

striking similarity in shape is apparent. This fact is believed to have a significant bearing on the question of the origin of the materials.

(See Plate XVI, A and B, and Plate XVIII, opposite p. 274.)

Locally the gravels in this formation have been cemented by iron to form a conglomerate.

With the exception of small pieces of silicified wood in the deposits forming the tops of the hills west of Fayetteville and a few trunks of silicified trees in similar deposits near Wade, both in Cumberland County, and one fragment of silicified wood from a cut $3\frac{1}{2}$ miles southwest of Four Oaks, no fossil remains have been obtained from the beds of this formation.

The thickness of the deposits probably averages about 25 feet, being less in places, and in places more, perhaps reaching a maximum of 40 or 50 feet locally.

Detailed Sections.—Some of the best exposures of the Coharie formation occur in Johnston County, especially in railroad cuts in the vicinity of Four Oaks. In a cut $2\frac{3}{4}$ miles northeast of the station, near Corinth Church (see Four Oaks quadrangle) the Coharie beds are seen to rest unconformably upon the Patuxent formation. (See Fig. 3, p. 94, and Plate XX, A, opposite p. 277.) The materials consist, first, of 0 to 2 feet of loose, gray, coarse, pebbly sand, forming a surface mantle, and, second, of 4 to 8 feet of mottled, coarse, argillaceous sand, with scattered pebbles and thin lenses and layers of pebbles in places. The contact with the underlying Patuxent formation is sharp and easily traceable. Another good section is afforded by a cut 5 miles southwest of Four Oaks. Here the Coharie materials consist of coarse, yellow, argillaceous, pebbly sand, with irregular lenses of pebbles which are more numerous along the base. Many of the pebbles and cobbles are smoothly rounded and they reach maximum diameters of 3 or 4 inches.

In the region to the southeast, south, and southwest of Four Oaks, the gravels of the Coharie contain noticeable percentages of flat, smoothly rounded pebbles. (See Plate XVIII, opposite.) Mention may be made of gravel occurrences in the vicinity of the first crossroads $1\frac{1}{2}$ miles directly southeast of Four Oaks, where this feature is especially noticeable. The same may be said of a gravel bed exposed in a cut of the Smithfield and Fayetteville road about 6 miles south of Four Oaks, where the road passes up the south slope of Stone Creek. (See Four Oaks quadrangle.) The section exposed here is described as follows: