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NOTE ON OREOHELIX IDAHOENSIS BAILEYI BARTSCH

By Mina Winslow

A large series of this Oreohelix was recently noticed in the collection of the Museum of Zoology, and the attention of the writer directed to it by Dr. H. A. Pilsbry. The shells were submitted to Dr. Paul Bartsch of the U. S. National Museum, who confirmed my identification and urged the publication of measurements of the series since it exhibits considerable variation in size and proportions.

The subspecies was described* from three specimens taken in the Seven Devils Mountains, Idaho. The present lot was collected in 1900 by I. C. Russell in the Snake River Canyon, Idaho, eight miles below the mouth of the Salmon River, on limestone. This locality is in the Seven Devils Mountains and

^{*} No. 2155.—Proc. U. S. Nat. Mus., Vol. 51, pp. 331-333, with plate 31. November 24, 1916.

may easily have been identical with the type locality of the subspecies.

About 125 specimens varying from shells of only a few whorls to fully adult specimens of a little over five whorls compose this series. The illustration accompanying Dr. Bartsch's paper evidently shows a shell not quite mature, as fully grown shells have about one-half whorl more, and the ends of the peristome united by a heavy callus. Measurements of thirty-six fully adult specimens yield the following figures:

Greater diameter 12.1, lesser 11.1 mm., alt. 8.16, Index A/D, 67.35 average for 36 shells.

Greater diameter 14.2, lesser 13.0 mm., alt. 9.6, Index A/D, 67.60 largest in diameter.

Greater diameter 11.0, lesser 10.8 mm., alt. 7.7, Index A/D, 70.00 smallest in diameter.

Greater diameter 11.5, lesser 11.2 mm., alt. 9.7, Index A/D, 84.34 most elevated.

Greater diameter 12.3, lesser 11.0 mm., alt. 7.0, Index A/D, 56.91 most depressed.

Variation in diameter from 14.2 to 11, or 3.2 mm.

Variation in altitude from 9.7 to 7, or 2.7 mm.

Several features correlated with age variation are apparent. In young shells the sculpture of the early whorls is very distinct, consisting of raised spiral lines noticeably stronger after the nuclear one and one-half whorls. Shells of three or four whorls tend consistently toward a less elevated form than mature shells, a difference correlated with the sudden descent of the last whorl or half whorl to the aperture. In some specimens the descent has been so sudden that the peristome partially conceals the umbilicus and is placed almost directly below the preceding whorl. One of the specimens figured (figs.

4, 5, 6) is of this exaggerated form, combining almost the minimum. The difference between this and the more typical form is illustrated on the accompanying plate.

In color the shells vary from a brown with white ribs to a uniform chalky white—the latter condition probably due to weathering and bleaching. Embryonic shells are horn color or darker, rather fragile, and with a satin-like sheen. The number of ribs on the last whorl varies from about 16 to 24, of varying sizes and arrangement. In outline the whorls vary from well rounded to decidedly shouldered, the latter predominating in the majority of shells.

It may be said in general that the extremes of the series depart from the typical form to such a degree that only the presence of intermediate forms keeps them within the limits of the subspecies baileyi. It is evident, however, that the degree of variation exhibited is only in proportion to the number of specimens in the lot, and does not justify selection of specimens as typical of another new subspecies.

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PLATE I

Figs. 1, 2, 3: Oreohelix idahoensis baileyi Bartsch. Most depressed specimen. Index 56.91.

Figs. 4, 5, 6: Oreohelix idahoensis baileyi Bartsch. Most elevated specimen. Index 84.34.

All figures enlarged 3 times.

