years not until a month later. During the winter the freshwater ice may attain a thickness of almost ten feet, from which it follows that all the ponds and lakes shallower than that freeze to the bottom. Owing to their size, currents and the influence of the winds the large deeper lakes do not freeze over permanently until a week or two after the ponds. As the large creeks forming the outlets are all shallow in this vicinity, they also quickly freeze to the bottom. It should be remembered however, that occasional low temperatures, generally at nights, both in the spring and the fall cause the surface of ponds and of the more quiet bights of the lakes to be covered with new ice which may, or may not, according to succeeding temperatures, melt away the same year.

To illustrate these general remarks about the influence of the weather upon the freshwater bodies the following field observations may be of interest.

May 22, 1915, was clear and unusually warm (from 24° to 62° F.). The melting snow formed temporary, stagnant, small pools, both on the sea ice, where there were accumulations of sand, and upon land. The largest of these pools was found in a depression on top of a ridge; it had free water six by two feet wide. The two big lakes inland west of the station had the snow upon their ice melted away at many places, but no water was to be seen. The different ponds at the harbour were all covered by snow.

About the same date next year the spring was more advanced. Thus on May 21 the weather was clear and warm (max. temp. 59° F.). Thermometer lying in a water accumulation (melted snow, dark bottom) on the tundra showed 54° F., while the air was only 43° F. (noon). Even on the lowland (tundra or swamp) the snow was disappearing fast; there were many and extensive melting ponds on top of the lake ice, and the latter was soft and wet. Much melting water was coming down in the big creek, and also in smaller, temporary streams.

May 24, 1915, was clear or cloudy, with temperatures from 20° to 45° F. Where there were, on land or on the sea ice, accumulations on top of the snow, the snow had melted, forming a hole with the sand in the bottom; the snow protruding as an icy brim over the north side of the hole, while the south side was open, and gently sloping outwards. At the bottom of such a hole upon the land the thermometer showed, when sheltered from the wind, 33·5° F., at noon, while the air was 27·3° F. Another stretch close by had the snow melted away to a considerable extent, so that the bare tundra was exposed, showing stagnant melting water pools in the depressions. This melting water had at noon a temperature of 48·8° F. (thermometer lying in the bottom), while the bare ground around it (thermometer lying on the ground) was 50° F.

On the last day of May, 1916, the land was all free of snow, except for patches upon the slopes. All the ponds at the harbour were also free of ice (apart from new ice formed at night) and snow, and had their maximum extension. The big lake in the valley west of the station was still covered with ice in its southern part, while the north part was open, with the water streaming to the outlet, along which cakes of ice were carried down to the sea.

On June 16, 1915, one of the ridges at the harbour was largely free of snow even upon its north side; and about half way to the top a broad terrace showed melting water in the depressions in the form of temporary smaller ponds or water-holes with gravel bottom. On the swamp below, south of the ridge, a few of the true tundra ponds with detritus mud bottoms were open, and there was stagnant water in the other depressions. The swamp itself was now mostly free of snow, but the mud flats through which it merges into the sandy beach, only partly so. The ponds now drained off through several small temporary streams to the bay. Two days later the snow was melting rapidly and the small streams coming down the slopes formed temporary pools here and there, and merged into lakes or creeks. The thermometer lying upon the bottom of such a pool showed 56° F., in flowing melting water close