

have been carried there by the currents from distant spawning grounds, just as the herrings are carried to the coasts of northern Norway from distant spawning grounds on the North Sea coast, or as the young cod of northern Iceland have drifted from the south coast of that island. This result is in itself of great importance, contributing to our knowledge of the mysterious life-history of the eel, especially when viewed together with similar facts pertaining to other leptocephali (conger, *Synaphobranchus*), and to forms like *Argyropelecus*, Scopelidæ, etc., which were far more numerous on our southern than on our northern track. Just as all the tropical and warm water forms, from foraminifera and copepoda to fishes, occur mainly south of the 40th degree, so also is the spawning of warm water fishes limited to this same area. I therefore believe that the eel probably belongs to this "intermediate" group, of which one is reminded by the large eyes and the silvery sheen of migrating "ripe" eels (compare, for instance, *Serrivomer*).

I am inclined to explain the fact that we did not obtain many of the remarkable larvæ and young fish collected by other expeditions from the surface of the ocean, as recorded for instance by Lütken in his *Spolia Atlantica*, by supposing that we did not go far enough south. Lütken states that his small young swordfish were all captured in tropical localities, and in regard to the mackerel he quotes Captain Andrea thus: "The Bonito is the oceanic fish which I have most frequently seen and captured; it is seen everywhere in the North and South Atlantic between the tropics, increasing in abundance as one approaches the equator. In the Indian Ocean I have not seen it south of lat. 26° S. nor east of long. 70° E. In the Java Sea, the China Sea, the Yellow Sea, and the Japan Sea I have never observed it."

In this place I have limited my remarks to the fishes alone, but similar results would probably appear in most animal groups if their vertical and horizontal distribution were studied; this must be reserved for the future, when the material collected by the expedition has been examined in detail.

AGE AND GROWTH

It has long been recognised that there is a certain correlation between the size and the age of animals belonging to the same species, and that a definite increment in size takes place within