

when oviposition is at an end, is the withering and splitting of the abdomen much the same as a bean pod will dry, curl and split open.

Females in the late fall may be found in this unfortunate spent condition with strength only left to drag themselves about awhile longer. Some specimens in our collection exemplify this most extraordinary characteristic.

*Time of Hatching.* Although abundant during 1918 it is worthy of note that throughout the past season, 1919, these insects were exceedingly scarce. Whether this was due to parasites, or weather conditions, or other controlling factors I am unable to say. A close watch was kept throughout the summer for any sign of their activities but I only succeeded in locating one nymph on June 14th, and two pairs of adults and one female on August 13. These last were collected for egg records and I was able to keep them in the laboratory until the beginning of October.

In his Report of Forest Insects for 1878, I find that the late Doctor Riley, of the United States Bureau of Entomology, refers to a communication received from a Mr. Snow, of Yates Co., N. Y., in which the latter states that walking sticks were unusually abundant every other year and that many of the eggs were found to remain on the ground for two consecutive winters before hatching. A further reference in this same report is made to the investigations of Messrs. Bringham and Trouvelot. These gentlemen, writing in the Proceedings of the Boston Society of Natural History, Volume XI, pages 88 to 89, observed that the eggs of the walking stick only hatch after an interval of two years.

Eggs laid in the summer of 1918 and held in storage for winter and spring in a box of sand left exposed to the atmosphere failed to hatch last summer. Those of 1919 were put into glass vials corked with loose cotton batting and left on the laboratory table in a temperature averaging about 70 degrees. On January 28th, 1920, I examined several of these and found them well advanced in their embryonic development. About 18th February, much to my astonishment, a nymph made its appearance in one of the bottles, to be followed by several others at irregular intervals. I had nothing at the time to feed the youngsters on except rock fern (*Pteris* sp.) to which they did not take happily. Later I tried several kinds of green foods, lettuce, tradescantia, geranium, etc., and dried oak leaves soaked in water, but to no avail. The nymphs all died.

*Notes on Habits.* The Phasmids have been popularly considered harmful and poisonous. Such is not the case. In fact the very reverse is the truth. They are quite harmless, inoffensive creatures, strict vegetarians and easily managed in confinement. One large female, I had in the house for three months and made quite a pet of her. I would often remove her from the cage and allow her to walk over a pot of ferns on the table. She would meander up and down on the green leaves, not attempting to drop to the table or trying to get away. If I put water on the leaves she would immediately take some up and blow it out from her mouth in the form of a bubble, then draw it in and blow it out again, keeping this up for some time, as it were for my amusement. Again I would place her on the table near an electric light. She would walk towards it, hesitate, look around as if uncertain what next to do, then rear herself, spreading out her long front legs to the light, as much as to say "Humph!