À NEW SONORELLA FROM THE CHIRICAHUA MOUNTAINS, ARIZONA

By WENDELL O. GREGG

Mr. M. L. Walton and the writer made a rather hurried collecting trip through southeastern Arizona in March, 1948. It was on this trip, while passing through the foothills on the northeast side of the Chiricahua Mountains, that we first noticed some low granitic cliffs on the north side of the Portal-to-Paradise road about three miles west of Portal. The rocky hillside below the cliffs appeared to be a likely place to find land snails, but since our time was limited, we stopped only at localities with published collecting records.

On our return to the Chiricahuas in October of the same year, we spent some time at this locality looking for land snails and were rewarded by finding *Holospira arizonensis* (cf) *emigrans* P. & F., *Thysanophora horni* (Gabb), and a *Sonorella* which quite obviously has been overlooked by other collectors. A fair series of the Sonorellas were found, most of them in quite good condition, though we failed to find any living specimens. One year later Mr. Walton and I revisited this place. This time two hours at turning heavy rocks failed to reward us with living specimens though an excellent series of snails in good condition was collected.

In spite of the extensive collecting done in these mountains by Pilsbry, Ferris, Daniels, and others, I fail to find any record of collecting done at this station.

Since this Sonorella seems quite distinct from any described form, it seems appropriate to name it at this time. It may be known as

Sonorella neglecta new species.

Plate 52

Shell small for the genus, depressed-conic; whorls 4 1/3, convex, increasing gradually to the last whorl which expands moderately and descends moderately behind the aperture; base rounded, the umbilicus contained about 7 1/3 times in the greater diameter of the shell. Aperture oblique, rounded-oval; peristome slightly expanded and slightly thickened, the columellar end dilated and covering the margin of the umbilicus. A thin parietal callus is present.

Embryonic shell consists of 1 1/2 whorl; the apex smoothish, followed by a radially wrinkled area which continues to the end of the first half whorl; the next half whorl wrinkly-granulose with forwardly descending and ascending delicate threads at regular intervals superimposed; the last half whorl of the embryonic shell wrinkly-granulose with elongate papillæ. The first neanic whorl marked with close growth wrinkles, indistinct granulation, and scattered papillæ; the remaining whorls smooth and marked only with fine growth striæ.

Color light Sayal Brown fading to whitish around the umbilicus and with occasional radial whitish streaks. A peripheral chestnut band 1 mm. in width is bordered above and below by somewhat narrower bands lighter in color than the body of the shell.

Maximum diameter 16.1 mm., minimum diameter 13.0 mm., altitude 9.2 mm., umbilicus 2.2 mm., whorls 4 1/3.

Type locality: Rocky hillside below granitic cliffs, north of Portal-to-Paradise road about 3 miles west of Portal, Chiricahua Mountains, Cochise County, Arizona. Altitude about 5,300 feet.

Holotype No. 5317, author's collection. Paratypes in collections of the Los Angeles County Museum (No. 1087), S. S.



PLATE 52
Sonorella neglecta Gregg. Holotype, X 2.
(Photos courtesy Los Angeles County Museum.)

Berry (No. 16579), M. L. Walton, and the author (Nos. 4640 and 5312).

Additional Localities: Steep rocky slope of eastern hill of low range running west opposite mouth of Cave Creek Canyon, 100 yards west of pumping station of A.V.A. Ranch, Cochise Co., Arizona, May 14, 1951, M. L. and D. M. Walton, Collectors. This locality is about 1/2 mile west of Portal and about 2 1/2 miles east of the type locality.

A single specimen in rather poor condition, which seems referable to *S. neglecta*, was found on a rocky isolated hill .8 mile east of the junction of the Whitetail Canyon road with the road to Paradise. This is 7.1 miles west of the type locality.

The sculpture of the embryonic shell suggests relationship with the Sonorella hachitana group. However all described forms of that group are considerably larger than neglecta. Snails of the Sonorella binneyi group are generally more globose. Sonorella bowiensis Pils. is larger, has a proportionately wider body whorl and the whorls are more flattened above. Sonorella delicata Pils. & Fer. is slightly larger and differs in having nearly smooth embryonic whorls. However, until live snails are found and the anatomy of the reproductive system studied, no conclusion can be drawn as to the definite relationship with other members of this genus.

The paratypes of *neglecta* are relatively uniform in size and shape. One paratype is somewhat smaller than the others. Maximum diameter 13.5 mm., minimum diameter 11.8 mm., altitude 8.8 mm., umbilicus 2.0 mm., whorls 4 1/2.

BIBLIOGRAPHY

Pilsbry, Henry A.

- 1905. Mollusca of the Southwestern States, I: Urocoptidæ; Helicidæ of Arizona and New Mexico. Proc. Acad. Nat. Sci. Phila., March 1905, pp. 211-290, pls. XI-XXVII.
- 1939. Land Mollusca of North America (North of Mexico). Vol. 1, Pt. 1. Acad. Nat. Sci. Phila. Monograph 3.

Pilsbry, Henry A. and Ferris, J. H.

1910. Mollusca of the Southwestern States, IV: The Chiricahua Mountains, Arizona. Proc. Acad. Nat. Sci. Phila., Feb. 1910, pp. 44-147, pls. I-XIV.



1951. "A new Sonorella from the Chiricahua Mountains, Arizona." *Bulletin of the Southern California Academy of Sciences* 50, 156–158.

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