

**4th & 5th Grade Wetland Ecology
Description of Classes
Inside/Outside, 2 – 2.5 Hours**

During this hand-on field study, students will be briefed on the different types of wetlands, three factors that make a wetland and how to explore and gather data in the wetland. Field and lab studies will include water quality testing, macro invertebrate collection and identification and plant identification. Students will determine the water quality of the wetland by analyzing and interpreting the data collected in the field. Macroinvertebrates and the biotic and abiotic factors affecting their health will be the highlighted during the lesson. Students will use appropriate materials and equipment in the collection and analyzation of data. Emphasis will be given to research, observation and data collection.



4th Grade Wetland Ecology TEKS (This is only a brief overview of TEKS covered)

The student conducts classroom and outdoor investigations. (1. A & B)

Plan and implement descriptive investigations, including asking well defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions (2.A)

Collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps (2.B)

Construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data. (2.C)

Analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured. (2.D)

The student uses critical thinking and scientific problem solving to make informed decisions: analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing. (3.A)

The student knows how to use a variety of tools, materials, equipment, and models to conduct science inquiry (4.A)

5th Grade Wetland Ecology TEKS (This is only a brief overview of the TEKS covered)

The student uses scientific practices during laboratory and outdoor investigations. (1)

Describe, plan, and implement simple experimental investigations testing one variable. (2.A)

Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology. (2.B)

Collect and record information using detailed observations and accurate measuring. (2.C)

Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence (2.D)

The student knows how to use a variety of tools and methods to conduct science inquiry. (4)

