

principal river valleys. South of Carteret County the Pamlico formation has only a limited development, being present in places along the coast and along the valley sides as very narrow bordering terraces. (See geologic map, Plate XIII, in pocket.)

The Pamlico terrace has been traced northward through Virginia into Maryland.

The character and age of the strata underlying the deposits of this formation are but imperfectly known. It is certain, however, that they are in part of Eocene, in part of Miocene, and in part of Pliocene age. It is certain, also, that in parts of the area beds of shell marl of Pleistocene age occur at shallow depths beneath the surface. To which formations of the Pleistocene these should be referred, however, has not been determined with certainty.

The upper surface of the Pamlico beds forms a low, nearly level, plain whose elevation above sea level nowhere exceeds 25 feet. Much the greater part of the area is made up of vast tracts of swamp land of which the Great Dismal Swamp which extends into the State from Virginia is a typical example. Several lakes occupy shallow depressions in this plain. The largest of these is Mattamuskeet Lake in Hyde County. Others are Alligator Lake in the same county and Phelps and Pungo lakes in Washington County.

The Pamlico terrace plain, on account of its low elevation and also on account of the relatively short time since its elevation above sea level as compared with the older terrace plains, has been subjected to but a slight amount of stream erosion. It is, therefore, preëminently the best preserved of the several Columbia terrace plains.

The materials of this formation consist of fine sandy loams, sands and clays, and to a limited extent of gravels. In the swamp lands the soils consist in large part of accumulations of peaty matter, which are of later origin than the main body of the deposits.

The thickness of the deposits is slight, the beds which may be regarded as strictly of terrace origin probably in but few places exceeding 15 or 20 feet.

But little is known regarding the fossil contents of the deposits. It is certain that marine shell beds of Pleistocene age underlie portions of the area. It is possible that much of the region covered by the Pamlico beds was under water during parts of Pleistocene time preceding the deposition of the Pamlico material. In this case some of the Pleistocene shell beds occurring at shallow depths beneath the surface are in all probability older than the Pamlico formation.

*Detailed Sections.*—A good exposure showing several feet of sandy clay overlain by 1 foot of dark to black soil has been noted by B. L.