Purpose: To explore representative pond life and understand pond ecosystems.

Materials: plastic container, plastic spoon, hand lens or microscope

Procedure:

1. Use the plastic container to get some pond water from the bucket/pond container.

2. Let the pond water settle in your container.

3. Look for shapes and movements in your representative pond. Compare what you see with the Pond Key attached to this lab, or with materials found at the web links from the Pond section of the Science Research class page.

4. Select at least 4 different organisms, including at least 1 plant or algae, and consider the following questions:

> a) What is it? (classification)
> b) With which structures does the organism respire? (gas exchange)
> c) What does the organism consume? (nutrititon)
> d) Where in the pond would you expect to find this organism? (bottom, surface, clinging to plants)
> e) Where in the food chain is the organism? (producer, primary consumer, secondary consumer, predator, prey, etc.)

5. Complete the table on page 2 using your answers to the above questions.

6. What is plankton? _____

> How does a plankton net differ from other aquatic nets? _____

7. Repeat steps 1 through 5 for at least 1 of the organisms collected with the plankton net.

8. Where which pond was this water collected? _____

Biodiversity:
a) How many different kinds of organisms did the class find in this representative pond? _____

b) Were all organisms equally represented? Or were there lots of some and few of others?

_____

c) Write a few sentences describing the biodiversity of this pond. Is this what you expected?

_____

_____

_____

Step 5. Complete the table below.

Organism	Respiration	Nutrition	Location	Food Chain	Comments