

ENVIRONMENTAL EDUCATION SERVICES FOR WINNEBAGO COUNTY SCHOOLS

Provided by the Winnebago County Conservation Board
2017-2018 School Year



Classroom Programs
Field Trips
Media Library
Items Available for Loan

Winnebago County Conservation Board

Lisa Ralls, Naturalist

Thorpe Park

34496 110th Avenue

Forest City, IA 50436

Phone/Fax: (641) 565-3390

lralls@winnebagoccb.com

Web Site: www.winnebagoccb.com

Winnebago County Conservation Board Fall, 2017

Dear Educators:

Welcome back to school! In this booklet, you will find information concerning the **free** educational programs and services that the Winnebago County Conservation Board provides to schools within Winnebago County. The Winnebago County Conservation Board is a county department providing outdoor recreational opportunities in Winnebago County and promoting the conservation of our natural resources.



In accordance with our goals, we conduct an active Environmental Education program that provides public education throughout the year and education targeted especially at school children during the school year. This program is ongoing, *so please keep your eyes and ears open for new programs and/or services that become available over the course of the school year.* I will keep you posted! Also, if you have an idea for a program that you don't see here, please feel free to contact me and I'll see what I can do for you.

Each fall, I e-mail this booklet to teachers throughout the county and you are now receiving this year's version. Hopefully, this electronic version makes it easy for you to keep the information handy, since you can simply save the booklet on your computer and refer to it when you need to. I hope this works out well for you.

I also e-mail occasional notices out over the course of the school year about new or upcoming programs, workshops, etc. Since I am also on the Board of Directors of the Iowa Conservation Education Coalition, you may receive periodic updates about what that organization is doing, as well. I will also be sending out periodic updates on the plans we have for an environmental education center here in Winnebago County! Naturally, if you do not wish me to contact you, just let me know and I will be glad to take your name off my mailing list.



Finally, if you are a new teacher, please feel free to call or e-mail me and introduce yourself! Of course, whether you are new or not, please don't hesitate to contact me for more information about any of our services or to arrange a program or field trip. My office hours are Monday through Friday, 7:30 AM--4:00 PM and I also check my e-mail often.

Have a great school year and I look forward to hearing from you!

Sincerely,

Lisa Ralls

Naturalist
Winnebago County Conservation Board

CLASSROOM PROGRAMS

The following programs are available for presentation in your classroom, with most running 30-60 minutes. Some are designed for elementary students, while others are best suited for middle and high school students.

Many can be adapted for any grade.

Please take a look at what we have to offer and contact me if you'd like to schedule a program.

And don't forget...Programs on other topics of your choice can also be given upon request—please just ask!

Programs for Elementary Students

(Don't forget the ones listed later that are also adaptable for any grade!)

Animal Adaptations and Defenses

By observing actual animal parts (such as feathers, furs, talons, and teeth) students will see how animals are able to survive in the wild.

Animal Tracks and Signs

Students will see what signs animals leave behind and also how to identify common animal tracks. Optional activities include making animal track ink prints or plaster animal track casts.



Discovering Insects

Students will discover what makes insects unique and will have the chance to see one of their peers turned into a bug right before their eyes!

Winter Bird Feeding

Your class will learn which birds stay around here in the winter, why they do, and what they eat. Each student will also get to construct a simple bird feeder to take home and will get a small bag of birdseed.

Winter Wildlife

Where do animals go in the winter? With the help of various items such as nuts, furs, antlers, etc., students will learn where animals go and how they are able to survive our harsh winter weather.

Programs for Middle and High School Students

(Don't forget the ones listed later that are also adaptable for any grade!)

Basic Canoeing

Your students can learn some of the basics of canoeing, including safety, entering and exiting a canoe, and paddling techniques. If a field trip is possible, they can then put that knowledge to work on Thorpe Park's quiet Lake Catherine.

Composting—Nature's Recycling

Composting is an easy way to recycle many common household wastes. Students will learn how composting helps out the environment, conserves our natural resources, and even saves us money. They will also learn how easy it is to do and see examples of what can be recycled!



Conservation Careers

Despite what many people think, not everyone in the conservation field is a park ranger! This power point presentation and discussion will give your students an excellent introduction to the many varied career paths that are possible in the field of conservation.

Earth Day

This program will help your students learn what Earth Day is all about. We will discuss the many ways we can celebrate Earth Day and then each class will construct a time line to put environmental events into perspective.



Geocaching

Geocaching is a popular outdoor activity! It combines GPS technology with hiking to create modern-day “treasure hunts.” Kids will learn about this activity and how to get started with it. And, if your students can get outdoors, they’ll be able to search for some virtual “treasures!”

Groundwater Detectives

Using a groundwater flow model, students will observe a dramatic demonstration of how water, including polluted water, flows underground. Where will it show up?

Iowa Wetlands

By viewing a power point program, some wildlife mounts, and furs, students will learn how our north Iowa wetlands were formed, why they are important, and how conservationists study and manage them.

Journey to the Stars

This DVD, followed by a short talk, is a wonderful way to introduce your students to the stars! The movie was produced by NASA and the American Museum of Natural History and was used by the Hayden Planetarium in New York City for their planetarium shows. It contains wonderful information, along with stunning visuals, all helping students understand the birth, life, and death of stars.

The Navigation Stars of Lewis and Clark

As Lewis and Clark traveled across the continent, they used the sun, moon, and stars to determine their exact locations. Students will learn just how they were able to do this. This program can also be combined with a trip to the Star Lab to “see” what Lewis and Clark saw!



Orienteering

After learning the basics of how to read a compass, students will head outdoors to put their skills to use constructing a compass trail for others to follow!

Rain Gardens

A rain garden is a garden that is located where water tends to pool up (near a drain spout, for instance). It is designed to soak up excess water, thus reducing runoff and the pollution often

associated with it. This program will introduce students to rain gardens, their benefits, where they should be located, and how to create them, including what types of plants should be used.

Skullduggery

After a discussion of carnivores and herbivores (and other “ivores”), students will have a chance to key out actual mammal skulls, discovering the unique characteristics of each one!

Space Food

By seeing a mock-up of a real space food tray and watching a fun video, students will learn just how astronauts are able to prepare food and eat in space!

Tree Ring Mysteries

You can learn a lot more from tree rings than just the age of a tree! Students will discover some of the tales that tree rings can tell by looking at actual tree ring patterns and trying to solve some tree ring puzzles. This program is a good follow-up to the Tree Detectives program (see below)!

Tropical Rainforests

Through a slide program, a discussion, and a fun video, students will learn about the uniqueness of our tropical rainforests.

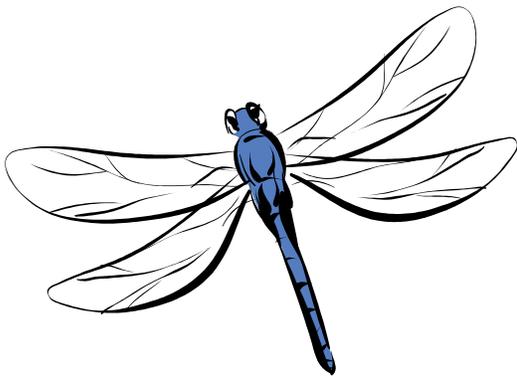


Water Quality Critters

One way that scientists can determine the general quality of stream water is to sample what kinds of invertebrates live there. By using some hypothetical water samples, students will learn how scientists are able to do this, and will have a chance to compare their “water” samples with those of their classmates!

Wildlife Populations

Students will learn what factors affect wildlife populations and, through an interactive activity, will also see how biologists are able to estimate populations and population trends.



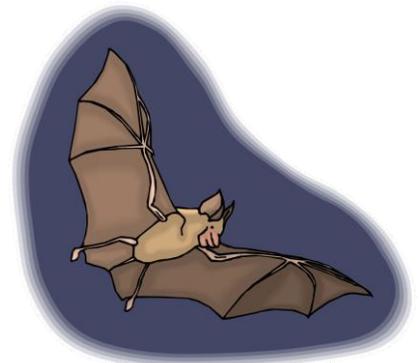
Programs that can be adapted for *any* grade level

Bats!

Bats can seem creepy. Through this program, though, students will see that bats are not only fascinating creatures, but also quite beneficial. The program will include an entertaining video, a bat skeleton, a bat house, and a sampling of food pollinated by bats!

Birds of Prey

Imagine a hawk or an owl in your classroom! Mounted birds will help demonstrate the unique adaptations of raptors, as will other items such as feathers, talons, and owl pellets.





Eagles of Iowa

Iowa has become a prime location for overwintering eagles, and has increasingly been the home to nesting eagles, as well! This program will teach students about our national symbol, including its return from the brink of extinction, its habitat, and threats that it still faces.

Endangered!

Students will learn the three main reasons why animals become endangered, will view a power point program of beautiful photos of endangered animals, and see some actual pelts and skins from endangered species. They will also learn how they can help.

Fishing Fun

Students will learn the basics of fishing, including equipment and techniques, and will even have the opportunity to try their hand at casting! As with the canoeing presentation, this can also be combined with a fun field trip!

Freshwater Animals

By viewing some mounted animals and other hands-on items, your class will learn about some of the unique adaptations that help aquatic animals to spend much of their lives in the lakes, rivers, and streams of Iowa.

Iowa Mammals

By experiencing a variety of different furs and mounts, students will have the chance to learn about many different Iowa mammals.

Iowa Wildflowers

Have you ever wondered why plants have flowers? Your class will know after this program! Thanks to a colorful power point program, your students will also learn about some of Iowa's more common wildflowers, including how to identify them and how many of them were used by Native Americans and pioneers.

Lewis and Clark's Discoveries

Students will learn about the numerous animals that we take for granted today, but that Lewis and Clark were actually the first to record as they explored the western U.S.

Monarch Magic

Students will learn about the Monarch butterfly and its amazing fall migration to Mexico. If the program is presented from mid-August through late September, the students may also have the unique opportunity to tag some migrating Monarchs for research!

My Side of the Mountain

Many classes read *My Side of the Mountain* as part of their reading curriculum. This program presents information about some of the things that are mentioned in the book, all in an effort to



enhance the students' reading experience. Items shown during the presentation include mounts, shells, nuts, pelts, and photos. Teachers are welcome to keep the items on loan in their classroom until the students are finished with the book.

Native Americans

Long before settlers arrived in Iowa, Native Americans were living in harmony with the land. By observing some very unique artifacts and items, students will see how some Native Americans lived. Older students can even try their hand at some archaeology role-playing as they try to reconstruct and interpret an "artifact!"

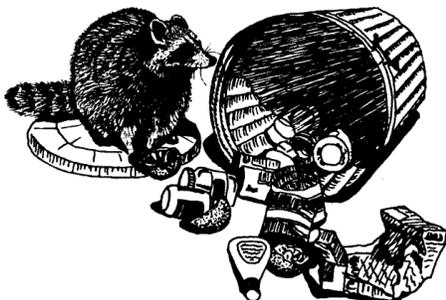
Owls—Hunters of the Night

Owls are unique and efficient predators that are able to find and capture their prey in almost total darkness. How do they do it? By viewing mounted owls and actual owl parts (talons, feathers, a wing, etc.), your students will learn the owls' secret techniques! Older students can also dissect some actual owl pellets to learn just what owls eat!



Prairie Life

Students will get to see firsthand some of the animals and grasses that make up a tallgrass prairie. Older students will also learn a little about prairie ecology. In addition, older students could also watch the wonderful DVD, America's Lost Landscape (see the Media Programs section) as a nice follow-up!



Rascal

This presentation is similar to the My Side of the Mountain program. If your class reads the book Rascal, you may be interested in this program that highlights some of the natural things that are portrayed in the book. Students will see mounts, photos, pelts, shells, and nuts, and hear frog calls, all to enhance the students' reading of the book. Teachers are welcome to keep the items on loan in their classroom until students are finished with the book.

Recycling and Waste Reduction

With the help of a very entertaining video and some "trash," students will learn how reducing and recycling their garbage can help out our environment. They will also see what can be made from recycled materials. This program makes an excellent Earth Day program!



Snowshoeing

Students will get to see different types of snowshoes and learn about each one, as well as basic snowshoeing techniques. Snow permitting, the class can even try out this fun outdoor activity!

The Star Lab

This portable and inflatable planetarium provides a unique way for students to learn about earth science and astronomy without leaving the school building! Star Lab topics that are available

include: *Greek Constellations*, *Native American Constellations*, *Plate Tectonics*, *The Solar System and Milky Way Galaxy*, and *The Navigation Stars of Lewis and Clark* (which requires the *Navigation Stars of Lewis and Clark* classroom program first).



Tree Detectives

After a discussion of the importance of trees, students will learn how trees work and how to “read” the history of a tree. Students will also learn the basics of tree identification.

Turkey Talk

The turkey is a truly unique bird that is becoming more common here in north Iowa. Students will learn interesting facts about the wild turkey and the remarkable comeback it has made. This program could add a nice touch to your Thanksgiving celebrations!

A Virtual Tour Through the Solar System

This visually stunning power point program will give your students a unique tour from the sun, out through the solar system, and beyond! Students will learn about planets, moons, and galaxies using amazing NASA photographs. This program would be a nice addition to a Star Lab program, or a wonderful substitute, if you don’t have the space for a Star Lab program!

*Other programs may be offered over the course of the school year.
If they are, they will be advertised through special e-mail notices.*

FIELD TRIPS



The following WCCB-sponsored field trips provide fun and educational learning experiences for your students. The activities for each trip will be customized, depending upon your wishes, as well as the size and grade level of your class, and the length of time involved. If you would like a field trip to another local area, just ask!

The Lime Creek Nature Center, Mason City (Fall, Winter, Spring)

Wooded trails, a prairie, the Winnebago River, a couple of ponds, and a wonderful nature center all provide countless opportunities for your students to explore and discover the natural world of north Iowa! The Center has also become a wonderful example of alternative energy use.

Thorpe Park, west of Forest City (Fall, Winter, Spring)

This park houses the offices of the Winnebago County Conservation Board. Many activities can be enjoyed from the shelterhouse, along the scenic marsh trail, at Lake Catherine, and throughout the park’s prairie areas.



Pilot Knob State Park, east of Forest City (Fall, Winter, Spring)

During the fall and spring, the park offers excellent wooded trails, a shelterhouse, and a pond for various outdoor activities. Much of the park is inaccessible to school groups during the winter but, even then, there are still areas available for students to enjoy.



The Rockford Fossil and Prairie Park (Fall, Spring)

For a fun, fossil-hunting experience, you can't beat this Floyd County park! It also contains scenic prairie areas and is the site of a rare and endangered plant. And, the visitor center (see the photo to the left) contains many excellent exhibits that demonstrate how Iowa's landscape has changed over the centuries.

The Landfill of North Iowa, Clear Lake (Fall, Spring)

You might not think that going to a landfill would be an educational field trip, much less a fun one.

Well, think again! This landfill is much more than just a place where people dump their garbage. It is a shining example of what and how much can be recycled. The center itself is a marvel of construction, with almost the whole building being constructed out of recycled materials! The Landfill even has its own Education Coordinator to lead tours and activities.



The Water's Edge Nature Center, north of Algona (Fall, Winter, Spring)

This nature center has many wonderful displays (see the photo to the right), and the adjoining lake and park provide many opportunities for a variety of outdoor activities!

Union Slough National Wildlife Refuge, east of Bancroft (Fall, Spring)

This area provides some wonderful wildlife viewing opportunities, allowing students to see what northern Iowa was like before settlement! A bus tour through or around the refuge can give your entire class the chance to view many of north Iowa's native and migrating species, and displays in the visitors' center will enhance your visit with some wonderful information.

ITEMS AVAILABLE FOR LOAN

Bulletin Board Packets—These include materials like posters, pictures, and other items that will spice up your science-related bulletin boards. Just give us a topic and we'll put together a packet for you!

The Star Lab—If you'd like to borrow the Star Lab for an extended period of time and use it yourself, you are welcome to! We do require, though, that before you borrow it, you either have past experience using it or have a brief (1/2 hour) introduction to setting it up and using it.

Recycling Education Kit—This kit comes with a teacher's guide and everything you need to conduct a whole unit on waste reduction and recycling!



Canoes—We have a set of five canoes that are available for schools and other youth groups to borrow. (We do not rent them out to families or individuals, though.) The canoes come with a trailer, life jackets, and paddles, and are usually used at Thorpe Park, but they can be taken other places, as well.

Snowshoes—If your students get “cabin fever” during the winter, you may want to borrow our set of 10 snowshoes. They can be taken to a nearby recreation area or can be used at the school, as long as there is enough snow. These work out great for PE classes!

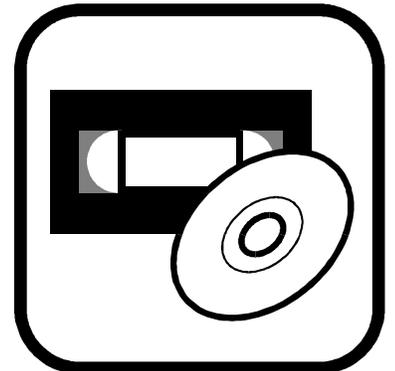
Fishing Poles—The DNR has loaned fishing poles to many county conservation boards and various organizations throughout Iowa. We have 16 of these poles and would be more than happy to let you use them! Thanks to a generous donation, we also have a set of ice-fishing poles you can borrow, if you feel a little more adventurous.

GPS Units—These are used for our geocaching programs, but can also be used for other activities.

Natural Materials—If you need to borrow furs, feathers, fossils, bird nests, skulls, or any other materials, we may have just what you need. We can also put together a collection of items based on a theme (birds, wetland animals, animal tracks and signs, etc.) Just call to see what we’ve got!

MEDIA PROGRAMS

The following **videos**, **slide programs**, **CD’s**, CD Roms, and **DVD’s** are sometimes used in classroom presentations, but are also available for loan to any teacher who feels they may be of use. Space does not permit a detailed description of each one but, if you would like more information on any of these programs, including their appropriateness for a particular grade level, simply give me a call.



- **Aldo Leopold—A Prophet for All Seasons** (video-56 minutes)
- **All Things are Connected** [Chief Seattle’s famous environmental speech] (video-13 minutes)
- **America’s Tallgrass Prairie** (DVD-60 minutes)
- **Animals of the Night** (video-30 minutes)
- **Archery: On Target for Life** [National Archery in the Schools Program] (DVD-12 minutes)
- **At the Crossroads—Iowa’s Environmental Issues** (slide program on video-12 minutes)
- **Attracting Birds to Your Backyard** (video-52 minutes)
- **Attracting Butterflies to Your Backyard** (video-58 minutes)
- **The Best Fishing—It’s in Your Hands** [catch and release fishing] (video-11 minutes) (also available in DVD format)
- **Better Land, Better Water** (video-53 minutes)
- **Biodiversity of Iowa—Aquatic Habitats** (CD Rom)
- **Bluebirds Up Close** (video-50 minutes)
- **Building Whitetail Paradise with “High Intensity” Food Plots** (DVD-60 minutes)
- **Building Whitetail Paradise with “High Intensity” Hunting Plots** (DVD-68 minutes)
- **Building Whitetail Paradise (Buck Aging, Spring Planting, Summer Maintenance)** (DVD-55 minutes)

- **Building Whitetail Paradise (Deer Season in Paradise!)** (2-volume DVD set, each 68 minutes)
- **The Butterfly King** [the Monarch's life cycle] (video-20 minutes)
- **Common Birds and Their Songs** (CD)
- **The Community Forest** [benefits of urban tree-planting] (video-6 minutes)
- **A Culture of Conservation Video Series** [includes the following short videos] (DVD-53 total minutes)
 - **Building a Culture of Conservation: Iowan to Iowan** (7 minutes)
 - **Water is Life** (8 minutes)
 - **We All Have a Place in the Watershed** (9 minutes)
 - **Don't Call it Dirt: A Passion for Soil** (8 minutes)
 - **The Work of Our Hands** (10 minutes)
 - **Reclaiming Stewardship** (11 minutes)
- **Discover Bats!** (video-47 minutes)
- **A Dynamic Heritage—Iowa's Natural Resources** (slide program on video-16 minutes)
- **Earth Day, Every Day** (a National Wildlife Federation narrated slide program-17 minutes)
- **Elliott Mess and the Case of Household Hazardous Wastes** (video-12 minutes)
- **Endangered Species** (a narrated slide program-20 minutes)
- **Exploring School Natural Areas** (video-13 minutes)
- **Eyewitness Video—Bear** (video-35 minutes)
- **Eyewitness Video—Butterfly and Moth** (video-35 minutes)
- **Eyewitness Video—Insect** (video-35 minutes)
- **Eyewitness Video—Jungle** (video-35 minutes)
- **Eyewitness Video—Plant** (video-35 minutes)
- **Fall Color** (video-30 minutes)
- **Fall Wildflowers** (video-45 minutes)
- **Forests are More Than Trees** (a National Wildlife Federation narrated slide program-20 minutes)
- **Freshwater Animals** (video-30 minutes)
- **From Gray to Green** [urban forestry] (video-11 minutes)
- **Green Means** [kids improving the environment] (video-15 minutes)
- **The Good Earth** [an inspirational video] (video-5 minutes)
- **Home Composting—Turning Your Spoils to Soil** (video-18 minutes)
- **How Animals "Talk"** (video-30 minutes)
- **Iowa Frog and Toad Calls** (CD)
- **Ice-Fishing in Iowa (also available in DVD format)** (slide program on video/DVD-8 minutes)
- **Incredible Wetlands** (DVD-25 minutes)
- **Iowa's Forests and Woodlands** (slide program on video-7 minutes)
- **Journey to the Stars** (DVD-25 minutes, special features add additional time)
- **Just a Drop in the Ocean** [the importance of clean water] (video-9 minutes)
- **Kids Discover Bats** (video-22 minutes)
- **Land of the Ringneck** [pheasant] (video-50 minutes)
- **Landscaping for Wildlife** (video-13 minutes)
- **The Last Great Wilderness** [why the Alaskan Arctic should be protected] (slide program on video-30 minutes)
- **Learning with Nature** [using outdoor areas for daily learning and the benefits of doing so] (DVD-23 minutes)

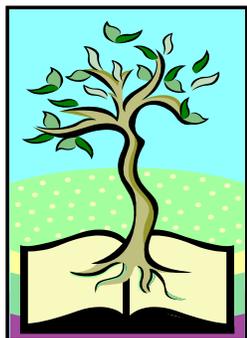
- The Living Soil (CD Rom)
- The Man Who Planted Trees (video-30 minutes)
- Less Means More...For the Future [waste reduction and recycling] (video-17 minutes)
- Living Roadway Trust Fund Educational DVDs [short videos showing alternate prairie plantings, an interactive plant gallery, prairie wildlife, as well as several short music videos]
- National Geographic Video—Camouflage and Mimicry (video-45 minutes)
- National Geographic Video—The Great Whales (video-60 minutes)
- National Geographic Video—The Grizzlies (video-60 minutes)
- National Geographic Video—Reptiles and Amphibians (video-60 minutes)
- National Geographic Video—Rocky Mountain Beaver Pond (also available in DVD format) (video/DVD-60 minutes)
- On the Wings of the Wind (also available in DVD format) [bald eagles in Iowa] (video/DVD-15 minutes)
- Owls Up Close (video-55 minutes)
- Out of the Mud—A History of Iowa's Roads (DVD-22 minutes)
- Partnerships for Watersheds (video-13 minutes)
- PET Recycling: The #1 Success Story [how plastic bottles are recycled] (DVD-10 minutes)
- Plight of the Freshwater Mussel—Canaries of the Deep (DVD-12 minutes)
- Predators—They're Part of the Picture (a National Wildlife Federation narrated slide program-20 minutes)
- Production Agriculture—Feeding People While Protecting the Environment (video-10 minutes)
- The Rainforest Rap [a music video] (video-7 minutes)
- Record-Breaking Animals (video-30 minutes)
- Recycle Rachel—Waste Reduction and Recycling for Grades 6-12 (video-8 minutes)
- Reduce, Reuse, and Recycle (video-9 minutes)
- Return of the Wild Turkey (video-5 minutes)
- The Rotten Truth (also available in DVD format) [solutions to the garbage problem] (video/DVD-30 minutes)
- Sarah's Tree—Waste Reduction and Recycling for Grades K-5 (video-11 minutes)
- Silent Witnesses—America's Historic Trees (video-57 minutes)
- Soil—We Can't Grow Without It (a National Wildlife Federation narrated slide program-20 minutes)



- Songbirds and Birdsongs (CD)
- Spittin' Feathers—Sounds of the Wild Turkey (CD-45 minutes)
- Spotlight on: Environment [plastic bottle recycling promo] (DVD-5 minutes)
- Spring Wildflowers (video-45 minutes)
- Summer Wildflowers (video-45 minutes)
- A Tallgrass Prairie Revival [why prairies are important and how we're bringing them back] (DVD-27 minutes)
- Trees in Any Language (video-21 minutes)
- Troubled Waters [why rivers are important and how they're at risk] (DVD—26 minutes)
- Voices of the Prairie [prairie sounds] (CD-51 minutes)

- [Voices of the Prairie](#) [prairie sounds and 3 songs] (CD-15 minutes of sounds, 15 minutes of music)
- [Water—We Can't Live Without It](#) (a National Wildlife Federation narrated slide program-20 minutes)
- [We All Live in a Watershed](#) (video-5 minutes)
- Wild About Turkey (CD Rom)
- [The Wilderness World of Sigurd Olson](#) (video-28 minutes)
- Wildlife Forever (CD Rom with curriculum guide for grades 3-6)
- [Woodland Harvests](#) [edible woodland plants] (video-55 minutes)
- [Young People Caring for Trees](#) (video-7 minutes)

ENVIRONMENTAL AND SCIENCE INFORMATION



We are also here to provide you with any kind of environmental and/or science information that you may need. If you need information, facts, or figures to teach a particular environmental or science topic, please call and we'll try to help you out. In addition, if you would like information on upcoming events, environmental education workshops, etc., please let me know.

Or, perhaps you would like to improve the area around your school to make it more attractive to wildlife and more conducive to outdoor lessons. Again, we can help you out by providing information on how to improve your school grounds, including plans for nesting boxes and technical assistance planting native vegetation. So, just give us a call—we'd like to work with you!