

from Kingston, on the scattered farms along the Addington Road, back to the township of Olden, a distance of about fifty miles. When we consider that many of the farms referred to are mere isolated patches of clearing in the woods, widely separated from each other, in some cases by miles of interminable forest and swamp, we see that the diffusion of this insect is totally independent of its own limited locomotive powers. In its winged state it is no doubt carried in clouds by the winds, like the seeds of thistles and other winged plants.

In looking over a general collection of insects, one is struck with the large numbers of species peculiar to certain countries or districts, and which, in spite of their locomotive powers and other means of diffusion, seem to persist in adherence to circumscribed localities. The aphides are of a different character; those of them which infest cultivated plants may probably, with most truth, be regarded as cosmopolitan, having no special regulating influences that we know of beyond the supply of their food and *extremes* of climate. They are like the corn weeds that spring up wherever the cereal grains are cultivated, and whose original nativity has been lost. The careful observation of animals and plants of this character, in a new country where settlement is still progressing, is calculated to afford valuable information to the zoological and botanical geographer.

The wingless aphides found in such numbers during the summer are all females, but some of the females are winged. Remarkable as it may appear, it is nevertheless true, that the females have the power of bringing forth living young, without any intercourse of the sexes. This may be readily observed by enclosing one under a glass, and observing the production of new individuals, which is regarded by naturalists rather as the result of a process of budding than a true reproductive process. Late in the season, when cold weather comes on, males are produced, all being winged; they are known from the winged females by the absence of the tail-like process at the apex of the abdomen. The sexes pair, the females lay eggs, these may remain dormant and be hatched during the following spring, and the young issuing from them are females, capable of giving birth, as before mentioned, to successive broods of young, in a viviparous manner, in the absence of males.

The reproduction of aphides thus presents some of the most remarkable phenomena with which naturalists are acquainted,