

Cretaceous (Patuxent formation):

	FEET.
Hard, light-gray, coarse-grained, arkosic micaceous sand.....	6
Band of hard, dark gray, arenaceous, somewhat micaceous, arkosic clay, mottled with purple iron stain.....	3-5
Hard, gray, coarse, very arkosic micaceous sand, in places becoming coarser and containing many small quartz pebbles as large as peas	6-8
Drab to yellowish and red mottled clay, making a dark band along the cliff, becoming micaceous and sandy towards base.....	4-5
Hard, coarse, arkosic sand, somewhat micaceous.....	3
Dark, bluish-gray, argillaceous, very micaceous sand not well exposed, to water's edge.....	3

The distance by the river from Wilmington to Fayetteville is 115 miles. The mile intervals are indicated by numbers painted on boards and nailed to trees growing near the banks. The numbering begins at the former place and proceeds upstream to the latter.

For the first 4 or 5 miles below Fayetteville the river has a nearly straight course and the exposures are few and unimportant. At about milepost 110 the river makes a broad bend from its south-southeast course around to the east, south and southwest, coming back in line with its former course at about milepost 100. For a number of miles along the right bank of the northern limb of this bend and along the left bank after it turns to the south and southwest, the Patuxent beds are remarkably well exposed in bluffs ranging from 25 to 50 feet in height. The materials consist of layers of compact, partially indurated clays and arkosic and micaceous sands, from a few feet to 10 or 12 feet in thickness, making broad light and darker bands along the faces of the bluffs, the sections being similar in all essential respects to those farther up the river previously described. The beds are almost horizontal, it being possible to trace the bands along the bluffs for a number of miles without detecting any appreciable dip.

One of the striking features to be observed along the face of these bluffs is the effect produced by the water of the brooks and springs which enter the river through little overhanging valleys, on the sands and clays of the Patuxent formation over which it descends. It seems that these materials, kept constantly moistened, are rendered more resistant to the eroding effects of the high waters of the main stream than the adjacent materials of the same layers which are subjected to repeated wetting and drying so that the latter are cut away more rapidly, leaving the former standing out as rounded projections 4 or 5 feet in thickness at right angles to the face of the bluff, and from 10 to 25 feet or more in height. See Plate II, B.

The upper 10 to 15 feet in all these bluffs is made up of Pleistocene