

Household Insects

Approximately 1 million insect species have been described, more than 90,000 of them in North America. In Washington State alone there are over 35,000 species. To quote Dr. Art Antonelli of Washington State University, "We are the Ellis Island of insects with several new ones yearly." Keeping such large numbers in mind; we elected to write about only the most common insects in this article.

Although many of us consider them pests, many insects are beneficial. They pollinate plants, produce useful substances, control pest insects and act as scavengers. Furthermore, insects are valuable objects of study in explaining many aspects of biology. Much of our knowledge of genetics has been gained from fruit fly experiments and of population biology from flour beetle studies.

There are many families of fruit flies. Apple maggot flies, for instance, start out infesting the fruit as it is growing. We bring the fruit into our home and that's how we get them or they get us.

Gnat is a common name loosely applied to any biting two-winged fly. In the U.S., the term is most often used for blackflies, fungus gnats, and sandflies. Not only are indoor gnats annoying, but their larvae can cause considerable damage to seedlings and small plants.

The common housefly is an important component of the recycling process. The female lays her eggs on rotting matter and as they hatch, they feed on the rotting particles. However, they are also vectors of disease. They feed on almost any food and move about from person to food, drink, or feces. By transferring infective organisms from the skin and intestine, houseflies are agents in transmitting typhoid, dysentery, cholera, summer diarrhea in children, and other intestinal virus and bacteria-caused diseases.

There are approximately 2000 species of mosquitoes ranging from the tropics to the Arctic Circle. Female mosquitoes have hypodermic mouthparts, which enable them to pierce the skin and suck the blood of mammals, birds, reptiles and other arthropods. This blood protein is used in egg production. The males have reduced mouthparts and feed on nectar.

The greenhouse whitefly gets into our homes via the houseplant and will quickly move from one plant to the next, covering the foliage with white specks and living on the juice of host plants like an aphid. Outdoors, they can't survive frost.

Clothes moths are weak flyers, not attracted to light and tend to hide when disturbed. For this reason, infestations are not usually noticed until the damage is found. They are about 1/4" long, whereas most food-infesting moths are 1/2" long. Females lay about 40–50 eggs in 2 to 3 weeks, then die. The larva is the damaging stage, feeding on woolens, furs, animal bristles in brushes, felts in pianos, and fish food.

The tiny granary weevil is chestnut brown or black. Females produce numerous eggs six times a year and deposit them inside the grain kernels. The flour beetle is a common pantry pest, found frequently in crackers, packaged cereals, or other dried foods.

It is only the carpet beetle larva that causes damage by feeding on items primarily of animal origin. They will also attack other materials, such as cotton and synthetic fibers, if these fabrics are soiled with human perspiration, body oils, beer, milk, or fruit juice. Some carpet beetles may become "pantry pests" by invading cereal grain products and nuts. The larder beetle is oval, black or brown with yellowish bands and dark spots. It feeds on cheese and dried meats.

The silverfish has vestigial legs in addition to the usual six. It is among the most primitive of all animals. Also known as "sugar mites", silverfish feed on starchy materials such as foods in kitchen pantries and the glue in bookbinding and wallpaper.

Termites live in colonies ranging in size from several hundred to several million individuals. Many species of termites have a caste system, consisting of reproductive individuals, workers and soldiers. In many species, egg production may approach 30,000 eggs per day.

There are over 8,000 species in the ant family. They occur worldwide, but are especially common in hot climates. Ants range in size from 2 to about 25 mm and are social insects, living in organized colonies.

The little black ant and its close relative, the pharaoh ant, infest households in the United States. Various species of ant are common intruders in and around dwellings. Colonies of this structural pest usually gnaw out the galleries and chambers of their nests in wood initially infested by beetles.

Mites and ticks, although not true insects, are distributed throughout the world in almost every conceivable habitat, including deep in the ocean and drifting high in the atmosphere. They surpass all other arthropods (except mosquitoes) in the number of diseases they transmit to humans, domesticated animals, and crops.

The dust mite lives in our homes, feeding on the dust produced by our skin. They are not harmful in themselves, but their droppings, which contain leftover digestive enzymes, are a significant cause of allergic diseases. Among other common mites are chiggers, the itch mite and the so-called red spiders, which spin spider-like webs and feed on the undersides of leaves.

The most common itch mite is a round, pearly white arachnid. It burrows into sensitive folds of the skin, but often spreads elsewhere. It lives about six weeks and lays its eggs in the burrows, with a new generation every three weeks. Intense itching begins about one month after the initial infestation and the resultant scratching may lead to secondary bacterial infections.

Scabies refers to a contagious skin disease caused by small parasites called, itch mites, infesting the out layers of skin, their waste products causing irritation. Such mites are usually transmitted by close body contact with another person, hence, scabies is particularly prevalent where crowding and unsanitary conditions prevail.

The common flea has no wings. The flea's flat body slips through the strands of a host's hair quite easily on powerful legs. Only about 0.1 inch long, the flea can jump as far as 13 inches. This strength has been harnessed

for flea "circuses", in which fleas perform trained stunts such as pulling small wagons. Fleas do carry disease from one host to the next.

The bed bug is a small wingless, reddish brown, bloodsucking insect that feeds on mammals and is also a carrier of infectious diseases. It is so named because it usually bites people in bed. Notorious pests, they can run at a surprising speed when threatened.

The body louse or cootie is found wherever humans live and is a carrier of epidemic typhus and other diseases. Larger than the head louse and ranging in color from white to brown, it usually lives in the seams of clothes and is very prolific. The eggs are laid in the person's underwear and hatch in about a week. They are transferred by direct contact, but ordinary laundry procedures will kill them, as they are heat-sensitive.

Smaller and tougher is the head louse. Its wingless, flattened body has a claw on the end of each leg that helps it cling to the hair of a host. Once a day, females lay whitish eggs, called nits, attaching them to the hair with a sticky substance until they hatch which is in about a week. Head lice are unpleasant and indiscriminating guests, passing from host to host by direct contact. They infest people who bathe often as well as those who do not, leaving itchy red spots on their host's scalps.

A book louse is any of various tiny, usually wingless, insects feeding on organic matter, especially books. The name louse is also applied to several small insects, such as the plant louse (aphid) and bark louse. The wood louse, also known as sowbug, is so called because of its superficial resemblance to a louse.

Cockroaches have been present on earth for more than 400 million years. Because they contaminate food with their excrement and secrete an unpleasant odor, which can permeate the indoor environment, these insects are considered to be one of the worst household pests. Many people develop allergies to them. Allergens present in their feces can become airborne along with normal household dust. Many of the needs of cockroaches (i.e., high humidity, warmth, and food sources) can be found in a typical home. They will readily feed on carbohydrates, but will also feed on a variety of other foods, including paints, wallpaper pastes, and book bindings.

Sources

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