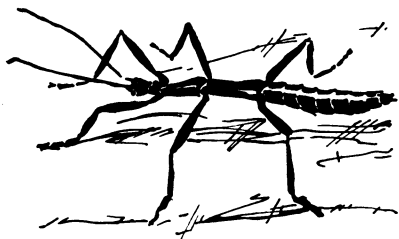


BIOLOGY

NATURE RAMBLINGS



Walking Stick

► THIS STRANGE insect is designed with such a close resemblance to a twig that as long as it remains immobile, it stands an excellent chance of escaping detection. But if you keep your eyes peeled in the country and you suddenly see a stick walking, it's probably a walking stick.

Now that the frost has come you are likelier to see some of the queerer creatures of the insect kingdom, sluggishly dragging themselves about in the relative warmth of noon. This time just before the deep snows is a good time for observing walking sticks.

The common walking stick of the United States is related to many similar insects, many of which abound in the tropics. One characteristic that this family of insects shares is the remarkable imitation which each species has managed to achieve of the twigs of its local environment. Some of the tropic varieties especially so cleverly mimic the appearance of their surrounding leafy vegetation that trained observers are frequently fooled.

It is remarkable that an insect which blends so perfectly with its environment as to seem to be immune from all predators, does not become so abundant as to be a pest. This may be because there is only one generation per year and the number of eggs laid by each female is about one hun-

dred. Compared to most other insects, notoriously fertile and prolific, this is very restrained rate of reproduction.

Like the grasshoppers to which they are closely related, walking sticks are vegetarians. Their color changes with the season, being green during the summer, turning to gray and brown later in the year. This change in color is actually part of the maturing process of the insect. The young hatch out about May. At this stage they are a pale green. They molt twice without change of color. As they develop into mature insects their color changes to the darker hue, more suitable to the color of fall vegetation.

The walking stick's manner of laying eggs is in keeping with its camouflaged appearance. Instead of fastening them to a leaf or depositing a heap of them in some natural recess somewhere, the female drops her eggs on the ground. These eggs, like the parents, are cleverly imitative also. They look like seeds of some plant, and they are scattered about loosely on the surface of the ground.

Where an egg falls, next spring there will probably hatch out a young walking stick. The egg is the winter hiding place for the developing, hibernating insect. By spring the brand new walking stick is ready to emerge. The warm spring sun signals to it. It pushes on the top of the shell. And lo, it lifts up like the top of a hinged box. And another walking stick steps forth, to live out its harmless summer, and to leave deceptive seedlike eggs on the ground, its bid for immortality.

Science News Letter, November 28, 1953

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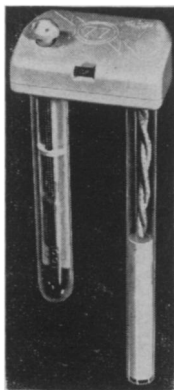


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Questions

AERONAUTICS—What are three causes of airport noise complaints? p. 341.

□ □ □

CYTOLOGY—Why are fused cells being studied? p. 340.

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PSYCHOLOGY—When was the first "rating scale" devised? p. 345.

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