

Pony Pasture Biotic Water Quality Testing

Biotic Water Quality Curriculum (Teacher Key)

1. What does the term Biotic mean?

Bio – means life. Describes living or once living organisms components in a ecosystem.

2. Can you name two different examples of Biotic organisms that would be found in a river?

Examples include Fish, turtles, plants, macroinvertebrates,

3. What does the term Abiotic Mean?

Nonliving physical and chemical attributes of an ecosystem.

4. What are two examples of Abiotic components of a river ecosystem?

Dissolved Oxygen, Temperature, pH, Nitrates, Turbidity of water

5. Name and describe the two ways we can collect macroinvertebrates from a river?

D-net = D shaped net with a long pole to scoop up aquatic insects from rocks and plants in the river.

Kick-sein net = net with 2 poles, hold net in current have a person agitate the water above the net, organisms float into the kick-sein net.

6. Describe how a dichotomous key works and how it eliminates chooses?

A dichotomous key goals is to help user identify an organism. Dichotomous keys work by asking a series of questions and each answer eliminates certain chooses.

7. What is the goal for calculating a “Water Quality Index Score”? What does it tell us?

The goal is to identify if the water is in good or poor quality. By identifying what macroinvertebrates live in the water helps us identify if the water in good or poor condition.