

sea or not cannot be with certainty determined. It is significant, however, that deposits of Sunderland age have never been observed beneath the cover of later Pleistocene deposits throughout the eastern portion of the Coastal Plain district. Furthermore, there are numerous instances where valleys of Sunderland time have been buried by the materials of the next lower or Wicomico terrace. Every gradation is found from uneroded valleys to those in which the later materials have been swept out and the older valley lines widened and extended at the headwaters by renewed erosion. Again, many instances are found where the Wicomico sea, during the formation of the Wicomico terrace, reduced the headlands formed of Sunderland and earlier deposits. This reduction in the more diversified outline may well have been produced by the advance of a sea over the region, although neither this nor the preceding effects would necessarily demand extensive submergence.

The Wicomico terrace encircles the Sunderland terrace wherever observed at an elevation of about 100 feet along its landward margin and represents the position at which the sea stood during the Wicomico epoch. Its level-topped character is more pronounced than that of the preceding Sunderland terrace, since it has been less affected by denudation. The materials, together with their internal structure, suggest the same conditions of formation as those of the preceding epochs. This terrace or its equivalents have been traced from the northern Coastal Plain across Maryland and Virginia and thence across North Carolina, with the changes noted, to the South Carolina border.

Similar conditions evidently closed the Wicomico and ushered in the building of the Chowan-Pamlico (Talbot) terraces. At some points the remnants of Wicomico materials have been found beneath those of Talbot age, and it seems clear that the post-Wicomico elevation was not of sufficient extent for the removal of the Wicomico sediments over the entire eastern margin of the Coastal Plain. The same type of buried valleys and the same reduction in the configuration of the shore line marked the inner margin of the Talbot terrace as has been already described in the case of the earlier terraces. The materials are similar in character and structure to those which precede, and there is every reason to believe that they were formed under similar conditions. The Talbot terrace and its equivalent, the Chowan and Pamlico terraces, are again less dissected than the Wicomico. Imbedded in their materials are marine, estuarine, and fresh-water fossils dependent upon the position of the terraces with reference to the marine, brackish, and fresh waters of the period. Marine fossils have been found at numerous