

*Characteristic Species.*

NEW JERSEY. — The following lists of New Jersey species are from the reports of R. P. Whitfield, from whom have been taken also the chief part of the references to occurrence in the Ripley group of Alabama (indicated by R.), and in the Upper Cretaceous beds of Texas (indicated by T.); the other references being from T. W. Stanton: —

*Lower Greensand.* — *Catopygus pusillus*, *Cassidulus florealis*, *Terebratula Harlani*, *Terebratella plicata*, *Ostrea larva* (R., T.), *Exogyra costata* (R., T.), *Gryphæa vesicularis* (R., T.), *Pecten venustus*, *Amusium simplicum* (R.), *Neithea quinquecostata* (R.), *Radula acutilineata* (R.), *Spondylus gregalis*, *Gervilliopsis ensiformis* (R., T.), *Inoceramus Crispii* var. *Barabini* (R., T.), *Idonearca vulgaris* (R., T.), *Trigonia Mortoni*, *T. Eufaulensis* (R.), *Cardium* (*Criocardium*) *dumosum* (R., T.), *C. Eufaulense* (R., T.), *Crassatella vadosa* (R.), *Veniella Conradi* (R., T.), *V. trapezoidea* (R.), *Anchura abrupta* (R., T.), *Cypri-meria depressa* (R., T.), *Gyrodes crenatus* (R., T.), *G. petrosus* (R., T.), *Veleda lintea* (R., T.), *Leptosolen biplicata* (R., T.), *Scalaria Sillimani*, *S. Hercules*, *Turritella compacta*, *T. vertebroides* (R., T.), *Ligumen planulatum* (R., T.), *Nautilus Dekayi* (R., T.), *Placenticeras placenta* (R., T.), *Scaphites hippocrepis*, *S. Conradi* (R.), *Baculites ovatus* (R., T.), *B. compressus*, *Turritiles pauper*, *Solenoceras annulifer*, *Belemnites Americana*; and in the Clay Marls, below the Lower Greensand, *Ammonites* (*Mortoniceras*) *Delawarensis*.

*Middle Greensand.* — *Montlivaltia Atlantica*, *Cidaris splendens*, *Pseudodiadema diatretum*, *Ananchytes ovalis*, *Hemiaster parastatus*, *Terebratula Harlani*, *Gryphæa vesicularis*, *Gryphæostrea vomer*, *Natica abyssina*, *Isocardia Conradi*, *Nautilus Dekayi*, *Baculites ovatus*, *Sphenodiscus lenticularis*.

*Base of Upper Marl bed.* — *Terebratulina Atlantica*, *Ostrea glandiformis*, *Gryphæa Bryani*, *Crassatella curta*, *C. littoralis*, *Turritella pumila*, *Rostellaria nobilis*, *Pleurotomaria Brittoni*.

The latest and fullest work on New Jersey Brachiopods, Lamellibranchs, Gastropods, and Cephalopods, with illustrations of all the species, is Whitfield's Report, in 4to, *U. S. G. S.*, vol. ix., 1885, and vol. xviii., 1892. It contains full references to the works of Morton, Lea, Conrad, and all other authors on New Jersey Cretaceous paleontology.

MISSISSIPPI AND ALABAMA. — *Eutaw group*, — chiefly Oysters in the marine part. *Rotten Limestone*: *Placuna scabra*, *Neithea quinquecostata*, *Gryphæa convexa*, *G. vesicularis*, *G. Pitcheri*, *Ostrea falcata*, *Rudistes*, *Mosasaurus*; and in the Tombigbee sand, many Selachian remains, and the gigantic *Ammonites Mississippensis* Spillm.

*Ripley group.* — Besides the species indicated, in the list for the Lower Greensand group, by the letter R., the following are common kinds; the references to Texas are from Whitfield and Stanton: *Ostrea subspatulata* (T.), *Gryphæa mutabilis*, *Anomia argentina*, *Inoceramus proximus*, *Gervilliopsis ensiformis*, *Cucullæa capax*, *Pecten quinquecostatus*, *Nucula percrassa* (T.), *Aphrodina Tippiana* (T.), *Veleda lintea* (T.), *Lunatia obiquata* (T.), *Pugnellus densatus* (T.), *Pyrifusus subduratus* (T.), *Volutomorpha Eufaulensis* (T.), *Morea naticella* (T.), *M. cancellaria* (T.), *Cinulia pulchella* (T.), *Baculites anceps* (T.).

TEXAS. — (The species of the Upper Cretaceous are wholly different from those of the Lower.)

(1) *Lower Cross Timbers*: Leaves of *Salix*, *Ilex*, *Laurus*, etc. (Shumard); *Otodus appendiculatus*, and other Fish remains; *Anguillaria Cumminsi* White, species of *Ostrea*, *Cerithium*, *Turritella*, *Neritina*, *Scaphites*, with *Ammonites Swallowi* Shumard.

(2) *Eagle Ford shales*: *Isastræa discoidea* White, *Ostrea congesta* Con., *O. belliplicata*, *Exogyra columbella* Meek, *Lima crenulicosta* Rømer, *Inoceramus labiatus*, *I. latus* Sow., *I. confertim-annulatus* Rømer; the Ammonoids, *Buchiceras Swallowi*, *Hoplites Deshayesi*,