

Franklin County

Henry County

Roanoke County

City of Roanoke

Jan/Feb. 2010

Blue Ridge Soil & Water Conservation District



SOL BASED ENVIRONMENTAL EDUCATION



Do you need help planning your classroom activities? If so, call on us!

A highlight of activities the Blue Ridge SWCD offers:

Enviroscape:



This is a model of a community watershed. With interaction from students, point and non-point sources of pollution are identified and discussed. This is an excellent activity for students to participate in a "meaningful watershed experience". (SOLs: K.5, K.10, 1.8, 2.8, 3.6, 3.8, 3.9, 3.10, 4.5, 4.8, 5.6, 5.7, 6.5, 6.7, 6.9, LS.11, LS.12, ES.7, ES.9)

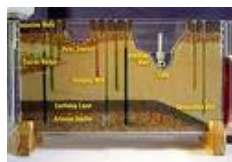
Erosion Box Activity:

Students test the velocity, turbidity and environmental impact of erosion on bare soil



and gullies and the environmental impact with the installation of best management practices. (SOLs: 1.1, 3.7, 3.10, 4.8, 5.7, 6.5)

Ground Water Model:



Is an interactive class room tool that is designed to show the flow of water and toxins through differing gradients. It may demonstrate flowage through confined and unconfined aquifers as well as the effects of pumping on these aquifers. (SOLs: K.9, 1.8, 3.7, 3.9, 4.8)

Animal Track Molds:



By making animal track molds out of plaster of paris, students learn about the unique physical characteristics of birds and mammals and how each is designed to live in their environments. (SOLs: 1.5, 3.4, 4.5, 4.8, 6.1, LS.5, LS.14)

Dirt Babies:



This is a fun and unique way to teach students about the characteristics and essential role fertile soil plays in the survival of all living things. Students

personalize their "dirt baby" with facial features and other decorative ornaments then place them in their very own incubator under the sun, provide them with lots of TLC and watch them grow. (SOLs: 3.5, 3.6, 3.7, 3.8, 3.9, 3.10)

Who Polluted the River?

Using a model to represent a body of water, students participate to see how as populations increase in an area the resource use changes and the body of water becomes polluted. This demonstrates how we are all connected in the pollution problem. Then the students discuss ways to conserve our resources. (SOLs: K.5, K.10, 1.8, 2.8, 3.6, 3.8, 3.9, 3.10, 3.11, 4.5, 4.8, 5.7, 6.5, 6.7, 6.9, LS.11, LS.12, ES.7, ES.9)

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Check out our web site for updated educational activities at brswcd.org

"Clean Water For the Frog" - A story about wetlands by Carol Anne & E. Graham

A wetland is an area that has standing water long enough to allow plant growth adapted to living in water or wet soils and soils that indicate low oxygen. "Clean Water for the Frog" activity provides students in K-3 grade an opportunity to

learn the basic benefits, structure, function of wetlands and the life cycle of the frog. Science SOLs include: K.6, 1.4, 1.5, 1.8, 2.4, 2.5, 2.8, 3.4, 3.5, 3.6 and 3.10. This is a Virginia Co-

operative Extension program.

Boy Scout Merit Badge College: February 6, 2010

2010 Soil Stewardship resources "Conservation Habits = Healthy Habits"

Soil Tunnel: Coming to Franklin County June 2010!

Educational Activities Continued—Jan/Feb. 2010

Can a 55 Foot Whale Fit in Your School?



Lucy the Whale will make scheduled visits to a variety of schools. She is a 55 foot inflatable Fin Whale and comes from the world of dolphins, whales and porpoises. Approximately 20-25 elementary aged children can walk

inside the whale to observe the skeletal system and learn about the importance of blubber. "Lucy" has been taken to Son-tag, Rocky Mount and Bent Mountain Elementary Schools.

Lucy the Inflatable Whale Model was first developed in a traffic jam with a Swiss army knife and a piece of paper and refined with the assistance of the 1991 and 1992 MASC 201 Introduction to Mathematical and Scientific Thinking classes by J. Michael Williamson, Associate Professor of Science at Wheelock College

in Boston Massachusetts. The model was further revised to develop the present model. The basic design has been revised to make both a right whale model and a humpback whale model.

The charge was to design an affordable model of a whale that is life-sized, can be carried by one person, can withstand an elementary class, and can reflect the magnitude of the size of a real whale to students of all ages.

The first stage developed the

Concept and prototype, and the second stage of development studied the original design and the model was further improved upon to better conform to actual whale dimensions and characteristics.

A special "thank you" to Ideal Lumber of Rocky Mount, John Richardson and his Environmental II Science Classes (Gereau Center for Applied Technology & Career Exploration) for making this project possible.

"Rigsby"



This is a story written and illustrated by Jenny Bingham

through "Virginia Naturally". **Rigsby** is a small raccoon who sets out on a happy hunt but encounters unexpected problems along the way. Students learn how important it is to take care of our environment for the sake of all as presented with animal puppets and props. Science SOLs for K10, 1.5 & 1.8

Other Activities

In conjunction with these programs and others, the District offers interactive stream survey curriculum utilizing the "Leaf Pack Stream Ecology Kit" as well as "What is Water?": A Virginia Cooperative Extension interactive curriculum featuring an animated Canadian Goose wittingly teaches numerous properties and characteristics of water.

The NEED PROJECT:

increase students' understanding of the environment

www.plt.org

- Virginia Association of Soil and Water Conservation Districts Education Cookbook - recipes for hands-on activities and projects from Soil and Water Conservation Districts across the state of Virginia. Most activities include SOLs to be covered.

www.vaswcd.org/cookbook.htm

- VA Cooperative Extension conducts education programs in agriculture and natural resources, family & consumer science, & 4-H youth development. www.ext.vt.edu

"Science of Energy"

(Elementary & Secondary)-hands on experiments that students use to learn about the forms of energy and energy transformation. Check yours out today.

Each program covers Science SOLs in each grade level. If you would like to schedule a program, to share your ideas for activities, or would like more information please contact Kathy Smith our Program Manager/Education Coordinator.

Other Resources

- VA Naturally - Here, you will find links to more than 600 organizations which provide environmental education programs and services in Virginia including volunteer and funding opportunities, teacher workshops and lesson plans, conferences, community events, and other resources.

www.vanaturally.com

- Department of Conservation and Recreation - information on watersheds, Non Point Source Pollution, storm water management, and the Adopt-A-Stream program

<http://www.dcr.virginia.gov/sw/>

- Project WET - a supplement

ary water education program for educators giving special emphasis to understanding the needs for water by all water users

www.projectwet.org

- Project WILD - a wildlife focused conservation education program for K-12 educators and students

www.projectwild.org

- Project Underground - a national educational program on caves and karst awareness www.dcr.virginia.gov/underground.htm

- Project Learning Tree - a K-12 curriculum of activities to

NEARLY ALL ACTIVITIES ARE FREE OF CHARGE AND CAN BE ARRANGED ON SCHOOL GROUNDS.

- Department of Environmental Quality - this site includes several links to environmental education resources which include \$500-\$1000 grant opportunities

www.deq.state.va.us/education/homepage.html

- Mission of NEED Project is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs. www.need.org