# Harvester Ants

Species: occidentalis Genus: Pogonomyrmex Family: Formicidae Order: Hymenoptera Class: Insecta Phylum: Arthropoda Kingdom: Animalia



### **Conditions for Customer Ownership**

We hold permits allowing us to transport these organisms. To access permit conditions, click here.

Never purchase living specimens without having a disposition strategy in place.

- Queens are prohibited from being transported by the USDA.
- A USDA permit is needed to send harvester ants into different states.
- In order to protect our environment, never release a live laboratory organism into the wild.

# **Primary Hazard Considerations**

**DO NOT TOUCH! ANTS WILL BITE AND INFLICT A PAINFUL STING.** If you are stung, apply ice to the area until the swelling goes down. The bite is much like a bee sting, so if you are stung and are allergic to bees please call your physician or go to the emergency room. If pain and swelling do not subside or get worse, call your physician or 911. Handle without making direct contact. The best method of placing the ants into the ant farm is to invert the tube directly into the ant farm opening. Handling the ants outside of the habitat isn't recommended. Ants can be placed in the refrigerator for a few minutes, so that they are slower and easier to handle.

# Availability

• Available most of the year, they are wild-collected from Utah. Therefore, there may be shortages during the winter months due to cold weather. The ants will arrive in small plastic tubes. We over-pack each order of ants. It is normal to have some deceased ants in the container. You will receive at least the quantity of live ants stated on the container. The ants can stay in the tubes for no more than 3 or 4 hours. If their arrival is during cold weather they might look lifeless, but will liven up a few hours after reaching room temperature. They will be red to dark brown in color and will be <sup>1</sup>/<sub>4</sub>" to <sup>1</sup>/<sub>2</sub>" in length.

### **Captive Care**

Habitat:

- Container and habitat requirements: An <u>Ant Farm 14 W 7525</u> or an <u>Ant Nest 14 W 7520</u> is the ideal habitat for your ants. Students will be able to easily observe the ant's constant tunneling. Specialized substrate may be supplied with the habitat or you can substitute local garden soil.
- You may also keep your ants in a plastic container with a lid, or a small terrarium. Use soil or sand as a substrate.

#### Care:

Place a wet cotton ball in the habitat for drinking water, and replace it every couple of days. Small slices of apples are another water source for the ants. The ants will eat food such as small pieces of hard-boiled eggs, cracker crumbs, candy, or a small dab of peanut butter. Feed your ants about once a week. A good rule to follow is to feed them a small amount and see if they eat it within a week. If they don't eat it, it is too much food. If they eat the food within a few days, it is too little food. If they don't consume the food, remove it before it gets moldy and replace with fresh food. Do not overfeed your ants. Remove dead ants when found.



### Information

- Method of reproduction: Sexual, but most are sterile, non-reproducing members of a colony called workers. The winged, reproductive females mate with the winged reproductive males away from their colony. The male dies after reproduction and the female lands on the ground to lay her eggs. The female will shed her wings and become the reproductive queen of a new colony. There is only one queen per colony and she produces all of the worker ants in the colony. Since the USDA prohibits the importation of queen harvester ants there will not be one in the colony that you receive. In a colony of harvester ants there are three main roles: the queen, who produces all of the worker ants; the worker ants, which are all sterile females; and the males, which only serve the purpose of mating and then die.
- Determining sex: All of the ants you receive will be female—sterile worker ants. The queen ants look like the other ants, but they are larger than the other ants. Male ants have wings and only live two weeks in order to reproduce.

# Life Cycle

The eggs hatch into white larvae, which pupate and emerge as adult ants. The whole transformation from egg to adult can takes about three months. The queen continues to produce more worker ants and her and the colony can last up to 12 years. Adult or worker ants only live about one to three months. After three to six years of producing worker ants, the queen ant finally starts producing reproductive ants, which have wings and fly away to start their new colonies. The amount and quality of food, temperature and hormones produced by workers and queen determine whether a female becomes a worker ant or a queen.

### Wild Habitat

Harvester ants live in southwestern states in the U.S., such as Utah, Texas, California, and Florida, mainly in prairies and grasslands. They are also located in Mexico, Canada, and parts of South America. In the wild, they are foragers and collect seeds and dead insects, which they store in their nests and consume later. Their colonies form flat and broad mounds. They are often barren of grass and there are often small pebbles that surround the hole. Their main predators are the Texas horned lizard, imported red fire ants and wasps.

### Disposition

- Do not release this organism into the environment.
- Adoption is the preferred disposition for any living animal.
- If the insects must be euthanized at the end of study, follow one of these procedures:
  - Put them into a container or bag and freeze for 48 hours.
  - Place the organism in 70% isopropyl alcohol for 24 hours.
  - Autoclave the organism @ 121°C for 15 minutes.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead insects should be handled as little as possible or with gloves, wrapped in an opaque plastic bag that is sealed (tied tightly) before being placed in a general garbage container away from students.



© 2008 Ward's Science. All rights reserved. Rev. 9/08, 11/09, 3/13