

SECTION AT MADDRY'S BLUFF, 1½ MILES BELOW MURFREESBORO, RIGHT BANK OF MEHERRIN RIVER.

Pleistocene:

	FEET.
Buff sand, somewhat loamy at top and containing a few pebbles toward base	8

Miocene (St. Marys) :

Buff sand	2
- Brown to blue sand, filled with specimens of <i>Mulinia congesta</i> . Certain bands are composed almost entirely of these shells.....	20
Drab clay with few fossils, some gypsum crystals.....	15
Shell marl, great variety of shells in blue sandy clay matrix.....	5

At Whiteley's Bluff, about 3 miles below Murfreesboro, left bank of Meherrin River, blue Miocene clay appears about 3 feet above water, overlain by about 15 feet of Pleistocene sand, poorly exposed.

Left Bank of Meherrin River, 150 Yards Below Sear's Wharf (Parker's Landing on Topographic Map).—A very compact blue Miocene clay appears in bluff 5 feet above water's edge. It contains no fossils. It is overlain by about 6 feet of Pleistocene sand.

The water seeps out of bank just above the Miocene clay, thus accentuating the contact between the Miocene and the overlying Pleistocene strata.

Chowan River Bluffs at Winton, N. C.—The bluffs consist almost entirely of Pleistocene, which is composed of clay loam at surface, beneath which is stratified and cross-bedded sand, brown and white in color and containing some clay laminæ. The sand in one place is so pure and so loose that it has been dug for building sand. Farther west from Winton, about 1 mile from the wharf, the Pleistocene consists largely of drab clay. At several places along these bluffs the Miocene is exposed, rising almost 6 feet above the water in a few places. The Miocene material consists of a compact, slightly argillaceous blue sand, in which are great numbers of fossil casts and moulds of small *Pelecypoda*. It is reported that shell marl is struck at a depth of a few feet near the river.

Bluffs on Chowan River at Petty Shore and About 1 1-2 Miles Below Petty Shore.—Bluffs at both places were examined, but exposures were very poor. No Miocene was observed, and it is believed that the Pleistocene extends to water's edge. It consists mainly of drab clay beneath the surface clay loam.

Shell marl has been reported to occur in these bluffs, but it probably lies beneath the water level, although it may occur at a higher level and be concealed by the vegetation or by materials that have slipped down from above.