

ARTICLE X.—*Notes on a Small Collection of West Indian Bats, with Description of an apparently New Species.* By J. A. ALLEN.

Mr. Charles B. Cory, the well-known ornithologist, has placed in my hands for study a small collection of Bats, gathered by his collectors in the West Indies. While the collection embraces only about fifteen specimens, they represent eight species, and come mostly from the smaller and little-known islands. One of the species proves to be apparently new to science.

1. *Vesperugo fuscus* Bauw.—A single specimen from Nassau, Bahamas, collected in January, 1879, by Mr. Cory, is nearly one-third smaller than average specimens from the United States, with the ears thin and papery instead of thick and leathery, and the wing membranes very delicate. An examination of the skull shows the specimen to be fully adult. In coloration and in all external characters it does not differ appreciably from *V. fuscus*, which presents a wide range of apparently purely individual variation in color, specimens from the same locality, taken at the same season, varying from a light yellowish or golden tint to deep sepia brown.

Following are the measurements of the Nassau specimen, taken from the dry skin: head and body, 55 mm.; tail, 35; ear from base of inner margin, 12; tragus, 5.5; forearm, 33; thumb, 7; third finger (metacarpal, 33; 1st phal., 13; 2d phal., 18), 64; tibia, 15.5; hind foot, 9.

2. *Natalus micropus*.

Natalus micropus DOBSON, P. Z. S., 1880, p. 443.

A single specimen from Old Providence Island, ♂ ad., May 10, 1887, seems distinctly referable to this species, described by Dr. Dobson from a Jamaica specimen.

3. *Noctilio mastivus* (DAHL).—One specimen, ♂ ad., Antigua, April 22, 1890. Apparently very distinct from *N. leporinus* (Linn.), differing in its much larger size and very different coloration.

4. *Molossus obscurus* Geoffr.—One specimen, Virgin Gorda, ♂ ad., Nov. 30, 1889. Above, deep black, the basal half or two-
[November, 1890.] [169]

thirds of the fur nearly pure white; below, plumbeous black, the basal portion of fur white. Forearm, 37 mm.; third finger, 72, its metacarpal, 38; tail, 41, its apical half exerted beyond the membrane.

5. *Macrotus waterhousei* Gray. — One specimen, Nassau, Bahamas, Jan., 1879.

I am also indebted to Dr. John I. Northrop, of the Columbia College School of Mines, New York City, for the opportunity of examining three specimens from Andros Island, Bahamas, taken May 15, 1890.

These specimens differ greatly in coloration from *M. mexicanus* De Sauss., from Mexico, and also in various structural details, as will be pointed out later in connection with the Mexican forms of this genus.

***Artibeus* “*perspicillatus* (Linn.)”**

The Bats of the *perspicillatus* section of the genus *Artibeus* (molars $\frac{2}{3}$ — $\frac{2}{3}$) from South America, the West Indies, Mexico, and Central America, present a wide range of variation in size, color, and in the distribution of the fur on the limbs, as also to some extent in the size and form of the nose-leaf, the tragus, and in the contour of the skull and the form of the molars. My series of twelve specimens represents the following localities: Tehuantepec, Mexico, ♂ ad. and ♀ juv.; St. Andrew's Island, Caribbean Sea, ♂ ad.; Porto Rico, W. I., two specimens; Anegada, W. I., two specimens; Virgin Gorda, W. I., one specimen; Anguilla, W. I., one specimen; West Indies (without definite locality), one; Yungas, Bolivia, one specimen; Bogota, United States of Colombia, one specimen. The Bolivian example is the largest of the series (metacarpal of third finger 66.5 mm.), with the general color sooty brown (the fur much paler at the base than at the surface, but only brownish gray, not white), with four well-defined and conspicuous light facial streaks, and the fur extending thickly on the forearm as far as the middle, forming a broad triangular area.

The Bogota specimen and the two Mexican (Tehuantepec) examples come next in point of size (metacarpal of third finger, in ♂, 60 mm., in ♀, 49 mm.), and have about the same distribution

of the fur on the limbs, but differ notably in color, being of a dark reddish brown above, lighter and with longer gray tips to the hairs below, with the fur everywhere at base very light (pale fulvous white), with the light facial streaks indistinct.

The specimens from Anguilla, Anegada, and another West Indian specimen from an unknown locality, are of about the same size and of nearly the same color as the smaller Tehuantepec specimen, and have about the same distribution of the fur on the limbs. In all there is a more or less distinct trace of a grayish line running from the outer margin of the base of the nose-leaf to the sides of the forehead opposite the inner base of the ear, on each side of the face. In all the pelage is more or less rufescent.

The Virgin Gorda specimen is of the same size, with the same distribution of fur, but the pelage is not at all rufescent, being dark sooty brown above, and a little lighter below, through the strong grayish tipping of the hairs. The fur is also darker below the surface.

The Porto Rico specimens are slightly larger (metacarpal of third finger 55 mm.). They lack all trace of facial streaks, and the color is dull smoke brown, with the fur scarcely lighter at the base than at the surface, and restricted to the body, even the humeri, as well as the forearms and tibiæ, being quite naked. The wing membranes are smoother, apparently thinner and more delicate, and of a peculiar dark, purplish horn color. In size and color they closely resemble the Virgin Gorda specimen.

The St. Andrew's Island specimen is like the last in size (metacarpal of third finger 55 mm.), but differs greatly from all the others in color and in the distribution of the fur on the forearms, which on the dorsal surface extends densely in a broad band along the humeri and over about the proximal third of the forearm bones. The color above is dark seal brown, the fur lighter (smoky gray) beneath the surface; below lighter and more grayish brown, from the gray tipping the hairs.

The skulls of these specimens differ much in size and proportions, and the molars also vary in form in the different skulls; but the difference is in part doubtless merely individual. It is worthy of note that while the minute last lower molar is present in all, the incisors vary in number, the lower incisors being all

absent in one skull, while two are lacking in another, and one each in two others, while in still another only three upper incisors are present. The size of the skull varies from a length of 33 mm. in the Bolivian specimen to 28 mm. in one of the Porto Rico specimens. The distance across between the outer border of the last upper molar on either side varies in the same skulls from 14 to 12 mm.

The shape of the tragus, particularly the form and position of its serrations, also varies more or less, as does the size and form of the nose-leaf, but these variations, as well as those of the skull and dentition, prove rather unstable.

In respect to coloration the series falls into four pretty strongly-marked groups, as follows,

1. Facial stripes four, grayish white, conspicuous; general color above dark sooty brown, the pelage below the surface smoky gray. Yungas, Bolivia; 1 specimen.
2. Facial stripes two, grayish, very inconspicuous (no stripe from the angle of the mouth); general color above dark rufescent brown, the pelage below the surface nearly pure white. Mexico, Anegada, and Anguilla, W. I.; 5 specimens.
3. No facial streaks; general color above dark sooty brown, the pelage below the surface smoky gray. Virgin Gorda and Porto Rico; 3 specimens.
4. No facial streaks; general color above dark seal brown (brownish black), but very little lighter at the base than at the surface. St. Andrew's Island; 1 specimen.

It may be added that none of the specimens have any white mark of any sort on the shoulder.

With the limited material at hand it is impossible to decide satisfactorily what value to accord these striking differences. It seems probable, however, that they must indicate at least well-marked local phases of a wide-ranging group, and that the Bolivian phase may be specifically separable from the West Indian, Bogota, and Mexican forms. In consequence also of the vagueness of all of the earlier descriptions of the Bats of this group it seems almost impossible to say to which phase belongs the name *Vespertilio perspicillatus* of Linnæus and other early authors, or to allocate the various subsequent names currently treated as synonyms of *Artibeus perspicillatus*.*

* Some thirty years ago Mr. R. F. Tomes (P. Z. S., 1861, p. 64), after synonymizing under this name some half-a-dozen of the species of previous authors adds: "After the examination of many specimens from the West Indian Islands and the continent of America I am fully persuaded that they are all referable to one species, and that that species is the *Vespertilio perspicillatus* of Linnæus. There is, I admit, considerable difference in the size of different individuals, the island specimens being smaller and darker-colored than those from the mainland," etc.

For the present I am disposed to make the following disposition of the West Indian specimens, believing that the differences above detailed are geographical rather than individual, seasonal, or sexual.

6. *Artibeus jamaicensis* Leach (?).—Porto Rico, two specimens; Virgin Gorda, one specimen, ♂ ad., Dec. 1, 1889.

7. *Artibeus carpolegus* Gosse (?).—Antigua, two specimens, ♂ ad., Dec. 30, 1889; ♀ ad., April 23, 1890. Anegada, one specimen, ♂ ad., Dec. 30, 1889. Cyrus S. Winch, collector.

8. *Artibeus coryi*, sp. nov.

Pelage short, soft, dense, and velvety. Above dusky seal brown, darkest along the sides of the body and posteriorly; below similar but somewhat lighter, with minute grayish tips to the hairs. The fur is nearly as dark at the base as at the surface, both above and below. No trace of white streaks on the face, nor elsewhere. Ears, nose-leaf, feet, and membranes black.

Both above and below the fur extends barely to the edge of the antibrachial membranes, but a narrow band densely covers the humerus, and proximal third of the fore-arm bones. Below the wing membranes are thinly covered with short woolly dusky gray fur to a line extending from about the knee to the elbow, and outwardly for about half an inch beyond the elbow-joint. The interfemoral membrane is well furred below to a point about opposite the knees. The interfemoral membrane is supported by well-developed calcanea, and is emarginate to a point a little below the knees. Ears short, broad, obtusely pointed. Nose-leaf small, pointed, confluent with the muzzle at the base.

Dentition as in *A. perspicillatus*. Inc. $\frac{1}{4}$, c. $\frac{1}{1}$, pm. $\frac{2}{3}$ - $\frac{2}{3}$, m. $\frac{2}{3}$ - $\frac{2}{3}$. Length, head and body (from skin), 73.7 mm. (2.90 in.); head, 23 (.90); nose-leaf, 9 (35), its free portion 4.6 (.18); height of ear (from crown), 11.5 (.45); tragus, 5.1 (.20); forearm, 50.1 (2.00); thumb, 6.4 (.25); third finger, 70 (2.75); metacarpal, 56 (2.20), 1st phalange, 18 (.70), 2d ph., 28 (1.10), 3d ph., 24 (.95); fifth finger, 58.5 (2.30); tibia, 25.4, (1.00); calcaneum, 7 (.27); foot, 16.5 (.65); interfemoral membrane from point of emargination, 23 (.90).

Type No. $\frac{1}{2}$ $\frac{4}{7}$ $\frac{8}{8}$, Am. Mus. Nat. Hist., ♂ ad., St. Andrew's Island, Caribbean Sea, Feb. 12, 1887; C. B. Cory.

This is apparently a well-marked insular form of the West Indian *perspicillatus* group. The single specimen on which the species is based is an old male, taken on St. Andrew's Island, by one of Mr. Cory's collectors, and presented by Mr. Cory, with a number of other West Indian Bats, to the American Museum. The species is named for Mr. C. B. Cory in recognition of his important natural history explorations in the West Indies.

