During this hands-on field study, students will focus on behavioral and physical adaptations of birds, their inherited traits and how these characteristics are used to enhance their survival. The adaptive characteristics of various bird species will be discussed. Students will learn the role birds play as biological control agents, bioindicators and vehicles of biodiversity. Migration will be discussed as well as how biotic and abiotic factors affect migration patterns, habitat and bird populations. Students will use binoculars and field guides to identify birds they see as they hike along the boardwalk out over the wetland.

**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)
- Collect and analyze information using tools (4.4A)
- The student knows that complex systems may not work if some parts are removed (4.5)
- Identify and describe the roles of some organisms in living systems (4.5.A)
- Predict and draw conclusions about what happens when part of a system is removed (4.5B)
- Identify characteristics that allow members within a species to survive and reproduce (4.8A)
- Compare adaptive characteristics of various species (8B)
- Distinguish between inherited traits and learned characteristics (4.9A)
- Identify and provide examples of inherited traits and learned characteristics (4.9B)
5th Grade TEKS

- The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. (1)
- The student knows how to use a variety of tools and methods to conduct science inquiry. i.e. Binoculars, field guides, white boards (4.A)
- Observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements. (9.A)
- Predict the effects of changes in ecosystems caused by living organisms. (9.C)
- The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. (10)
- Compare the structures and functions of different species that help them live and survive. (10.A)
- Differentiate between inherited traits of different species that help them live and survive. (10.B)