

The limestones from the Trent formation have been quarried for use as building stones, buhrstones, and for the manufacture of lime.

At Polloksville and near Olivers this formation contains beds of the gigantic oyster, *Ostrea georgiana*, many specimens of which are more than a foot in length. Some are said to measure more than 20 inches in their longest diameter. The shells are found in an extremely rotten condition that renders them valuable for fertilizing purposes.

In certain places the deposits of this formation contain small amounts of glauconite, black, water-worn, phosphatized pebbles, and fragments of sharks' teeth and other Cretaceous fossils. It seems probable that all of these materials have been derived from the underlying marine Cretaceous deposits which were worn away and redeposited by the waves during the time that the Trent formation was being laid down. A section in which these characters are shown is exposed along the Neuse River about 6½ miles below Kinston.

Some outliers of Eocene materials that are provisionally referred to the Trent formation in the vicinity of Raleigh consists of firmly indurated, siliceous shell rock. They were undoubtedly calcareous limestones originally, but have gradually been changed to their present character by the removal of the calcium carbonate and the deposition of siliceous matter in its place.

To determine the total thickness of the Trent formation is very difficult, for the reason that it occurs in isolated areas, for the most part, occupying depressions in the old Cretaceous surface, and thus far it has not been possible to determine whether these separated beds are contemporaneous or not. Where the strata are continuous for a considerable distance, as along the Trent River, the total thickness of the beds exposed is much greater. Later strata appear as one goes eastward, as the dip of the beds is in that direction. At Trenton a well record shows the formation to be 73 feet thick, while it seems probable that it is about 100 feet thick at Polloksville. Southeast of Wilmington, well borings show a total thickness of 140 feet of Eocene material, but the data are not sufficient to determine what part of the beds belong to the Trent and what portion to the Castle Hayne formation. From what we know of the two formations from outcropping strata the Trent seems to be much the thicker of the two and probably constitutes somewhat more than 100 feet of the combined Eocene strata.

The fossils of the Trent formation are especially abundant in many places and constitute the greater portion of the exposed strata. They are well preserved in most places, though certain strata contain only the moulds of the shells, with no part of the original animal remaining. The fossils belong to the *Mollusca*, *Molluscoidea*, and *Echinodermata* mainly.