

is 350 miles west of the region where *troostiana* is found, across the Mississippi River, and is apparently a member of the Cumberlandian fauna as defined by Pilsbry (Mollusca of the Ozarkian Region, Proc. Acad. Nat. Sci. Phila., p. 531 [1906]).

It is quite unusual to find two new forms of *Polygyra* in one locality in the Middle West, but I am certain even more will be uncovered when the Ozarkian region is thoroughly explored, especially northern Arkansas.

LYMNAEA (FOSSARIA) PERPLEXA IN SOUTHERN CALIFORNIA

BY WENDELL O. GREGG

A small fresh-water gastropod which has been puzzling me for the past ten years has proven to be *L. (Fossaria) perplexa* F. C. Baker and Junius Henderson.¹ This well-named species first came to my attention in 1922, at which time specimens were incorrectly identified by H. Hannibal as *L. truncatula*. The specimens were found in Hallenbeck Park, Los Angeles, around the base of a leaking hydrant. The following year specimens were taken in a small lake in Elysian Park and also clinging to moist flowerpots in a greenhouse in Lincoln Park, Los Angeles. Most of these specimens were quite immature. In 1924 two specimens were taken in the Rio Hondo near Montabello and again in 1928 about three dozen specimens were taken in a small creek north of the Los Angeles River and opposite Griffith Park. On June 8, 1930, a small colony was found along the creek in Big Tujunga Canyon, about one mile below the dam. Later that year specimens were found in a small brook near Ave. 64, in La Loma Lake, brook connecting La Loma Lake with the Arroya Seco, and Arroya Seco Creek, below La Loma Drive, all four localities in Pasadena. Specimens taken at 6,400 ft.

¹ Nautilus, XLII, 103-104, 1929.

elevation at Bear Flats Meadows, near Mt. San Antonio, San Gabriel Mts. are also probably referable to this species.

The shells from Big Tujunga Canyon and from near Griffith Park were examined by F. C. Baker and definitely identified as *perplexa*. I have carefully examined topotypes of that species kindly furnished by Junius Henderson and have compared them with all of the above mentioned specimens.

The above records of material taken in varied localities in Los Angeles County and collected over a period of eight years show quite conclusively that this form is a well established member of our fauna and not a species accidentally introduced. It seems strange that a form so widely distributed over Los Angeles County should have escaped notice all these years in a community where there were so many conchologists. However it has never been found in abundance; frequently several trips to the same locality have yielded only a small set. Many of the specimens found have been "too young for identification," at least until one has been sufficiently patient to procure and study a complete series ranging from very small to fully adult shells. Because of its small size it is probable that many a shell collector has passed it by thinking it the young of one of our well known forms.

It was stated by Junius Henderson in 1929² that *perplexa* was known only from Grand Coulee, Wash., the type locality, nearly a thousand miles north of Los Angeles County. Hannibal³ reported *Lymnaea truncatula* from southern California giving quite a number of localities. It is known, however, that *truncatula* does not occur in this region. Since the specimens from Hallenbeck Park which he identified for me as *truncatula* have turned out to be *perplexa*, it is reasonable to believe that many of his records of *truncatula* in southern California are also referable to that species.

² University of Colorado Studies, XVII, No. 2, p. 134.

³ Bulletin, Southern California Acad. Sci., XI, No. 1, pp. 25, 26.