Connecting Students to Nature
in Alabama State Parks

Introduce your class, club, troop, or group to the wild places of Alabama through a guided, safe, and fun state park fieldtrip. These are customized, place-based, and immersive experiences developed to support the Alabama Course of Study grades K-12.

Alabama State Parks provide unique educational opportunities "from the deepest cavern to the highest mountain to the most pristine beaches" through a hands-on approach to learning about our natural world, heritage, and history.

By providing outdoor place-based education to park visitors of all ages, parks increase the public's knowledge of conservation, build appreciation for nature and public lands, develop connections to natural resources, inspire sustainability, and encourage wellness.

Cheaha State Park
Field Trip and Program Topics:
Topics depend upon instructor availability.

Contact:
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Field Trip Objectives
-Connect people to public lands through a "sense of place."
-Develop a sense of responsibility toward the conservation and stewardship of natural resources.
-Cultivate an understanding of the association between spending time outdoors and personal well-being.
-Inspire a creative vision for connection, collaboration, community, and careers.
-Increase environmental awareness.
-Defeat Nature-Deficit Disorder (No Child Left Inside).
-Encourage environmental literacy through arts and science.

Topics are correlated to Alabama's State Course of Study and the Environmental Education Association of Alabama (EEAA) Environmental Literacy Plan (Best Practices in EE).

Fees:
$10 per student for ONE topic
$12 per student for TWO topics
$15 per student for THREE topics
Fee includes gate (park entrance) fee.

Field Trip Tickets for Parents/ Chaperones/Siblings $5 per person (Must be pre-purchased before final invoice.)

Groups of more than 36 participants may request a customized field trip; groups of more than 100 students may require multiple days

Outreach Programs: some topics are adaptable for classroom/auditorium presentations. One topic per visit.
Fee: $10 per student; $150 minimum program fee.

Planning Your Visit: Please schedule at least 2 weeks in advance. Rates and programs are subject to change, so ask questions and be specific about your group's needs. Ask if all amenities you plan to use will be available. Sites typically offer picnic areas, Mountain Store gift shop, restrooms, and bus parking. Some activities may be seasonal.

Field Trip Topics & Descriptions:

Nature Hike

Grades 2-12

COS – ALEX SC15: *3.5 3.6 4.5 4.9 5.8 5.9*

Moderate Hike or Learning Station
Options: Medicinal and edible plant focus; native species vs. non-endemic species

Activities: Activities that focus on structure, function and identification of native plants that help the student see every plant as a unique living organism. The students will be guided through the forest, studying the interdependence of the living and non-living components.

Principles:
-Plants are important.
-A plant is composed of specific parts which function together to create a life-supporting system.
-Each plant species has unique physical characteristics (i.e., leaves, bark, roots, and shape) that help to identify it.
-Biodiversity includes the variety of flora and fauna in an ecosystem.
-Air, water, animals, plants, and soil are interdependent components of a forest community.

Key Terms: community, photosynthesis, oxygen, carbon dioxide, decomposer, soil, heartwood, sapwood, xylem, phloem, bark, root, lobed, opposite, compound, dichotomous key, deciduous, evergreen

Tree Talk (Botany)

Grades 3 – 12

0.5 COS – ALEX SC15: *3.5 3.6 4.5 4.9 5.8 5.9*
-mile hike (easy or moderate trails) or Learning Station

Activities: Students explore the recreational, ecological, and economical use of trees. Through a hike, discussions, measurement activities, and role playing, students analyze the value of trees.

Principles:
-A value is the worth of something.
-Different people value different uses of trees.
-Forestry is the science which strives to maintain and develop forests for human use.
-Human use of the forest can have both positive and negative effects on the forest community.

Key Terms: value, habitat, forestry, natural resources, renewable, non-renewable, aesthetic, economic, hardwood, softwood, merchantable, endangered species, tree products

Every Drop Counts (Watershed/Water Cycle)

Grades 1-5

COS-ALEX SC15 4.5 4.6 4.9 4.11 4.12 4.13 4.15 5.1 5.3 5.4 5.5 5.8 5.9 5.10 5.11 5.14 5.15 5.16 5.17
Usually implemented in a shallow pond, stream, or creek

Activities: Students will review the water cycle and the importance of freshwater environments to plants and animals. Students will participate in activities to help them better understand these aquatic ecosystems and the effects of human impact upon them.

Principles:
-Ponds, creeks, rivers, and oceans are part of the water cycle. They are important to all living things.
-Aquatic creatures are diverse and interrelated.
-Aquatic creatures have specialized adaptations for feeding, breathing, and moving to help them survive in specific micro-habitats such as at the surface or at the bottom of the water or in a pool or a riffle.
-Human actions can alter the health of water sources.

Key Terms: water cycle, food chain, adaptation, nymph, larvae, detritus, pollution, tolerance, tributary, erosion, sediment, species, indicator species, macro-invertebrate, sampling, habitat

Salamander Stroll

Grades 6-12

COS-ALEX SC15		4.5	4.6	4.9	4.11	4.12	4.13	4.15	5.1	5.3	5.4	5.5	5.8
5.9	5.10	5.11	5.14	5.15	5.16	5.17	6.5	6.7	6.16	7.5	7.6	7.7	7.9
ES.7	ES.10	ES.13	ES.17a	ESS.8	ESS.11	ES10	ES.17	ES.17a	BIO.7	BIO.8			

Indoor & Outdoor Programs

Activities: Through biological sampling of macrobenthic organisms, students learn how to assess water quality and become aware of the impact that nonpoint and point source pollution can have on waterways.

Principles:
-The physical and chemical properties of water determine what organisms can live there.
-Aquatic creatures have different tolerance levels to pollution based on their physical characteristics and behavior.
-Human actions can alter the chemical and physical properties of a river and thus affect its health.
-Each of us can help to monitor and improve water quality.

Key Terms: aquatic, adaptation, nymph, larvae, species, indicator species, detritus, point source pollution, nonpoint source pollution, tolerance, tributary, erosion, sediment, titration, dissolved oxygen, pH, acid, base, turbidity, water molecule and watershed

Seasons & Weather: Changes

Grades K-3

COS-ALEX SC15	K.4	K.9	1.3	1.9	2.4	2.8	3.11	3.13	4.12	4.14	5.13	6.1
6.12	6.14	ESS.5	#S.4									

Outdoors; easy stroll

Activities: Observe and describe the effects of sunlight on Earth's surface (e.g., heat from the sun causing evaporation of water or increased temperature of soil, rocks, sand, and water) and seasonal changes in nature.

Principles:
-Define seasons.
-Use data to create drawings related to seasons and weather.
- Compare weather patterns for different seasons.

Key Terms: habitats, geography, temperature, precipitation, wind direction, weather patterns, weather conditions, climate

Critter Tales (Zoology/Ecology)

Grades 2-12

COS-ALEX SC15	K.3	k.4	1.5	3.10	3.11	4.9	4.11	7.10	7.18	8.7	BIO.7	BIO.8
	BIO13	BIO14	BIO15	ES.4	ES.17							

Hike and non-hike options

Options: Focus can be on a variety of Alabama animals or specifically toward mammals, birds, reptiles, or insects

Activities: Students participate in activities that illustrate animal adaptations. They can take a hike (or participate in an interactive classroom) to find evidence of animals in their habitats, examine animal pelts and skulls, and explore the effects of habitat loss. Students will make decisions about habitat requirements.

Principles:
-A habitat is where an animal obtains food, water, and shelter.
-An adaptation is a physical or behavioral attribute that allows an animal to survive in a particular environment.
-Variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.
-Habitat alteration and destruction are the number one problem for wildlife today.

Key Terms: food chain, predator, prey, community, adaptation, habitat, camouflage, niche, extinction, species, scat, track, wings, scales, fur, feathers

Hiss & Sslither (Herpetology)

Grades K-12

COS – ALEX SC15: K.3 K.4 1.5 *2.5* *2.7*

Hike and stationary options

Activities: Students participate in a hands-on experiential learning hour about herpetology (amphibians and reptiles).

Optional: Students participate in a "fake snake" hike to increase observation skills

Principles:
-Identify different reptile and amphibian species and their characteristics.
-Learn about the selection, care, needs of herps and basic principles of herp behavior.
-Demonstrate movement of species.
-Explore the behavioral and chemical defense of reptiles and amphibians.

Key Terms: vertebrate, cold blooded, life cycle, venomous, non-venomous, Jacobson's organ, fangs, unhinged jaw, adaptation, camouflage, estivate, endangered species, indicator species, habitat, predator, prey

Beautiful Birds (Ornithology)

Grades K-12

COS – ALEX SC15: *3.5* *3.6* *4.5* *4.9* *5.8* *5.9*

Hike and stationary options

Activities: Students participate in a hands-on experiential learning hour focused on ornithology and the diversity of avifauna. Students study feathers, skulls, beaks, feet, bones, scat, and pellets. Optional: Students participate in a bird identification hike or learn how to attract birds to their own yards/farms.

Principles:
-Identify different bird species and their characteristics.
-Learn about the needs of birds and basic principles of bird behavior.
-Demonstrate movement of species.
-Explore the behavioral and chemical defenses of birds.
-Discuss adaptations.

Key Terms: Flight, sedentary, wings, feathers, talons, beak, egg, molt, plumage, nest, predator, prey, insectivore, carnivore, herbivore, warm blooded, pellet, scat, adaptation, habitat, forage, migration

Who was here in the night? Aka Nocturnal Creature Clues: Scat & Tracks

Grades 3-12

COS - ALEX SC15: K.3 K.4 1.5 1.6 2.7

Activities: Investigating signs that animals leave behind

Principles:
-Identify types of consumers by inspecting the characteristics of scat, tracks, and other evidence, using "Process of Elimination" techniques to aid animal identification
-Drawing conclusions about animal behavior based on evidence

Key Terms: Track, scat, sign, ecological story, animal behavior, nocturnal, diurnal, watershed, predator, prey

American Black Bears (Be BearWise)

Grades 2-12

COS-ALEX SC15 3.10 3.11 5.11 5.17 7.8 7.10 BIO.8 ES.3

Activities: Through interpretive teaching techniques such as role play, creative drama, storytelling and/or music, participants are immersed in the natural history of the American black bear. Black bears once roamed over all of America's forested lands. But after European settlement, their numbers and habitat dwindled. Thanks to new attitudes and enlightened conservation and management efforts, black bears are making a dramatic comeback over much of their historic home range. Now that bears are returning to areas, they used to call home, it's up to people and communities to learn how to peacefully coexist with these amazing animals.

Principles:
-Students will gain an understanding of the basic needs black bears require to survive and thrive in their environment.
-The basic needs of all animals are food, water, air, shelter, and space. If these needs are not met the animal may die or not thrive.
-Six "at home" BearWise basics and six "outdoors" BearWise basics

Key Terms: Omnivore, hibernation, mammal, warm blooded/endothermic, forager, ranges, predator, prey relationships, conservation

Insect Safari (Entomology)

Grades 4-6
COS – ALEX SC15: K.4 1.5 *2.5* *2.7* *3.5* *3.6* *4.5* *4.9* *5.8* *5.9*

Outdoor/easy walk

Activities: Through discovery-oriented explorations of habitats, students collect and study insects in their natural setting. Students use sweep nets, collecting jars and magnifying equipment.

Principles:
-Insects are amazing in their adaptations and abundance.
-Most small creatures are harmless to humans.
-These animals play invaluable roles in ecological processes such as decomposition and pollination.

Key Terms: niche, adaptation, head, thorax, abdomen, invertebrate, arthropod, arachnid, decomposer, pollinator, herbivore, predator, species, venomous, poisonous

Bibbity Bobbity Bugs aka Incredible Insects

Grades PreK-3
COS – ALEX SC15: K.4 1.5 *2.5* *2.7* *3.5* *3.6*
Outdoor/easy walk (or indoor option)

Activities: Students are led on an insect identification hike that includes live bugs and fake bugs. Creative drama activities are woven into the science so that the children are taught about the movement and sounds of insects through experiential play.

Principles:
-Insects are amazing in their adaptations and abundance.
-Most small creatures are harmless to humans.
-These animals play invaluable roles in ecological processes such as decomposition and pollination.

Key Terms: insect, arachnid, wings, legs, head, abdomen, thorax, stinger, pollen, flowers, color, camouflage

Teddy Bear Hike (Observations and Connections)

Grades PreK-2

COS- ALEX SC15		K.3	K.4	K.5	K.10	1.2	1.5	2.8	2.9	2.11	3.4	3.11	3.11c
3.15	4.5	4.17	5.1	5.11	5.12	5.16	6.14	6.16	7.6	7.7	BIO.15	ES1	ES.3
ES.4	ES.6	ES.11	BIO.15	ES.5	ES.6								

Activities: Students take an easy hike along a trail with a naturalist. Toy (but realistic) stuffed animals have been placed along the trail in natural poses. The students stop at each animal and are asked a series of questions and then told a story about the animal.

Principles:
-Many animals only come out at night.
-Most animals leave clues.
-Animals need food, water, and shelter.
-Animals are connected to their habitat in many ways.

Key Terms: mammal, bird, reptile, insect, fish, amphibian, camouflage, track, scat, carnivore, herbivore, omnivore, various animal calls (growl, bleat, bark, chirp, song)

Un-Natural Trail Activity & Observation Skills Challenge

Grades 3-12

COS- ALEX SC15		K.3	K.4	K.5	K.10	1.2	1.5	2.8	2.9	2.11	3.4	3.11	3.11c
3.15	4.5	4.17	5.1	5.11	5.12	5.16	6.14	6.16	7.6	7.7	BIO.15	ES1	ES.3
ES.4	ES.6	ES.11	BIO.15	ES.5	ES.6								

Easy stroll

Activities: After learning the basics of observation through a natural history exercise, students participate in a nature observation walk quietly counting the 'un-natural items" that they see hidden along the trail. This activity is a measurable challenge for learning successful observation skills.

Principles:
-Practice observation skills.
-Learn the "ABCs" of looking with purpose.
-Discuss the concepts of coloration, camouflage, and natural/un-natural objects.

Key Terms: observe, compare, coloration, camouflage, movement, collage, plant, and animal adaptation

Windows to Nature: Enhancing Observation Skills: Building Connections to Nature

Grades 1-12

COS- ALEX SC15		K.3	K.4	K.5	K.10	1.2	1.5	2.8	2.9	2.11	3.4	3.11	3.11c
3.15	4.5	4.17	5.1	5.11	5.12	5.16	6.14	6.16	7.6	7.7	BIO.15	ES1	ES.3
ES.4	ES.6	ES.11	BIO.15	ES.5	ES.6								

Activity: The activity of building fairy houses or gnome homes in a natural area offers unique opportunities for cross-curricula education. While children are fully engaged with building a tiny structure they are stimulated in many ways – learning the basics of ecology, connecting to nature, observing, collecting, communicating, exercising, and imagining – all while having lots of fun.

Principles:
-Conservation basics are easy to understand.
-Nature provides for all living things: food, water, and shelter.
-Nature doesn't have to be large and overwhelming; nature can be small and intimate.
-Creatures, like insects, arachnids, arthropods, and reptiles are not scary once we understand their purpose in the natural world.
-Imagination is a key to enrichment.
-Storytelling is a catalyst to nature-based education.
-Fairies like to Leave No Trace so only use natural materials and leave the living landscape as it is.

Key Terms: habitat, range, geography, evergreen, deciduous, carnivore, herbivore, omnivore, venomous, poisonous, watershed, dimensions, layers, design, observation, research, comparison, contrasting, imagination

Wilderness Skills or Children's "Hug a Tree"

Grades 1-12

COS-ALEX	PE19.BKI	1.3	3.10			
	PE19	7.3.3	7.4.5	8.3.3	8.4.5	AC1.3.2 AC2.5.1

Activities: Students will learn skills and strategies for staying safe and calm in a lost wilderness situation. They will build skills in trip planning and preparation, utilization of outdoor equipment and gear, and primitive living skills. Students will use ingenuity and teamwork during the hands-on activities such as shelter building with natural resources, fire building, collecting potable water, and packing a survival kit.

Principles:
-Traveling in wild places requires planning, preparation, and proper utilization of equipment.
-Nature can provide many things to meet the human body's basic needs.
-The four important concepts to consider while traveling in the wilderness are preparation/planning, attitude, meeting your needs and knowledge.
Key Terms: survival, prevention, basic needs, conservation, debris shelter, itinerary, positive mental attitude (PMA), dehydration, hypothermia, potable, compass, transpiration, microorganisms, sustainability

Leave No Trace: Outdoor Ethics

Grades K-12

COS – ALEX SC15	K.6	K.7	4.5	5.15	5.16	5.17	6.7	6.15	6.16	7.7	ES.1
	ES.3	ES.6	ES.10	HAP.9a							

Activities: Students will learn the Seven Principles of Leave No Trace in a fun and interactive way.

Principles:
-Plan and prepare.
-Travel and camp on durable surfaces.
-Dispose of waste properly.
-Leave what you find.
-Minimize campfire impacts.
-Respect wildlife.
-Be considerate of others.

Key Terms: waste management, natural resources, sustainability, recycling, reduce/reuse,

Nature Journaling

Grades 3-12

COS – ALEX SC15:	3.11	3.5	3.12	3.12	4.5	5.16	6.16	7.11	ES.1	ES.2	ES.4	ES.6
	ES.11											

Activities: Inspired by the smells, sounds, textures, and tapestry of nature, students learn to express themselves articulately. Sequenced drawing, sensory awareness, and observation activities help students hone their creative writing and art skills. Surrounded by the diverse beauty of Alabama State Parks, even the most reluctant writer discovers that words come easily.

Principles:
-Sensory details improve creative and descriptive writing.
-Careful observation brings a new awareness and perspective toward the natural world.
-Both authors and explorers utilize nature journals and art pencils as tools to improve their trade.

Key Terms: nature journal, observation, metaphor, simile, adjective, setting, scene, detail, naturalists, creativity, sketch, outline, original

Careers in State Parks (aka Working in the Wild aka Conservation Careers aka Public Lands Professions)

Grades 9-12

CTE20.AFN	.OA.E.9	.OA.E.10a	ABE.11a	ABE.12	EM.14	FWM.3C	FWM.6	F.1a				
	F.8	F.14	FA.8	PA.11	PA.17	D.2	D.5	D.6				
	D.6a	D.6b	D.9	D10	D11							
	CTE21.BMA.4	F.1a	HMM11	F.FS.1	F.FS.2	F.FS.3	F.FS.					
	CTE22.AC.	PS.22										

Hike or non-hike options

Students gain the opportunity to interact with professionals from various conservation and public lands career fields and those who can advise and/or mentor them toward this field. This can be an exciting opportunity for students to learn how and why park naturalists, interpreters, historians, and others do what they do. This program increases the students' options as they decide about their own paths toward institutes of higher learning, types of degrees, salaries, and opportunities in a diverse field. Volunteer, internships, and seasonal jobs are discussed.

History of the Civilian Conservation Corps in Alabama

Grades 5+

COS – ALEX SS10:	K.11	1.3	1.4	1.5	1.6	1.7	1.9	1.11	2.3	2.10	3.1	3.2
	3.4	3.3	3.4	3.8	3.11	3.13	4.1	4.2	4.3	4.4	4.12	4.13
	6.5	7.2	7C.11	7G.7.1	US1.15	US1.16	US2.10	US2.14	E.8.6	CWI.1.1		

Location: CCC Museum located at Bunker Tower (highest point in Alabama)

Activities: Students will learn about the CCC within Alabama and go over some of the projects they carried out around the state. They will be introduced to information designed in a way to help them begin to grasp larger pictures and how one project can lead to disproportionate impacts. Students will have time to explore the museum and ask questions relating to the artifacts. They will also be taken to the highest point and (should teaching staff permit) be allowed to go up the tower.

Key Concepts:

- The CCC had a major impact on not just the lives of young men, but also local communities, states, the country, and the world.
- The New Deal was brought forth during a time of extreme hardship for many
- How the CCC helped a generation of young men who went on to do great things
- The numerous contributions of the CCC to history, both domestic and foreign

Key Terms: CCC, FDR, New Deal, Depression, WWII

Alabama's Cultural Heritage

Grades k – 5 (Extensions in History and Archaeology for 6-12)
COS – ALEX SC15: K.4 1.5 2.5 2.7 3.5 3.6 4.5 4.9 5.8 5.9
Learning Station: Walt Farr Native American Relic Museum

Activities: Looking at artifacts and discussing their uses. Basics of archaeology. People, places, and environments: for thousands of years, indigenous people have studied, managed, honored, and thrived in their homelands. These foundations continue to influence American Indian relationships and interactions with the land today.

Principles:
-Learning about Alabama's native people through archaeological evidence.
- Discovering the different cultures that preceded Cheaha State Park.
- Expanding knowledge through heritage stories.
- Unique ways to look at nature.
Key concepts:
-There is no single American Indian culture or language.
-American Indians are both individuals and members of a tribal group.
-For millennia, American Indians have shaped and been shaped by their culture and environment. Elders in each generation teach the next generation their values, traditions, and beliefs through their own tribal languages, social practices, arts, music, ceremonies and customs.
-American Indians share many similarities with other indigenous people of the world, along with many differences.
Built on ideas from Smithsonian's Native Knowledge 360
https://americanindian.si.edu/nk360/pdf/NMAI-Essential-Understandings.pdf

Archery

Grades 4-12

COS-ALEX	PE19.BKI	1.3	3.10			
	PE19	7.3.3	7.4.5	8.3.3	8.4.5	AC1.3.2 AC2.5.1

Activities: Students will have the opportunity to learn a new skill in a controlled environment, while learning the past time of the old hunting technique.

Principles:
- Having the opportunity to try a new skill in a education environment.
- Confidence building activity.

Field Trip Assessment Methods of Measurement: Verbal assessment; written evaluations; participant surveys; semantic web activities; teacher assessment and evaluation; social media; email discussions; Educational Advisory Committee meetings and input from the community

Field Trip Partners and Allies: Alabama State Parks, DCNR, Wild Alabama, Jacksonville State University, University of Alabama, Alabama Forestry Commission, Wildlife and Freshwater Fisheries, Auburn University, Legacy Partners in EE, Environmental Education Association of Alabama (EEAA), Alabama Water Watch, Anniston Museums and Gardens, Alabama Parks and Recreation Department (PARD), Southeastern Environmental Education Alliance, Alabama Clean Water Partnership, Alabama Scenic River Trails, ACES, Choccolocco Creek Watershed Alliance, US Fish and Wildlife Service, Friends of the Talladega National Forest, Discovering Alabama, and many others.