



Bug Picking - Is Your Creek Polluted?



Have you ever noticed the many small animals such as insects, snails, and worms that live on the rocks and roots at the bottom of creeks, rivers, ponds, and lakes? Some of these small aquatic animals are very sensitive to changes in the water and will die if the water becomes polluted. By looking for and recognizing the different types of aquatic animals in aquatic environments, you can begin investigating the water quality of those environments.

Equipment: safe footwear for wading, forceps, magnifiers, small aquatic nets, pipettes, Bug Picking Data Sheet, pencils and shallow pans for holding specimens

Directions:

1. Wade into shallow water, turning over rocks, looking for aquatic animals ("bugs"). Replace rocks where you found them after you inspect them.
2. Place each "bug" you find in a specimen pan and begin to divide them into different types and groups according to the Bug Picking Data Sheet. (Water in the pans will keep them alive while you take data.)
3. On the Bug Picking Data Sheet, put a tally mark next to the picture that matches each aquatic animal you find. Gently return the animals to the water.
4. Look at the 3 different groups of aquatic animals you found in the water. To determine if your water **might** be polluted, answer these questions or circle the correct response.

- Did you find animals that are pollution sensitive?

None 1-3 species More than 3 species

- Did you find animals that are somewhat sensitive?

None 1-3 species More than 3 species

- Did you find animals that are tolerant of pollution?

None 1-3 species More than 3 species

- What could be happening upstream or on land around the water to affect the water quality where you are sampling?

This water appears to be (circle one): **Not Polluted** **OK** **Polluted**

I am basing this hypothesis (guess) on:
