

# Between the ROWS

Spring 2010



A Newsletter of the Nebraska Agriculture in the Classroom Program

## Celebrate Earth Day's 40th Anniversary April 22

Everyday is Earth Day in agriculture. American farmers are stewards of the land. They realize without a healthy Earth, they could not provide us with the safest, most abundant and most affordable food supply in the world.

Everyday should be Earth Day for all of us. It is everyone's respon-

sibility to care for the Earth. Each of us can make a difference.

Are you and your students good friends to planet Earth? There are lots of easy things you can do at school every day to help save the land, air, water and even animals. So, let's celebrate Earth Day by learning new ways to help keep our planet healthy!

### AIR

You can help reduce air pollution by reducing oil use at school too.

- Keep the doors closed when the heat is turned on.
- Ask your school to fuel the busses with biodiesel made from soybeans.
- Turn off the lights in empty hallways when not in use.
- Use the PA system to share energy tips.

### LAND

You can help reduce the amount of trash in the garbage dumps too.

- Don't throw away that paper – recycle it! Does your class recycle paper? Do you recycle anything else?
- Start or improve a recycling center in your classroom and/or in your school.

### ANIMALS

- Make bird feeders by placing peanut butter in pinecones and rolling them in birdseed. Hang the pinecone in a tree you can see from your classroom.
- Visit a zoo and see how animals live in different environments. Some of their habitats, like a wolf's home, may look like land near your home or school. Other habitats, like a polar bear's home, will look very different.

### WATER

- Ask your janitor to water the school lawn when it's cooler (like in the morning or evening) because the soil is less thirsty then.
- Make sure the bathroom faucets are turned off.
- Don't litter near or in lakes, ponds and creeks.

*Adapted from Illinois Agriculture in the Classroom Earth Day Ag Mag*

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# Earth Day Bracelet

**Objective:** Students will learn about the 'circles of the Earth.'

**Grades:** K-5

**Materials (1 each per student):**

- 14" brown or black REXLACE
- **Clear** Plastic 6X9MM Pony Bead
- **Blue** Plastic 6X9MM Pony Bead
- **Green** Plastic 6X9MM Pony Bead
- **Brown** Plastic 6X9MM Pony Bead
- **Orange** Plastic 6X9MM Pony Bead
- **Black** Plastic 6X9MM Pony Bead
- **White** Plastic 6X9MM Pony Bead
- **Yellow** Plastic 6X9MM Pony Bead

**People**  
**Water**  
**Plants**  
**Soil**  
**Day**  
**Night**  
**Air**  
**Sun**



**Directions:**

1. Tie a knot on one end of the REXLACE at about 1". String the colored beads to represent the circles of the Earth. Take the end of the REXLACE without a knot and lace it through the clear "People" bead. Tie a knot at the end to form an adjuster for the bracelet.
2. People move in circles. The earth provides us with everything we need to survive. We must take care of our valuable resources.
3. Water is a circle. Water rains down on land. Water collects in oceans, rivers, lakes, and streams. It evaporates back up into the sky and collects in clouds. The clouds become heavy, and rain falls down to the land again.
4. Plants and soil are circles. Plants grow from soil. Plants provide food for animals. Animals provide food for other animals. Animals die and decompose. New soil is made. New plants grow.
5. Earth is a circle. Earth is spinning through space, rotating on its axis, revolving around the sun. The Earth and sun give us the circle of the seasons and the circle of night and day.
6. Air is a circle. Animals breathe in oxygen and exhale carbon dioxide. Plants take in carbon dioxide, use it to make food, and give off oxygen. Animals breathe it in again.
7. The sun is a circle. The sun provides warmth and light for all the Earth's circles. Without the sun, plants and animals would not survive. The sun binds us together.

*Adapted from Illinois Agriculture in the Classroom*

# Earth Day Time Line

**Objective:** Students will identify important dates in environmental history.

**Grades:** 4-6

**Materials Needed:**

- Sequencing Strips of Events for each group

**Directions:**

1. Begin by asking students to think about important dates in environmental history.
2. Divide students into small groups. Give them the historical event strips provided with this lesson. (Note: These strips can simply be copied and cut apart. You may want to choose different colored paper for each group set to make sorting them afterwards easier.)
3. Without using any additional materials, have students put the events in order of time they occurred. When all the groups have finished, facilitate a class discussion to determine as a class the proper order. Students could line up in the room to make one large human time line as a class.



## Earth Day Time Line Answers

**1780** – John Audubon, founder of the National Audubon society, is born. The society promotes the conservation of wildlife, especially birds.

**1872** – The tree planting holiday known as Arbor Day becomes a national holiday and is now celebrated the last Friday in April.

**1872** – Yellowstone becomes the nation's first national park.

**1902** – Ansel Adams is born. His famous black and white photographs of our national parks helped the environmental movement.

**1905** – The United States Forest Service is established.

**1916** – The National Park System is established.

**1970** – The first Earth Day, coordinated by Denis Hayes, gave 20 million Americans a chance to express concerns about the environment.

**1970** – The Environmental Protection Agency is established.

**1972** – The Clean Water Act becomes a law.

**1973** – The Endangered Species Act becomes a law.

**1990** – The National Environmental Education Act is established to educate the public about environmental decisions.

**1992** – EPA launched the Energy Star® Program to help consumers identify energy-efficient products.

**1994** – The bald eagle is moved from an “endangered” species to a “threatened species”.

**2003** – The Clean School Bus USA program updated 4,000 school buses to reduce air pollution.

**2005** – The Energy Policy Act created regulations to ensure all gasoline sold in the U.S. contains set percentages of renewable fuels (such as ethanol).

**2009** – The “Change the World, Start with Energy Star” national campaign was launched to help fight climate change through energy efficiency.

*Adapted from Illinois Agriculture in the Classroom Earth Day Ag Mag*

# Sequencing Strips of Events

Recommendation: These strips can simply be copied and cut apart.  
You may want to choose different colors for each group set to make sorting them afterwards easier.  
Please be sure to mix these strips up as they are listed in order.

**John Audubon, founder of the National Audubon Society, is born. The society promotes the conservation of wildlife, especially birds.**

**The tree planting holiday known as Arbor Day becomes a national holiday and is now celebrated the last Friday in April.**

**Yellowstone becomes the nation's first national park.**

**Ansel Adams is born. His famous black and white photographs of our national parks helped the environmental movement.**

**The United States Forest Service is established.**

**The National Park System is established.**

**The first Earth Day, coordinated by Denis Hayes, gave 20 million Americans a chance to express concerns about the environment.**

**The Environmental Protection Agency is established.**

*Adapted from Illinois Agriculture in the Classroom*

# Sequencing Strips of Events (cont.)

**The Clean Water Act becomes a law.**

**The Endangered Species Act becomes a law.**

**The National Environmental Education Act is established to educate the public about environmental decisions.**

**EPA launched the Energy Star® Program to help consumers identify energy-efficient products.**

**The bald eagle is moved from an “endangered” species to a “threatened species”.**

**The Clean School Bus USA program updated 4,000 school buses to reduce air pollution.**

**The Energy Policy Act created regulations to ensure all gasoline sold in the U.S. contains set percentages of renewable fuels (such as ethanol).**

**The “Change the World, Start with Energy Star” national campaign was launched to help fight climate change through energy efficiency.**

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# Ag Pen Pal Program

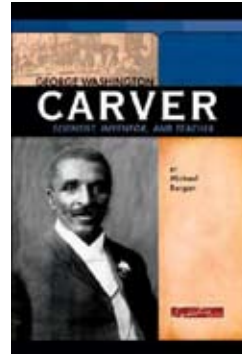
**Teacher & Classroom Registration  
2010-2011**



**Sign up by May 28, 2010 to be entered to win one of the 2009 Children's Agriculture Books of the Year for your grade level!**



**Grades  
K-3**



**Grades  
4-5**

Name: \_\_\_\_\_ # of Students: \_\_\_\_\_ Grade Level: \_\_\_\_\_

School Name: \_\_\_\_\_

School Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

- I am a returning Ag Pen Pal participant.  
How many years have you participated in the Ag Pen Pal Program? \_\_\_\_\_
- I am a new Ag Pen Pal participant.      Public \_\_\_\_\_      Non-public \_\_\_\_\_
- OK to give out my email address

**Please return this form  
by mail to OR email the  
above information to:**

Natalie Friesen, Coordinator  
Ag Pen Pal Program  
P.O. Box 80299  
Lincoln, NE 68501-0299  
natalief@nefb.org

**Contact information:**  
800-546-3496  
402-421-4485

# Books

## Soil! Get the Inside Scoop

By: David L. Lindbo

Grade Level: 3-6

Get kids excited about the living world of soil with this new publication from the Soil Science Society of America. This 36-page, full-color book explores how soil is part of our life – the food we eat, the air we breathe, the water we drink, the houses we live in and more. Along the way, readers learn about different kinds of soil and meet the scientists who work with soil every day.

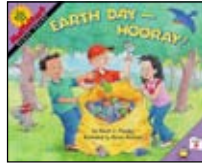


## Earth Day – Hooray!

By: Stuart J. Murphy

Grade Level: 3-6

Earth Day is on the way, and Ryan, Luke and Carly have a plan. If they manage to collect and recycle 5,000 aluminum cans, they can make enough money to buy some beautiful flowers for nearby Gilroy Park. CAN they do it? Counting the cans gives Ryan, Luke and Carly – along with readers – a lesson in place value. And facts about recycling throughout the story will help readers understand how important it is to take care of the earth.



## The New 50 Simple Things Kids Can Do to Save the Earth

By: Sophie Javna

Grade Level: K-12

In this revised book you will find easy-to-do and kid-friendly projects that show how kids can make a difference, and each chapter is packed with tons of links to groups and resources. It doesn't just inform kids, it encourages them to make a difference by providing them, their friends and their families the tools to take action.



## Drip! Drop! How Water Gets to Your Tap

By: Barbara Seuling

Grade Level: K-2

This brightly illustrated picture book enters an already crowded field of titles about this topic. After a brief explanation of the water cycle, the author explains how reservoir water is filtered, mixed with alum to remove dirt, made “clean and safe” at the water-treatment plant, and sent through pipes to homes and buildings. The writing is clear and concise, the science simple and correct.



Agriculture in the Classroom is a nationwide educational program to help students develop an understanding that agriculture is our source of food, clothing, shelter and other essentials of life.

Nebraska's Agriculture in the Classroom Program is funded and administered by the Nebraska Foundation for Agricultural Awareness.

### The program provides:

- Educational resources
- Teacher/student workshops
- In-service and Pre-service presentations
- Ag Pen Pal Program and the Learning Barns

[www.agclassroom.org/ne](http://www.agclassroom.org/ne)

800/546-3496

### Nebraska Foundation for Agricultural Awareness

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## Recycling with Sidewalk Chalk

### Materials

6 eggshells (saved from eggs you've eaten)  
2 small dishes  
1 tsp. flour  
1 tsp. very hot tap water  
clean, smooth rock  
spoon  
strip of paper towel

### Directions

1. Wash and dry the eggshells. Grind them outdoors on clean, smooth concrete with a clean, smooth rock. Grind until you get fine eggshell powder. Sweep it up with your hands and put it into a dish. Pick out any big pieces of eggshell and throw them away.
2. Measure flour and hot water into another dish. Stir until you get a paste. Add 1 tablespoon of the egg-



shell powder. Mix and mash until it all sticks together.

3. Shape and press the mixture firmly into a chalk stick. Roll it up tight in the strip of paper towel. Let it dry for 3 days. Your sidewalk chalk will get rock hard.

4. Tear the paper off one end. Write with the chalk, erase with your shoe! (Hint: Sidewalk chalk is for sidewalks, not blackboards.)

*Adapted from Illinois Agriculture in the Classroom Earth Day Ag Mag*

## Websites

[www.earthday.org](http://www.earthday.org)

[www.arborday.org](http://www.arborday.org)

[www.agintheclassroom.org/060605/Teachers/Top40Hits\\_of\\_PlanetEarth.pdf](http://www.agintheclassroom.org/060605/Teachers/Top40Hits_of_PlanetEarth.pdf)