

#8705

EVERYDAY IS EARTHDAY ON THE FARM

Grade Levels: 4-9
22 minutes

CHRIS FESKO ENTERPRISES, LLC. 1999
1 Instructional Graphic Enclosed

DESCRIPTION

Gives a broad overview of how farmers and the environment work together. Chris, a farmer, explains crop rotation and how it benefits the soil. She also shows different crops being harvested and discusses soil erosion, pest control, and how her family takes care of the land. Her New York farm practices good stewardship of the land and its resources.

ACADEMIC STANDARDS

Subject Area: Science

- ◆ Standard: Understands how human actions modify the physical environment
 - Benchmark: Knows how human activities have increased the ability of the physical environment to support human life in the local community, state, United States, and other countries
- ◆ Standard: Understands the characteristics of ecosystems on Earth's surface
 - Benchmark: Knows the components of ecosystems at a variety of scales
 - Benchmark: Understands the functions and dynamics of ecosystems
 - Benchmark: Understands how relationships between soil, climate, and plant and animal life affect the distribution of ecosystems
- ◆ Standard: Understands how physical systems affect human systems
 - Benchmark: Knows how communities benefit from the physical environment



INSTRUCTIONAL GOALS

1. To introduce environmental and ecological systems.

2. To observe the interdependence of all the earth's systems.
3. To present how the farmer must work within the systems of the earth to grow food.
4. To illustrate the water cycle.
5. To emphasize the importance of water for all living things.
6. To stress the importance of being stewards of the land.

VOCABULARY

- | | |
|------------------|-----------------------|
| 1. crop rotation | 9. migration |
| 2. cultivate | 10. natural resources |
| 3. environment | 11. nutrients |
| 4. ecology | 12. pests |
| 5. fertilizer | 13. sediment |
| 6. herbicide | 14. soil |
| 7. insecticide | 15. soil erosion |
| 8. manure | 16. wildlife |

BEFORE SHOWING

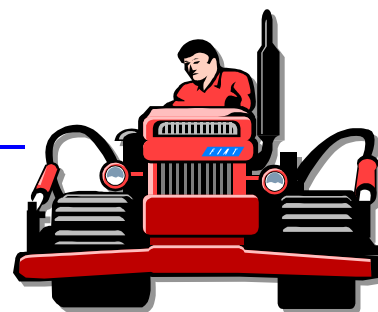
1. Preview the video for unfamiliar vocabulary and concepts.
2. Discuss the purpose of Earth Day.
3. Create a list of do's and don'ts for helping protect the environment.
4. Discuss life on a farm.
 - a. What are the working hours of a farm?
 - b. How does the weather affect a farm?
 - c. How can rain positively affect a farm? Negatively?
5. Discuss the types of farms that are in the area and what crops and animals are raised.
6. Discuss what products in whole or part come from a farm.
7. Study the water cycle.



AFTER SHOWING

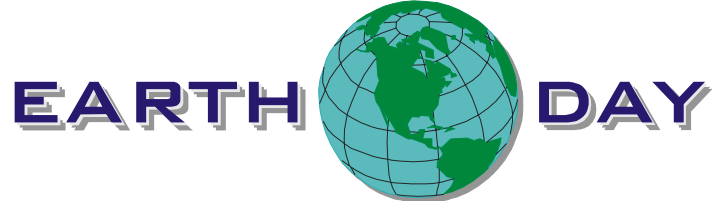
Discussion Items and Questions

1. When is Earth Day celebrated?
2. When is Earth Day on the farm? Why?
3. What is the meaning of ecology?
4. Everything on Earth begins with what two things?
5. What are natural resources?
6. What is crop rotation and why is it done?
7. What kinds of pests are found on the farm? How are they controlled?



8. What is soil erosion? How is it controlled?
9. How can wildlife be protected on the farm?
10. What parts make up the ecosystem?
11. The ecosystem provides three things needed to sustain life. What are they?
12. Explain the importance of water to the ecosystem.
13. Explain the water cycle.
14. What does it mean to be a responsible manager of the ecosystem?

Applications and Activities



1. Research and report on the founder of Earth Day, Senator Gaylord Nelson.
2. Visit a farm. Study methods used to:
 - a. Control soil erosion.
 - b. Control weeds and other pests.
 - c. Provide the soil with needed nutrients.
 - d. Manage wildlife.
3. Create an ecosystem by making a terrarium. (See INSTRUCTIONAL GRAPHICS.)
4. Develop an Earth Day program for the school or neighborhood.
 - a. Create slogans to promote Earth Day. Design artwork for the slogan and display.
 - b. Set up booths to distribute information on environmental and conservation issues.
 - c. Invite local environmental agencies and organizations to speak.
 - d. If not already in place, set up a recycling program.
5. Invite farmers to speak to environmental issues that are of concern to the local area.
6. Go on an energy fast by cutting down or eliminating energy usage. Keep a journal of experiences.
 - a. What activities could not be done without electricity?
 - b. What adaptations had to be made?
 - c. Personal feelings about the experience.
7. Organize a school club or community organization to adopt a highway.
8. Organize a panel discussion. Invite personnel from the local Soil and Water Conservation District, Department of Natural Resources, and Environmental Protection Agency.
9. Visit a local, state or National Park. Gather information on conservation projects and wildlife management. Have a picnic and enjoy the beauty!
10. Visit a water treatment plant to learn how water is treated for human consumption.
11. Create posters depicting the water cycle.

12. Create a timeline of environmental issues.
13. Discuss the following quotes related to conservation:
 - a. Leave it as it is. The ages have been at work on it and man can only mar it. - *Theodore Roosevelt, title of a novel, 1903.*
 - b. We have not inherited the world from our forefathers--we have borrowed it from our children. -*Kashmiri, proverb.*
14. Read books relating to people who have had a great impact on the environment.
 - a. *American Environmental Heroes* by Phyllis M. Stanley.
 - b. *Earth Keepers* by Stuart A. Kallen
 - c. *Gaylord Nelson: A Day for the Earth* by Jeffrey Shulman, Teresa Rogers and Larry Raymond.
 - d. *Margaret Murie: A Wilderness Life* by Jennifer Bryant and Antonio Castro.
 - e. *Rachel Carson: Friend of Nature* by Carol Greene.
 - f. *Women and Nature: Saving the "Wild" West* by Glenda Riley.

RELATED RESOURCES



Captioned Media Program

- Farming #2062
- Deaf Mosaic #1003 #7971
- Dairy Farm #3453
- Earth Week: Seven Days to a Greener Planet #3027
- A Trip to the Farm #2536



World Wide Web



The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid-safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

- **EARTH DAY 2001**

<http://earthday.wilderness.org/>

Part of the Wilderness Society's web site, this site should not be missed. Includes lessons and activities for preschool through high school, printable pages, time lines, quizzes, teacher resources and an extensive list of links.

- **STUDENT ENVIRONMENTAL ACTION COALITION**

<http://www.seac.org/>

A student and youth run national network of progressive organizations and individuals whose aim is to uproot environmental injustices through action and education.

- **KIDS DOMAIN: EARTH DAY**

<http://www.kidsdomain.com/holiday/earthday/>

Lots of great information and activities on Earth Day. Includes stories, on-line games, clip art, printable pages, links to other sites and much more.

- **U.S. EPA's HAPPY EARTH DAY COLORING AND ACTIVITY BOOK**

<http://www.epa.gov/docs/Region5/happy.htm>

An 11-page coloring book full of tips for making the Earth a better place.

- **CYBERSPACE FARM**

<http://www.cyberspaceag.com/>

Check out farm life in Kansas! Learn about animals and crops, print some recipes, and enjoy puzzles, games, and fun facts.

EARTH DAY ON YOUR BLOCK

<http://www.allspecies.org/neigh/block.htm>

A guide on how to plan and organize an Earth Day project in your neighborhood.

INSTRUCTIONAL GRAPHICS

- **WATCH IT GROW!**

Watch It Grow!

Materials:

Plastic 2 Liter bottle with cap
Sharp scissors or knife
Dirt or potting soil
Seeds (most seeds will work)
Water

Directions:

1. Wash and rinse bottle.
2. Draw a line around the entire bottle just below the bottom edge of the label.
3. Remove label and discard.
4. Cut the bottle along the line.
5. Place dirt or potting soil in the base.
6. Plant seeds.
7. Water lightly.
8. With bottle cap on, fit top of bottle into the base. This may take some patience, as it will be snug.
9. Place in a sunny spot and watch the seeds grow.
10. Transplant plants when they are ready.

