

Conservation Lending Library

Books:

The Way Nature Works

ISBN 0-02-862281-2

The Way Nature Works has been created to give non-specialists a real understanding of the way our planet and its living organisms function. It provides scientific answers to questions that arise when looking at the world around us, watching nature documentaries, or studying - answers that strip away the mystery and cut through to the fundamental processes.

Science Encyclopedia

ISBN 1-56458-328-7

The Encyclopedia is divided into 12 topical sections, such as reactions and Living Things. Within each section are main entries on the subject, such as the Chemistry of Food or reptiles.

The Changing Forest: Forest Ecology

ISBN N/A

The activities in this module are designed to encourage students to explore and learn about forest ecosystems through hands-on discovery and experimentation. Their investigations will help them appreciate the diversity of life in forest life, and develop an awareness of the importance of forests in our daily lives. They will also learn about the variety of professionals and practices involved in managing forests, from small urban parks to large national parks. Copyright 1996

Exploring environmental Issues: Focus on Risk

ISBN N/A

This module provides formal and non-formal educators with a series of activities to help students learn the rationale for and the mechanics of *risk assessment*, *risk management*, and *risk communication*. The module activities provide students with a framework through which they can apply scientific processes and higher order thinking skills to environmental issues. Once students learn the basics of risk, they should be able to apply their knowledge and skills to environmental issues, public policy issues, and personal decisions. Copyright 1998

Exploring environmental Issues: Municipal Solid Waste

This module will help youth explore the important and current topic of managing our municipal solid waste (MSW). Both the challenges and solutions of this rather complex subject are addressed, thereby providing students with a fuller understanding of the factors that affect the management of our waste. Copyright 1997

Learning and Assessing – Science Process Skills

ISBN 0-7872-7779-7

What are science process skills? They are the things that scientists do when they study and investigate. Observing, measuring, inferring, and experimenting are among the thinking skills used by scientists or by you and your students when doing science. Much of pleasure of both learning and teaching science is experiencing science. Mastering these process skills will help you develop the kind of science program that mirrors real science.

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Models and Games:

Ground Water Flow Model

The Groundwater Model is an interactive classroom tool that is designed to show the flow of water and toxins through differing gradients. It can be used in front of the classroom and is easily used by students themselves. It may demonstrate flowage through confined and unconfined aquifers as well as the effects of pumping on these aquifers.

Non-Point Source Model Enviroscope

We all live in a watershed with water pollution comes from many sources. Nonpoint sources contribute a great deal to the pollution in our water bodies. The combined affect of pollution from many small sources can have a real impact on the quality of our shared water resources.

Storm water pollution and runoff are visually apparent when rain falling over the landscape top carries soil (cocoa), chemicals (colored drink mixes) and oil (cocoa and water mixture) through a watershed to a body of water. Storm water runoff and storm drain function are also addressed.

Stream Table

The stream table slopes from one end to the other, like the land a stream flows through. To create a miniature stream, water flows in at the higher end and drains out the lower. A pump circulates the water. The flow can be increased or decreased to show how runoff changes with more or less rain. This table shows how streams are formed and how they change over time.

The Incredible Journey Game:

From Project Wet*

After this game students will be able to describe the movement of water within the water cycle. Identify the states of water as it moves through the water cycle. In this game there are 9 boxes that are used as dice. A specific dice goes with each station. At each station there is a different color bead that the student puts on a pipe cleaner. After each student has 15 beads they can describe their water drops incredible journey and how the water moved from each object.

* I can only provide each teacher with three activities from Project Wet, Project Learning Tree and Project Wild.

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Publications:

What is a Watershed:

This one page hand out explains what a watershed is and how it works. Published by United States Department of Agriculture and Natural Resources Conservation Service.

Backyard Conservation:

In this publication are practices used to conserve and improve natural resources on agricultural land across the country and how similar practices can be used in your own backyard to help improve the environment, help wildlife and make the area more attractive and enjoyable.

For the Good of the People:

This booklet helps tell the story of America's Farmers and Ranchers and illustrates the importance of agricultural products in our lives. It also illustrates the need to conserve, sustain, and improve the natural resources that future generations and American farmers and ranchers will need to continue providing food and clothing for growing population.

Your Hometown Clean Water Tour:

Give examples of how to take care of water in your community.

Rain Garden Manual for Homeowners – Protecting our water, one yard at a time:

This manual explains what a rain garden is, why we need them, how to install them and questions to answer if considering one. If your school is considering installing a rain garden this manual would be a good place to start. Copyrighted 2006

EPA: Polluted

Printed by the United States Environmental Protection Agency in 1990. Tells how forestry, agriculture, urban stormwater runoff, household and automotive care and construction can harm local water ways.

American Aggregates and You: Learning About Mining Sand, Gravel and Stone

This coloring book was developed and funded by the American Aggregates Corporation as part of its continuing commitment to community service. Shows how aggregates are taken out of the ground and what they are used for. I have 28 copies to give out.

2009 Soil Stewardship Week:

1. **Dig It! Bookmark:** Shows a soil profile and has facts about soils such as how long does it take to form a topsoil. – I have 28 left to give out. (2008)
2. **Soil Stewardship Litany:** Gives verses from the bible to show the importance of soil such as Genesis 2:7 Out of the soil, God shaped the form of a man and breather life into Adam. – I have 28 left to give out. (2008)
3. **Soil Stewardship:** Explains why conserving soil is important and how much soil we have on earth that we depend on for food. – I have 25 left to give out. (2008)
4. **Dig It! Worksheet:** Designed for upper elementary thru adult. Have puzzles and fun facts about soil. – I have 43 left to give out. (2008)

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AgVenture – Exploring Ohio Agriculture:

In AgVenture you will find pages packed with lively short articles, fun facts, maps, and activities that are curriculum boosters. It is designed to help fourth grade teachers reinforce Ohio's Academic Content Standards.

1. **2006/07 Volume 16. Issue 2:** I have 18 copies to give out.
2. **2006/07 Volume 16. Issue 1:** I have 20 copies to give out.
3. **2005/06 Volume 15. Issue 3:** I have 4 copies to give out.
4. **2005/06 Volume 15. Issue 2:** I have 24 copies to give out.
5. **2005/06 Volume 15. Issue 1:** I have 5 copies to give out.
6. **2000/99 Volume 9. Issue 3:** I have 1 copy to give out.
7. **2000/99 Volume 9. Issue 2:** I have 3 copies to give out.
8. **1997/98 Volume 7. Issue 3:** I have 39 copies to give out.
9. **1997/98 Volume 7. Issue 2:** I have 16 copies to give out.
10. **1997/98 Volume 7. Issue 1:** I have 2 copies to give out.
11. **1995/96 Volume 5. Issue 2:** I have 4 copies to give out.
12. **1995/96 Volume 5. Issue 1:** I have 4 copies to give out.

Posters:

1. **How Do We Treat Our Wastewater?:** Color poster that shows the pipes underground, the names of the process that the wastewater goes through and show four different ways we treat waste water such as septic tanks, trickling filters, activated sludge and lagoons. Meant for grade school. I have 21 copies to give out.
2. **Navigation: Traveling the Water Highway:** Color poster that shows how boats move shipments through water ways. Meant for grade school. I have 34 copies to give out.
3. **Ground Water: The Hidden Resource!:** Color poster that shows recharge areas, reservoirs, permeability, water table and wells. Meant for grade school. I have 3 copies to give out.

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VHS:

Stay Out and Stay Alive: Abandoned Mine Safety:

The mining legacy goes back to the early 1800's leaving us with more than 500,000 abandoned mine openings nationwide. These old mines and water filled pits and quarries pose a multitude of hazards. The Utah Bureau of Land Management, Utah Abandoned Mine Reclamation Program and Colorado Inactive Mine Reclamation Program have cooperatively produced this video as an educational tool to show the dangers associated with abandoned mines, pits and quarries. Run time 24 minutes.

Squaw Creek Bioengineering Demonstration Project:

The Squaw Creek Bioengineering Demonstration Project is an exciting video which highlights innovative techniques for streambank stability, soil erosion control, habitat enhancement and improved water quality. The bioengineering techniques include vertical bundles, willow mattress, root wad, willow waddle, fish lunkers and cottonwood pole plantings.

The Popo Agie Conservation District led this community based restoration project, constructed on Squaw Creek by volunteers and students from Lander Valley High School, within the boundaries of the Museum of the American West, in the spring and summer of 2003. Run time 18 minutes. Copyrighted 2004

Production Agriculture: Feeding People while Protecting the Environment

In the 1940's, there was one farm for every 21 people in the United States. Today, there are 115 American consumers for each farm. American farm production must not only feed our own growing population but also help to feed the growing global population, which could reach 10 billion in the next 50 years. Farmers are expected to produce more food, ensure the safety of the food and do so without harming the environment.

To do this, America's farmers rely on innovative, science-based agricultural systems to balance production with conservation. Tailored to meet site-specific conditions, these systems use a combination of conservation practices, including soil testing, conservation tillage and good fertility programs, to help farmers protect the environment while increasing their economic returns.

Farmers throughout North America use this systems approach, also known as Core 4 Conservation, to achieve *Better Soil* and *Cleaner Water* for our environment, *Greater Profits* for agriculture and *Brighter Future* for all of us.

Production Agriculture: Feeding People while Protecting the Environment... demonstrates the impressive ways some farmers use the systems approach to meet the need for more food without compromising the health of the environment.

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Habitats for Learning: Ohio takes a new look at school land labs

People have been teaching and learning outdoors ever since people started teaching and learning. Happily, educators and learners are still teaching and learning in the “great outdoors.” In recent years there’s been a lot of interest in developing land labs – and there’s some great education going on in many of these land labs.

But some schools don’t have land labs; and some that do don’t use them fully. Some educators aren’t teaching outdoors – either because they think don’t have the facility, or because they think they don’t know how. But every school site is a “habitat for learning” – and anyone can teach almost and subject outdoors!

That’s what Habitats for Learning is all about. This video is a motivational look at using the school grounds for teaching and learning – whether on blacktop or in a field or on the playground. Habitats for Learning advocates a “use what you have, enhance as you go, develop if and when you’re ready” philosophy. A guidebook on using outdoor “habitats” and directory of existing Ohio land labs were developed as companions to this video.

DVD:

Conservation in the Twin Creek Valley:

Twin Creek Valley, a stream in southwest Ohio, has become a conservation partnership between local governments, private landowners, private conservation organizations, and state/federal government agencies. Using incentives, education, grants, and both public and private resources, residents of the Twin Creek Watershed have come together to protect the stream for the people, plants and animals that call it home.

In this 16 minute DVD you’ll learn that a combination of **Land Acquisition and Management**, planned **Recreation** and well managed **Research**, can restore, develop and maintain an area with superior water quality and wildlife habitat.

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CD-ROM

Ohio's Natural Heritage:

ISBN: 0-933128-03-7

Here, again is a long-awaited book. First published in 1979 in hardcover and out-of-print since the early 1980's, it is presented here for the digital age in full color Adobe Acrobat® format on a CD-ROM. Twenty eight specialists invite the reader to survey in a single volume the whole of Ohio's natural environment. The geologic forces that shaped the state, the colorful plant and animal life of its forests, prairies, hills, lakes and streams, the first people in what is now Ohio – these are only a few of the features that are described.

In each chapter maps, drawings and photographs, many of them in color, supplement a readable and nontechnical text. For young students, it is a gateway to anthropology, geology, climatology, and the whole study of living things. For adults, it opens new world interest. *Ohio's Natural Heritage*, particularly because of its wide range, the quality of its authorship, and the uniqueness of its approach, continues to meet a longstanding need.

Ohio's place in history has been achieved by the use of our rich natural endowment. Our forest soils, minerals and energy resources, streams, climate, plants and animals have been the foundation upon which our great agricultural and industrial state has developed. This book commemorates and interprets our great natural heritage for all to appreciate and understand.

Published in cooperation with The Ohio Department of Natural Resources, Division of Wildlife and Division of natural Areas and Preserves.