

SECTION AT HORRELL LANDING, 48½ MILES ABOVE WILMINGTON, RIGHT BANK.

Pleistocene:

	FEET.
Loamy sand, becoming coarse at base.....	5

(Unconformity.)

Cretaceous (Black Creek formation):

Laminated, dark, carbonaceous, lignitic clay and greenish-gray sand, well preserved leaf remains.....	1-1½
Dark greenish-gray, marine sand and clay.....	4

The following is a list of the plant remains collected from the fossiliferous portion of the above section:

Araucaria bladenensis Berry.*Cunninghamites elegans* (Corda) Endl.*Chondrophyllum Nordenskioldi* Heer.*Malapoenna horrellensis* Berry.

In the southern part of Johnston County, at Bentonville, and on the side of the valley of Stone Creek where it is crossed by the Smithfield and Wilmington wagon road, there have been observed a few poor exposures of white to yellow sand with lenses and laminæ of drab, purple, and chocolate clay, which are believed to form a weathered phase of the Black Creek formation.

Exposures of the Black Creek formation occur in the bluffs of Neuse River from Blackmans Bluff, 117½ miles above New Bern, in Wayne County, to Whiteley Creek Landing, 60 miles above New Bern. From the first-named point to the A. C. L. Railroad bridge southwest of Goldsboro the formation rests unconformably upon the undulating surface of the Patuxent formation, which at the latter point passes finally below water level. It is overlain unconformably by Pleistocene terrace deposits and by several basin-like occurrences of Eocene strata. Below Whiteley Creek Landing the beds are believed to pass conformably beneath the overlying Peedee formation. (See sketch map of Neuse River, Fig. 4, p. 96.)

In descending the river from Smithfield the first high land observed approaching close to the river banks was at Blackmans Bluff. Here the Black Creek formation was first seen. The lower 20 feet of the section was exposed at the time, the water being 4 or 5 feet above normal.

SECTION AT BLACKMANS BLUFF, RIGHT BANK.

Pleistocene:

	FEET.
Concealed by vegetation.....	30

Cretaceous (Black Creek formation):

Drab to brownish drab, sandy, micaceous clay.....	12
Stratified, iron-stained sand, and drab to dark or brownish drab clay, containing leaf impressions, comminuted vegetable particles, small pieces of lignite, a few concretions of iron sulphide, occasional bits of amber and pieces of silicified wood. Near the base the sand lenses are in places indurated.....	8