

# What Do You Know About Beetles?

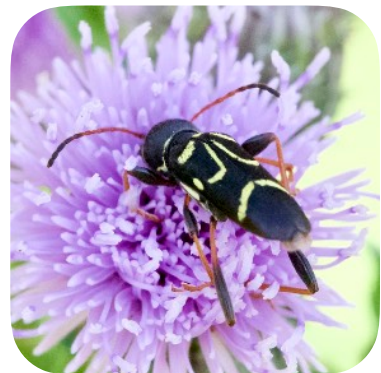
1. Beetles are probably the oldest insect pollinators. *Yes or No*
2. Beetles visit flowers mainly for pollen, not nectar. *Yes or No*
3. Beetles prefer white/dull white or greenish flowers. *Yes or No*
4. Beetles find food mainly by smell. *Yes or No*
5. Beetle-pollinated plants evolved to have thicker flowers and leaves. *Yes or No*
6. Beetles make up about 25% of all known species of animals on the earth. *Yes or No*
7. Unlike pollen baskets on honey bees, beetles lack special structures for transferring pollen. *Yes or No*



Longhorned  
Flower Beetle

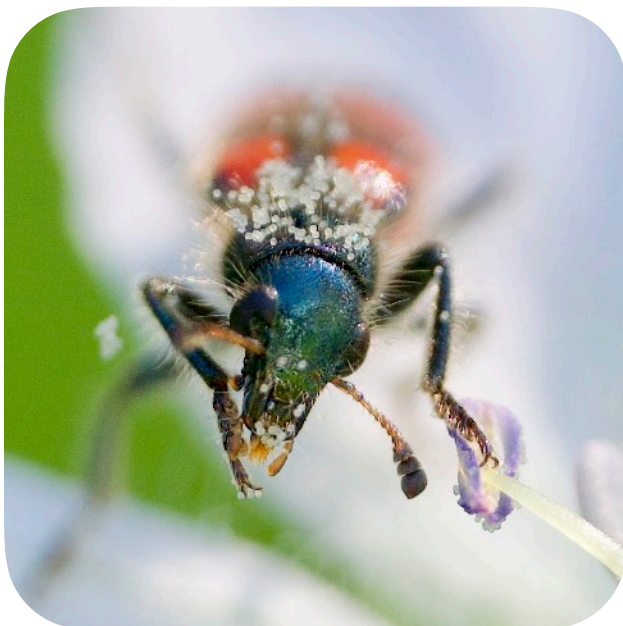


Who said beetles aren't  
cute?



Round-necked  
Longhorned Beetle

1. **YES: Beetles are probably the oldest insect pollinators.**  
They were abundant when dinosaurs roamed the earth and helped shape insect-plant pollinator relationships. Beetles began pollinating flowers about 150 million years ago. Bees are latecomers—they didn't appear until about 50 million years ago.
2. **YES: Beetles visit flowers mainly for pollen, not nectar.**  
Beetles come to bulk up on pollen which is much richer in protein and fat than nectar which is mainly sugar (25-75%), amino acids and lipids.
3. **YES: Beetles prefer white/dull white or greenish flowers.**  
While they prefer these colours, they go where the food is—such as bright yellow dandelions.
4. **YES: Beetles find food mainly by smell.**  
Beetles can see colours but they depend mainly on smell to find food. Some flowers they visit have no smell but many are strongly fruity, spicy or fetid.
5. **YES: Beetle-pollinated plants evolved to have thicker flowers and leaves.**  
Beetles can cause a lot of damage because of their weight and their feeding habits—they're often called *mess and soil* pollinators for this reason. While they're gobbling pollen they may dine on flower petals and other plant tissues. They also poop on the flowers. Obviously not house-broken.
6. **YES: Beetles make up about 25% of all known species of animals on the earth.**  
There are more species of beetles than any other known group of animals. Beetles make up about 40% of all known insects.



7. **YES: Unlike pollen baskets on honey bees, beetles lack special structures for transferring pollen.**

Flower-pollinating beetles, like Nuttall's Checkered Beetle, have hairy bodies. Pollen grains stick to the hairs and are carried to the next flower the beetle visits.