## **Harvester Ants**

Scientific Names: Pogonomyrmex occidentalis (Cresson) (western harvester ant); Pogonomyrmex rugulosus Emery (rough harvester ant)

Order: Hymenoptera (Bees, Ants, Wasps,

Sawflies, etc.)

Family: Formicidae (Ants)



**Figure 1.** Western harvester ant workers at nest entrance

## **Identification and Descriptive Features:**

Workers of harvester ants are moderately large (5-7 mm) reddish-brown ants. The western harvester ant is an overall reddish brown, whereas the head and thorax of the rough harvester ant



Figure 2. Mound of rough harvester ant.

Figure 3. Workers of the rough harvester ant.

is black. The ants are usually observed near their very characteristic mounds, which are broad and flat with an extensive area around them cleared of vegetation.

**Distribution in Colorado:** Harvester ants are grassland species found in open areas. Within the state they are particularly common on the eastern Plains, but also are present in the San Luis Valley and in the grassland areas of western Colorado. The distribution of the rough harvester ant is more restricted within the state, being found primarily in southeastern Colorado.

Life History and Habits: Harvester ants are primarily seed feeders although they will sometimes collect dead insects. Their relatively large heads provide the powerful jaws needed to crack seeds and brushy hairs of the front of the head are useful for carrying food and other materials.

Harvester ants construct large, highly visible mounds over the network of below ground tunnels that is used by the colony. The mounds often have incorporated into

them small pebbles that the ants have excavated and the vegetation around the edge of the nest is cleared. The mound, surface covering materials and cleared area that prevents shading all help to warm the nest. Most often the main nest entrance is located so it orients to the southwest.

Mating swarms of the winged reproductive stages (males, potential queens) occur in summer, usually a few days following a heavy rain. They usually orient to prominent features of the landscape (hilltopping) and masses of winged ants sometimes have been observed atop tall buildings, over farmhouses, and even farm equipment in an open field. Mating balls of ants have sometimes been reported falling down chimneys during these mating flights. The males die



Figure 4. Winged western harvester ants in mating balls.



**Figure 5**. Newly mated rough harvester ant queen excavating new nest.

within 24 hours following their emergence from the colony to flight, but the newly mated female will subsequently begin to attempt establishment of a new colony, breaking off her wings and using the flight muscles to sustain her. If successful, she may live a decade or more during which time the size of the colony may continue to grow.

If their nests are directly disturbed, harvester ants will vigorously defend the mound and are capable of very painful stings. However, their stinger is relatively short and can not penetrate thicker areas of skin.

**Special Note:** Harvester ant workers can live for a long time and can easily be maintained in captivity. Because of this they have long been used for as the species to inhabit "Uncle Milton's Ant Farm", a long-time novelty product sold to children.