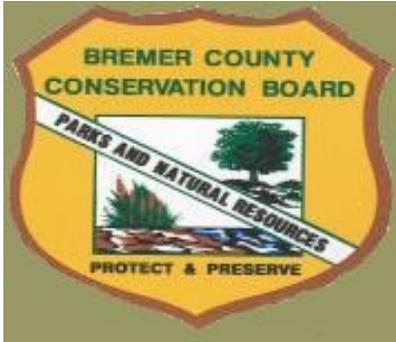


Bremer County Conservation Board

Fall 2016

Environmental Education Programs



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Programs for the 2016 - 2017 School Year:



Babies & Parents: A quick lesson discusses that babies can come from eggs or be born alive. Some babies look like parents and others don't. Several animal match activities and a book make this one fun.
Grade: PreK - Kind. Time: 30 minutes

Living vs. Nonliving: The program will discuss things that are living or non-living as well as dead or alive. Students will sort hands on objects as well as classroom/outdoor objects. A coloring page is provided.
Grade: PreK - Kind. Time: 30 minutes

Electricity: Participants will learn about static vs. current electricity. We can build a circuit and use energy "sticks" to pass a small voltage of electricity through the entire class.
Grades: 5th grade & up Time: 1 hour



Seasons: This program starts with a book. Then we will review some pictures of each season. Finally, we will celebrate the season we are in with activities/crafts from that season.
Grade: PreK - Kind. Time: 30-45 minutes



Iowa State Symbols: Participants will learn about the state tree, rock, flower, bird and those that have been proposed such as the fossil and fish. Iowa's flag, motto and state coin are also discussed. We can add more to go with Bremer County or Iowa history.
Grades: 4th - 6th Time: 45-60 minutes

Snowshoes: Get your class out to **Ingawanis Woodland** for a winter fieldtrip. Participants will get out and enjoy the brisk, winter air during a snowshoe hike while the other half of the class does an indoor craft or lesson. Let us know if you are interested and we'll put you on a list so when it does snow, we can get out and about!
Grade: 3rd and up Time: 60 minutes



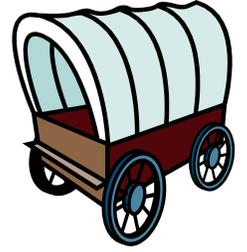
In the Tall, Tall Grass: NEW! This program is based on the Denise Fleming book and has sounds that go along with the book as well as a craft that "hides" animals in the tall, tall grass.
Grade: PreK - Kind. Time: 40 minutes

Habitats or Biomes: Habitat is the most important factor in animal survival and well-being. Learn about the three main Iowa habitats or biomes. Students will participate in a variety of activities to deepen their understanding of habitat importance. We will also touch on **endangered species** since habitat loss is the reason for many species becoming endangered. To fit upper grades, this can focus more on the differences in the biomes. **Ask for books to use.**

Grade: 2 - 12 Time: 1 hour Location: In/Outdoors

Prairies and Pioneers of Bremer County: Learn about prairies and where they've all gone. View pictures of actual prairies and/or visit one. Learn about animals that lived in the prairie long ago and today. Learn about life as a pioneer in Iowa through a variety of exploratory activities such as the Move West game or check out our buffalo and pioneer tubs. America's Lost Landscape - The Tallgrass Prairie DVD is available for checkout.

Grade: K - 12 Time: 45-60 minutes Location: Indoors or at a prairie



Wetland Wonders: Learn about what makes this habitat different from rivers and streams. Find out what critters are found in Bremer County such as the Sandhill Crane and Blanding's Turtle. In-class activities or fieldtrips are available.

Grade: 2 - 12 Time: 1/2 - 2 hours Location: In/Outdoors

Rainforests and Iowa Forests: Students will compare the two. We will look at the layers in each and the animals that live in the different layers. There are a variety of songs, worksheets and guided imagery that can be done to imagine the rainforest. We can also relate the value of rainforests by looking at common items which originate from the rainforest.

Grade: 2 - 12 Time: 45 - 60 minutes Location: In/Outdoors

Tree Factory and Photosynthesis: Students will become a tree! Actually, they will act out the parts of the tree to better understand how the tree uses water and makes food. Students can learn the basics of tree identification. We can also find out about photosynthesis in an unforgettable play!

Grade: 3 - 6 Time: 1 hour Location: In/Outdoors



Oceans: Learn about this former Iowa habitat. Students will learn about where the world's five oceans are located. Layers of the ocean, zones and animals found in the ocean will be discussed as well. Two programs are available depending on the grade level. Animal replicas and a book will be shared with students.

Grade: K - 6 Time: 45 minutes Location: Indoors

GPS Units: There are 30 units. Geocaching continues to be very popular in Bremer County parks and areas. Try geocaching at your school to tie in with latitude and longitude lessons.

Grade: 4 - 12 Time: 1 hour Location: Outdoors



Using a Compass: Students will have the opportunity to learn about maps and compasses as well as how to use them. Students will go on a hunt for rubber stamps to get familiar with the compass.

Grade: 4 - 12 Time: 1 hour Location: Outdoors



Fishing: Students will learn the basics of fishing. This includes equipment, gear, bait and how to fish. Students can fish at a local pond or lake. Chaperones requested! Fish On board game is available.

Grade: K - 9 Time: 1 hour Location: Outdoors

Survival: Students will learn about layers of clothing and how to properly dress for all activities to prevent hypothermia/frostbite and heat exhaustion/stroke. Students will also learn about what to do in an emergency situation. Fieldtrip topics could include fire and shelter building. This program was meant to be done along with the book, **Hatchet**.

Grade: 4 - 12 Time: 1 - 2 hours Location: In/Outdoors

Canoeing: Students will learn about canoeing, water safety and paddling techniques. Students can go canoeing on the water depending on age/ability.

Grade: 3 - 12 Time: 1 - 3 hours Location: Outdoors



Pond Study / IOWATER - Water Testing: Help find out more about water quality in a stream/pond near you. Students will test oxygen levels, pH, Phosphorus and Nitrogen as well as discover the variety of invertebrate and vertebrate life that lives in the water. D nets are used to find eggs, tadpoles, frogs, crawdads, dragonfly nymphs and many more!

Grade: 2 - 12 Time: 1 hour Location: Pond

Enviroscape: This is a model landscape that shows erosion and pollution flowing into a lake. Students will get to spray (rain) on the exposed dirt (cocoa) and pollution (Kool-Aid). A fun way to learn about land practices. You can borrow this model from us or have us do the program.

Grade: 2 - 12 Time: 1 hour Location: Indoors

Geology Rocks! Learn about the three classes of rocks, cave formations, volcanoes, minerals, etc. This program is an interactive way to hold students' attention on an important and sometimes difficult to teach topic. Geodes and rock examples will be brought in. Starbursts will help demonstrate metamorphic rocks.

Grade: 3 - 12 Time: 1 hour Location: Classroom



The Life of a Water Droplet: A necessity for life but do you know where your water supply comes from and how valuable it is? We will learn about the water cycle. A water dice activity allows students to move from ocean to clouds as a water molecule might. There is a **kindergarten - 2nd grade version** of a water program that discusses states of water.

Grade: 3 - 6 Time: 1 hour Location: Indoors

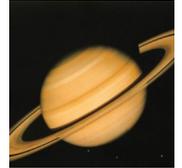


Weather: This program dives into the depths of basic meteorology. We discuss clouds, wind, tornadoes, hail, pressure systems and lightning/thunder. Students move from station to station filling out a worksheet that reviews what they have learned. **Rainbow activities can be done for PreK.**

Grade: K - 6 Time: 1 - 1.5 hours Location: Indoors

Climate Change: We have a kit that contains an interactive cd rom and video. There are printable activity sheets. Students can watch, [An Inconvenient Truth](#).

Grade: 4 - 12 Time: Unlimited Location: Indoors



Solar System: Discuss galaxies, stars, planets, and other phenomenon. Activities can include constellation cans. A Jeopardy game at the end reviews students' knowledge.

Grade: 3 - 8 Time: 1 - 1.5 hours Location: Indoors

Nature Journals: We will make journals out of natural materials such as paper bags. Students can write poems, draw, record temperature and weather conditions or simply discuss their surroundings to get them more aware of the outdoors!

Grade: 3 - 12 Time: 30 - 45 minutes Location: In/Outdoors

Food Chains: Students will talk about food chains and webs. We can use a water activity to show how each animal uses/loses energy from the sun. There are a few books to share with children.

Grade: 3rd - 12th Time: 30 - 60 minutes Location: Indoors

Dinosaurs: Students will work together as paleontologists in a "dig" for dinosaur bones. Ok, the bones are plaster of paris and are in a tub of sand, but at least the kids enjoy digging! A basic lesson discusses some of the common dinosaurs. The Magic School Bus - The Busaurus movie about prehistoric animals can be shown.

Grade: Kind. - 4th Time: 45 minutes Location: Indoors

Snowflakes: Learn about the different types of snowflakes. A book will be shared and students can make a pipe cleaner/bean snowflake. Students can also do a snowflake matching activity.

Grade: PreK - 1st Time: 30 - 45 minutes Location: In/Outdoors



Life Cycles: Learn about life cycles of insects and amphibians. Several replica eggs, larvae, pupa and adults are available for complete metamorphosis and there are some frog stage replicas too. A book may be used as well.

Grade: K - 6 Time: 30 minutes Location: Indoors

Connections to the Land / Food: We discuss the importance of locally grown food and how fruits/veggies grow in the soil. We can discuss food groups or even farmers/gardeners. Lots of books to bring in. We also touch on the food groups and have children plan a healthy meal.

Grade: 1 - 12 Time: 1 hour Location: Indoors

Seeds & Plants: We briefly discuss how a seed grows, how they travel and how plants make their own food. Then we go over plant parts & listen to a song to help students remember. Finally, we play a game that teaches what a seed needs.

Grade: K - 3 Time: 30 - 45 minutes Location: Indoors

Native Americans: Students will brush the surface of Native Americans. We have stories, a drum and some activities to share. We can also assemble a Cheyenne Hunting Lodge. This requires plenty of outside room but places students in a frame of mind to discuss Native Americans. Check out the Buffalo Tub, Lost Nation - The loway DVD and/or Meskwaki History cd rom.

Grade: K - 12 Time: 1 hour Location In/Outdoors

Monarch Tagging: Learn the basics of butterfly id, behavior and life cycles. We will try to catch Monarchs using insect nets or tag Monarchs that have been raised in the classroom. **This program is only available in August and September due to the Monarch's migration to Mexico.**

Grade: K - 12 Time: 30 - 45 minutes Location: In/Outdoors



Polar Bears and Penguins: Students will learn about how these cold weather animals survive. Puppets and stations will help children visualize the cold these animals endure.

Grade: PreK - K Time: 30 - 45 minutes Location: Indoors



Squirrels and Acorns: Students will discuss this commonly seen animal and how it uses acorns for food.

We can take a hike to look for tracks that are commonly found on mild winter days. We will also sort, count and use acorns in a game. Please let us know if you have a nut allergy as real nuts would not be appropriate for your class.

Grade: PreK - K Time: 30 - 45 minutes Location: In/Outdoors

Reptiles and Amphibians: Students will investigate similarities and differences between reptiles and amphibians. "Sal" our salamander can visit. Students can also become a frog chorus. **The Salamander Room felt board is fun for PreK.**

Grade: PreK - 4 Time: 1 hour Location: In/Outdoors

Bats: Students will learn about bats and their importance while exploring some of the common myths surrounding this unique creature. An echolocation game called Bat & Moth shows kids how bats find food.

Grade: K - 4 Time: 1 hour Location: In/Outdoors



Animal Tracks: Students will learn about animal tracks while listening to a book. Then they can use rubber stamps, clay molds or look for tracks in the snow outside.

Grade: PreK - 3 Time: 1 hour Location: In/Outdoors

Insects: Students will participate in activities to keep them buzzing! We can collect insects with nets during the fall.

Grade: K - 6 Time: 1 hour Location: Outdoors

Fuzzy, Furry, Feathery, Slimy, Scaly: Students will learn about mammals, birds, amphibians, reptiles and fish and their characteristics. They will experience hands-on what these animal furs, feathers and scales feel like through examples.

Grade: 2 - 4 Time: 1 hour Location: Indoors

Predator / Prey: Students will learn the terms predator and prey. Carnivore, herbivore and omnivores will be discussed. We will take a look at skulls to decipher which animals eat what by examining teeth. Older students can play an in-depth version of tag.

Grade: 2 - 8 Time: 1 hour Location: In/Outdoors

Who Gives a Hoot? Students will find out what owls live in Iowa and the sounds they make. They will also learn about an owl's hearing, sight and other unique adaptations for living. Owl pellet dissections to find bones can be done.

Grade: 1 - 8 Time: 1 hour Locations: In/Outdoors

Turkey Talk: Learn the basics of wild turkeys in Iowa. Students will see feathers, feet and a pretend head.

Grade: K - 6 Time: 30 - 45 minutes Location: Indoors



Birds/Eggs: Students will learn bird basics before going on a bird hike to identify common birds. We can use binoculars to observe birds, listen to bird calls, discuss migration or just talk about eggs.

Grade: K - 12 Time: 1 hour Location: In/Outdoors

Nocturnal Animals: Students will discover the life of animals that are awake at night. We will discuss bats, owls, coyotes, frogs, and fireflies. Sensory activities with smelling, hearing and touching can be included.

Grade: 2 - 6 Time: 1 hour Location: Indoors



Honey Bees: Students will be visited by "Heather the Honey Bee." Students will learn all about her duties as a worker bee. They will learn what other honey bees do as well. Bee spit (honey) can be tasted.

Grade: K - 3 Time: 30-45 minutes Location: Indoors



Animals Prepare for Winter: How do animals know when winter is coming? Discover the differences in their lives come fall and winter. Find out where they live and how they survive.

Grade: K - 2 Time: 1 hour Location: Indoors

Groundhogs: Learn about groundhogs aka woodchucks. Basic information is provided along with a story. A puppet, skin and skull will show the children what this animal is really like. Crafts can be included.

Grade: PreK - 1 Time: 30 minutes Location: Indoors

Camouflage: What is it? Why do animals have it? Students will learn about camouflage. Animal pictures and a book will be used. During the fall or spring, a camouflage game can be played outside.

Grade: K - 6 Time: 30 - 60 minutes Location: In/Outdoors

Spiders: Basic information on spiders is provided before reading a book. Spider replicas and a coloring page are used. Children can go on a hunt for spiders and their webs outside.

Grade: PreK - Kind. Time: 30 minutes Location: In/Outdoors

