

THE VARIATION AND DISTRIBUTION, RECENT AND
FOSSIL, OF THE LAND SNAIL *POLYGYRA*
PROFUNDA SAY, IN ILLINOIS*

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ABSTRACT

Polygyra profunda in the recent fauna has a large shell with an almost round aperture. In Pleistocene time a race lived which averaged smaller than the recent form and which had a more elongated aperture, especially when viewed from the front of the shell. The average index (shown by fifteen graphs of recent and fossil species from several localities) of each is shown below.

	Greater Diameter	Height of aperture	Altitude of aperture
Recent.....	25.7 mm.....	9.6 mm.....	7 mm.
Fossil.....	22.2 mm.....	7.6 mm.....	5.5 mm.

The Pleistocene race has been differentiated as variety *pleistocenica* F. C. Baker and occurs in deposits of Sangamon, Peorian, and the Shelbyville age in Illinois, the localities being near or bordering Mississippi River. The race also lived in Iowa during Peorian time. Typical *P. profunda* is distributed geographically throughout northern Illinois only but its distribution in the United States ranges as far south as Kentucky, North Carolina, and northern Alabama. During Pleistocene time, however, *P. profunda* is known to have been distributed as far south as Missouri and southern Mississippi. In Illinois the fossil form was abundant as far south as Union County. This difference in the geographical distribution in recent and Pleistocene time indicates an extension of the species in the Mississippi Valley of about 600 miles south of the present Illinois range and about 300 miles south of the Kentucky localities.

*To be published in full in American Midland Naturalist, Vol. 15, 1934.