## The Ground Beetle

While working in your garden have you ever turned over a rock and raked up some wet leaves and been startled to see a big, black beetle scurry away? Faster than a speeding bullet? Yes, it is "Super Insect." Master Gardeners are often asked, "What is that big insect?" The happy answer is that he is one of the good guys in your garden. A very ferocious looking fellow with a shiny blue-black, purple, or dark metallic green body with long legs and long antennae on the top of its head. It has large powerful jaws for chewing and large compound eyes. In fact everything about this beetle is large.

It goes by equally ferocious-sounding names: caterpillar hunter (<u>Calosoma scrutator</u>) or snail eater (<u>Scaphinotus marginatus</u>) and it's close relative of the tiger beetle (<u>Cicindela Formosa</u>). As these names suggest this beetle, commonly called the ground beetle, is a predator of many other kinds of insects. They are random hunters, roaming at night eating any suitable life form they come upon including cut worm larvae, slug and snail eggs and young. Ground beetles are not discriminating feeders. If they encounter an occasional earthworm it is devoured as well. They burrow under rocks, leaf mold, or any dark damp place by day and come out to hunt again after dark.

The adults deposit their eggs one at a time under garden debris in the spring. The larvae grow for a year before they pupate and emerge as adults. They live in the soil and are seldom seen, but they will eat almost any insect or insect egg they meet. Since it is a growing youngster, the larva needs twice as much food as the adult to sustain it. The larva does not look like the adult beetle. It has short legs and elongated bodies and powerful chewing mouth parts. Like the adult the larva is a nocturnal hunter.

Actually, ground beetles are not all super sized. They range from one quarter inch long to over an inch long. There are thousands of different species of this insect found in the United States and Canada. This is certainly one of the creatures you want to encourage in your garden. It would be wise to familiarize yourself with it and take steps to protect it from insecticides and unnecessary chemicals.

The WSU Master Gardener insect collection, which is housed at the WSU Skagit County Extension office, has a dozen or more different identified ground beetle species from this area. Ask to see them the next time you are in the office. Also ask for the bulletin number PNW 343 which has a picture not only of the adult ground beetle, but many other beneficial insects you should know about.

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