

TERTIARY:

Pliocene—Lafayette
Waccamaw.

Miocene—Yorktown } north of Hatteras axis.
St. Marys }
Duplin (south of Hatteras axis).

Eocene—Castle Hayne.
Trent.

MESOZOIC.

CRETACEOUS:

Upper Cretaceous—Peedee.
Black Creek.

Lower Cretaceous—Patuxent.

These Coastal Plain formations stand in marked contrast to the formations in other parts of the State, in that they have been but slightly changed since they were deposited. Laid down one upon another along the eastern flank of the Piedmont Plateau when the sea occupied the present area of the Coastal Plain, these later sediments form a series of thin sheets which are inclined slightly seaward, so that successively later formations are generally encountered in passing from the inland border of the region toward the coast. Oscillation of the sea floor with considerable variation both in the angle and direction of tilting went on, however, during the periods of Coastal Plain deposition, with the result that the stratigraphic relations of these formations, which generally have been held to be of the simplest character, possess in reality much complexity. Viewing the Coastal Plain as a whole, we find at no place accessible to our study a complete sequence of deposits, although sedimentation must have been going on continuously along the continental shelf. The incompleteness, therefore, must be regarded as a purely marginal condition due to the retrogressions and transgressions of the sea along the coastal border.

It is not uncommon to find in any particular region marked breaks in the sequence of sedimentation, the absent members being present perhaps only a short distance away. A number of instances of this kind are shown in the Coastal Plain district of North Carolina, which lack formations that appear in Virginia on the north and South Carolina on the south, while formations found in North Carolina are lacking in those States. Not only is this true as regards North Carolina and adjacent States, but also in different portions of the North Carolina Coastal Plain itself, particularly when the region to the north of the Hatteras axis is compared with that to the south, which will be fully discussed in a later portion of this report.