

# Meet the Beetles

By Valerie Jean Rose

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## ‘Let It Be’ beetles

Everybody knows the Beatles, right? John, Paul, George and Ringo—the Fab Four—over 350,000 species of insects worldwide. Wait, that’s the BEETLES, the most common type of insect. About 40% of the world’s known insects are beetles! You could say they are “Here, There and Everywhere”—which is also the title of one of the BEATLES’ many songs. There are at least 11 song titles in this column. Can you find them?

Back to the BEETLES. In the language of scientific classification, beetles are in the order Coleoptera, from the Greek words for “sheathed wing.” Most adult beetles have two pairs of wings: a hardened, shell-like front pair, protecting the rear wings and the back of the beetle’s body. Perhaps the most widely known beetle is commonly called a “Lady Bug.” But according to Lloyd Eighme, PhD., Skagit County insect expert, it should really be called a Lady Beetle.

Dr. Eighme is not your average paperback writer. He is a retired professor of entomology, and author of *Insects of Skagit County*, a unique guide to the six-legged creatures who fly, crawl and climb through our exquisite region. In his guidebook, Dr. Eighme observed, “Like many other common insect names, ladybug is a taxonomic error because this insect is a beetle, not a bug, but we call it a ladybug anyway, because that is the name most people know.” To an entomologist, a “true bug” has mouthparts to pierce and suck juices from plants and animals.



**LEFT:** One of our native Lady beetles, the Western Blood-red – *Cycloneda polita*, has spots on its face, but not on its back. It’s also tiny, almost half the size of the other Lady beetles. **Photo by Christine Farrow/WSU Skagit County Master Gardener** **RIGHT:** If you see these tiny ladybeetle larvae feeding on the underside of leaves, rejoice. They hungrily eat all the aphids they can find. **Photo by Virgene Link/WSU Skagit County Master Gardener**

“While adult lady beetles do eat aphids, they do not eat as many as their hungry, rapidly growing larvae,” added Dr. Eighme. “Unfortunately, most people do not recognize the ugly larvae as even related to lady beetles, and they often destroy them, thinking they are a dangerous pest.” If lady beetle larvae could talk they would say, “Help! I need you!” In their formative stages, lady beetles are often killed when they are mistaken for pests. While most adult lady beetles are red, babies are black. It is only when the adult lady beetles emerge from their pupae that people finally recognize them as their friends. Please be a lady beetle advocate by sharing this information with friends and neighbors!

Do you want to know a secret about those shiny black beetles in your garden? The ones you find under clumps of grass or dirt. Commonly known as ground beetles (Carabidae), these insects feast on caterpillars, insect eggs and larvae, every little thing they can get in their pincers. Most people don't realize that ground beetles even eat caterpillars, slugs and snails! But they are not selective, also eating beneficial insects and balancing the population's food web. After a hard day's night hunting slugs, ground beetles seek a damp, dark home. In my life, there's never enough time to remove all the patches of weeds and clumps of leaves, so ground beetles will always find a place in my garden.

The handsome fungus beetle (Endomychidae) doesn't really live up to its first name. To me it just looks like another hard-shelled insect. “Fungus beetles obviously feed on fungus,” remarked Dr. Eighme. “But why ‘handsome’ is not clear.” Some are picky eaters, consuming only one kind of fungus, but most feed on a variety of fungi.

Click beetles (Elateridae) are named after this insect's ingenious ability to turn right-side up after being turned on its back. “A spine on the underside of the body fits in a tight groove,” explained Dr. Eighme, “and when the front part of the body is forced back, the spine snaps (clicks) out of the groove with enough force to flip the beetle into the air, so it will come down right side up.” Unfortunately, some click beetle larvae feed on roots and tubers, damaging crops such as potatoes.



**Left:** With its huge horn, the Rhinoceros beetle – *Sinodendron rugosum* – has a fierce appearance but it won't harm you. If the adult eats at all it may be just a taste of honeydew ; the sticky waste substance that aphids leave behind. **Center:** They may not call him “Mr. Moonlight” but when the Predaceous Diving beetle , *Dytiscus hatchi*, emerges from a pond at night to fly in search of a new body of water, it will often be attracted to a light source such as a porch light or a kitchen window. **Right:** One of the showiest of our native insects, the Banded Alder Borer- *Rosalia funebris*- helps to break down dead wood in the forest. You might spot them in piles of drying firewood. **All three photos by Christine Farrow/WSU Skagit County Master Gardener**

Predaceous diving beetles (Dytiscidae) live in creeks and ponds. Dr. Eighme explained, “The larvae are called water tigers because they attack and eat anything they can overpower, including tadpoles and minnows.” The larvae breathe through gills, but adults carry air trapped between their folded wings and their bodies. “They come to the surface periodically to get a fresh supply of air,” he said.

Thank goodness for carrion beetles (Silphidae) and dung beetles! You may not want to invite them to a potluck, but without them the planet would be smothered in poop and carcasses. Dung beetles roll small pieces of feces into tiny balls for later consumption—a kind of moveable feast. Researchers at North Carolina State University found that dung beetles benefit ranchers by competing with flies for food and nesting habitat, resulting in fewer flies. The tunneling varieties of dung beetles aerate soil while adding organic matter. Dung beetles are in the Scarabaeidae family, and some varieties are called scarabs. In ancient Egypt the scarab beetle enjoyed sacred status, symbolizing transformation and metamorphosis.

You have now met a few of the myriad variety of beetles who call Skagit County home. None will hurt you, and some are beneficial, and anything that eats slugs is always welcome in my garden. Don't be like the fool on the hill, who panics and poisons insects out of ignorance and fear. Next time you encounter a beetle, remember these words of wisdom: Let it be.

### **Skagit County Master Gardener Plant Clinics:**

#### **Burlington:**

WSU Skagit County Extension Office, 11768 Westar Lane, Suite A;  
Wednesdays, 10 am-2 pm, April through October.

#### **Anacortes:**

Anacortes Senior Center, 1701 - 22nd St.; Thursdays, 9 am-12 noon,  
April through September.

### **RESOURCES:**

- *Insects of Skagit County*, Lloyd Eighme, available at WSU Skagit County Extension (360) 428-4270 ext. 0.