

are insufficient for the task, though they afford material help. All our insectivorous birds should be protected and encouraged, especially the woodpeckers and chickadees, which remain with us all winter. The former destroy an immense number of borers, codling-worms, etc., and the latter pick out many minute insects that spend the winter about the buds and in crevices in the bark of trees. Toads, snakes, and skunks, though generally regarded with aversion, are really most useful creatures, and assist very largely in reducing the numbers of destructive insects.

INSECTS AFFECTING THE APPLE.

THE CODLING WORM (*Carpocapsa pomonella*), Figs. 1 and 2. The insect that causes the greatest amount of annual loss to the Ontario fruit-grower is, no doubt, the Codling Moth (*Carpocapsa pomonella*), and yet probably not one orchardist in fifty has ever seen the moth itself. It is very small, flies only at night, is not attracted by either lights or sweets, and consequently can rarely be obtained except by breeding it from the worm. Everyone, however, is familiar with the worm or caterpillar which feeds in the interior of the fruit. The moth lays her scale-like eggs about the time the trees are in bloom on the leaves, stem or skin of the young apple. In a few days the larva is hatched out and proceeds to burrow into the fruit, usually in the cavity at the calyx end.



Fig. 1. The Codling Moth and its work, showing the different stages.



Fig. 2. Apple injured by the burrows of a Codling Worm.

After a time the infested apple falls to the ground, the worm emerges, and usually finds its way to the tree, where it forms its cocoon under the bark or other shelter. Throughout the southern counties of Ontario there are two broods in the year, but east of Toronto and north of that latitude there is usually but one brood, though a small percentage may