CAVOC 6th Grade Spring Curriculum- Micro Odyssey (Cedric A. Vig Outdoor Classroom)

Suggested Schedule-

7:50	Homerooms		
7:55	Report to Commons, check in, board bus		
8:10	Arrive at CAVOC		
8:15	Orientation & Large Group Ropes Instruction		
8:30	Session I (90 minutes)		
10:00	Break – juice served at the lodge (15 minutes)		
10:15	Session II (90 minutes)		
11:45	Lunch (45 minutes)		
12:30	Session III (90 minutes)		
2:00	Clean Up		
2:15	Walk to bus		
2:30	Departure		
2:50	Arrive JWJHS – Commons or outside		
2:58	Dismissal		

--SESSIONS--

MO: Micro Odyssey I: Ichthyology **RO:** Ropes Course

Sessions	1	2	3
Time/team	8:30 - 10:00	10:15–11:45	12:30 - 2:00
1	MO	I	RO
2	RO	MO	I
3	I	RO	MO

Micro Odyssey (~ 90 minutes)

Objective for Unit

Students will be given the opportunity to study, collect, and identify insects that are found in this area.

Students will identify forms of microscopic life that live in water.

Students will describe how various aquatic organisms are interrelated.

Student will gain general knowledge about the terminology associated with insects.

DPI Standards for Environmental Education

A.8.2, A.8.3, A.8.4, A.8.5, B.8.3, B.8.8- Environmental Education Standards

A.8.4, B.8.3, B.8.4, C.8.1, C.8.2, C.8.3, C.8.4, C.8.5, C.8.6, C.8.10, C.8.11, F.8.1, F.8.2, F.8.3, F.8.7, F.8.8, F.8.9- Science Standards

Materials

Pond water

Hand lens

Magnifiers

Nets of fine mesh

Microscopes

Slides

Cover slips

Eyedroppers

Writing materials

Collecting jars

Charts on the parts of insects

Petri dishes

Reference books

Charts on the parts of microscopes

Worksheets

Tablespoons

Desired Location

Pond and later the shelter

Resource

Project Wild Aquatic

Background Information

When Anton Van Leeuwenhoek and Robert Hooke, the inventors of the first microscope, looked into the micro-world of stream and pond water, they were surprised to find life forms. They always saw small insects (macro insects) in the air and swimming in the water, so with the invention of the microscope it enabled them to view so much more. As time went by and more researchers gazed into this world, it became clear that there were thousands of tiny organisms that made their homes in water and elsewhere on land. Research has shown that without these microscopic life forms the entire aquatic eco-system could not function. Microorganisms are vital in the food supplies of fish, aquatic birds, reptiles, amphibians, and mammals-including humans.

The major purpose of this activity is to provide students with ways of becoming familiar with various microscopic life forms and their roles in larger-scale habitats and ecosystems.

Activity

- 1. Students are to collect samples of pond water that contain abundant microorganisms.
- 2. Students are to collect land insects.
- 3. Students are to get one teaspoon of pond water and put it into their petri dishes.
- 4. Students are to examine the water within the container from their hand lens or magnifiers.
- 5. Students are also to examine any land insects that they found using a hand lens or magnifier.
- 6. Students are to make sketches of the living things that they found.
- 7. Students are then to make slides of some of the living things in their water.
- 8. Students are to view the living things under the microscope.
- 9. Students are to sketch the living things once again from under the microscope.
- 10.Students are to note how the organisms move and how they interact
- 11. Students are to question if the organisms are predators or are they preyed upon.
- 12. Students will then identify the organisms that they saw in their pond water.
- 13. Students are to count the number of living things in their pond water.
- 14. Teacher will lead discussion on the importance of microscopic organisms in the pond water and on land.