

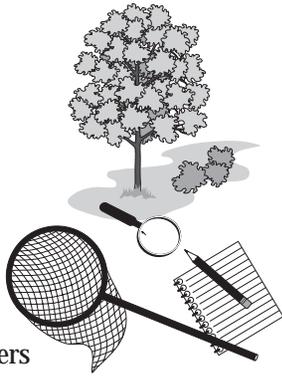
The world has more than 1 million different types of insects. Become an insect investigator and see how many you can find!

Here's what you'll need:

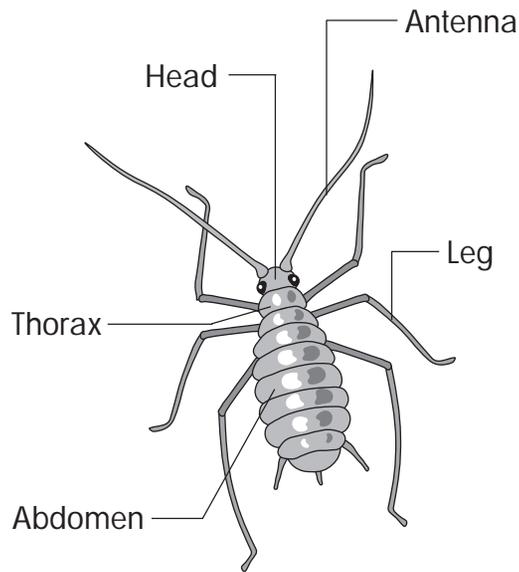
- Outdoor area
- Interest in insects

(If available):

- Magnifying glass
- Notebook
- Pencils and/or markers
- Net



What is an insect?



Insects have a head, thorax, abdomen, and six legs. Look closely for these parts to make sure it is really an insect.

For more information about gardening, youth activities related to horticulture, and insects, visit these Web sites:

ISU Extension publications
<http://www.extension.iastate.edu/pubs/>

ISU Horticulture
<http://www.hort.iastate.edu/>

ISU Youth and 4-H programs
<http://www.extension.iastate.edu/4H/>

ISU Entomology
<http://www.ent.iastate.edu/>

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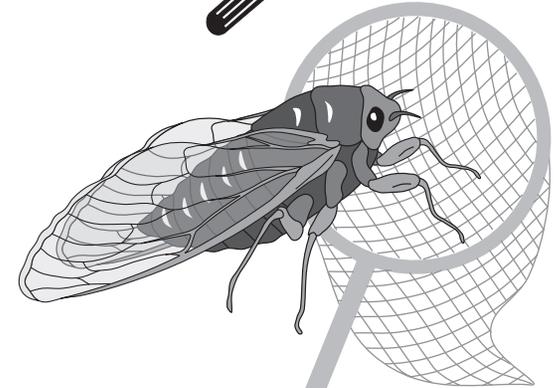
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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Stanley R. Johnson, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

And justice for all

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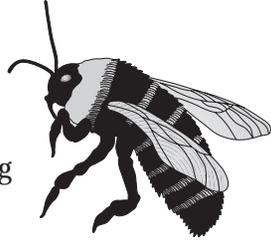
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GARDENS
IOWA STATE UNIVERSITY



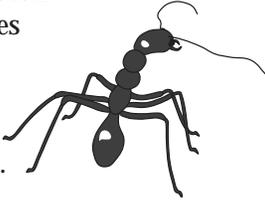
Insect Investigator

IOWA STATE UNIVERSITY
University Extension

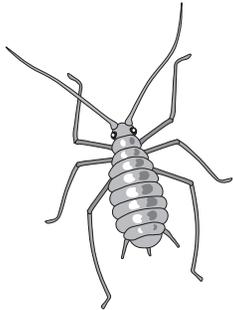
Did you know that honey bees have chores just like you? When they are old enough to work, their first job is cleaning the hive. The next week they get to feed the younger bees. Repairing the hive keeps them busy the third week. During the fourth week they guard the hive and then finally, in the fifth week, they leave home to collect nectar and pollen. Do you think bees get an allowance?



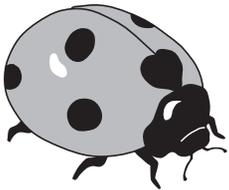
As many as 654,900 ants can live in a nest at one time. Talk about needing your own room!



Aphids are tiny green insects that suck juices out of plants. They can do a lot of damage while snacking in your garden.



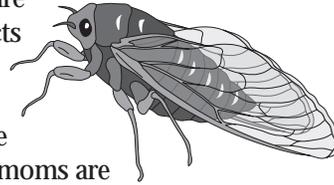
Most people think of ladybugs as friendly, but aphids don't think so! Ladybugs are *predators*. Predators eat other insects. Ladybugs can eat 5,000 aphids (their favorite snack) in their lifetime! No wonder gardeners love ladybugs.



Spittlebugs are tiny insects that cover themselves with foam to hide. The foam makes the plant look like someone spit on it. This makes them easy to find in the garden.



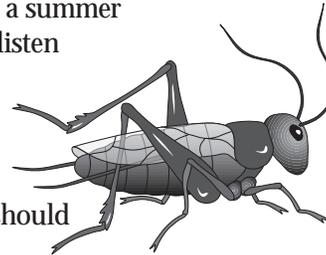
Male cicadas are the loudest insects in the world. They can be heard $\frac{1}{4}$ of a mile away. I bet their moms are glad they live outside!



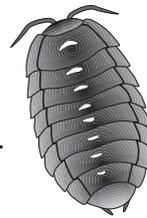
Flies hum in the key of F and beat their wings more than 20,000 times a minute. Now that's an exhausting music lesson!



Some crickets can tell temperature. On a summer evening, sit and listen to how many chirps you hear in 15 seconds. Add 40 to that number, which should be close to the actual temperature!



Pick up a rock or look under a board and you are likely to find a sowbug. Sowbugs are related to crabs. That is why they like dark, wet places to live.



Now see how many of these insects you can find!

- Honey bee
- Ant
- Aphid
- Ladybug
- Spittlebug
- Cicada
- Fly
- Cricket
- Sowbug



Keep an Insect Investigator Journal. Entomologists are scientists that study insects. They write down descriptions of what they see to help them learn new things. You can too! Here are some ideas for what to include:

- Draw a picture.
- Where did you see it?
- What was the insect eating?
- Was it flying, hopping, crawling, or just standing still?
- Was it day or night when you saw the insect?
- What was the weather like?

