

dytiscids, trichopterous larvæ, water mites, snails (*Aplexa hypnorum*), oligochaete worms (*Lumbriculus* sp.), protozoa, etc., which were secured in the beginning of June from them. From the middle of June most of the tundra ponds are free of ice, except where this is found in the bottom of the deepest ones, and contain a rich animal life. Thus a partly dried-up pond surrounded by swamp on the coastal tundra at Collinson point had a water temperature at 10 a.m. of 53° F. (air 40° F.), and contained a number of mosquito larvæ, hemiptera, water mites and dipterous imagines.

Another pond situated on the tundra at Konganevik also contained some bright red *Hydra* species¹ attached to the water plants, when examined at the end of June; its marginal water had a temperature of 54° F. at 2 a.m. on June 27 (air about 30° F.).

When I reached Konganevik (June 25) the smaller tundra ponds on the coastal plain were already dried up or nearly so (steaming), while the large inland lakes were only partly melted and had ice in their middle and deeper water-layers. There are half a dozen of these large lakes, situated about a mile inland and surrounded by extensive swamps with many ponds through which an outlet² finds its way to the sea (see p. 68), at their eastern end. Their general direction is east and west, paralleling the coast; and while tundra bluffs face them for longer stretches on their north and south sides, the low land surrounding and separating them from the sea at their east and west side indicates that they represent a former sound found here at a time when the coast had a lesser elevation. I could not then ascertain their depths; but it is possible they contain salt water in their deeper layers. Their general appearance is well shown by the photograph that is given (Plate I, fig. 1); it will be seen that a rich vegetation of Cyperaceae, etc., extended far out into them, thus indicating a broad belt of shallow, marginal water. In this latter I secured a great number of invertebrates, including many insects (perilids, trichoptera, diptera, dytiscids, etc.), water mites, copepods (*Cyclops capillatus*), "winter eggs" of *Daphnia pulex*, snails (*Aplexa*), oligochaete worms (*Lumbriculus*), etc.

In the beginning of July many of the ponds or brooks containing melting water are dried up completely or only have a small waterhole in the deeper part of the bed, while the deeper ponds are ice-free, and the melting of the ice in the large lakes progresses rapidly. The large creeks and rivers contain far less water than earlier in the summer. The animal life inhabiting the bodies of freshwater is much the same all the time, but at the beginning of July is supplemented by the young Cladocera (*Daphnia pulex*) which hatch several weeks after the nauplii of the fairy shrimps (*Brauchinceta paludosa*) emerge from the eggs (see p. 68).³

In the beginning of August I had the opportunity of examining a part of Icy reef, which stretches along the coast between Martin point and Demarecration point. The reef or sandspit is broader and longer than the spits forming Martin point and its gravelly places are larger and composed of bigger stone fragments, and the vegetation is far better developed. As is the case everywhere else along this coast much driftwood is scattered around, filling up smaller bays or bights on the south side, where also occur marshes, the latter often continued out into the shallow sound or lagoon separating the reef from the mainland. The sandspit also contained several closed-in lagoon ponds or beach ponds, mostly dried up, and containing so far as I observed not nearly so varied and rich a life as those at Martin point. No phyllopod were seen.

Herschel island reaches an elevation of 558 feet and represents a tundra island wholly made up of sand, mud, clay and a few boulders, while the ground-ice crops out here and there and very help supply some of the smaller creeks with

¹ See Vol. VIII, Part I, (Hydroids) in this series of reports.

² Shallow swamp in its upper course and deep tundra holes in its lower course.

³ The less conspicuous and common nauphi of *Lepidurus arcticus* probably also hatch in the middle or end of June.