

PURPOSE OF THIS GUIDE

The purpose of this guide is to give area teachers environmental education program possibilities. Shelby and Audubon County Conservation employees, mainly the Naturalist, Christina Roelofs, will put on the programs. Most of the programs are geared towards a classroom or playground setting. Fieldtrips may also be incorporated into the programs or be used as a program in itself at the request of the teacher. This guide lists just a few possibilities. If a teacher would like a program that is not listed, feel free to call and request the new program. Also call if there are any questions concerning the contents of a program.

SCHEDULING A PROGRAM

Ideally, programs should be scheduled at least two weeks in advance to allow for sufficient preparation. Programs may be scheduled for any time of the school year. When selecting programs please keep in mind any seasonal constraints. For example, a program on butterflies probably would not be feasible in January.

To schedule a program call Christina at Nishna Bend Recreation area, 744-3403 or 744-4203 between 8:00 a.m. and 4:30 p.m., Monday through Friday. When calling please have the following information ready to schedule the program:

Contact person, school/organization, phone number, and email

Program location (school, nature center, county park)

Program selection

Program date and time

Grade/age

Number of students

Programs will be scheduled on a first come, first serve basis. However, there will be an attempt to schedule programs in the same county on the same day, to cut back on driving time.

A letter or an email will confirm scheduled programs. This allows a double check of the program information. If any of the information is incorrect or changes need to be made the teacher should do so at this time.

AVAILABLE PARKS

Many parks owned by Shelby and Audubon Conservation Departments are available for use during field trips. In the case of field trips, extra adult supervision will probably be required. Some of the available parks are listed below with their location and their main features.

Nishna Bend Recreation Area: It is located five miles south of Harlan, near Corley. The park is home to a few ponds and the Nishnabotna River. There is Nature Center and hiking available.

Manteno Park: It is located eight miles northwest of Defiance. Manteno has camping facilities, a lake, and hiking trails.

Dinesen Prairie: It is located three miles northeast of Harlan. This native prairie remnant is home to many diverse prairie plants and animals because it has never been plowed.

Elk Horn Recreation Area: It is located two and a half miles southwest of Elk Horn. Elk Horn has camping facilities, hiking trails, and stream access.

Oak Ridge Wildlife Area: It is located four miles east and three miles south of Harlan. This area is wooded and hosts a hiking trail.

Littlefield Recreation Area: It is located six miles southeast of Exira. This park has camping facilities, hiking trails, a lake, and three buffalo.

Nathaniel Hamlin Park: It is located one and a half miles south of Audubon. This park has a classroom, hiking trails, and elk.

THE PROGRAMS

Most programs will last between a half an hour and an hour. This time can be lengthened or shortened depending on age group, program content, and length of program desired. Crafts or games can be incorporated into many of the programs to help students grasp the concepts learned during the program. Many of these programs may also be incorporated into a field trip.

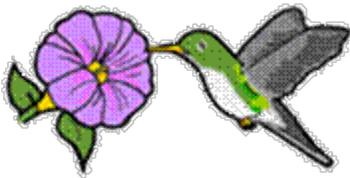


MAMMALS

What Makes a Mammal a Mammal? Learn what sets mammals apart from other kinds of animals. For a better understanding and hands on learning furs, tracks, scat, antlers, and mounts may be brought into the school.

Bats. Bats are the only mammals that truly fly. Some people think bats are harmful, but they actually help people by eating insects such as mosquitoes. Bats use the unique characteristic of echolocation to help them search for food.

Programs on Individual Mammals. Instead of focusing on all mammals, programs can be narrowed down to discuss specific mammals. A program about a specific mammal will allow more discussion on habitat and food requirements.



BIRDS

Songbirds. Learn about the variety of songbirds found in this area. Discover what some of these birds require for food, habitat, nesting, and also their migration. Some mounts are available for viewing.

Birds of Prey. Through the use of mounted hawks and owls students can see the adaptations that these birds have for hunting. Students will also learn what, when, and how raptors eat.

Owl Pellets. Owls do not digest the fur and bones of their prey. These parts are regurgitated into small ball-like objects called pellets. Students will be allowed to dissect an owl pellet and reconstruct the skeletons of the owl's prey. The pellets help demonstrate the kind of food that owl eat and where they live.

Bird Beaks and Their Food. Birds have beaks adapted to the type of food that they eat. A game will be used to help students discover which kind of beak helps birds eat a specific type of food.



REPTILES AND AMPHIBIANS

Reptiles vs. Amphibians. Learn how reptiles and amphibians differ from each other. Live specimens could possibly be used.

Snakes. Many people are afraid of snakes. Learning about how snakes live may decrease this fear. Students will have the opportunity to view snake skins and maybe a live snake.

Individual programs may also be done on another specific reptile or amphibian.



INSECTS AND SPIDERS

Are Spiders Insects? Students will learn the differences between spiders and insects. Live specimens may be used depending on the time of year.

A Bug's Life. All bugs are insects, but not all insects are bugs. Learn the differences between bugs and other insects, including the differences in their life cycles.

Butterfly Life Cycle. Students will have an opportunity to learn about all stages of a butterfly's life. Depending on the time of year, live specimens may be used.

Spiders, Our Eight Legged Friends. Spiders help people by eating pesky insects. Learn about a spider's life cycle, what they eat, and where they live. Live specimens are a possibility.



WATER

The Water Cycle. Water is continually in motion. Students will learn how precipitation forms and trace a single drop of rain through the water cycle.

Water Pollution. Water becomes polluted by many human activities and sources. Pollution from lakes and river can easily reach our drinking water supply. Through the use of Enviroscape, students will be able to see some sources of water pollution and how they can be reduced.

Fish. Learn how fish survive in water and coexist with each other. Fish eat a variety of organisms allowing them to live together. Students will see the differences between kinds of fish, learn where they live, and what they eat.

Fish Are Not the Only Ones. Water is home to many creatures other than fish. Many microscopic organisms, aquatic insects, reptiles, amphibians, mammals, and birds live in and on the water. This program may be done as a field trip or water samples can be brought into the classroom from area lakes and streams to allow students to view some of the other organisms.

Fishing can be taught to the students through a field trip and Fish Iowa!

Snow. Snow is a limiting factor for plants and animals in the winter. Learn how snow affects plants and animals. This program will also explain that snow forms differently than other forms of precipitation, there are different types of snow crystals, and the type of crystal is determined by atmospheric conditions (temperature and moisture).



PLANTS AND TREES

Plants of the Prairie. Ideally, this would be a field trip, but by arrangement prairie plants will be brought into the schools to allow students to view them. The best time for this program would be at the beginning of the school year.

Trees of Iowa. Students will learn about many trees native to Iowa. Leaves and fruit can be brought into the classroom or if available, trees on the playground can be studied. Learn how trees grow, how to tell their age, and why they change color in the fall.

Discover Trees Through Your Other Senses. In order to allow students to discover nature through their senses other than sight, students will be blindfolded to feel and smell a tree. After a while, the blindfold is removed and students will try to find their tree back. This activity can be done on a playground or on a field trip.



MISCELLANEOUS

Habitats/Ecosystems. This program can be a general topic talking about all ecosystems or can be made to go into depth on one specific habitat or ecosystem. The different types of plants, animals, and adaptations to the environment will be discussed.

Wintering. Plants and animals do many different things to help them survive the cold, harsh winters months. Students will learn about a variety of responses to the cold and the animals that have these characteristics.

Food Chains or Webs. By studying food chain or webs, students can learn how important each plant and animal is to the overall ecosystem. Plants and animals depend on each other for survival.

Endangered and Threatened Species. Students will learn about the plants and animals of Iowa that are in danger of vanishing. The students will have an opportunity to see how they can help protect and increase the populations of these organisms.

Recycling. Many people participate in recycling. Why is recycling important? How can we encourage others to recycle? Students will learn the answers to these questions and much more.

Nature in Winter. Learn about plants and animals in the winter time. Take a hike to look for signs of animals.

Animal Adaptations. Animals have adapted in many ways to survive adverse weather condition, help them find prey, and avoid predators. A variety of different animals, furs, and mounts will be brought in to demonstrate these adaptations.

Native Americans. When Native Americans hunted buffalo, elk, and deer they used every part. Learn how Native American used each part. Specimens of antlers, horns, bones, and hide will be shown for students to guess the purpose of a few parts.

Animal Classification. This program will discuss the differences between animals groups. The complexity of this program will be adjusted for grade level.

Animal Babies. When spring comes so do the babies. Animals care for their young in a variety of different ways. Students will also learn how a mother knows exactly which baby belongs to her. An activity can be done with this program to see if students could identify their baby if they were an animal.

Prehistoric Animals/Fossils. The Audubon County Historical Society has graciously allowed me to borrow some fossils from them. These fossils include two shell fossils, a mammoth tooth, and a mastodon bone. I also have a few fish fossils at the Nature Center. This program will focus on how fossils are formed and give a brief history about mastodons and mammoths.

Soils. There are a variety of different things that I can do in relation to soils. I can talk about how soil forms, characteristics (particle size, water retention, water movement, color, chemistry), and soil organisms. All of topics have activities that accompany the program for a better understanding of what I can talk about. This is one program that weather conditions will need to be taken into consideration. I need to be able to get soil samples so during the winter when the ground is frozen I cannot do this program.

Shelby County Conservation Department

Nishna Bend Recreation Area

516 Maple Road

Harlan, IA 51537

712-744-2403

712-744-4203

712-744-4204 (Fax)

Email: cgroen@fmctc.com or mustangsteena@yahoo.com

Audubon County Conservation Department

Littlefield Recreation Area

2672 Littlefield Drive

Exira, IA 50076

712-268-2762