

scarcely increased our knowledge with regard to the life of higher plants, water-insects, and almost the whole organic life of the littoral zone. Even in regard to the plankton it is strange to note how few really new facts with regard to the individual plankton, animal or plant, the biological laboratories have brought to light. These principally deal with the biology of plankton diatoms and plankton Myxophyceæ. The main reason is, that many of the laboratories are bound by obligations to the fishery, which in my opinion neither promotes the fishery nor the limnology; but also, partly, that the studies as mentioned above have been carried out on far too wide a base. It must be admitted that this method, when the biological stations began their work, was tempting and perhaps also necessary. Nowadays, it must be demanded from the laboratories, *that regular study of the single organism on the spot where it lives and where it grows is in future one of their chief tasks.* Situated in nature itself, the laboratories have the great advantage of never wanting material, as also that the organisms can be studied at the very place to which they primarily belong. It is in nature itself that the investigations of the fresh-water laboratories should be carried out, *and the investigators must learn to transfer the experimental work and the biological observations from the aquaria to nature itself.* By means of *marked* animals and plants, studied at regular short intervals the whole year round, this is very well possible. In my opinion, it is from such studies that these laboratories will be able to increase our knowledge of the biology of the fresh-water fauna and flora in a very high degree. Studies of this kind have hitherto been carried on only with regard to the plankton—in general for the whole plankton community at once, and only very rarely for a single plankton organism.

When similar investigations on the same or other organisms are carried on in other latitudes, we will gradually get the biology of the species elucidated, not only at the different seasons of the year, but also at the different localities. Then, by and by, the material will be brought together on the basis of which we shall be able to build up what in the infancy of the science of limnology could of course only vainly be attempted.

If the investigations are carried out as now sketched, it will be understood that a very great deal of the time of the investigators will be spent on excursions. From the explorations in nature, questions arise which can only be solved either by histological or by detailed anatomical investigations, or, if they belong to the vast field of heredity, by cultivation and experiment carried on for a long time under special conditions. For all these studies our investigators will hardly find sufficient time; nor do they in reality belong to the main