

Article XVII. — FURTHER NOTES ON MAMMALS FROM
NORTHWESTERN DURANGO.

By J. A. ALLEN.

Since my previous report on mammals collected by Mr. J. H. Batty in northwestern Durango (see this Bulletin, XIX, 1903, pp. 590-612), additional specimens have been received from him, from the same general region, representing additional localities and six additional species. The later shipments raise the total number of specimens received from this limited area (*cf.* l. c., pp. 590, 591) to about 660, and the number of species to 40. Considering the comparatively small area traversed, and the arid nature of the country, this large number of species indicates a quite varied fauna, and shows that Mr. Batty made a thorough exploration of this small tract of country, limited to the Sierra Madre and adjoining plains to the eastward.

The new localities represented by the present material are San Andres, Guanacevi, La Cienega, Cienega Corrales, and La Boca, ranging in altitude from 3000 to 8000 feet. The species additional to the previous list are indicated by an asterisk prefixed to the name.

1. ***Odocoileus battyi* Allen.**—Four specimens, skins and skulls, and 2 additional skulls, Guanacevi, September.

2. ***Sciurus apache* Allen.**—Three specimens, collected as follows: San Andres (alt. 3000 ft.), 1, Oct. 15; Cienega Corrales (alt. 7000 ft.), 2, Nov. 9 and 11. These are much darker than May specimens, with the fulvous of the underparts deeper, and the tail fringed with deep fulvous instead of pale fulvous or yellowish white, as in late May specimens from the same general locality.

* 3. ***Sciurus aberti phæurus*, subsp. nov.**

Type, No. 23821, ♀ ad., La Cienega (alt. 7500 ft.), northwestern Durango, Mexico, Nov. 4, 1903; coll. J. H. Batty.

Similar to *S. aberti durangi*, but with the back gray, faintly suffused

with reddish, chiefly below the surface and only slightly visible, instead of dark rufous or reddish chestnut along the back from shoulders to rump, as in typical *durangi*; sides of nose (to eyes) gray, in some specimens faintly tinged with pale buff, not "dingy gray suffused with brownish but usually reddish brown," as in *durangi*; eyering soiled white; base of ears externally pale reddish brown; a prominent black lateral line; tail gray above and below, more finely grizzled below, broadly fringed with white, exactly as in *durangi*.

Measurements.—Type: Total length, 493 mm.; head and body, 271; tail vertebræ, 222; hind foot, 69. A series of 11 adults measure: Total length, 477 (453–508); tail vertebræ, 216 (203–229). These measurements are considerably below those given for *S. durangi* by Mr. Nelson (Proc. Washington Acad. Sci., I, 1899, p. 86).

This subspecies is based on 12 specimens collected at La Cienega (alt. 7000 ft.) and Cienega Corrales (alt. 7000 ft.), Nov. 1–13, and hence in fall pelage, with the ear-tufts only slightly developed. The series is very uniform in coloration. The faint reddish suffusion of the back is mostly hidden below the surface, giving the effect of dull gray with a faint reddish cast, scarcely noticeable except on close inspection. A single specimen forms an exception, having the whole middorsal region strongly reddish, but much less red than typical *durangi*.

Sciurus aberti phæurus differs from *S. aberti durangi* mainly in the absence of the reddish brown dorsal area and in smaller size. As regards coloration, it is almost the exact counterpart of *S. aberti ferreus* of True (described originally as *S. a. concolor*) from northeastern Colorado, the most distant point from Durango in the range of the *Sciurus aberti* group.

Since writing the above I have had an opportunity, through the kindness of Dr. C. Hart Merriam, Chief of the Biological Survey, to examine the fine series of *Sciurus durangi* collected by Messrs. E. W. Nelson and E. A. Goldman, comprising a series of 24 specimens, all practically topotypes of the species. These are all red-backed, in striking contrast with the form here named *phæurus*. Seven specimens in the same collection from Guadalupe y Calvo, Sonora, are variously intermediate between *aberti*, *durangi*, and *phæurus*; three of them are dis-

tinctly intermediate between *durangi* and *aberti*, being similar to *aberti* but with much less white in the tail; two others closely approach *phæurus*, having the back gray and the tail as in *durangi*; the other two are fairly intermediate between *durangi* and *phæurus*.

An allied and apparently rather unstable form occurs at Colonia Garcia, in northwestern Chihuahua, and may be thus described:

Sciurus aberti barberi, subsp. nov.

Type, No. 17503, Am. Mus. Nat. Hist., ♀ ad., Colonia Garcia, Chihuahua, Oct. 14, 1901; coll. C. M. Barber, for whom the subspecies is named.

Similar to *S. a. phæurus*, except that the lower surface of the tail is white instead of finely grizzled gray, as in *durangi* and *phæurus*.

Fall pelage. — Sides of nose and eyering soiled white; general color above clear gray, with a subapical pale fulvous suffusion not usually visible except on parting the hairs; a broad black lateral line; ventral surface white; upper surface of fore and hind feet white; tail above mixed black and white, very broadly fringed with white, and white below, except at extreme base, as in *S. aberti*; ears nearly naked, slightly rufous at base outside, with the black ear-tufts about half grown.

Measurements.—Type: Total length, 500 mm.; tail vertebræ, 240; hind foot, 70. Six adult specimens, all from the type locality, measure: Total length, 507 (500–516); tail vertebræ, 237 (220–250); hind foot, 71.9 (70–72).

In the worn summer pelage (May 26–June 18) the gray of the upper parts is duller and more dingy, and the feet are gray instead of white; two specimens out of five show slight traces of red along the middle of the back.

This form is closely related to true *aberti*, it considerably exceeding in size either *durangi* or *phæurus*, from both of which it differs in having the under surface of the tail heavily washed with white, so that the gray basal portion of the hairs is thinly overlaid by white, while in *aberti* the hairs of the lower surface of the tail present a solid mass of white, the hairs of the whole lower surface being pure white to the base.

The above description was originally based on a series of 7 specimens with wholly gray backs, or with only a slight

suffusion of reddish brown, they agreeing in this respect with typical *phæurus*, but the lower surface of the tail is lightly washed with white instead of being wholly grizzled gray. I have since had the pleasure of examining a series of 22 specimens in the collection of the Biological Survey, from Colonia Garcia and vicinity, of which about half have the dorsal region gray, while most of the others have the reddish brown dorsal area common to true *S. aberti* and *S. aberti durangi*; all, however, have the under surface of the tail superficially white — not solidly white as in true *aberti*. The red-backed specimens are strikingly similar to the Sonoran red-backed Guadalupe y Calvo specimens noted above under *S. a. phæurus* as intergrades between *S. aberti* and *S. a. durangi*, and perhaps they should be considered as intergrades between the form here described as *barberi* and *aberti*. The color of the feet varies with season in probably all the forms of the *aberti* group, being gray in summer and white in winter, but the amount of white on the feet is to some extent correlated with the color of the under surface of the tail.

Sciurus aberti forms a curiously variable group, with somewhat parallel lines of variation in widely separated localities, the intermediate regions being occupied by other and very different forms, as illustrated by the distribution of *S. a. ferreus* and *S. a. phæurus*, in comparison with that of true *aberti*.

* 4. ***Eutamias canescens***, sp. nov.

Type, No. 23852, Am. Mus. Nat. Hist., ♀ ad., Guanacevi (alt. 8000 ft.), Durango, Mexico, Oct. 12, 1903; coll. J. H. Batty.

Similar in general appearance to *E. dorsalis*, but with the dorsal stripes much more strongly defined. General color above gray, suffused with fulvous, the tips of the hairs being whitish with a subapical zone of yellowish, which more or less tinges the surface; median dorsal stripe narrow, deep black, extending from middle of crown to base of tail; the two lateral dark dorsal stripes short, mixed fulvous, gray and black, the black sometimes predominating but usually obscured by the gray and fulvous; inner pair of light stripes ashy gray, the outer lighter, whitish gray; sides pale rusty fulvous, much brighter than in *E. dorsalis*; tail as in *dorsalis*,—above mixed gray and black, sides fringed with whitish gray, lower surface with the central area and

anal region deep orange rufous; head stripes and ears as in *dorsalis* but the dark stripes are stronger, the white stripes clearer white, and the post-auricular white patch larger and more conspicuous.

Measurements.—Type: Total length, 254 mm.; head and body, 140; tail vertebræ, 114; hind foot, 35; ear from crown, 16; ear from notch, 19.5. *Skull*, total length, 38; zygomatic breadth, 20. Three other specimens have practically the same measurements as the type, and two others (young adults) are somewhat smaller.

Based on 9 specimens, all collected at Guanacevi, Oct. 8-17.

Eutamias canescens belongs distinctly to the *E. dorsalis* group, but differs from true *dorsalis* in the greater distinctness of the dorsal stripes and the deeper fulvous of the sides. Two specimens from Colonia Garcia, Chihuahua, collected Oct. 12, and thus strictly comparable as to season, closely agree with the Durango series. This is apparently the first record of the *E. dorsalis* group in Mexico. Two very distinct species of *Eutamias* — *durangæ* and *canescens* — thus occur in the mountain ranges of northwestern Durango.

5. ***Citellus grammurus rupestris* Allen.** Nine specimens, 6 adult and 3 young, Guanacevi, Oct. 8-17. Two of the adults are still partly in the discolored, greatly worn pelage of summer; the other four adults have moulted into fall pelage. The young are less than one quarter grown, showing that the young are sometimes born as late as the latter part of September. As the April and May series contained no young, and no females that were nursing young when killed, the breeding season does not begin apparently till June and continues till late in September.

* 6. ***Citellus spilosoma* (Bennett).** Three specimens, an adult female and two young in first pelage, Rio Ocampo, June 30.

7. ***Mus alexandrinus* Geoffroy.** Two specimens, San Andres, Oct. 15.

8. ***Mus musculus* Linn.** Two specimens, Guanacevi, Oct. 19.

9. **Sigmodon minimus** *Mearns*. One specimen, Guanacevi, Oct. 12.

10. **Sigmodon baileyi** *Allen*. One specimen, Guanacevi, Sept. 21.

11. **Thomomys sinaloæ** *Merriam*. One specimen, La Boca (alt. 8000 ft.), Oct. 15.

12. **Lepus gaillardi battyi** *Allen*. Three adults and one young in first pelage, Rio Ocampo, June 29 and 30.

13. **Lepus arizonæ major** *Mearns*. Three specimens — one young in first pelage, Rio Ocampo, June 30; two adults, Guanacevi, Oct. 6 and 13.

Mr. E. W. Nelson has kindly called my attention to the fact that my *Lepus durangæ* (this Bulletin, XIX, 1904, p. 609) is the same as *Lepus holtzneri* Mearns, a species I entirely overlooked when describing *L. durangæ*.

* 14. **Urocyon cineroargenteus scotti** (*Mearns*). Two specimens, Rosario, Jan. 21; Rio Ocampo, June.

* 15. **Ursus americanus** *Pallas*. One specimen, skull only, Rio Ocampo.

16. **Myotis californicus durangæ** *Allen*. One specimen, Rio Ocampo, June.

17. **Antrozous pallidus** (*Leconte*). One specimen, Rio Ocampo, June.