

HEILPRIN, ANGELO.—*Contributions to the Tertiary Geology and Paleontology of the United States*. 117 pp., map, 4to. Philadelphia, 1884.

The writer gives little new information in regard to the Eocene, but does give a short summary of existing information concerning the Eocene strata and their contained fossils. He does not attempt to correlate them with Eocene strata elsewhere in the United States.

The Miocene is discussed at considerable length, and from a comparison of the fossils he comes to the conclusion that these strata represent the same formation in North and South Carolina, and that they are younger than the Miocene deposits of Virginia and Maryland. The name "Carolinian" is applied to them.

KERR, W. C.—*The Geology of Hatteras and the Neighboring Coast*. (Abstract.) Bull. Wash. Phila. Soc., vol. 6, pp. 28-30, 1884. Abstract, Science, vol. 1, p. 402, 1883.

Describes in a general way the character of the low-lying region adjacent to Cape Hatteras.

The statement is made that "the quaternary as well as the tertiary of this coast region of North Carolina are laid down upon an eroded surface of cretaceous rock."

PHILLIPS, W. B.—*North Carolina Phosphates*. Jour. Elisha Mitchell Sci. Soc., 1883-1884, pp. 60-63. Abstract, Amer. Jour. Sci., 3d series, vol. 28, p. 75.

The phosphatic materials found in the Miocene strata of Duplin, Brunswick, and Pender counties are described. The best localities are said to be from 4 to 8 miles northeast of Magnolia, where a thin irregular bed of phosphate is found in places at a depth of from 3 to 5 feet beneath the surface.

1885.

HOLMES, J. A.—*Taxodium (Cypress) in North Carolina Quaternary*. Elisha Mitchell Sci. Soc. Jour., 1884-85, pp. 92-93, 1885.

Describes the occurrence of fossil stumps of cypress on the southwest bank of the Neuse River 10 to 12 miles below the town of New Bern.

KERR, W. C.—*The Eocene of North Carolina*. Amer. Nat., vol. 19, p. 69, 1885.

Through finding upper Eocene fossiliferous rocks capping some of the highest hills of the Coastal Plain, the author concludes, erroneously, that most of the sand and gravel deposits, previously referred to the Quaternary, are really Eocene in age. "The area of Tertiaries in this State must now be extended over a wide stretch of country, from the tops of Laurentian hills, near Raleigh, and the higher elevations of the Huronian slates, to from 50 to 75 miles southeastward, along the course of the Deep River, and so onward to the South Carolina border, reaching at one point an elevation of 600 feet above tide. This leaves the Quaternary, like the Miocene, to be represented by a thin and broken covering of superficial deposits, of only a few feet to a few yards in thickness, and reaching from the coast only about 100 miles inland and an elevation but little above 100 feet."

KERR, W. C.—*Distribution and Character of the Eocene Deposits in Eastern North Carolina*. Elisha Mitchell Sci. Soc. Jour., for the year 1884-1885, pp. 79-84.

Essentially the same discussion as in the preceding paper.