

tration of this fact, the observation was made that among various seeds which have been found in the snow in this area this winter, the most abundant is birch, which, nevertheless, was not represented by living plants in the summer. The birch cannot thrive without the light of the open and therefore fails to gain a foothold here. Similarly many other species must perish when brought by the vagaries of their migrations to this plantation; and this is just what has been going on with all species, until recently. On the other hand, many forest and other plants which would be perfectly at home in this environment, or would at least be capable of enduring it, have not yet reached here. Among the plants collected which seem best at home are a fern, *Aspidium spinulosum* var. *intermedium*; a violet, *Viola blanda*; a bedstraw, *Galium triflorum*, and two sedges, *Carex Deweyana* and *C. varia*, as also the various fungi, which are no doubt at their best in such a habitat.

Many of the plants not so well adapted for enduring shade showed plainly its effects upon their habit or structure, as for instance, by their broader, greener and more succulent leaves, their elongated internodes, etc. The prickly lettuce or compass plant, *Lactuca scariola*, which ordinarily turns its leaves edge-wise to escape the force of the strong mid-day sun, was here compelled to spread them after the fashion of other plants, so as to catch the full benefit of the light which filtered down to them.

Notice was taken of the various ways in which the seeds of these plants may have been brought to the plantation. Animal life and the wind were no doubt the principal agencies. The seed may have adhered with mud to the feet of men or animals, or they may have been drifted along over the frozen snow. Three or four of them are armed with prickles or barbed processes for attachment to animals etc. Some would be eaten by birds and other animals and then be deposited in a fit state for germination at this place, and six possessed fleshy fruits indicating this means of dispersal. Another six were provided with wings, while ten had pappus tufts, enabling them to be carried for greater or less distances through the air.

Such a survey as described, opens up a variety of interesting problems which can only be settled by repeating the observations during a series of years. No society of plants can be fixed and stable at such an early stage of its history, and each year should contribute something new to its composition.

H. G.