



BUG EXPERIMENTS



Search For Insects Indoors

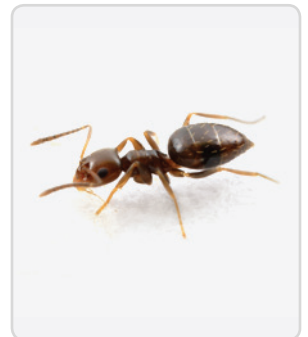
On a blustery cold day in the middle of winter, insects seem scarce, but don't be fooled. Even though you might not see them, insects are all around you. They are overwintering, which refers to how an insect survives the winter months. Different types of insects overwinter in different ways.

Just like many people, insects don't like the cold, so they try hard to keep warm when temperatures drop. To survive the chilly days of winter, some insects lay eggs that will hatch in the warmth of spring, some migrate to areas with warmer temperatures, and still others find a hiding place and sleep through most of winter. Scientists call insects in this sleeping stage dormant.

Would you like to search for some dormant insects? You might find eggs, larvae or pupae (young forms of insects), or adult insects overwintering in old tree stumps, in rotten bark, under fallen leaves, or right under the ground you walk on.

When you're finished looking for insects in the cold of the outdoors, you can go inside, drink some hot chocolate, and look for insects and arthropods right in your own house. Look in corners, house plants, stacks of old newspapers, recycling bins, piles of firewood, and cabinets; you just might find a new roommate! However, many of these roommates are considered to be pests. They spoil food and damage property such as clothing, so if you find these insects inside your home, you should tell your parents.

Few insects have proved themselves a more persistent and unwanted houseguest than the ant (pictured to the right). These social insects live in colonies, or large groups, in the ground, or in the foundations and walls of buildings. A colony contains numerous female workers that cannot lay eggs, a queen who is the only female that lays eggs, and during part of the year, a few males.



Some of the ants you may find in your home are female workers, gathering food for the colony and its queen. When an ant searches for food, it makes a trail for the other ants to follow by laying down a scent from its abdomen. That is why you usually see ants in a line. They are following the trail of the first ant.

Clothes moths (pictured to the right) are small insects, less than 1-inch wide with their wings open, that live in and around clothing. You may find them inside drawers of clothing and in closets. The adults range in color, but are usually white, cream, light brown, or gray. The larva, or caterpillar eats fabrics that are made from animals, such as angora, cashmere, and wool. Some even eat the feathers in down pillows. You can sometimes find the larvae inside tiny silk cases attached to clothing.



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During the winter, or at any time of the year, and no matter how hard people would like to, we cannot forget about cockroaches! (pictured to the right) No one likes to see these brown, shiny, flat-bodied creatures scurrying around the house, and you need a lot of luck to eliminate them completely. Cockroaches boast a long and impressive history. They have been around for 350 million years and are among the earliest of all insects. Fortunately, the cockroach has changed since those times. A standard pre-historic cockroach was 6 inches long!



In the United States, five or six species of the cockroach are common. They are mainly nocturnal, which means they are active at night. They feed on a wide variety of plant and animal products. They prefer high temperatures and humidity and they have a low tolerance for the cold. This is unfortunate for the humans, who wind up acting as unwilling landlords to those cockroaches during the winter.

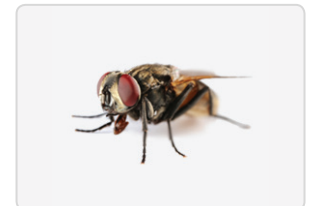
Another insect that can be found indoors is the house cricket, (pictured to the right) considered a pest only because of the chirping noises the male makes at night when calling on a female house cricket. It is brown and grows up to be one-inch long. Like the cockroach, the house cricket is mainly nocturnal, preferring warm places where they can obtain moisture and food such as animal products, plant materials, and other insects. It typically overwinters in fireplaces and kitchens, or near water heaters and furnaces.



Because of the frightful appearance of their pincer-like cerci, (hairy appendages at the ends of their abdomens) that the insects use for hearing, earwigs (pictured to the right) may unsettle homeowners when discovered indoors. Luckily, these creatures live most of their lives outside. Earwigs overwinter as either eggs or adults, and the adults will dig as deep as six feet beneath the ground to avoid the cold winter temperatures. If you find one in your home, it has probably come in search of moisture. Earwigs do not bite, but if handled, might pinch with their cerci. Watch out! The larger males can have a painful pinch.



Found mostly in the kitchen or around trash cans, is the common house fly (pictured to the right). It is present at one time or another in nearly every home in the world. In the northern United States, house flies overwinter as larvae or pupae, but in heated buildings, some adults may survive and continue to breed slowly throughout the winter. This insect has one of the shortest life cycles among the insect world: its entire life lasts only 6 to 20 days.



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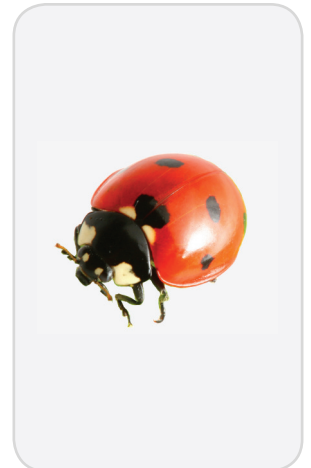




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House flies are diurnal, which means that they are generally active during the day. They also prefer direct sunlight, and can take food only in the liquid state. To eat something solid, a house fly must first drench the morsel in its saliva or in its regurgitate stomach contents to dissolve it. An interesting feat of the house fly is its ability to walk on ceilings without falling. While they do have mouth parts on their head that they use to eat with, house flies actually taste with their feet.

Did you ever see a little red and black beetle crawling along your window sill? It was probably a lady beetle or lady bird beetle or just lady bug as some people call them (**pictured to the right**). Most species of lady beetles are among our most beneficial insects as they consume huge numbers of plant feeding insects mostly aphids. This fact and their attractive appearance have contributed to the generally good opinion of them held by most people.



There are about 350 different species of lady beetles in North America, and some tend to overwinter in people's homes, at times in numbers so large that people have to suck them up in a vacuum cleaner to gather them all up. They do no harm homes, but in such large numbers, they can be a nuisance. If agitated or squashed, they may release an unpleasant-smelling, yellow fluid from their leg joints. This stops predators such as birds from eating them, but in a home, it can stain walls and fabrics.

Silverfish (**pictured to the right**), one of the few insects covered with scales, are also likely winter visitors. A uniform silvery or gray color, the silverfish prefers damp places such as basements or bathrooms. When this scaly, wingless houseguest arrives, book bindings, papers, cards, and boxes are not safe-they all make appetizing meals for this creature.



Now you know about a few of the insects that might join you during the cold days of winter. Sometimes we don't like the idea of insects sharing our space-especially if we find a small colony of ants in the kitchen!-but we have to realize insects always have been and probably always will be a part of our lives. And if you do find yourself face to face with some unwanted winter visitor, just help it along to its natural overwintering stage: catch it carefully in a jar and release it outside.

