

At Colonel Yellowby's marl pit, where digging is now in progress, I found the Miocene about 3 or 4 feet in thickness, resting on black Cretaceous sand with black gravel, and containing characteristic Ripley group fossils. It is here that a profusion of Belemnites is thrown up by the laborers, over the Miocene marl heap, and give rise to the opinion that they occur in the Miocene marl.

At Snow Hill, 22 miles from here in Greene County, the Ripley group is finely developed, containing closely packed specimens of the Ripley species in perfect preservation.

The most complete and comprehensive report on the geology of the State afforded by the literature even to the present time is that of Prof. W. C. Kerr,¹³ which appeared in 1875. The Cretaceous is described (pp. 147-149) as being visible only on the river bluffs of the southeastern portion of the State from the Neuse and its tributary, Contentnea Creek, southward. He elsewhere refers, however, to outcrops on Tar River (see p. 191) still farther to the northward. His description of the Cretaceous is quoted:

It is best exposed in the bluffs along the Cape Fear between Fayetteville and Wilmington. The rocks of this system (everywhere very slightly compacted) are, for 50 to 60 miles below Fayetteville, sandstones, clay slates and shales, 30 to 40 feet thick, in many places dark to black and very lignitic, with projecting trunks and limbs of trees, and at a few points full of marine shells. These beds Dr. Emmons regards as probably eocene. For 40 to 50 miles above Wilmington, and in all the other river sections, the rock is a uniform dark, greenish-gray, slightly argillaceous sandstone, massive, and showing scarcely any marks of bedding. This sandstone everywhere contains a small percentage of glauconite, and is in fact the representative of the true greensand * * *; but westward, higher up the Cape Fear, the beds lose entirely their glauconitic and calcareous character, and become more clayey and frequently black-lignitic with embedded trunks, limbs, and leaves of trees; and not unfrequently it is composed of sandy accumulations exhibiting much false bedding. These beds extend a hundred miles up the Cape Fear from Wilmington. It is probably the same lignitic member of this series which appears at low-water in the Neuse, at the railroad bridge near Goldsboro. The Cretaceous beds of North Carolina are not usually very rich in fossils, the greensand containing generally scattered specimens of belemnites, ostrea larva, exogyra costata, and an occasional anomia.

The following fossil localities are named: Kelleys Cove, Cape Fear River, 40 miles [46 miles] above Wilmington, in a stratum 2 to 4 feet thick; and Snow Hill, on Contentnea Creek, Lenoir County, where in a line of bluffs several hundred yards long and 20 to 40 feet high Cretaceous shells occur in a sandy marlite 10 to 12 feet thick at base, which he regards as representing a Ripley horizon.

¹³Geol. of North Carolina, 1875 (especially pp. 147-149).