

EDGECOMBE COUNTY.

Topography.—Portions of three Pleistocene terrace plains make up the surface of this county. The Chowan plain at elevations of 30 to 60 feet borders Tar River in a belt 4 to 8 miles wide on the east and north along its entire length in the county; the Wicomico plain at elevations of 60 to 100 feet covers a belt a few miles wide in the eastern and northeastern part of the county and has a limited development along the west and south side of Tar River; the Sunderland plain, with elevations ranging from 110 to 135 feet, covers the greater part of the area west and south of Tar River, and is also present in the northern part of the county. In many places these plains are separated from each other by well-defined scarps. They are all dissected in greater or lesser degree by stream erosion.

Geology.—Granite rocks outcrop in the bed of Tar River in the vicinity of Rocky Mount. The bedrock, consisting of these granites and other crystalline rocks, dips gently to the eastward, becoming deeper beneath the deposits of the Coastal Plain. At Tarboro, crystalline schists were encountered in a well at a depth of 328 feet. Over the central and eastern portions of the county the compact, arkosic, micaceous sands and drab clays of the Patuxent formation rest upon the eroded surface of the crystallines, attaining a maximum thickness of about 290 feet at Tarboro, as shown by the deep well at that place. The upper undulating surface of the Patuxent formation rises and falls a few feet above and below water level along Tar River. Overlying the latter, and overlapping and transgressing still farther westward upon the crystalline rocks, is the Miocene, which consists in the main of stratified sands, clays, and shell marls, but along the base is made up in part of greenish, gravelly, lignitic sands and dark, lignitic, laminated clays. Pleistocene loams, sands, and gravels of the Sunderland, Wicomico, and Chowan formations blanket all older formations over the entire county.

Water Resources.—In this county the Pleistocene formations furnish most of the water for domestic use. Open and driven wells 12 to 30 feet in depth yield water from the lower sandy or gravelly portions of the terrace deposits. So compact is the sandy loam at the surface that in many places the open wells require no curbing to keep the walls intact. Along the stream slopes and scarps there are many springs of small size. These are but little used.

At Turnage, open and driven wells 8 to 25 feet deep are used. The water from the driven wells is reported ferruginous. Many of the deeper open wells enter a bluish clay containing roots and vegetable matter.