

Procedures for requesting activities and presentations

- The following scale indicates suggested age levels; however, activities can be adjusted to fit other age groups.
 - * pre-K and lower elementary
 - ** upper elementary and middle school
 - *** middle school and high school
- Length of presentations can vary. Some activities may require 2 or 3 class periods.

This catalog may be found online. Our website address is:

www.vanwertswcd.org.



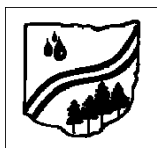
Guide to Activities & Programs



Van Wert Soil & Water Conservation District
1185 Professional Drive
Van Wert, OH 45891
(419) 238-9591 ext. 101
julie.buggle@oh.nacdnet.net

2009—2010

**Van Wert Soil & Water
Conservation District**



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1185 Professional Drive
Van Wert, OH 45891

Phone: 419 238-9591 Fax: 419 238-5323
julie.buggle@oh.nacdnet.net

School Year 2009—2010

Dear Educator

The **Van Wert Soil and Water Conservation District** has a variety of educational kits and activities available for you to borrow. These are generally science related; however, can be directed toward math, social studies and language arts as well.

To schedule the use of these kits and activities phone, email or stop by the Van Wert SWCD at the above address. A list of activities and presentations with brief descriptions can be found on the following pages.

The SWCD appreciates your efforts to present and reinforce the conservation message. Little by little we are making a change in our environment.

The Board of Supervisors and Staff
Van Wert SWCD

The mission of the Van Wert SWCD is to protect and to conserve the natural resources for all residents by providing technical, educational and financial assistance.

What does it Mean to be Wild? - A *Power Point* presentation and classroom discussion helps students differentiate between domestic and wild animals. All animals need food, water, shelter and protection; the importance of habitat for wild animals is emphasized. (*, **)

Ohio's Wild Animals

The ODNR Wildlife Officer joins us with pelts and skulls of Ohio's wildlife. Identification, characteristics and habitat are emphasized in this presentation. (*, **)



Fox & Rabbits

This game is a great way for students to learn about predator/prey relationships. As participants seek food, water, shelter and protection the populations of fox and rabbits moves back and forth. A playground or large room is needed for the activity. (*, **)

(Note. The above three activities fit together well for a 2 or 3 day presentation.)



Tremendous Trees

Trees are all around us yet many give them little thought. Students will discover they have much in common with the trees. "Tree Cookies" are examined and students receive a small tree cookie to take home. An interactive game demonstrates the difficulty a young tree experiences. (*, **)



Wonderful World of Birds

What does it mean to be a bird? Feathers, eggs, nests and flight are emphasized along with other characteristics. A set of colorful plush songbirds will "sing" on command. This is a favorite presentation for all ages. (*, **, ***)

The Very Hungry Caterpillar

We use this popular children's book by Eric Carle to introduce insect characteristics. Students create a take-home activity using brightly colored pasta shapes to help them remember insect metamorphosis. (*, **)



What the Glaciers Did to Us

A *Power Point* presentation gives an overview of moving continents, glaciers, lakes and swamps that have played a part in forming the soil we have today. A model glacier in the **Stream Table** (p.5) helps students visualize how the glaciers shaped our land. (**, ***)

Erosion Drop By Drop

Water is dropped on soil in this activity as data is recorded and graphs are used to reach a conclusion. Water collected after running across soil that is bare, and covered is observed. The amount of sediment in the run-off is astonishing! This presentation has *math applications*. (*, **, ***)



Ohio Rocks

The Ohio Geologic Survey provides a collection of rocks and minerals found in our state. These are placed on a map of the State of Ohio as we look at and discuss each specimen. This activity relates well to classes studying *Ohio's geography*. (**, ***)

Mineral I.D.

Color, luster, streak plates, and a hardness scale are presented as properties used to identify minerals. Using these properties students, in small groups, identify several unknown minerals. (**, ***)

Let's Rock



Rocks have a story to tell; it is up to us to discover what that story is, how it was formed for example. A favorite part of this presentation is the "Rock Cycle" song. Using observations and simple chemical tests students identify common rocks. A keepsake rock completes this presentation. (**, ***)

Miscellaneous Activities

Earthworms are my Friends—Who would want to eat things such as banana peels, apple cores and eggshells? Students discover that worms are interesting critters not only eating these things but improving our soil as well. (*, **, ***)



Water

The Water Cycle

Precipitation, surface water, evaporation and condensation make up the water cycle; each is easily visualized with this **Water Cycle Model**. This model can be added to the following **Groundwater Model** for a complete presentation of how we get our water. (*, **, ***)



Where does your water come from?

This recently updated model of the **Groundwater Model** shows how water tables, aquifers, and wells function. It also shows how they may become polluted. The **Water Cycle Model** can be connected to this model. (**, ***)

The Incredible Journey

In this activity students create a bracelet of beads collected as the "roll of the dice" directs them to the next step in the journey of water. This is a fun way for students to discover the path of water in our environment. Writing would be a good follow-up to this activity. (*, **, ***)

The *Enviroscape* -

Nonpoint source pollution in our environment is easily visualized with this model. After identifying various ways we use the land, "materials" having the potential of polluting waterways are added to the model. Precipitation" makes everyone a believer in *nonpoint source pollution*. This presentation can be used by itself or with other activities. (*, **, ***)



Drinking Water/Wastewater Treatment Model

With this model students experience the processes involved in treating surface water for human use. They also experience the treatment of wastewater before it is returned to the waterways.

A comparison between urban and rural water use. The use of biosolids can also be demonstrated with this model. (**, ***)

Francis the Fish

Travel with Francis, our friendly little fish, as he swims in a stream through rural and urban areas. Students add litter, soil, paint, etc. to the water as they observe the effects of *nonpoint source pollution*. Poor Francis! (*)

Creek Critters

Critters collected from a make believe stream help students learn how organisms can indicate water quality. Recording and analyzing data are important parts of this activity. This activity is an excellent introduction to "Stream Monitoring." (**, ***)

Streams: Sick or Healthy?

A local stream is used as we determine the water quality based on data collected. Populations of "macro-invertebrates" (i.e. insect larvae, mollusks, etc.) and the chemistry of the water are analyzed along with physical factors. This is known as **Stream Monitoring**. This activity is not available late-fall, winter, or early-spring. (**, ***)



NPS: Solution or Problem? - The EPA has determined most water pollution comes from *nonpoint sources*. This *Power Point* presentation covers the major sources of these and creates a case for taking care of our watersheds. Appropriate activities to follow this presentation could be **Enviroscape**, **Streams: Sick or Healthy**, **Creek Critters**, or **Pollution Dilution** (pgs. 3 and 4). (**, ***)



A Grave Mistake

In this classroom scenario students arrive at a sinister conclusion to a groundwater pollution problem. They also discover that "jumping to conclusions" can lead to an incorrect solution to a serious problem. The **Groundwater Model** (pg. 3) fits well with this presentation. (**, ***)

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Soil and Geology

Soil is more than Dirt

We begin this presentation by making a "batch of soil." Different soil types are available for the students to examine and relate to soil maps. When possible a soil probe is used to bring up a plug of soil from the schoolyard, showing the layers. Students complete this activity by making a "soil profile" on an index card. (*, **, ***)

What's It Like Down There?

A 10' by 10' tent painted to give a "worms eye view" of the Earth's crust is available for either self-guided tours, "scavenger hunts", or soil judging activities. Due to the amount of time and effort for set-up this adapts well to fairs and similar "long term" events. (*, **, ***)



Water for Urban Areas

How does the *City of Van Wert, Ohio*, get water to supply the needs of its residents, businesses and industries? A *Power Point* presentation shows what takes place as water enters and leaves the city.

Guided tours of the city water treatment and wastewater treatment plant with stops along Town Creek complete this activity. The **DWWT Model** (pg. 3) fits in well with this presentation. (**, ***)

Pollution Dilution

In this activity students will discover how a pollutant in water can be diluted but never completely eliminated. Fractions and percentages are needed to complete the data sheet; these make this activity an *appropriate presentation for math classes*. (**, ***)

Wetland Metaphor

What does a wetland have in common with a cradle, an eggbeater, a dinner plate and other common household items? These are the questions students will ask and answer as we investigate this important ecosystem. A visit to a wetland, either real or virtual, will allow students to experience the variety of life and relationships that exist here. (**, ***)



Stream Table

With this "sand box" model students can see the effects of water on the landscape. Students place trees, buildings, bridges, etc. on the landscape. As water moves through the stream students discover their choices for land use were not always wise. (**, ***)