

to the transgression of later deposits, but similar interruptions occur at other points in Virginia and in Maryland where the sparse flora has permitted correlation on paleontological grounds. To the southward of North Carolina, on the other hand, similar deposits have been traced with only a few interruptions through South Carolina and Georgia into eastern Alabama, where fragmentary plant remains have been found which suggest a somewhat younger age for the deposits in this region than in the north.

These deposits in the far south were long erroneously associated with the Tuscaloosa formation farther westward in Alabama and Mississippi, from which, however, they are entirely distinct both in stratigraphic position and lithologic character, while they are separable everywhere by marked unconformities from the overlying Upper Cretaceous deposits. They are, according to the evidence at present available, physically continuous with the Patuxent beds farther north, whether or not the same formational name is employed throughout the entire district. Notwithstanding physical evidence in favor of a single formational unit being found at the base of the Coastal Plain series all the way from Maryland to Alabama, it must be admitted that a transgressing sea throughout so extended a coast line may well involve considerable time for its accomplishment, and if the transgression progressed from the north toward the south, as seems probable, the deposits in Alabama would necessarily be somewhat younger than those farther north.

The detailed comparison of the Patuxent deposits of North Carolina with those of adjacent regions indicate the stratigraphic and lithologic similarity of the strata over a wide area. The beds everywhere are characteristically arkosic and predominately arenaceous, with layers or lenses of clay. There is often a tendency to compactness and slight induration, while the colors are much the same everywhere. There is universal cross-bedding and bands of small pebbles here and there, indicating similar conditions of deposition in disturbed waters. In these respects the deposits are quite different from the overlying Arundel and Patapsco beds of Lower Cretaceous age, while it is quite clear that the deposits do not represent any portion of Upper Cretaceous sedimentation.

The flora of the Patuxent formation in Virginia and Maryland indicates that the deposits are of Neocomian age, and they have been thus correlated by Berry, who has made an extensive study of American Lower Cretaceous floras.