## 2. WHO LIVES IN THIS POND?

Overview: The pond is home to many creatures and the students will have an opportunity to discover some of them through the eye of the microscope.

**Objective:** The students will use microscopes and hand lenses to investigate the creatures that live in the pond besides the ducks, geese and fish. Students will compare the water in the pond to tap water and see the difference in what lives there.

Time needed: Approximately 45 minutes.

Group Size: Any size.

Age appropriateness: 3rd grade and up.

Site: Any location at the pond.

**Background:** The pond is the home of several species of ducks, geese, and fish as well as the normal spectrum of water critters. The pond is fed from canal water and is not suitable to drink. The water in the pond is used to water the roads in the fairgrounds and so water is added as needed to keep it at its present level.

#### Materials:

Provided at the Garden
Brock microscopes
Slides, flat and bubble
Hand lenses
Clipboards
Plankton nets
Provided by the classroom teacher
Paper and pencil to record data

### Preparation:

**Pre Activity:** Students should know the basic operation of the microscope and be able to recognize what they see under it. Discuss with the class the need for water safety around the pond.

#### Procedure:

- 1. Students, working in groups, collect a water sample and place it on their slide.
- 2. Make observations of slide sample.
- 3. Using a plankton, each group should collect some plankton to observe.
- 4. Compare a sample of tap water to the pond water.
- 5. Students should also look at soil, mud, feathers, and anything else they see around the pond.

Modifications: With younger students, you may want to set up different microscopes with different samples that the students can then look at. Always stress safety and watch students around the water!!

**Extensions:** Students could record data, draw pictures, or journal what they saw and then share these back in the classroom. A pond water sample could be taken back to the class for further examination. Students could learn about mapping, measuring, estimating quantity, as well as water quality.

# **Reference List:**

Pond Life--Delta Education
Project Learning Tree
Project Aquatic Wild
Pond Life by George Reid, A Golden Nature Guide.

Time of Year: Any time.

\*\*This activity was created and tested at the Yuma Conservation Garden by Paul Myers.