## CANADIAN FISHERIES EXPEDITION, 1914-15

ment is arrested; in the gulf of St. Lawrence, the development can hardly be supposed to begin before early May, and at the close of this month the rise of temperature in. the surface layers of the coastal water is distinctly apparent. On the other hand, the summer temperature is not sufficiently high to favour the development of a rich *Ceratium* plankton answering to the European plankton community called by Cleve the "Triposplankton."

More than this we can hardly say on the basis of the present observations; they represent a first commencement. As a necessary foundation for further studies, we must first have observations carried out throughout the entire year from a number of selected stations, so that we can obtain a clear view of the annual periodicity. In this connection, it will be of great interest to have investigations similar in plan to the present ones, repeated over a wider area at various seasons, but a continuous investigation series covering the whole of the year should first be made, in order that it may be possible to choose, for the more extensive investigations, the seasons at which the most important plankton communities are in course of development. Even now we may say that it would be particularly interesting to have quantitative investigations of the plankton in the gulf of St. Lawrence and environs for the beginning of May, so that we could determine the distribution of the rich spring plankton; the investigations should preferably be combined with determinations of oxygen content according to Winkler's method, as this would enable us to gauge the quantities of organic matter produced by the phytoplankton during this rich period of development.

I have not considered it necessary at the present stage to give a list of the species found and their synonyms. It will here suffice to refer to "Nordisches Plankton," where the great majority of the species are described; to my paper on the plankton production of the North European waters in May, 1912<sup>3</sup>; and to Caroline Leegard's work published at the same time (Untersuchungen ueber einige Planktonciliaten des Meeres." Kristiania, 1915. Nyt Magazin for Naturbidenskaberne, Bd. 53), with a description of the *Laboea* species and some related forms.

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