

# **CURRICULUM-BASED PROGRAMS**

S.C. Department of Natural Resources can bring conservation education to your classroom! Each in-school program is designed to be approximately an hour long and incorporates a hands-on activity. Lessons can be completed in the classroom, but most of the activities will need an open outdoor space on the school's campus. SCDNR staff availability will determine how many classes can be seen in one day. These free programs are correlated to the 2021 South Carolina College and Career-Ready Science Standards.

For questions or to schedule a program, please contact Beth Foley, Conservation Education Coordinator, at FoleyE@dnr.sc.gov or (803) 394-3920. In your request, please make sure to include your school's name, grade level, total number of classes, total number of students, and suggested program dates.

#### **KINDERGARTEN**

## **EAGER BEAVER:**

# THE AMAZING LIFE OF THE AMERICAN BEAVER

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment

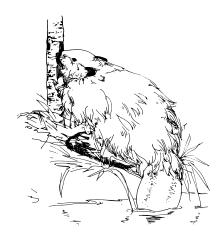
to meet their needs.

K-ESS3-1. Use a model to represent the relationship between the needs

of different plants or animals (including humans) and the

places they live.

Students will learn about this hard-working species' needs for survival in a wetland ecosystem and fun facts about America's largest rodent. They will explore how a beaver can build a dam to change their environment, creating essential habitat for itself as well as many other wildlife species. The class will compete in small groups to create their own beaver dams and see which one holds the most water!

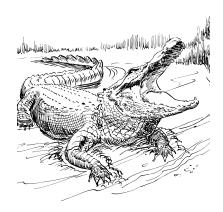


### FIRST GRADE

## AMERICAN ALLIGATOR: A SUCCESS STORY

1-LS1-2. Obtain information from multiple sources to determine patterns in parent and offspring behavior that help offspring survive.

Brought back from the brink of extinction, students will learn how conservation efforts helped this species to recover and now thrive. They will discuss the adaptations that have allowed this cold-blooded species to survive in a semiaquatic environment for millions of years. Students will experience alligator communication through a game in which mother alligators (cows) will have to locate their hatchlings, while only using their sense of hearing.





#### SECOND GRADE

## POLLINATOR PALOOZA: PROLIFIC AND POWERFUL

2-LS2-2. Develop a simple model that mimics the function of an animal

in dispersing seeds or pollinating plants.

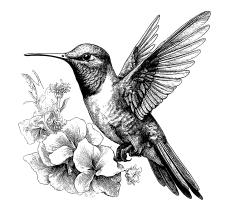
2-LS4-1. Make observations of plants and animals to compare patterns

of diversity within different habitats.

2-PS1-1. Plan and conduct an investigation to describe and classify

different kinds of materials by their observable properties.

From invertebrates, to birds, to bats, pollinators exist in all shapes and sizes and thrive in a diversity of habitats. Students will explore the importance of pollinators and how they are essential to agriculture and the environment. They will learn how a variety of wildlife species are designed differently to pollinate specific plants. The class will then compete in small groups to design their team's own pollinator and race to collect the most pollen.



## THIRD GRADE

## OH DEER! SURVIVAL OF THE FITTEST

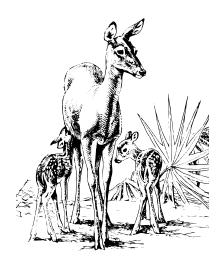
3-LS4-2. Use evidence to construct an explanation for how the

> variations in traits among individuals of the same species may provide advantages in surviving and producing offspring.

3-LS4-3. Construct an argument with evidence that in a particular habitat

some organisms can thrive, struggle to survive, or fail to survive.

White-tailed deer are abundant, highly adaptable, and a heavily managed species in our state. Students will learn about their adaptations for survival in a forest ecosystem, such as spots on fawns for camouflage. Students will become deer in a game to explore their habitat needs, carrying capacity, and limiting factors.



## **FOURTH GRADE**

### STRIPED BASS: FISH ON THE RUN

4-LS1-1. Construct an argument that plants and animals have internal

and external structures that function together in a system to

support survival, growth, behavior, and reproduction.

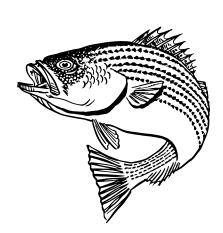
Use a model to describe that animals receive different types 4-LS1-2.

> of information through their senses, process the information in their brain, and respond to the information in different ways.

Anadromous fish are a type of fish that migrate from saltwater to freshwater to spawn. Students will learn how and why one of the state's most popular fish species, the striped bass, make this journey each year. They will dive deep

into fish anatomy and explore how structural adaptations and processes of fish allow for defense, movement, and resource obtainment. Students will then

complete an activity in which they design their own fish.





#### FIFTH GRADE

# **ENERGY IN ECOSYSTEMS: WE ARE ALL CONNECTED**

5-PS3-1. Use models to describe that energy in animals' food (used for

body repair, growth, motion, and to maintain body warmth)

was once energy from the sun.

5-LS1-1. Support an argument with evidence that plants obtain

materials they need for growth mainly from air and water.

5-LS2-1. Develop a model to describe the movement of matter among

plants, animals, decomposers, and the environment.

Ecosystems come in all different sizes and forms, but they have one thing in common – energy! Students will learn about the interconnections of flora and fauna endemic to their region of South Carolina. They will become part of a food web to experience the flow of energy through an ecosystem.



## MIDDLE AND HIGH SCHOOL

## TOPIC-SPECIFIC TAILORED PROGRAMS ARE AVAILABLE UPON REQUEST.













# NON-CURRICULUM-BASED PROGRAMS

These additional education programs are a great opportunity to have SCDNR visit your school. The grade bands are age-appropriate suggestions but not a requirement for each program. SCDNR staff availability will determine how many classes can be seen in one day. Programs are designed to be an hour + long but can be tailored to fit with the school's class schedule.

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# PRE-KINDERGARTEN - SECOND GRADE **ANIMAL TRACKS**

Students will learn fun facts and the natural history of five native wildlife species found in South Carolina – the bobcat, American beaver, Southern fox squirrel, Virginia opossum, and white-tailed deer. They will learn how to identify these species' tracks and why this skill is important for wildlife biologists. Each student will then make their own plaster cast of one of the five animal tracks.

\*Due to supplies, there is a limit of two classes per day for this program.



# THIRD GRADE - FIFTH GRADE

# NATURE JOURNALING

This cross-curricular activity is a great way to get students outside while having an immersive experience in nature. Students will use all five senses while making observations, connections, and developing questions about the nature found on their school grounds. This program can be used as an introductory activity to natural journaling skills in which the teacher can build on throughout the school year.

\*Schools must provide their own supplies for this program. It can be as simple as a piece of paper, clipboard, and pencil per student. However, a notebook and colored pencils are recommended.



## MIDDLE AND HIGH SCHOOL

## SCDNR - WHO WE ARE AND WHAT WE DO

The mission of SCDNR is to serve as the principal advocate for and steward of South Carolina's natural resources. An SCDNR representative will visit your classroom or special event and speak on our agency's mission, division and duties, and career opportunities. A hands-on activity can be incorporated at the teacher's request. Presentations will be tailored around the timeframe available, so please include the proposed presentation length in your request.



