

TABLE SHOWING CORRELATION OF LOWER CRETACEOUS FORMATIONS.

APPROXIMATE EUROPEAN EQUIVALENTS.	PENNSYL- VANIA AND DELAWARE.	MARYLAND.	VIRGINIA.	NORTH CAROLINA.	GEORGIA AND EASTERN ALABAMA.
Albian.....	Patapsco---	Patapsco---	Patapsco---	-----	(?)
Aptian..... Barremian.....	-----	Arundel-----	-----	-----	Lower Cretaceous. (Earlier referred to "Tuscaloosa.") (?)
Neocomian....	-----	Patuxent---	Patuxent---	Patuxent---	

BLACK CREEK FORMATION.

The Black Creek formation presents much that is of correlative value, not only in its lithology and stratigraphy, but also in its contained fossils. When we apply the physical criteria to the correlation of the Black Creek beds we find that the deposits present many points of similarity with the Magothy-Matawan deposits of the northern area, with the Black Creek beds of South Carolina, and also with the Tuscaloosa and the Eutaw in the eastern Gulf. Everywhere along the Atlantic coast an unconformity separates these beds from those below, and this is also the case in eastern Alabama. Throughout the Atlantic coastal border these deposits, which are sands and clays, often cross-bedded, also afford interstratified marine beds containing more or less glauconite, and these gradually pass over into typically marine strata, which are widely glauconitic. No unconformity exists in the series as far as known. The beginning of sedimentation essentially glauconitic and permanently marine as shown by its contained fauna, while it may not have been inaugurated at exactly the same horizon at every point, already appears before the close of the Black Creek and synchronous deposits. Some modification in the character of sedimentation appears, to be sure, in different portions of the area, but the upper beds present many points of similarity throughout the entire region.

When we come to consider the evidence of the fossils, we find an extensive fauna and flora, each with a large representation of forms known in other areas. The fauna of the Black Creek formation has been collected at 24 different localities in the upper part of the formation, the fossils being found for the most part in glauconitic beds that are interstratified with the leaf-bearing zones.* Although there is more or less diversity in the forms at the several localities, certain species are common to the great majority of them. Although 92 species of invertebrates have been determined, of which 19 range on into the Peedee formation, the remainder, as far as known, not passing beyond the confines of the Black Creek formation. A comparison of this fauna with

*The ranges of the species in the Black Creek and Peedee formations have been revised by Dr. Stephenson in the light of his more recent studies. (See table opposite p. 147.)