Cass County Conservation
Program List K-3rd
2015-2016

The programs listed are sponsored by the Cass County Conservation Board and are designed to actively involve your students. **Call Lora Kanning at 712-769-2372 or e-mail lkanning@casscoia.us to schedule a program** (Some require further advance notice)! Each program length will be made to fit your schedule. The grade level is just a best fit, feel free to ask about any program or topic to fit you needs!

Kindergarten

Monarch Magic- (K-3) September Only. Your students will get to know the Monarch Butterfly up close and personal during this program. We will tag some Monarchs with special sticky tags (to aid in research), learn about their migration, and we'll watch a video to learn about the Monarch's life cycle and habitat requirements. Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of life cycles of plants and animals.***

Gobble, Gobble- (K) November Only. Is this the only sound that turkey's make? Not by far! We will bring a guest from the local Turkey Federation to demonstrate turkey calls, followed by a chance for your students to make their very own turkey caller craft. Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
Life Science
_ *Apply and understand the basic needs of plants.*

Beaver Adaptations (K-3) March Only. Discover all about Nature's Engineers! This nocturnal animal is not only interesting but a picky eater! Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

Mammals R' Us- (K-3) Using seven different props and student assistants, your classroom will quickly learn what makes a mammal unique from other critters…and they won't soon forget! This program has previously been used by the Des Moines Zoo educational staff.

Feathers for Lunch- (K) The book, *Feathers for Lunch* uses colors and feathers to match with the birds in the story. We will also use the colors, shapes and feathers in a matching/puzzle game.

Nature's Yucky- (K-2) The book, *Nature's Yucky!* uses kids' natural fascination with the stinky, the gross, and the icky to help them learn more about wild animals and why critters

behave as they do. Props will be brought as an addition to this program. Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

Ready to Recycle- (K) This program focuses on showing the class how simple it is to recycle and how they can become involved at home and in their school. By the end of this program they will know exactly what can and can't be recycled in Cass County and even how to spot recycled products while at the store! Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of ways to help take care of the environment.***

Seasons Safari- (K) Outdoor hike, We will discover all what is changing around us! In fall- human, plant, and animal change are the main topics of the hike. Spring focuses on plants and animals. Your students will not look at your schoolyard the same!

1st grade – 3rd grade

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_ *Identify and generate questions that can be answered through scientific investigations*
_ *Recognize that scientists perform different types of investigations*
_ *Use evidence to develop reasonable explanations*
_ *Follow appropriate procedures*
Life Science
_ **Essential Concept and/or Skill:** ***Understand and apply knowledge of life cycles of plants and animals.***
_ *Understand and apply knowledge of organisms and their environments*
_ *Structures, characteristics, and adaptations of organisms*
_ *How individual organisms are influenced by internal and external factors*
_ *Relationships among living and non-living factors in ecosystems*
_ *Understand and apply knowledge of environmental stewardship*

Monarch Migration (1-3) Outdoor-September Only We will begin by reviewing the monarch life cycle. The class will then get to become monarchs as they face migration hazards on their way to Mexico. A great review and fun game!

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Batty for Bats- (1-3) October Only.. Your students will have fun learning facts about bats and will leave with a new appreciation for the often misunderstood bat. A TV/VCR will be needed for a short introductory video. Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*

Owls (1-3) January – February Only. Iowa's first bird species to nest, kicks off the new year right! Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
_ Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

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_ *Ask questions about objects, organisms, and events in the environment*
_ Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

In a Nutshell- (1) We'll read the story *In a Nutshell*, discuss the job of a seed, and do seed sorting and seed math in groups! Iowa CORE: Mathematics, Science, Science as Inquiry
_ *Use mathematics in scientific inquiry*
Classify objects and count the number of objects in each category
Operations and Algebraic Thinking
_ *Represent and solve problems involving addition and subtraction*
Ask questions about objects, organisms, and events in the environment

Metamorphosis Surprise- (1-3) Did you know that a ladybug and dragonflies goes through metamorphosis? Ladybugs, dragonflies and other unexpected insects will be shown and discussed as students and teachers alike will be surprised to learn about metamorphosis of animals other than frogs and butterflies! Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
_ Life Science
_ **Essential Concept and/or Skill:** ***Understand and apply knowledge of life cycles of plants and animals.***
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

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_ Life Science
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Nature's Yucky- (K-2) The book, *Nature's Yucky!* uses kids' natural fascination with the stinky, the gross, and the icky to help them learn more about wild animals and why critters behave as they do. Props will be brought as an addition to this program. Iowa CORE: Science, Science As Inquiry
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Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.*

Inflatable Greenhouses- (K-3) Students will learn what plants need to survive as they build their own greenhouses (made from inflatable, clear balloons). The greenhouses will be left in the classroom for your viewing.

Adaptations of our Feathered Friends- (1-3) Why aren't all bird beaks shaped the same? The answer will be obvious, as the students become different birds and try to eat their favorite foods using another bird's beak. Iowa CORE: Science, Science As Inquiry
_ *Generate questions that can be answered through scientific investigations*
_ *Use appropriate tools and techniques to gather, process, and analyze data*
_ *Plan and conduct scientific investigations*
_ *Use evidence to develop reasonable explanations*
_ *Communicate scientific procedures and explanations*
Life Science
_ *Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats*

What is a Box Turtle? (1-2) We'll learn all about land turtles by reading the book *Box Turtle at Long Pond*. The focus of this program could easily be switched to adaptations if you wish.

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Ready to Recycle- (K-1) This program focuses on showing the class how simple it is to recycle and how they can become involved at home and in their school. By the end of this program they will know exactly what can and can't be recycled in Cass County and even how to spot recycled products while at the store! Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of ways to help take care of the environment.***

4 R's of Recycling - (1-3) In depth learning about recycling and challenge the classroom to a game of Trash or Treasure!

The Lunch Box- (2-3) April Only. Two 'picnic lunches' will be brought to your classroom and your students will be guided through a comparison of the amount of trash each one produces. The program encourages students to make wise choices when selecting foods for their lunches, a great program before the field trip season! Iowa CORE: Science, Science as Inquiry
_ *Use mathematics in scientific inquiry*
Mathematics
_ *Operations and Algebraic Thinking*
_ *Represent and solve problems involving addition and subtraction*

Everything must go somewhere!- (2-3) April Only. Life of a hamburger is the example used to explain everything must go somewhere! Consumerism, packaging, energy, and farming are just a couple topics we touch on.

Seeds- (2-3) Fall is a great time to learn about seeds and nuts. We'll look at different types of seeds and nuts, and play the game Maple Seed Mix-Up.

Swans- (2-3) Winter is the best time to learn about N. A largest waterfoul! Iowa CORE: Science, Science As Inquiry
_ *Ask questions about objects, organisms, and events in the environment*
Life Science
_ *Apply and understand the basic needs of plants and animals and how they interact with each other and their physical environment.*
_ *Apply and understand ways to help take care of the environment*

Web of Life- (2-3) After the story *Pass the Energy, Please!*, students will work together to build a food chain. Food webs could also be discussed. Desks may need to be moved for this activity. Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.***

Web of Life (Calories)- (2-3) This is a food web activity that focuses on primary and secondary consumers. Desks may need to be moved for this activity.

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Classifying Animals- (2-3) Introduction to the animal classification system. Discussion includes mammals, reptiles, amphibian, insects and fish.

Recycle Magic!- (2-3) After learning facts about deforestation, we will make our very own recycled paper! Iowa Core: Science, Science as Inquiry
_ *Generate questions that can be answered through scientific investigations*
_ *Use evidence to develop reasonable explanations*
Life Science
_ *Understand and demonstrate knowledge of environmental stewardship*

Soil Smarts- (2-3) How long does it take to make soil? After a soil discussion, we will look at items that have been decomposing for several weeks. Which ones are decomposing fastest? Why? These questions and more will be answered as students learn why we need to protect our planet. Four weeks notice is required for this program.

Soil Discovery – (2-3) After a review of how soil is made, introduction of terms like fertilizers, and hypoxia. This is also a great program to do before pollutions/solutions. Access to a multimedia video is recommended. Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.***

Plant Basics- (2-3) Two students will be chosen to become "Chloro" and "Phyll" as they help us learn what gives plants their green color and how they make their own food. We can then move on to discuss how plants disperse seeds to ensure their survival. Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.***

Frog n Toad- (2-3) Expand on the life cycle of a frog with learning how to identify them! The focus will be learning about Cass County Frogs and Toads. This program can also integrate tadpole identification. Iowa CORE: Life Science, **Essential Concept and/or Skill:** ***Understand and apply knowledge of life cycles of plants and animals.***

Winter Adaptations- (2-3) We will read Who lives in the Snow. In depth discussion on animal survival including a fun way to remember the animal's strategies for surviving winter! Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.***

Grady's Garden- (2-3) Students will perform a melodrama called *Grady's Garden*. In *Grady's Garden*, "bad" insects and animals destroy garden plants, while "hero" insects and animals help the plants. Other roles in the play include flowers, Grady the Gardener and the producer. The whole class will feel important as they actively learn about the relationships

between plants and animals. Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.***

Rock 'n Cookies???- (2-3) What could a rock and a cookie possibly have in common? That is what your children will find out with this basic introduction to rocks and minerals.

Salmon Struggles (3-5) Outdoor- Learn about the salmon's life cycle and the dangers that they face in their migration. The students will become salmon…can they survive the obstacles?

Pollutions & Solutions- (3-5) I will bring my 3-D model of a watershed complete with houses, industries, golf courses, etc. as your students get a very basic introduction of erosion, water pollution and, most importantly, learn ways to prevent pollution. This is a great hands-on activity that will involve all of the children.

Trumpeter Swans- (1st-3rd) Students will participate in a discussion of the life history of trumpeter swans and the history of their populations in North America, and Iowa in particular. January- optional field trip to Atlantic Schildberg Rec. Area to see the swans.
Iowa CORE: Science, Life Science **Essential Concept and/or Skill:** ***Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment. Apply and understand ways to help take care of the environment. Ask questions about objects, organisms, and events in the environment***