

Cretaceous (Black Creek formation):

FEET.

Laminated, dark drab to black clay, with partings and lenses of fine sand, containing a large amount of lignite in form of logs, which are in places teredo-bored, smaller pieces and comminuted particles. Irregular iron sulphide concretions are also present. Near the base the sand lenses are in places indurated with iron oxide and in places the surface of the exposed materials is coated yellow with sulphur stain..... 6

From here to a point about 4 miles below Fools Bridge (Contentnea P. O.) similar laminated materials are exposed at frequent intervals, rising to a maximum height of 8 or 10 feet above the water. Lithologically these materials resemble in all respects the laminated sands and clays of the Black Creek formation exposed in the bluffs of Cape Fear and Neuse rivers.

At Snow Hill no exposures of Cretaceous materials were observed along the immediate river banks. Professor Kerr,¹ however, observed such exposures, as shown by the following quotation: "And at Snow Hill, in Lenoir County, on Contentnea Creek, is a line of bluffs on the south side of the stream, several hundred yards in length, and 20 to 40 feet high, the lower portion of which to the height of 10 or 12 feet is a Cretaceous sandy marlyte, filled with shells, . . ." At the time visited the water was several feet higher than extreme low stage, and it may be the outcrops referred to were thus concealed; or vegetation may have since taken possession of the slopes. However, in a ravine near an old schoolhouse, in the scarp bordering a swamp to the west of town, a small fossiliferous exposure was found in which were collected a large number of fossils, including the larger part of the species described by Conrad in Kerr's report, to which reference has just been made. The matrix here consists of dark green, glauconitic, argillaceous sand or sandy clay. The fossil layer is perhaps 10 to 15 feet above medium low-water level in Contentnea Creek. In 1891 a collection was made by Dr. T. W. Stanton from the same horizon somewhere along this scarp to the west of town. These have not previously been studied or reported upon. The list of fossils as given below has been compiled from Conrad's list, from a list furnished by Gabb,² from Dr. Stanton's collection, and from the recent collection made by the writer.

¹N. C. Geol. Surv. Report, Pt. I, 1875, pp. 147-149.

²Acad. Nat. Sci., Proc., Philadelphia, 1876, pp. 276, 324.