During the Wildlife Ecosystems class students will learn how the health of a habitat affects the flow of energy within an ecosystem and how energy is transferred within it. The role of producers, primary, secondary, and tertiary consumers will be discussed. During the field study portion of the class, students will learn techniques to observe various animal patterns, creating a data table, and analyzing the results. Students will collect observational data in the wetland and create an energy pyramid based on their observations.

4th Grade TEKS (this is only a brief overview of what TEKS are covered)

- Collect and record data by observing and measuring (4.2B)
- Construct simple tables, organize, examine, and evaluate data (4.2C)
- Analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured (4.2D)
- Collect, record, and analyze information (4.4A)
- Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while Consumers are dependent on other organisms for food (4.9A)
- Describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web such as a fire in a forest. (4.9B)
- Explore how adaptations enable organisms to survive in their environment. (4.10A)

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

- Demonstrate safe practices and the use of safety equipment (5.1A)
- Collect information by detailed observations and accurate measuring (5.2C)
- Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence (5.2D)
- Observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements (5.9A)
- Describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposers (5.9B)
- Compare the structures and functions of different species that help them live and survive (5.10A)