elegans Berry. The leaf layers at this locality, which consist entirely of closely matted fossil leaves, are strikingly similar to the matted masses of recent leaves which float down our southern rivers with the spring floods, and suggest that the diversity in the fossil flora at this locality may be due to its favorable location near the mouth of a Cretaceous river down which floated the remains of *Andromeda, Celastrophyllum, Cinnamomum, Diospyros, Juglans, Leguminosites, Liriodendron, Myrsine, Pterospermites, Quercus, Sequoia*, etc., from their natural upland habitats, while *Araucaria, Salix, Magnolia, Malapoenna, Pisonia, Phragmites*, etc., were added from the coastal zone, together with *Pistia*, which grew in the rivers above the influence of salinity. About 75 different species have been identified from all of the localities.

"This flora is clearly a single unit, for of the common forms at the extreme top of the formation at the lower Black River localities (Atlantic Coast Line Railroad bridge and Horrell Landing), *Araucaria bladenensis* Berry occurs immediately above the contact of the Black Creek with the underlying Patuxent formation along Rockfish Creek and *Pistia Nordenskioldi* (Heer) Berry occurs at Blackmans Bluff on the upper Neuse River towards the landward margin of the formation. Likewise the plants from the most northerly outcrops along the Tar River show exactly the same forms as occur on the lower Black River 100 miles to the southward and 50 miles from the landward margin of the formation.

"The Black Creek flora is unquestionably of Upper Cretaceous age. It is more complex and modern in its composition than any known Lower Cretaceous flora, not a single dicotyledon being known from the English Gault, while the representation of this group of plants in the corresponding Albian of continental Europe is very meager indeed; in the Black Creek, on the other hand, 70 per cent of the species belong to this class. Furthermore, the Black Creek altogether lacks the fern element which is so prominent in the Lower Cretaceous, and the gymnosperms are less varied than in even the basal formations of the Upper Cretaceous (Raritan, Atane).

"There are several Black Creek species that are deserving of special emphasis in any consideration of correlation. Among these *Araucaria bladenensis* Berry is the most important, being found often in great abundance, at 14 out of the 21 plant localities in the formation. It occurs also in the Black Creek beds of South Carolina, in the equivalent of the Eutaw along the Chattahoochee River in western Georgia, at the summit of the Tuscaloosa formation in Alabama, and also at the summit of the Magothy formation in Maryland. The nearest allies of this species are *Araucarites ovatus* Hollick of the Magothy formation and *Araucaria Toucasi* Sap. of the Turonian of France. Two other species of this genus occur in the Black Creek formation, but no representatives of this type have ever been found in deposits of Raritan age. *Ficus stephensoni* Berry, a new species of fig, is confined to the Black Creek and to the Middendorf beds of South Carolina. Its nearest relative is a species described by Lesquereux from the Dakota Group. *Leguminosites robiniafolia* Berry, another new species, is likewise confined to the Black Creek and Middendorf beds, as is also *Quercus pseudowestfalica* Berry. The writer has elsewhere emphasized the presence of oaks in any abundance as a feature indicating the post-Raritan age of the Magothy and allied formations. Two species of *Quercus* are described from the Black Creek, and the apparently synchronous