

Bed Bugs



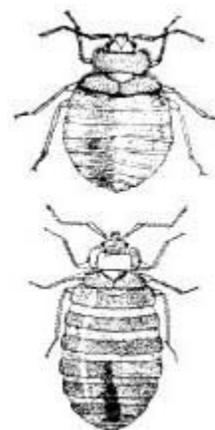
Common Name	Scientific Name
Bed Bug	<i>Cimex lectularius</i> L.
Bat Bug	<i>Cimex adjunctus</i> Barber
Swallow Bug	<i>Oeciacus vicarius</i> Horv.
European Swallow Bug	<i>Oeciacus hirundinus</i> (Jenyns)
Chimney Swift Bug	<i>Cimexopsis nychalis</i> List

Bed bugs and their relatives (bat bugs, swallow bugs and swift bugs) feed on the blood of humans, rats, guinea pigs, rabbits, bats, poultry, birds and other warmblooded animals. These insects feed mostly at night when hosts are asleep, causing small, hard, swollen, white welts on the skin that become inflamed and itch severely. An infestation can be recognized by blood stains and dark spots of excreta on sheets and mattresses, bed clothes and walls as well as a sweet, musty odor like the smell of fresh red raspberries (bed bug odor). In Ohio, bat bugs are far more common than bed bugs.

Identification

Adult bed bugs are reddish-brown to mahogany, oval-shaped, flattened and about 1/4 to 5/8 inch long. The upper body surface has a flimsy, crinkly appearance. Mouthparts are piercing-sucking, with the three-segmented proboscis (beak) fitting into a groove beneath the head extending between the front legs. The antennae have four segments, three long, thin segments and one short segment next to the head. The wings are small, oval and stubby-not

equipped for flight. The body becomes more elongate, swollen and dull red after a blood meal. Young bugs (nymphs) are nearly colorless, becoming brownish as they mature. Eggs are white, pear-shaped, with a cap at one end and about 1/32 inch long. Adult bat bugs have longer hairs (as long or longer than the eye width) on the pronotum (top platelike covering of thorax) and the wing pads are broader. Adult swallow bugs are yellowish with long body hairs. The adult chimney swift bug is about 1/8 inch long, and the beak does not reach the hind coxae (leg base).



**Mature Bed Bug
before (above) and after (below)
engorgement**

Life Cycle and Habits

Each female bed bug can lay about 200 eggs under favorable conditions of 70 degrees F and with regular feeding on blood. Three or four eggs are laid per day over two months

and are coated with a sticky substance. Often eggs and eggshells are seen singly or in clusters in crevices where bed bugs hide. Eggs hatch in 6 to 17 days or 28 days under lower temperatures. Newly hatched bed bugs feed, when possible, and molt five times before maturity. In one year, there may be three or more generations.

When bed bugs bite, they inject a fluid into the skin that assists in obtaining blood. This fluid (salivary secretion) causes the skin to become irritated and inflamed, with welts developing. No evidence indicates they spread disease. Usually a full-grown bed bug becomes engorged with blood in three to five minutes and then crawls away to a hiding place to digest the meal. It returns to seek more blood when hungry. Adult bugs may go two to eight weeks without food, or even up to a year.

Bed bugs sometimes are serious pests in animal and poultry houses or in laboratories where rabbits, rats, guinea pigs or birds are kept. Initially bed bugs can be found about tufts, seams and folds of mattresses and day bed covers, later spreading to window and door casings, pictures, posters, loosened wallpaper, cracks in plaster, baseboards and partitions. They are spread in clothing and baggage, secondhand beds or furniture, bedding, laundry and furniture. They are found in old buildings, hotels, boarding houses, theaters and other dwellings.

Bat bugs are found in attics and unused chimneys infested with bats, and swallow bugs and chimney swift bugs in homes inhabited by wild birds. In Ohio, well over 95 percent of the specimens found are bat bugs rather than bed bugs. They feed on bat blood and are common where bats roost such as in unused chimneys, attics or other uninhabited portions of the house. Bat bugs wander away from the bat's roosting area

when bats are controlled or when they leave the area. People and other animals are then bitten. Although bites are painless, some individuals are very sensitive, experiencing intense itching while others suffer little or no reaction. Bat bugs feed on all the common bats in Ohio, namely the big brown bat, little brown bat and silver haired bat. Bed bugs and their relatives apparently do not transmit human disease, but can cause nervous and digestive disorders in some individuals.

Control Measures

Bed bugs are usually discovered in unsuspected areas such as in floor cracks, under carpets, behind loose wallpaper, behind wall pictures, in old unused stoves, in stuffed chairs, in curtain seams and in bed springs. They are fast moving and usually found near the blood meal host. Look for dark spots of fecal material, bloody spots on sheets or pillowcases, cast skins, eggs, eggshells and an offensive odor. Sometimes control is difficult in homes with many cracks, crevices, loose wallpaper, etc.

Prevention

Practice sanitation by laundering bedding routinely, vacuuming the premises, repairing cracks in plaster, painting walls and ceiling, rearranging furniture, and carefully inspecting clothing and baggage of travelers, if practical. Inspect secondhand beds, bedding and furniture. Caulk cracks and crevices and repair openings to eliminate bats and wild birds from the building.



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