

unimportant, except that they demonstrate its existence there and afford presumptive evidence that the formation is, or originally was, continuous throughout the whole length of the Atlantic border region.

A vertical section from Haywood to New Bern, constructed from data derived from Kerr's report of 1875, is given.

An important contribution to the literature of the Carolina Cretaceous was made by J. A. Holmes²¹ in 1893. The following general statements are made concerning the Cretaceous deposits along a portion of the inland margin of the Coastal Plain region:

That part of this region which lies between the Neuse and Savannah rivers has been examined more particularly, and in this region the following sections will indicate fairly well the geologic structure:

(a) A series of cross-bedded, medium to coarse arkose sands lying on the irregularly eroded surface of the crystalline rocks. These beds, which are classed provisionally as Cretaceous, contain in the upper layers in places lenses of clay and occasional thin beds and seams of lignitic material. They have been deeply eroded, their present surface rising nearly to the tops of the highest hills and sinking to the level of the deeper valleys.

The thickness of these sands is said to be several hundred feet. They are overlain by remnants of Eocene deposits, by loams and ferruginous sands of the Lafayette formation, also partly eroded away, and a surface mantle of sands and loams classed as Columbia. In this paper the author does not attempt to differentiate these sands as between Lower and Upper Cretaceous, but in a later publication (1896)²² he correlates them, as well as other Cretaceous deposits in the State, with the Potomac (Lower Cretaceous) of Virginia, as indicated in the following quotation:

In the Potomac (Lower Cretaceous) formation there are extensive beds of laminated, dark-colored clays, exposed along the banks of rivers crossing the Coastal Plain region, notably on the Cape Fear River, for 50 miles below Fayetteville. These clays are usually dark in color, owing to the vegetable matters which they contain; and, in some cases, they are highly lignitic. The thin laminæ of clay are frequently separated by still thinner partings of sand; and frequently within a short distance (from a few feet to a few hundred feet) the clay laminæ become thin and disappear, while the sand partings gradually thicken, so that the whole assumes the character of a sand-bed instead of a clay-bed. * * *

Along the western border of the Coastal Plain region, especially in Moore and Harnett counties, there are limited exposures of siliceous Eocene deposits (overlying the Potomac series, and capping some of the sandhills). * * *

²¹Abstract, Geol. Soc. Amer., Bull., vol. 5, 1893, pp. 33-35.

²²Trans., Am. Inst. Min. Engrs., vol. 25, 1896, pp. 929-936.