

*Diaptomus*, *Daphnia*, and *Bosmina* are occasionally found, but the species included in the preceding list are so much more common, that when the generic name only is mentioned it will be understood that the common species is referred to.

This small association of animals and plants constitutes what may be called the lacustrine type of plankton. A not very dissimilar association is found in small ponds, but the species for the most part are different. The *Diaptomus* may be *D. castor*, the *Daphnia* *D. pulex*, the *Bosmina* *B. cornuta*; Rotifers and Algæ will be more abundant and varied, and there will probably be some Ostracodes. It might have been expected that the shallowest lochs would have had a plankton of the pond type, but it has been found that even the smallest lochs surveyed had the plankton distinctly lacustrine. A few nearly or quite stagnant lochans showed a slight approach to the pond type in the presence of *Bosmina cornuta* and *Volvox* and in the abundance of Rotifers and Algæ.

The remarkable variations of the loch trout, which have so much puzzled naturalists cannot be touched on here, but parallel cases are found among the smaller animals. *Diaptomus gracilis* varies remarkably in colour, and is usually constant for each loch, and several other Entomostraca vary greatly in size and form; chief among these is *Daphnia*. The typical lacustrine form of this genus, which will be referred to as *Daphnia lacustris*, has an evenly rounded head with a depression on the line of the forehead marking off the brow from the beak. Where this depression is obliterated the head of the animal has a very different appearance, resembling that of a parrot. The form differing most from the typical *Daphnia lacustris* is that in which the head is produced upwards into a sort of peak or helmet. For convenience, this form will be referred to as *Daphnia galeata*, though it is doubtful if the points of difference are of specific value, and intermediate varieties are found.

After *Daphnia*, the species which varies most is *Bosmina obtusirostris*. The typical lake-form has a short mucro at the posterior angle of the valves. It varies much in size and in colour, being usually hyaline, but sometimes purple, or rarely orange and purple.

During its season *Holopedium*, from its large size, is very conspicuous in those lochs in which it occurs. It is frequently so abundant that it chokes up the nets in a short time, and makes it impossible to get a fair proportion of the other animals present. It appears in some lochs as early as May, and continues till August.

Commonly a single organism, usually vegetable, will so increase in a loch as to form what the Germans call a "Wasserblut." The Algæ (*Chthrocystis*, *Oscillaria*, *Botryococcus*, *Anabaena*, and *Volvox*) are among those which most frequently increase to this extent, but almost any of the smaller organisms, as Diatoms, Rotifers, or Protozoa, may on