

Bed Bugs

Cimex lectularius
J.D. Young



Figure 1. Bed Bug

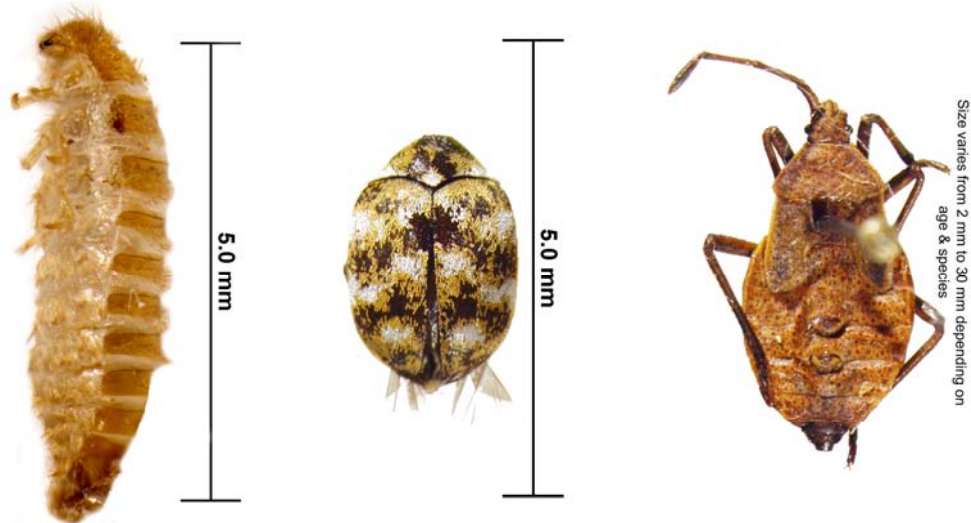
Until recently bed bugs were largely considered to be eradicated from North America. A nationwide project in the 1940's & 50's promoted the use of pesticides in homes and businesses to eradicate this pest. While the project was a success, increased international travel and the bed bug's resistance to many pesticides is allowing this pest to gain a foothold in the US.

Like a blood-feeding mosquito, bed bugs stab their victims with their straw-like mouthparts, inject an anticoagulant and leave an itchy wound. Also like mosquitoes, individuals react differently to the bites of this pest. Some people experience large swollen bumps while another person sleeping in the same room has virtually no reaction. Luckily this pest is not known to transmit any human diseases so long-term health issues are of little concern.

Controlling this pest begins with having the pest correctly identified. The majority of people born in the US after 1950 have never seen this pest. One thing that should be remembered is that bed bugs can go without feeding for up to 35 days so it is not advisable to simply close off a room and wait. These insects are active and will literally go looking for a warm meal. Several insecticides are registered in Oregon for homeowners to use to control bed bugs, however because of this pest's tenacity and ability to hide. Due to this it is recommended that you leave this job to the professionals. Historically, bed bugs developed resistance to different insecticides quickly so it is possible that the products currently available for homeowners may not work in the near future. If you decide to attempt eradication of this pest yourself and find live insects 1-2 days after spraying an insecticide you may want to consider contacting a professional. Professional applicators should have experience with this pest and have twice as many products available for bed bug eradication. The main benefit of using a pest management professional

(PMP) is that his training has prepared him to effectively inspect and treat for bed bugs. Because bed bugs are cryptic insects, locating their hiding places is crucial to effective suppression.

There are a couple of non-chemical options available for controlling this pest: high temperature steam cleaning or freezing. Both options can efficiently control this pest when used properly. Trapping bed bugs is a relatively new idea and several companies have traps for monitoring/capturing this pest. Much like the propane mosquito traps, the bed bug traps use heat and carbon dioxide (CO₂) to attract and capture the pest into an easily emptied container. These monitoring devices can be used alone to monitor or reduce populations or in conjunction with steam, freezing or insecticide applications as part of a management program.



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Figure 2. Insects that are commonly misidentified as bed bugs. Left to right: moult of a larval dermestid/carpet beetle, Adult Carpet Beetle, immature True Bug (note lack of hair and different shape of the antenna)

Things to look for

- Small trails of dried blood droplets
- Accumulation of red-brown stains in the cracks and seams of furniture and bedding.
- Moults (shed skins) of the insects, typically translucent and yellow-brown. Be careful to not mistake moults from carpet beetles as those of bed bugs (see Fig. 2).
- Bed bugs are most active at night. If you suspect an infestation, a quick inexpensive (however not foolproof) method for testing for bed bugs can be performed by placing a plastic soda bottle filled with hot tap water in the bed of a darkened room for 1-2 hours. If there is a large population of bed bugs in the room, they will be attracted to the heat given off by the bottle.

Where to look

- In the cording around a mattress
- In furniture: the cracks where the side rails and cross braces attach to the headboard, the underside of drawers, and inside recessed screw holes.
- Behind electrical and telephone outlet covers
- In/under electrical devices kept near the bed (alarm clocks, lamps, telephones, *etc.*).

Things to do help prevent the introduction of bed bugs into the home

- If purchasing second-hand furniture (mattress, box spring, couch, upholstered chairs, *etc.*) check all of the surfaces for evidence of bed bugs, including in recessed screw holes, fabric seams and along zippers.
- When first checking into a hotel, motel, or B&B inspect the linens and bed area for signs of bed bugs before placing items on the bed or unpacking.
- When traveling, keep your luggage away from the bed (especially at night).

Misconceptions

- Bed bugs do not have nests like bees or ants; however, they do tend to cluster during the day.
- Bed bugs do not infest people - they infest items.
- Bed bugs are not discouraged by insect repellants (i.e. DEET).

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