## KLUGH-PLANT FORMATIONS OF BRUCE PENINSULA.

preliminary survey of the whole Peninsula from Tobermory at the north to the base in which notes were made of all species found second, an intensive study of small areas of typical formations.

## HYDROPHYTIC FORMATIONS

## PLANKTON FORMATION

Merismopedium glaucum, Ophiocytium cochleare, Ophiocytium parvulum, Chlamydomonas globosa and Rhaphidium falcatum aciculare. Another swale near Colpoy's Bay on June 5th contained the following phytoplankton :—Chlamydomonas communis, Chlamydomonas globosa, Pandorina morum, Volvox aureus, Rhaphidium falcatum, Nephrocytium agardhianum, Scenedesmus obliquus, Scenedesmus quadricauda, Coelastrum proboscideum and Pediastrum boryanum.

Floating at the windward shore of Sky Lake on May 28th were the following forms :- Microcystis marginata, Coelosphaerium kuetzingianum, Merismopedium glaucum and Pediastrum boryanum.

## PLEUSTON FORMATION

This formation consists of plant forms larger than those composing the Plankton which are free-floating. It exists in much the same situations as the Plankton formation, but exhibits greater variety as to the species of Algae which enter into its composition in different ponds and swales. A swale near Boat Lake had the following representatives of this formation:—*Conferva bombycina and Spirogyra varians*. A swale near Golden Valley had *Conferva bombycina*, *Mougeotia genuflexa and Draparnaldia glomerata*. A swale near Colpoy's Bay had *Hydrodrictyon reticulatum* and *Oedogonium capilliforme*, and at the margin of Lake Isaac there were *Zygnema leuospermum* and *Mougeotia scalaris*. LIMNO-NEREID FORMATION

This formation includes those Algae which are attached to stones and rocks in lakes, pools and streams. Along the shore of Georgian Bay this formation is represented solely by *Ulothrix aequalis* and *Ulothrix zonata*. The two species grow in separate patches and the former is of a darker green than the latter. Gametes of *Ulothrix aequalis* were mature on April 30th.