

Bessbug



Bessbug Care

- Bessbugs (short-horned stag beetles, *Odontotaenius disjunctus* or *Passalus cornutus*) live happily in captivity when they are provided with damp, slightly decaying wood, which they eat. They prefer oak (any species) but will also thrive on elm. They like to burrow in and under slightly damp wood and paper.
- Your beetles arrived with a generous supply of wood packed under a wet paper towel. The wood will last several weeks. The paper towel must be kept moist. Use a spray bottle to dampen without soaking.
- If you move your beetles to a larger habitat, be sure to keep it humid. You may want to use a kitchen sponge instead of a paper towel. Bessbugs will thrive in a terrarium “mulched” with sawdust or small chips of oak or elm. They are happiest when hidden in a woody burrow.
- You can collect slightly rotting wood from a forest floor or wood pile. “Slightly rotting” is generally indicated by flaking, loose bark, “sawdust” and softness, which indicate that bacteria (harmless to humans) have attacked a fallen branch or tree.

Simple Experiment

- Bessbugs are not discouraged by big pieces of wood. If you find a large chunk—for example, a fallen branch or a split log from your wood pile—you might like to try an experiment. Will your bessbugs eat their way into the log? Do they prefer a whole log to their original wood chips?
- Sometime during the school year or over the summer, your bessbugs will die of old age. Like all insects, their lives are short.

Safety Tips for Handling Bessbugs

- Bessbugs don’t bite, but sometimes they might pinch a little when they are afraid. Handle them gently! Bessbugs travel slowly. Wash your hands before and after handling bessbugs, for your safety and for theirs. Lift bugs by their abdomens (back section). To keep them from running off, lay bugs belly up in a shallow box. Be gentle. Don’t rush.

A Beetle Mystery

- *Materials:* A bessbug—and a magnifying glass.
- Review the basic definition of an insect: an air-breathing animal with 2 antennae, 6 legs and three main body parts—head, thorax and abdomen.
- Remove a bessbug from its container and take a close look at it. Where is the thorax? Where is the abdomen? Are you sure?
- Do you know that in all insects, the six legs grow out of the thorax? Now where do you think the thorax and abdomen are? Turn your bessbug over onto its back. Locate the base of each leg.
- Now answer the questions: Where is the thorax? Where is the abdomen?

The Mystery Explained!

- When the bessbug is standing right side up, you see what might appear to be head, thorax and abdomen. Actually, these parts are the head, pronotum and elytra.
- The pronotum is a hard covering that protects the second and third segments of the thorax. You can see the segments of the thorax from the underside of your bessbug.
- The elytra are two leathery forewings. They hide and protect a pair of fragile hind wings. Elytra and hind wings grow from the thorax. A single forewing is called an elytrum. All beetles have two elytra.
- To locate the bessbug’s abdomen, turn it over and look for a division behind the third pair of legs. In this beetle species, the abdomen is much shorter than the thorax.
- Here is the definition of beetle: an insect with (1) a complete metamorphosis and (2) elytra. These two facts set beetles apart from all other insects and from all other animals.
- The next time you find a ladybug, also called a lady beetle, you might want to examine it to see if you can locate its head (tiny!), thorax and abdomen, pronotum, elytra and hind wings.



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