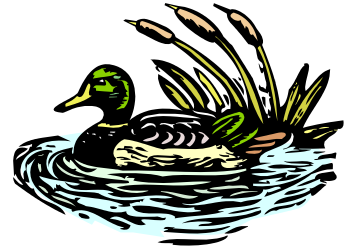


4th & 5th Grade Wetland Ecology
Description of Classes
Inside/Outside
1 ½ - 2 hours

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, soil survey and plant identification. Students will determine the water quality of the wetland by analyzing and interpreting the data collected in the field. Macro invertebrates and the biotic and abiotic factors affecting their health will be the highlighted during the lesson. Each group will receive data gathering tools - Data logger, Soil probe, Collection Nets, Collection Buckets. The blackland prairie and wetland ecosystems will also be discussed with direct observation of the ecotone between them. Emphasis will be given to research, observation and data collection.



4th Grade TEKS

- The Student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices. (4.1)
- Demonstrate safe practices during field and laboratory investigations (4.1A)
- The student uses scientific inquiry methods during field and laboratory investigations (4.2)
- Collect information by observing and measuring (4.2B)
- Analyze and interpret information to construct reasonable explanations from direct and indirect evidence (4.2C)
- Communicate valid conclusions (4.2D)
- The student uses critical thinking and scientific problem solving to make informed decisions (4.3)
- Analyze, review, and critique scientific explanations (4.3A)
- Collect and analyze information using tools (4.4A)

5th Grade TEKS (this is only a brief overview of what TEKS are covered)

- Demonstrate safe practices during field and laboratory investigations (1)
- Collect information by observing and measuring (2.C)
- Analyze and interpret information to construct reasonable explanation from direct and indirect evidence. (2.D)
- Collect and analyze information using tools including hand lenses, thermometers, collecting nets, document reader, collection containers, Petri dishes, and pipettes. (4.A)
- Compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet in aquatic animals; (10.A)
- Describe the differences between complete and incomplete metamorphosis of insects. (10.C)

