Article XIII.—A NEW RABBIT AND A NEW BAT FROM NEO-TROPICAL REGIONS.

H. E. Anthony.

Plate XXXIV.

Among the mammals collected by the author in Panama in 1914 and reported on by him in 1916 a Sylvilagus taken at Old Panama was commented on as worthy perhaps of separation from Sylvilagus gabbi gabbi which ranges throughout the Canal Zone, but for lack of abundant comparative material it was left with g. gabbi. Later the question was reopened and Mr. E. A. Goldman, who has ready for press an extended report on the mammals of Panama agrees with me that the Sylvilagus from the savanna region of Panama deserves a new name. The author wishes to acknowledge indebtedness to Mr. Goldman for the loan of comparative material from the more humid Canal Zone.

Sylvilagus gabbi consobrinus subsp. nov.

Type, No. 36793, ♀ ad., Old Panama, Panama, Feb. 21, 1914; collector, H. E. Anthony, Shiras Expedition.

Very similar to S. gabbi gabbi Allen but differing from it noticeably in lighter coloration.

Upperparts mixed warm buff and black, the black being on the tips of the hairs and giving the predominating tone to the pelage; sides lighter, cartridge buff grizzled with black; top of head russet, the hairs black at the base; nape not contrasting conspicuously with rest of upper surface, the short sparse hairs cinnamon rufous; cheeks like sides and with scarcely any black; superciliary stripe maize yellow; white patch at either side of nostrils and on lower lip and chin extending backward to even with ear; ears resembling dorsal region and without any conspicuous black areas; upper surfaces of fore and hind limbs tawny to russet; underparts white; throat like sides but lacking black tips to any of the hairs.

Total length, 373 mm.; tail, 28 mm.; hind foot, 79 mm.

Skull not essentially differing from that of gabbi gabbi but slightly narrower interorbitally than a skull of true gabbi from Gatun. Compared with a series of 9 skulls of gabbi messorius from the Darien the skull of consobrinus is noticeably smaller than the average of the series. Skull measurements: Total length, 67.8 mm.; zygomatic breadth, 33.9 mm.; interorbital breadth, 15 mm.; length of nasals, 27.5 mm.; palatal length, 26.5 mm., length of palatal bridge, 6.5 mm., maxillary toothrow, 13 mm.

The closest affinities of consobrinus are with gabbi gabbi, type locality Talamanca, Costa Rica. Mr. E. A. Goldman of the U. S. Biological Survey,

found upon examination that *gabbi* from the humid, forested Canal Zone was indistinguishable from specimens from Costa Rica. Using one of Mr. Goldman's skins from Gatun as a basis the specimen from Old Panama may be regarded as a paler geographical race. The savanna belt of Panama in which the ruins of Old Panama are located is much drier and far more arid than the other portion of the isthmus. *Sylvilagus* from as far south as Corozal, Canal Zone, are the dark *gabbi* and the arid zone subspecies, *consobrinus*, apparently is not found outside of the narrow coastal strip. Specimens of *Sylvilagus* in the collection of the American Museum from Boqueron, Chiriqui, are intermediate in part between *consobrinus* and true *gabbi* and have been hitherto referred to the latter where it appears they had best remain. Compared with specimens of *gabbi messorius* from the mountains of eastern Panama *consobrinus* is decidedly paler since *messorius* is even darker than typical *gabbi*.

Only one specimen, the type, was secured in the savanna belt of Panama.

In comparing a new stenodermine bat from Cuba with the available material of this group in the American Museum it was discovered that *Ardops haitiensis* Allen ¹ is not an *Ardops* but a *Phyllops*. Mr. Gerrit S. Miller, Jr., of the United States National Museum, has kindly loaned the author six skulls of the genus *Ardops* among which is the type species *nichollsi* from Dominica. A careful comparison with this borrowed material shows that *haitiensis* is quite distinct from any species of *Ardops* but agrees well with *Phyllops falcatus* in all characters of generic rank. The two genera are sufficiently similar in most characters to make it very difficult, if not impossible, to place an unknown species of either without the aid of comparative material and this explains how *haitiensis* came to be considered as an *Ardops* in the past. Inasmuch as *Ardops* has not been taken in the Greater Antilles, barring the Haiti record, this transfer of *haitiensis* makes the range of *Ardops* as now known more definitely restricted. A new species of *Phyllops*, a form very similar in general characters to *haitiensis* was taken from a cave in Eastern Cuba in February of this year. Thus the number of species of *Phyllops* will be raised from one to three. The new form was found as a fossil and judging from the condition of the specimens evidently has not been frequenting this region since the more recent animal remains, bats of the present day, were deposited. Therefore, while it is quite possible that this bat may be discovered living on some part of the island I am led to believe that it is truly extinct, a fossil of an earlier period than the very recent and hereby propose as a name *Phyllops vetus*.

Phyllops vetus sp. nov.

Type, No. 41001, Dept. of Mammals, from a cave at Daiquiri, Province of Oriente, Cuba, Feb. 1917; collector, H. E. Anthony. The type is a skull, without mandible, lacking the incisors, two premolars and a third molar and with a portion of the braincase broken.

Most like Phyllops haitiensis in general proportions and size of skull and also like *P. falcatus*, proportionally, but noticeably smaller. From both of these species *vetus* differs markedly in several important details.

Skull high and rounded, the view from above presenting most of the well known characters of *Artibeus*. Rostrum short, not expanded and nearly flat with no concavity; nares opening slightly upward. Zygomatic arches rounded in contour, flaring and of moderate width across jugals.

Palate short, horse-shoe-shaped and deeply cleft by the interpterygoid fossa, this notch reaching nearly to the anterior border of the first molar where it ends as a U: the sides of this emargination converge gradually as they penetrate the palate and are straight lines throughout their length. The pterygoid processes are prominent and sharply angular. A pair of deep pits nearly meeting in the midline are present in the basi-occipital region.

The dentition is that of the type species of the genus, *P. falcatus*. The teeth are smaller than in *falcatus* and the molars are proportionally wider, antero-posteriorly than in this species. The third molar, quite small, has the crown nearly circular in outline.

A mandible arbitrarily selected to go with the type presents no detailed differences except size to mark it off from *falcatus*. The full number of molars, three in this genus, is present on one side in the fossil.

Measurements: Basal length, 15.8 mm. (of topotype, 15.5 mm.); greatest length of skull (topotype), 20.2 mm.; greatest breadth of braincase (topotype), 10.4 mm.; interorbital breadth, 5.4 mm. (topotype, 5.2 mm.); zygomatic width (topotype), 13 mm.; width of palate outside of m², 7.8 mm.; (topotype), 7.5 mm.; palate, post-palatal notch to posterior border incisive alveolus, 3.8 mm. (topotype, 3.6 mm.); width palate inside of m², 4.5 mm., (topotype, 5.35 mm.) width from tip to tip of pterygoid processes, 4, (topotype, 3.9 mm.); mandibular length, 10.9 mm.

*Vetus* is sufficiently well characterized to be readily distinguished from either *falcatus* or *haitiensis* at a glance. From *falcatus*, the smaller size of the skull in general and the palate in particular, the more nearly parallel-sided palatal emargination, the presence of deep pits in the basi-occipital region, and the cross section of m² circular instead of oval are clear cut distinguishing characters. *Haitiensis* and *vetus* are of approximately equal size and more nearly resemble one another than do *vetus* and *falcatus*. *Haitiensis*, however, does not have the prominent basi-occipital pits, the palatal emargination is V-shaped instead of U-shaped, and the sides of the emargination are not straight lines. Other minor differences exist but are not necessary to establish the identity of the new form.

Material collected.—About 40 skulls, most of them quite fragmentary, and 5 mandibles of this new species were collected, the greater part coming from one cave although it was taken from another cave as well, both at Daiquiri.
Fig. 1. *Ardops nichollsi*.

"2. *Phyllops haitiensis*.

"3. " *falcatus*.

Fig. 4. *Phyllops vetus*, type.

"5, 6. " topotype.