

Winter Homes of Insects.

Of the millions of insects and ephemera that filled the air, covered vegetation, or swarmed over the earth, a few weeks ago, but few can now be found.

It is interesting to study how they house themselves and how they protect their eggs and larvæ for the winter.

Have you ever thought what becomes of all the bumble-bees? All die when the cold weather comes except the queen. Before the severe weather sets in, the queen bumble-bees select some comfortable place—a deserted field mouse's nest, or a hollow stump or log—where they secrete themselves and lie dormant through the whole winter. They do not prepare food for the winter as do the honey-bees. When the warm weather comes, you may see a queen bumble-bee busily seeking a home where she may start her household.

The mud-wasps build their nests in as protected a place as they can find, lay their eggs, putting into each mud compartment food—spiders and worms—that the grubs may have a supply when they hatch from the eggs. Whether any of this class of insects ever live over winter, i. e., the old ones, or not, I am unable to say. I have never been able to find any specimens during the cold weather.

The leaf-cutting bees select any opening they may find, from an unused keyhole to the hole of the wood worm. Here they fit bits of leaves which they cut to suit the size of the hole, packing their eggs in snugly between layers of leaves and mud, making a warm nest for their young. Examine the fallen leaves and you will find many of them have little knobs on them. Examine these carefully and you will find an egg or a grub of some insect inside the knob.

Did you ever see a mother grasshopper depositing her eggs in the earth? She must die when the cold comes; but she forces her eggs into the earth where they are safe until the warm weather comes.

Spiders are rather tenacious of life, and many of them survive the cold. Go to the dark corners of the garret or cellar; look into hollow trees or logs, and you will find suspended little grayish colored balls in an old web. Open these and you will find hundreds of eggs which the warm weather will hatch into young spiders.

The butterflies and moths have all perished, but before going they have all left their eggs deposited on leaf, or bark, or board, or fence, or somewhere.

The caterpillars have woven them silken houses where they may change their ugly forms into things of beauty.

Cannot the teacher make many an interesting lesson about the winter homes of insects or their young?—*S. S. Milligan.*

A Dozen Suggestions to Teachers.

1. Every recitation should begin with enough of review to connect the lesson with what has preceded.
2. Be independent of the text-book, as far as possible, during the recitation. Pupils are supposed to use text-books before the recitation period arrives.
3. Nothing wastes time more, or more surely leads to inattention, than the habit of repeating the question to the class.
4. Young pupils should be given no home work to do.
5. Never speak to your pupils in a petulant ill-natured manner, and be cautious about resorting to ridicule as a means of discipline.
6. Kindness and affection, when set in an iron frame, are the strongest elements of a teacher's power.
7. Never command when a suggestion will do as well.
8. It is wrong to discuss a case of discipline with any one before your school.
9. There is something wrong in the discipline that would be subverted by a hearty laugh.
10. Avoid all loud, harsh tones of voice; cultivate gentleness of speech and pleasantness of expression.
11. No communication from parents should be treated with disrespect.
12. It never pays to show your temper in dealing with a parent.—*Selected.*

Patrons are critical, and young teachers—teachers whose reputation is not pretty well established in the district—must forego some of these pleasures or pay the price which is frequently costly enough. Be sociable without being frivolous; be talkative without being pert; be friendly without being familiar. Mind your own business and remember a good listener is often more entertaining than a great talker. Keep your character unquestioned and look to your reputation, for without these you had far better leave the schoolroom.—*T. E. Sanders, in Progressive Teacher.*