a pair of frontals, a pair of prefrontals, and a pair of supranasals embracing a medial series of three scales; the second medial very large and preventing the prefrontal from making contact with its mate of the opposite side, the anterior and posterior medial scales small; frontals and prefrontals separated from the canthal scales by an elongate rhomboidal scale; three supraorbitals on one side, four on the other; seven supraoculars on each side, the first very small; a small occipital bordered anteriorly by two narrow parietals; four parietals in all, the outer pair three times as broad as the inner pair; all head shields ridged; the supraoculars and parietals most distinctly; six to ten ridges on the larger scales; four upper and five lower labials to the middle of the eye. Dorsal and lateral scales sharply keeled, mucronate; ventral scales smooth with denticulated edge; about forty-one scales around the middle of the body; scales of the neck like the dorsals; scales behind ear keeled and imbricate, not granular; dorsal and caudal crests low.

Color (in alcohol) iridescent green above, with two pale dorso-lateral stripes becoming whitish in the shoulder and neck region, some indication of two additional pale stripes between these, but extending only half the length of the body; sides of the head and body below dorso-lateral stripe a dark brown, a whitish stripe on the lower part of the flanks extending from shoulder to groin; dorsal surface of the head dull brown; upper surfaces, sides, and ventral surfaces of posterior limbs and tail a reddish brown; this color much paler below than above. Ventral surface of throat and chest whitish or bluish, marked with seven irregular cross-bands of black or very dark brown; two of these bars broken, but the bars not divided into spots as in *L. barahonensis*; the first, second, and third bars continued on the sides of the head to form three vertical bars as in *L. barahonensis*, but better defined. Center of abdomen a brilliant yellow, sides of abdomen washed with grayish and studded with a series of azure blue spots; base of the thighs suffused with pinkish.

Length, 188 mm.; body, 76 mm.; arm, 27 mm.; leg, 57 mm.; head-length, 21 mm.; head-breadth, 15 mm.

