

have yet been discovered in the Cretaceous series; and three or four species in the Tertiary formations. Among living Fishes, scales of this kind occur only in the two genera, *Lepidosteus* and *Polypterus*.

Not a single genus of all that are found in the Oolitic series exists at the present time. The most abundant Fishes of the Wealden formation belong to genera that prevailed through the Oolitic period.*

Fishes of the Chalk Formation.

The next and most remarkable of all changes in the character of Fishes, takes place at the commencement of the Cretaceous formations. Genera of the first and second orders (Placoidean and Ganoidian), which had prevailed exclusively in all formations till the termination of the Oolitic series, ceased suddenly, and were replaced by genera of new orders (Ctenoidean and Cycloidean), then for the first time introduced. Nearly two-thirds of the latter also are now extinct; but these approach nearer to Fishes of the tertiary series, than to those which had preceded the formation of the Chalk.

that were warmer, or subject to more sudden changes of temperature, than could be endured by Fishes whose skin was protected only by such thin, and often disconnected coverings, as the membranous and horny scales of most modern Fishes.

* The most remarkable of these are the genus *Lepidotus*, *Pholidophorus*, *Pycnodus*, and *Hybodius*.