

About $\frac{1}{2}$ mile farther downstream the same upland bluff is cut by the river and a section essentially the same as the preceding is revealed. The same species of plants were found at about the same level. It is probable that the Patuxent formation occurs a short distance below the water level here, and might be exposed at a low-water stage.

In the two preceding sections the following fossil plants were collected:

Acerates amboyense Berry.

Eucalyptus nervosa Newb.

Andromeda novae-caesareae Hollick.

Kalmia brittoniana Hollick?

Chondrophyllum Nordenskioldi Heer.

Liriodendron cf. primaevum Newb.

Dewalquea groenlandica Heer.

Planera cretacea Berry.

At a spring a few hundred yards back from the river and at a higher level than the materials revealed in the preceding sections a poor exposure of Eocene limestone occurs, which, although the contact was not seen, probably overlies and rests directly upon the Black Creek formation.

In a section at milepost 105, right bank, 10 feet of Black Creek materials appear resting unconformably upon the Patuxent formation and overlain by questionable Tertiary beds. A detailed account of this section is given on page 97. The materials here are irregularly bedded, consisting in part of dark drab, thinly laminated clay with some lignite, and in part of large lenses of yellowish stratified sand.

At about milepost 104, a few feet of laminated Black Creek materials were observed at the base of a low bluff on the right bank.

At $97\frac{1}{2}$ miles above New Bern the following section was made:

SECTION AT $97\frac{1}{2}$ MILES ABOVE NEW BERN.		FEET.
<i>Pleistocene:</i>		
Yellow sandy loam, grading down into coarse yellow sand with a thin band of gravel at base containing quartz and crystalline pebbles		14
(Unconformity.)		
<i>Cretaceous</i> (Black Creek formation?):		
Gray, sandy, carbonaceous clay, in places near the base interstratified with rather coarse sand, and containing some good-sized logs of lignite, partly in the condition of brown lignite, and an abundance of iron pyrites in the form of irregular concretions.....		9

A section essentially the same as the preceding occurs at $95\frac{1}{2}$ miles above New Bern.

The unconformable relations of the Patuxent and Black Creek formations are well exhibited in an exposure at the county-road bridge 2 miles southwest of Goldsboro and $94\frac{3}{4}$ miles above New Bern. The