On this same trip I found in another building, a large log cabin this time, two nests and various piles of sticks, among which were thistles and pieces of rose bushes. In a closet or small room in this house I found aspen leaves piled on the shelves in a manner similar to those in the shafthouse.

At Alma I heard a story of some miners who, having missed several pounds of candles, later found them laid away on a shelf or ledge in or behind the timbers 35 feet down a shaft, where a rat had carried them. As there are six candles to the pound the animal, or animals, went to much trouble for nothing.

# AN INSULAR RACE OF COTTON RAT FROM THE FLORIDA KEYS

#### By GLOVER M. ALLEN

In April, 1920, Mr. Winthrop Sprague Brooks collected two adult cotton rats (Sigmodon) on Big Pine Key, Florida, which are so different from those of the neighboring mainland, that they seem worthy of recognition as representatives of a distinct island race. Through the generosity of Dr. Thomas Barbour, the specimens are in the collection of the Museum of Comparative Zoölogy to the authorities of which I am indebted for the privilege of studying them.

Big Pine Key is one of a group of small islands lying some thirty-five miles southwest of Cape Sable, the nearest point on the mainland of Florida. A chain of larger and smaller islands trends northeast from Big Pine to Key Largo and forms the eastward margin of the Bay of Florida. The other islands of the chain continue westward to the Dry Tortugas. These southern keys have no doubt been separated from the peninsula itself for a long period.

Due to the investigations of Messrs. F. M. Chapman and Outram Bangs, the cotton rat of the subtropical tip of the Florida peninsula has long been recognized as a well-marked geographical race,—Sigmodon hispidus spadicipygus,—readily distinguishable from the larger and darker races to the north,—S. h. littoralis, covering most of peninsular Florida, and S. h. hispidus of Georgia and the southeastern states. The new race needs comparison with the first-named only. It may be known as

## Sigmodon hispidus exsputus¹ subsp. nov.

Type, adult male, skin and skull, 18,100 Mus. Comp. Zoölogy, from Big Pine Key, of the southern Florida Keys, collected April 16, 1920, by Winthrop S. Brooks.

General characters.—Small, about the size of S. h. spadicipygus but with a proportionally longer tail; at once distinguishable from the latter race by the general pale ochraceous tone of the dorsal surfaces of head and body, with slaty rather than blackish bases to the hairs, and the clearer white of the belly with the bases of the hairs less prominent and of a paler slaty gray.

Description.—General color of the dorsal surfaces pale "ochraceous buff," clearest along the sides of the cheeks and body, becoming slightly deeper on the rump. The long overlying hairs of the pelage on the lower half of the back are whitish tipped instead of black throughout as in the mainland form. The concealed bases of the hairs are slaty instead of blackish, and lack the indistinct brownish cast of spadicipygus. Belly nearly clear white, the color rather sharply marked off at the sides, the pale slaty bases of the hairs showing through but little, in contrast to the mainland form in which the transition from the color of the back to that of the belly is less sharp and the belly much tinged with brownish and slaty where the bases of the hairs show through. Fore feet above like the sides; the hind feet dusky with a sprinkling of dull-whitish hairs. Tail dusky, with short sparse hairs which are blackish above, faintly whitish below.

The skull is essentially as in S. h. spadicipygus, but a very little slenderer. Measurements.—The collector's field record gives the following: total length 259 mm., tail 117, hind foot 33.5, ear 18.5. The skull measures: greatest length 36.5 mm., basal length 32, palatal length 28.5, nasals 15, upper tooth row 6, lower tooth row 6, zygomatic width 20.5, mastoid width 15.

Remarks.—In a series of twenty excellent skins from Cape Sable and Flamingo, collected in late March and early April and representing spadicipygus, there is but one (Bangs Coll. 4490 from Flamingo) that closely resembles the island race in its color. It is at once distinguishable, however, by its slightly brownish or rusty tint especially on the lower back, by the blacker bases of the hairs, and by its much shorter tail. In eighteen specimens of S. h. spadicipygus the collector's field measurements indicate that the tail averages 37 per cent (extremes 35 to 41) of the total length, whereas in the two island specimens it is much longer, 45 per cent in each, a difference at once obvious to the eye. Both specimens were shot by Mr. Brooks in the day time, while they were running actively about in the scrub.

<sup>&</sup>lt;sup>1</sup> exsputus, cast out, banished, exiled.



Allen, Glover M. 1920. "An Insular Race of Cotton Rat from the Florida Keys." *Journal of mammalogy* 1, 235–236. <a href="https://doi.org/10.2307/1373247">https://doi.org/10.2307/1373247</a>.

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