

KPNC CLASS DESCRIPTIONS

Class times run from 40-90 minutes depending on school's needs

Zoology Classes:

AWESOME AMPHIBIANS

This class introduces students to the world of amphibians, their unique characteristics and their key role in the ecosystem. Topics focus on frogs, salamanders, and newts with discussions on habitat, life cycle, and defining traits. Students will have a chance to learn frog calls of our native species and practice them during their hike to the pond. Alabama is home to over 75 species of amphibians including seven of the 10 families of salamanders found worldwide with the Red Hills Salamander, found uniquely in our state.

BIRDS OF A FEATHER

This class explores the fascinating world of birds. As a stop on the Piedmont Birding Trail, the Kreher Preserve and Nature Center is home to a large diversity of native and migratory bird populations. Students will have the opportunity to observe birds in their natural habitat, learn how to use binoculars and field guides, and begin to listen and distinguish various common birdcalls and songs. Interactive discussion, scientific inquiry, and examples of bird anatomy, feathers, habitat, and characteristics will engage students as they take their first steps into the birding world.

INCREDIBLE INSECTS

This course takes a close look at the meticulous and diverse insect world. Scientists estimate there may be 10 million different insect species, more than any other animal population. Learn why insects are so numerous and what awesome adaptations they have evolved in order to become so successful! Students will engage in discussion on insect characteristics and habitat as well as conducting an insect scavenger hunt to find species all around the preserve.

MARVELOUS MAMMALS

This class explores the diversity and wonder of the mammalian family; from tiny bats that weigh as much as a dime to whales that weigh 200 tons, the world of mammals is truly marvelous! Students will learn the defining characteristics of mammals and focus on those native to our state and the southeast including bobcats, coyotes, and deer. Students will have hands-on interaction with pelts and skulls of various native species as well as learn skills in track and scat identification.

RADICAL REPTILES

Get out the cameras because this class will bring students face-to-face with species from the reptile family including turtles, snakes, lizards and an alligator. Alabama is home to 115 types of reptiles including both the biggest species of turtle and biggest species of snake in North America. These animals are often misunderstood but this course will calm any fears by exploring the habitat, characteristics, and importance of these animals as well as ways that humans and reptiles can interact in a mutually beneficial way.

Focus Species Classes:

THE BUSY BEAVER

This course introduces students to the fascinating world of the beaver. Through interactive learning, the students will discover the key features of a beaver, their habitat, why they build dams, and why they need those big teeth. Students will also have the opportunity to dress up like a beaver and explore our beaver lodge in the nature playground.

CREATURES OF THE NIGHT

This class explores nocturnal animals including various mammal, reptile, arachnid and insect species. Students will study the unique adaptations that owls, bats, spiders, and snakes possess in order to be a creature of the night. This class is a great way to help students overcome fears about the night through education and fun.

SNAKES ALIVE!

This class introduces students to the exciting subject of snakes! Not many animals on earth scare people more, but snakes are some of the most beneficial and ecologically important creatures in our woods. Alabama is home to more than 60 different types of snakes including six venomous species. Students will have the opportunity to see and touch live non-venomous snakes and learn the difference between venomous and non-venomous species and well as identify snake habitat, characteristics, and patterns.

TURTLE TALK

This course focuses on the diversity and wonder of turtles. Alabama is home to more species of turtles than any other state and during this session, students will meet some of the native species found in their woods and ponds. Students will also discover the difference between terrapins, tortoises, and turtles through various specimens. Turtles found in the coastal regions of our state will also be discussed including the gopher tortoise and sea turtles.

WHAT'S THE BUZZ ABOUT BEES AND POLLINATION

Students will learn all about bees and the vital role they play in pollination. Many of the fruits and vegetables that we eat everyday are pollinated exclusively by honeybees. The intricate social system used by bees will be explored as well as the various roles that each bee plays in the system. Students will have the chance to look inside of a sample bee hive and dress up like a beekeeper as well as sample some local honey.

SPECTACULAR SPIDERS (NEW)

In this session, students will learn about several spider species and their arachnid families. Spider anatomy, habitat, and characteristics will be discussed along with the features that make spiders truly unique: web spinning and production. Students will meet our tarantula, Rosie, up close, as well as learn about other notable species including jumping spiders, black widows, and the wolf spider.

Botany Classes:

THE POWER OF PLANTS

This class focuses on the diversity and importance of plants. Students will examine live plants and plant parts in the classroom and in the field. Observe the plant life cycle and learn common species of trees, shrubs, vines, and flowers in our state. Learn about the essential interdependence of flowering plants and the pollinators. Explore our bog gardens and the cool insectivore plants found there during our plant prowl.

TREMENDOUS TREES

This class explores trees from the inside out. Students will learn the parts of the tree from its roots to its stem. Basic tree identification information will be taught along with students learning some of the common trees in our ecosystem including our state tree, the longleaf pine. Students will experience a demonstration on coring a tree to estimating its age. In addition, topics of tree use and sustainability will be discussed including their role in habitat and ecology.

Geology Classes:

ALABAMA ROCKS!

In this course, students will learn about the unique geological features that help shape our state and contribute to its wealth of biodiversity. During this class, students will learn about all the amazing geological facts of Alabama including that it was once all underwater. Various samples of rocks, minerals, and prehistoric fossils will be shown to the students along with a discussion about what they can tell us about our past. Hike through the Preserve to see examples of Alabama geology up close!

THE DIRT ON ALABAMA

Soil is extremely important to the state of Alabama and has had a major impact on our history. In this unique class, students will get down and dirty observing soil layering and distinguishing between some of Alabama's many soils. They will have the opportunity to witness the wonders of weathering and the enigma of erosion along with learning how exactly soil is created in the first place. An interpretive hike will lead students to discover soil types and patterns of wear along the trails concluding with a visit to our soil tables for some hands-on discovery.

PREHISTORIC ALABAMA

In this class, students will be introduced to the great dinosaurs of Alabama's history. Learn about fossils and identify examples of them. Go on a mock dino dig to uncover bones! Most of Alabama was underwater when the dinosaurs ruled the earth giving the state prehistoric whale fossils and our very own special type of tyrannosaur. Learn all of this and more as we explore Prehistoric Alabama.

SOILS AND LANDFORMS

In this course, students will learn about the great forces that shape our land creating mountains, valleys, cliffs, and hills. We will learn about tectonic plates and their role in volcanos and earthquakes. How does water affect landforms? Learn all about erosion and weathering with some hands-on activities. On a hike, students can see the fall line that runs through the preserve and the effect it had on our local history.

The World Around Us:

AMAZING ALABAMA (NEW)

In honor of Alabama's Bicentennial, this course will highlight the beauty and wonder of our state. As one of the richest states in biodiversity, Alabama boasts of over 4,500 species of plants and animals including the most diverse populations of freshwater mussels, fish, snails, and turtles. These species are found throughout the over 60 ecosystems in the state from the hills of the north to the beaches of the south. This course will introduce students to some of the most well-known and interesting Alabama species as well as talk about why our state has such rich ecological resources.

SUSTAINABILITY AND ENVIRONMENTAL ISSUES

This class will have students excited to learn about sustainability and their role in making the earth a cleaner and healthier place. Topics such as waste, recycling, and pollution are discussed through interactive games that will open your eyes to new ways to help our environment. Explore the preserve's sustainable practices and learn about what you can do to help make the planet a better place!

FOOD WEBS AND HABITATS

Animals and plants depend on one another more than you know! In this fun class, we take a look at the major ecosystems and habitats on Earth, while focusing on those in Alabama. Discover how animals and plants adapt to different habitats and to each other. Learn and observe how organisms are grouped into populations, communities, and ecosystems! Hike the preserve to discover real-time food webs in action! Play the web of life game and see if you can survive! This class is an excellent hands-on way to introduce children to the complexities of ecology!

<u>WETLAND WONDERS</u> (5th grade and up- \$6/student- cannot be done with large groups)
In this course, students will learn how the vast amount of water in our state has led to its biodiversity.
Alabama has 59% of America's mussel species and 320 freshwater fishes. Learn about our own little water basin at the Kreher Preserve and Nature Center and the bigger Tallapoosa watershed that we drain into. Visit the natural springs, creek, pond, and waterfall during the hike. Study the animals that use the pond from macroinvertebrates to larger animals like deer and coyote. Discover how the Preserve protects the Saugahatchee Creek with a SWaMP plan (Saugahatchee Watershed Management Plan) in our front parking lot and at our pavilion with our rainwater cachement system.