

Note: Choose a different activity if ground is dry OR moisten ground at least an hour before the hike.

Supplies:

- 1 Larger shovel
- 3 large green mats
- Wagon
- Bucket of small shovels
- Bucket of gloves
- Paper towels
- Spray bottle filled with water
- Observation instructions

Instructions:

1. **OPTIONAL:** Prior to this hike, ask if the teacher would like a "worm hotel" for the students to observe in the classroom for a week. If so, see one of the following resources for instructions (books are in the Habitat section of the Hilton library):

http://www.stemmom.org/2012/10/building-earthworm-home.html

My First Nature Book, page 40

Ecology for Every Kid, page 17

- 2. Gather the hikers around the grade level gardens (4 small gardens around the circular herb garden).
- 3. Use the large shovel to pull the mulch to one side of each garden. You may want to do this shortly before the hike. The children can use the small shovels for their worm hunt where the dirt is exposed. The large green mats in the shed can be used for the students to kneel on.
- 4. Explain that worms are fragile animals and can be hurt easily, so they must be handled gently. As the students search for worms, ask them to comment on anything interesting they find in the soil. What do they see when they look closely?
- 5. Any worms found can be placed in the wagon **on a wet paper towel** for observation.

- 6. Please return the worms to the soil, fill any holes and replace the mulch before leaving the area.
- 7. Refill bird feeders and remove weeds/litter as time allows. Plant material may be discarded in the woods.
- 8. You may want to offer small prizes for things like longest worm, largest weed, weirdest thing found in the dirt, etc.
- 9. Comments and photos for use on the Habitat website may be sent to the Habitat chairperson.

Please feel free to offer suggestions for improving this activity.



Ask the children why they think the worms are on a wet paper towel. Then explain that worms "breathe" oxygen through their wet skin, so they must be kept moist at all times. Mist the worms as needed.

Find the **anterior** or head end, which is more pointed and narrow. Worms usually travel forward but are able to move backward as well.

Look for the hair-like bristles called **setae** (pronounced SET tay) around or under the worm's body. Worms use their setae to help crawl and also to grip and anchor themselves firmly in the ground. (That's why you see robins tugging to get worms out of the soil!) Are setae paired? How are they spaced around the body? What differences in setae patterns do you see?

Look at the top **(dorsal)** and belly **(ventral)** side. Try turning the worms. A worm turned over will immediately right itself.

Notice each worm's color: brownish, reddish, gray-blue, pale or white. **Pigmented** worm species live at or near the surface of the soil in organic matter such as leaf litter or compost piles, but they may also burrow very deeply. **Nonpigmented** worms live and feed in the soil, not at the surface. The litter-dwelling species help the soil-dwelling species because they work the organic matter into the soil where the soil-dwellers can eat it.

Compare each worm's movements on wet and dry surfaces and its response to water, touch and darkness.