

the larger ones prey upon the smaller, but our fishermen deny the fact of finding young herring in the stomach of larger ones. The surface of the sea about our coasts in Spring and Summer is fairly alive with the medusæ, and our shores are covered in winrows with small shrimps, called brit and herring bait, one cannot but fancy that these rich gelatinous masses must allure him to the surface.

To sum up all that I have obtained within regard to our herring :

1. It is of one species.
2. With regard to teeth, those upon the tongue and vomer seem constant in all ; the larger specimens very rarely upon the lower lip ; the smaller usually having them there. Generalising from examining some hundred specimens, I would say the teeth became obliterated by age, and that the more readily as they have no bony origin like the genus *Salmo*.
3. Some spawn in May and June, others as late as October. This very remarkable fact, causing suggestions of how far it modifies the growth and habits of each run, stands so far without any reason.
4. These separate runs, hatched under very different circumstances, and necessarily of different age and size, revisit their old haunts, spawn the second year, and are three years in attaining adult size, and probably by that time become absorbed in the runs of older fish.
5. That great and small of all ages approach the surface, and the land in spring, and disappear in autumn. The warm seas and calm weather of the summer being necessary for their spawning and their food,—that as far as regards our coasts their only migration is from the deep soundings of the sea banks to the coasts and back again,—though I by no means assert that in higher latitudes they do not perform greater migrations. These migrations must cause a total change in the food, the temperature, respiration and external pressure during winter and summer.

Following DEKAY and STORER, I have considered it a distinct species, from the Harenga, or English, though RICHARDSON calls his taken at Bathurst inlet, Harenga ; and YARRELL'S description of the Harenga seems to vary but little from ours.

We have seen that our herring passes his existence alternately in a state of rest in deep soundings, (this rest not so deep though, as from recent facts, we infer the mackerel does, who, it would appear, becomes torpid and blind during winter, like certain Batrachians whom he resembles in his color), and of a highly, aerated and lively existence upon the surface. During this state he presents himself as food for man who employs his arts in securing this rich bounty, spread as it were at his