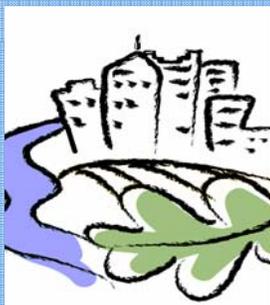


Spotlight on Resources:

Riparian Zones and Water Quality



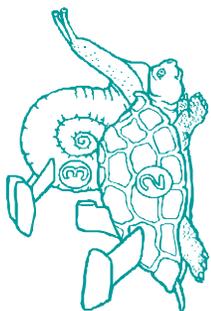
Fall
2010



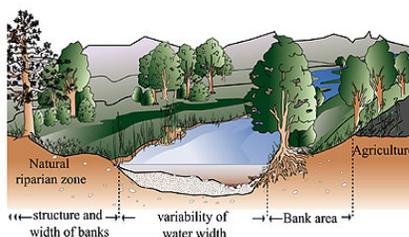
FRANKLIN SOIL AND WATER CONSERVATION DISTRICT

SWIFT

Soil and Water Information for Teachers



A **riparian zone** or **riparian area** is the boundary between land and a river or stream. **Riparian** is also the proper name for one of the fifteen terrestrial biomes (ecosystems) of the earth. Plant habitats and communities along the river margins and banks are called riparian vegetation, characterized by hydrophilic (water loving) plants. Riparian zones are significant in ecology, environmental management, and civil engineering



because of their role in soil conservation, their habitat biodiversity, and the influence they have on animal life and aquatic ecosystems.. Riparian zones occur in many forms including grassland, woodland, wetland, or even non-vegetative. In some regions the terms **riparian woodland**, **riparian forest**, **riparian buffer zone**, or **riparian strip** are used to characterize a riparian zone. The word "riparian" is derived from Latin *ripa*, meaning river bank.

Benefits: Scientific research has identified many benefits to protecting and restoring riparian areas. Riparian areas have been found to:

- **Reduce flood damage** by increasing storage and infiltration of storm waters and slowing their velocity
- **Protect drinking water** by filtering out pollution and helping combat drought conditions
- **Increase property values** by providing natural enhancements that increase property values and local tax revenues
- **Reduce stream bank erosion** by providing root systems that stabilize stream banks and by slowing down runoff
- **Cool stream waters** by providing shade; shaded, cooler waters mean healthier streams, particularly for temperature-sensitive fish such as trout
- **Improve stream habitat** for fish and other aquatic life by providing leaves, sticks, and other natural debris that act as food, shelter, and habitat and support the food chain
- **Filter pollutants** including sediment and other contaminants that could get into the aquatic system and be harmful to environmental and human health.
- **Create recreational opportunities** by improving the overall health and aesthetic appeal of waterways.

How can you improve water quality ? One of the most important things you can do while enjoying your property is plant native, deeply rooted grass, shrubs and or trees to hold soil in place and provide native habitat. The plants will slow the velocity of runoff, allowing the water to infiltrate into the soil and recharge the groundwater supply and prevent erosion . Remember that what we do on our property will effect *water quality*.



Inside this issue:

Fun Stuff to Do	2
Upcoming Events for Educators	3
More Upcoming Events for Educators Calendar of Events	4

New this year, Practice Envirothon!

Save the Date: Tuesday, October 19th, At Glacier Ridge Metro Park from 4:00-6:30pm high school students and teachers will have the opportunity to become more familiar with the Envirothon competition. For more information or to register contact: Linda at: linda-pettit@franklinswcd.org.



Fun Stuff to Do

Franklin Soil and Water's 64th Annual Banquet "Branching Out"

Franklin Soil and Water Conservation District's 64th Annual Banquet is being held on Thursday, October 21st, 2010 from 6:00 to 8:30 pm. Please join us in celebrating 64 years of conservation efforts and accomplishments along with our partners, sponsors, staff and board. The evening will include sponsor and partner displays and information, a silent auction, board of supervisor election, and awards ceremony. The Banquet will be held at The River Club at Confluence Park in downtown Columbus. Cost for prepaid registration is \$40.00 each or \$70.00 per couple. For more information: and to purchase tickets contact Sherry at (614) 486-9613.

Boo at the Zoo is a howling good time at the Columbus Zoo and Aquarium. Young ghosts and goblins can trick-or-treat at candy stations scattered throughout Zoo grounds and board the haunted train ride in North America. Fortune-tellers, storytellers, and magicians ensure a fun, but not too scary time for all. Oct. 22-24, 29-31



Columbus Department of Public Utilities asks:



Did you know?

Your classroom can become a GreenSpot in the Community Group category by making three commitments toward responsible environmental stewardship. Learn more at www.columbusgreenspot.org.

The Columbus Department of Public Utilities has educational materials appropriate for grades 3-6, including colorful booklets like How Wastewater Treatment Works, and Respecting the Water Cycle. Call (614) 645-2926 for more information.

The Storm Drain Marker program is a great way to directly involve students in protecting the city's stormwater system. Learn more at <http://utilities.columbus.gov/Conservation/StormDrainMarkerProgram.htm>.

The Future City Competition



Ohio's statewide competition will be held January 16th, 2010. Registration is Oct. 31st and mini-grants are available. For more information go to: www.futurecityohio.org The program asks 7th and 8th grade students from around the nation to team with engineer-volunteer mentors to create — first on computer and then in large, three-dimensional models — their visions of a sustainable city of tomorrow. The Competition offers students a fun way to learn about earth stewardship, engineering, and awareness of community and business issues of the future.

Darby Creek Day



Sunday, October 3rd, 1-4 p.m. Metro Parks and the Darby Creek Association present this fun educational event at the Indian Ridge picnic area (1 mile south of the main entrance) of Battelle Darby Creek Metro Park. Enjoy noodling for mussels, seining, fly fishing, observing live animals and more!



Don't forget the **Dawes Arboretum** for your fall program needs. We have **The Dawes Arboretum** over 1800 acres of collections, hiking trails and wetlands. Either field trip or on-site programs are available on a variety of topics. Call the Arboretum Education Department @ 1.800.44.DAWES or email sblowe@dawesarb.org



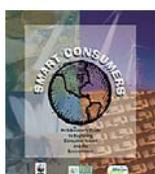
Upcoming Events for Educators

Fall 2010

Environmental Educator Workshops



A series of science based workshops are scheduled for educators of all types this fall. Participants will experience activities appropriate for various age levels that can be used to help meet current science curriculum standards. Additional background information will be provided, as well as sharing resources available to teachers. Formal classroom teachers, non-formal educators, homeschooling parents and scout leaders are welcome to attend. Participants may be eligible for a semester hour of graduate credit through Ashland University upon the completion of any two workshops and the related assignment (for an additional fee). These workshops will be held at the Nature Center at Highbanks Metro Park.



Smart Consumers: Friday, October 15, 2010 . 8:30 a.m.–4:00 p.m.

This resource is part of the World Wildlife Fund, “Windows on the Wild” Education Series. In *Smart Consumers – An Educator’s Guide to Exploring Consumer Issues and the Environment* students learn how their consumer choices affect the environment and how they can become earth friendly consumers.

The toolkit includes an Educator's Guide with background information, creative activities, and a list of resources. It also contains a [Community Action Guide](#), with project ideas and advice on organizing group projects, and a colorful two-sided poster. Materials are geared for grades 6-9. The registration fee is \$40.



What Makes the World Go Round: Saturday, October 16, 2010 8:30 am – 4:00 pm

Explore our important natural resources, including human impact on the environment and issues of energy and conservation through interactive lessons, stories and songs. Correlated to current science standards for grades 1-7. The registration fee is \$20.



Project Learning Tree (PLT): Saturday November 20, 2010 8:30 am– 4:00 pm PLT is an interdisciplinary approach to understanding trees, forests, and woodland habitats. Through activities students discover how trees live and grow, the many useful items that we get from trees, and the important role trees play in an ecosystem. Materials are geared for grades preK-8. The registration fee is \$40.



Healthy Water, Healthy People: Saturday, December 4, 2010 8:30 am – 4:00 pm An innovative water quality education program sponsored by [Project WET](#) and the Hach Scientific Foundation to promote awareness and understanding of water quality issues. Designed for middle and high school teachers. The registration fee is \$40.

These workshops are coordinated by the Delaware, Franklin and Union Soil and Water Conservation Districts, Delaware General Health District, Keep Columbus Beautiful and Highbanks Metro Park. The workshops are co-sponsored by the Environmental Education Council of Ohio and made possible in part by a generous grant from the Ohio Environmental Education Fund

For more information contact:

Elizabeth Fields at Highbanks Metro Park, (614) 846-9962 or fields@metroparks.net

Linda at the Franklin SWCD, (614) 486-9613, ext. 115 or Linda-pettit@franklinswcd.org

Dona Rhea at the Delaware SWCD, (740) 368-1921 or dona-rhea@delawareswcd.org



More Upcoming Events for Educators



Inquiry Into Watersheds Teacher Workshop October 15 and November 6, 2010 (8am–4pm, both days) Recommended for teachers of grades 3–8. Dive in and explore the banks of the Scioto as we examine how watersheds work in this two-day workshop. Investigate the properties of soil, how water reshapes the earth's land surface, and evaluate a watershed to determine if it is hospitable to life. Additional topics include: watershed dynamics, macro-invertebrate sampling, chemical analysis, and more. Correlated with Earth Sciences: 3.5, 4.2, 4.3, 4.8-10, 5.6, 7.2 - 4 Life Science: 3.2, 3.6, 5.4, 5.6, 7.5 To register call 614.228.2674. Cost: \$130 if reserved by 9/17/2010; \$155 afterwards. For more information check out: www.cosi.org/educators.



THE GRANGE INSURANCE AUDUBON CENTER EDUCATION PROGRAMS **CONSERVATION CLASSROOM (SEPTEMBER- MAY/JUNE) GRADES K- 8TH**

Conservation Classroom is a science inquiry- based program that engages students through hands-on investigations. The 4-hour program invites students to pose questions, investigate and collect data in their natural environment and draw conclusions from that investigation. Our educators work one-on-one with each individual school to create an individualized education plan (IEP) that correlates with the new Ohio Standards and our conservation efforts on site. Your IEP directly reflects your schools target areas and where teachers feel limited in the classroom. For more information about the Grange Insurance Audubon Center visit www.grange.audubon.org. For more information how to get involved with the Conservation Classroom program please contact Victoria Strickland, tstrickland@audubon.org or call 614.545.5483.

September: Library Card Sign Up Month

September 19– 25: Banned Books Week

October: National Popcorn Poppin' Month

October 1: World Vegetarian Day

October 10-16: Earth Sciences Week

October 17-23: Teen Read Week

October 27: Make a Difference Day

November: Peanut Butter Lover's Month

November 3: Sandwich Day

November 12-17: Children's Book Week

November 15: America Recycles & Use Less Stuff Day

November 18-24: National Family Week

December: Universal Human Rights Month

December 17: Wright Brothers Day

December 21: National Flashlight Day



Calendar of Events

Franklin Soil and Water partners with many local municipalities to increase awareness of storm water runoff and water quality. These municipalities help to fund our educational programs in their local schools. Because of the increasing numbers of requests, the District will have to charge for school programs outside these locations during the current school year. Loan of materials and assistance with information is still available to everyone free of charge. Contact Linda Pettit for more details at 614-486-9613 or Linda-pettit@franklinswcd.org

