

Crucibulum sp.
Cypraea sp.
Leviformis (?) *trabeatus* Conrad.
Marginella sp.
Melongena (?) sp.
Mitra sp. cf. undesc. sp. from Ocala,
 Fla.
Mitra (?) sp.
Oliva (?) sp.
Puncturella sp.
Scala octolineata Conrad.
Scala sp.
Scaphella cf. *ocalana* Dall.
Serpulorbis (?) sp.
Siliquaria (?) *vitis* Conrad.
Strombus sp.
Triforis (?) sp.
Turbinella sp.
Siliquaria (?) *vitis* Conrad.
Volutilithes sp.
Xenophora conchliophora Born.

PELECYPODA:

Arca sp.
Cardium sp.
Crassatellites altus Conrad.
Crassatellites sp.
Exogyra costata Morton.
Isocardia sp.
Modiolus sp.
Ostrea sp.
Panopea sp.
Pholadomya (?) *claibornensis* Aldrich.
Pholadomya sp. cf. undes. sp.
 from Cretaceous of Wilmington.
Pecten membrannosus Morton.
Pecten scintillatus Conrad.
Plicatula filamentosa Conrad.
Spondylus dumosus Conrad.
Tagelus (?) sp.
Tellina (?) sp.
Venericardia sp.
Veniella sp.

CEPHALOPODA:

Nautilus sp.
Aturia sp.

Sufficient data have not been obtained to determine definitely the limits of the Castle Hayne formation. The type section is exposed in the quarries near Castle Hayne, while the section exposed in the quarries on Smith Creek just north of Wilmington is similar. The Eocene strata that outcrop at frequent intervals along the Northeast Cape Fear River as far as Chinquapin Landing, 79 miles above Wilmington, seem to belong to the same formation as far as their lithologic character is concerned. At Black Rock Landing on the Cape Fear River, 37 miles above Wilmington, the formation again outcrops. In the vicinity of Elpaso, Brunswick County, it is exposed in several places, while it has been penetrated by the drill in several deep wells east and southeast of Wilmington.

The Castle Hayne formation mainly occupies depressions in the surface of the Cretaceous and occurs in isolated areas usually of rather small extent. Under these conditions the structure is not readily obtained. So far as known, the strata seem to be practically horizontal or with a very slight dip in the direction of the ocean similar to most of the other formations of the Coastal Plain. There is no evidence of the formation having suffered deformation, though it has undoubtedly been elevated and depressed several different times since its formation.