

NOTES ON *SCELOPORUS VARIABILIS* AND ITS GEOGRAPHICAL
DISTRIBUTION IN THE UNITED STATES.

BY

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Hallowell's *Sceloporus marmoratus* has had a very curious fate in our herpetological literature. The name occurs a few times in later nominal lists, but so little is known of it, and so little has been said of it that Boulenger, in the second volume of the Catalogue of Lizards in the British Museum, was compelled to simply refer to it in a foot-note (p. 216).

Two specimens of Fence-Lizards brought home by Dr. S. W. Woodhouse from San Antonio, Bexar County, Texas, were described in 1852 by Hallowell as *Sceloporus marmoratus* and *S. delicatissimus* (Proc. Phila. Acad., VI, p. 178), and fuller details, as well as two wretched plates illustrating the two supposed species, were given in Captain Sitgreaves' Report of an Expedition down the Zuñi and Colorado Rivers (pp. 109, 110). The alleged differences of these consisted chiefly in the somewhat different number and arrangement of the cephalic scales. It must have been plain, however, to anybody familiar with the great variability of these scales in this group of lizards that the two species were only individual variations of the same thing, and in Professor Baird's report upon the reptiles collected during the survey of the United States and Mexican boundary the two forms were correctly united, the name *marmoratus* being retained as the first one described by Hallowell (p. 6). In this report two additional localities for the species were recorded, both in southwestern Texas.

We next find the name *S. marmoratus* in Cope's Check-list of North American Batrachia and Reptilia (1875), but with an entirely different habitat, as, on page 48, it is referred to the "Sonoran region, Utah," and on page 92 it is enumerated as one of the "species confined to the Sonoran region." This exclusion of *S. marmoratus* from the original habitat is still more accentuated five years later, as it is not at all mentioned in Professor Cope's memoir "On the Zoological Position of Texas." This misplacement seems not to have been caused by the accession of new material, but is probably due to a *lapsus* of some kind, for, as will be shown further on, this form seems really to be confined to southwestern Texas so far as its occurrence within the United States

is concerned. Garman (List of N. A. Rept. and Batr., 1884, p. 17) shifts the locality still further west by assigning *S. marmoratus* to "Southern California."

The only other American author referring to it under the name of *S. marmoratus* is Yarrow, who, in his Check-list of North American Reptilia and Batrachia (p. 58, 1883), refers to it two specimens, one (No. 4116) from "Redmond's Ranch, Rio Grande," the same mentioned by Professor Baird (*loc. cit.*), and another (No. 2885) from "San Diego, California." The latter specimen is correctly identified, but the statement as to the locality involves a double error, for, in the first place, the original No. 2885 did not come from San Diego, California, but from San Diego, Nuevo Leon, Mexico, and in the second place this specimen is not at all No. 2885, but a much more valuable one, as attested by the original parchment label which is still firmly attached to it, for it is nothing less than the type specimen of Hallowell's *Sceloporus delicatissimus*, which was thought to have been lost.

It was the examination of this specimen that proved to me conclusively that *S. marmoratus* is nothing but a synonym of *Sceloporus variabilis* of Wiegmann.

The latter name has but recently been introduced in the herpetological works as occurring within the United States. Boulenger in the third volume of the Catalogue of Lizards in the British Museum (1887, p. 503) mentions three specimens from "Duval County, Texas," collected by W. Taylor, Esq., and Cope, about simultaneously (Proc. U. S. Nat. Mus., 1888, p. 397), records nine specimens as belonging to the National Museum from the same source.* He adds: "First found in the United States near Corpus Christi, by Francis Aaron," but as *S. marmoratus* is the same as *variabilis* the species was found within the United States long before it was collected by Mr. Aaron.

The identification of *S. marmoratus* with *variabilis* extends the known range of the latter considerably, as San Antonio, whence came the type, is situated about 120 miles north of San Diego and Corpus Christi. The species does not seem to be rare even so far north, for we have, in addition to the type of *S. delicatissimus*, another specimen, a female from Medina, the county on the southwest of Bexar, as well as a female collected by Mr. G. W. Marnock at Helotes, in the latter county. Both of these specimens I found labeled "*Sceloporus scalaris*" (and the first one is so recorded by Yarrow, Bull. U. S. Nat. Mus., No. 24, p. 62), with which species there is no good reason for confounding them. However, Professor Cope (Zool. Pos. Texas, p. 17) states that *S. scalaris* "is abundant in the region southwest of San Antonio, according to Mr. Marnock, from whom I obtained specimens," and it may therefore be that both species occur there, though our Museum possesses no specimen of true

* Of these I have been unable to find more than two specimens in the collections of the Museum, and only these are, therefore, included in the list of specimens examined given below.

Sceloporus scalaris from the region in question. On the other hand, Professor Cope records "seven specimens" received from San Diego, Texas, as "*Sceloporus ? scalaris*" (Proc. U. S. Nat. Mus., 1888, p. 397) as if he was uncertain as to their belonging to this species, an uncertainty which I am inclined to extend to all the alleged specimens of *S. scalaris* from southwestern Texas. That I am unable to express any final opinion upon the San Diego specimens is due to the fact that the specimens, although stated to belong to the Museum, have not been found in spite of an extended search.

There are two more Texan specimens in the collection, viz, No. 11457, collected by Mr. George B. Sennett in "Texas," presumably somewhere on the lower Rio Grande between the mouth and Hidalgo where Mr. Sennett was collecting during April and May, 1877. The other specimen is No. 4116, from "Redmond's Ranch" on the Rio Grande, the same as Bellville, about 70 miles below Laredo.

There remains one specimen which requires special mention on account of the uncertainty of its origin. It has a tin tag attached to it numbered 2882, which, if correct, would give it "China, Nuevo Leon, Mexico" for a locality, and Lieutenant Couch for a collector, but to one of its legs is tied an original parchment label which reads, "4108, Utah, December," and the record book gives the information that it was "removed from No. 2877," a bottle containing numerous specimens of *Sc. graciosus* collected at Salt Lake, Utah, by Captain Stansbury. Several other "removals" took place at the same time, however, and it is almost certain that both numbers are wrong. At any rate it would not do to credit Utah with *S. variabilis* on the strength of the present specimen.

In order to facilitate the identification of this species, which has been so singularly overlooked within our territory, I may point out some of the most salient characters by which it may be recognized.

Sceloporus variabilis differs from all the species hitherto found within the United States by having the scales of the sides of the body considerably smaller than those of the back; a white half moon-shaped mark on the side above the insertion of the fore limb is present in both sexes and is quite characteristic. The male, moreover, is readily distinguished by the flank patches of a pink (in alcohol grayish) color, which come very close together on the belly and are bordered by a dark bluish line, the latter joining a large dark patch on the shoulder behind the white semilunar mark. Among the other characters the following may be mentioned: Head-shields wrinkled; lateral scales directed obliquely upwards; femoral pores about twelve on each side, not meeting medially across the belly; about fifteen dorsal scales in a head length; anterior frontal divided longitudinally.

Sc. scalaris, on the other hand, is easily distinguished by having the series of femoral pores nearly meet across the belly; the scales on the sides are nearly as large as those of the back, and these are much larger

than in *Sc. variabilis*, about eight corresponding to the length of the head; no white semilune on shoulder, and male with "deep-blue" flank patches; anterior frontal undivided.

List of specimens examined.

U. S. Mus. No.	No. of spec.	Sex and age.	Locality.	By whom collected.	From whom received.	Remarks.
16020	1	♂ ad	San Antonio, Tex	Dr. S. W. Woodhouse.	.....	Type of <i>S. delicatissimus</i> .
2916	1	♀ ad	Medina, Tex.....	T. D. Cutts .....	.....	.....
4116	1	♀ ad	Redmond's Ranch, Rio Grande	J. H. Clark	Major Emory .....	.....
11457	1	♀ ad	"Texas"	G. B. Sennett.....	.....	.....
13630	1	♀ ad	Helotes, Tex	G. W. Marnock .....	.....	.....
15654	1	♂ ad	San Diego, Tex.....	W. Taylor .....	.....	.....
15655	1	♂ ad	do	do .....	.....	.....
4108	1	♀ ad	(?) .....	(?) .....	.....	.....
2886	1	♂ ad	Matamoros, Tamaulipas	Lieut. Couch.....	.....	.....
4790	2	♂ ad	Xalapa, Mexico	De Oca .....	.....	.....