

CHAPTER 9 – SWCD EDUCATION AND OUTREACH PROGRAMS

The intent of this chapter is to provide a valuable resource for expanding and improving your district's education and public outreach efforts. It is designed to be used by all SWCD staff and district board members. Education and outreach are part of everyone's job, as everyone in your SWCD interacts with the public, elected officials, teachers and students, partnering agencies, and the media. Hopefully this chapter contains practical and useful information and links to resources that will help you present your soil and water conservation message more effectively to a variety of audiences.

CAMPS – DAY AND RESIDENTIAL

SWCDs in Northwest Ohio – SWCDs in Northwest Ohio sponsor a Kids' Outdoor Science Camp each June at 4-H Camp Palmer. This 4-day, 3-night residential camp targets youth in grades 3-8 and can accommodate up to 125 students. More information on their program is available at <http://swcd.fultoncountyoh.com/students.htm>

The Muskingum SWCD – The Muskingum SWCD hosts Camp Adventure every summer for students entering the 4th, 5th, or 6th grade. It is held at Friendly Hills Grange Camp. Each year, approximately 100 children have the opportunity to experience the joy of nature in a safe and fun setting. For two days, campers explore the outdoors and enjoy hands-on activities based around a yearly theme. <http://www.muskingumswcd.org/education/campadventure.html>

Pickaway SWCD – Pickaway SWCD puts on "Experience Earth" Day Camp for children who have completed 3rd or 4th grade. It takes place for three days each July, and campers are charged a small fee. <http://www.pickawayswcd.org/education.html#Experience Earth>.

COMMUNITY PROGRAMS

SWCDs provide a wide variety of educational and informational programs targeting the general public. A few of the most common examples are listed below, along with tips, sample agendas, or links to exemplary programs and/or resources.

Arbor Day Programs – Traditionally, National Arbor Day is celebrated each year on the last Friday in April. While it is a worldwide event, in individual communities the date is frequently set to tie in with optimum tree planting conditions for the area, or to coincide with Earth Day celebrations. Possible Arbor Day related activities include: tree sales, community tree plantings, "big tree" contests, and school programs. Franklin SWCD offers a program featuring The Lorax by Dr. Seuss. Students sit in the setting of The Lorax as they listen to the story. The 30 ft. wide felt backdrop hangs from a 10 ft. by 10 ft. pop-up tent. <http://www.franklinswcd.org/programs-and-services/youth-education/youth-presentations/> National Arbor Day info at <http://www.arborday.org/>

Backyard Conservation: Lawns & The Environment – The OFSWCD has partnered with the National Association of Conservation Districts and Scotts Miracle-Gro to provide resource materials, brochures, and sample presentations on how to care for your lawn in an environmentally friendly way. <http://ofswcd.org/BackyardConservation.html>

Backyards for Wildlife – The National Wildlife Federation coordinates a program entitled "Backyards for Wildlife," with information and resources on plants that are native to your locale as well as tips on improving your property with habitat enhancements. Backyards and garden areas can be certified through this program: [Certify Your Garden](#)

CONTESTS

Big Tree – The Big Tree Contest is designed to stimulate or continue interest in trees. In this competition, entrants submit a nomination for a predetermined type of tree that they believe to be the largest in their county. Guidelines for the Big Tree Contest are determined by the ODNR Division of Forestry. Winning trees may be nominated for the Ohio Big Tree Program.

<http://ohiodnr.com/Home/bigtrees/OhioBigTrees/tabid/4806/Default.aspx> . Gallia SWCD awards an engraved plaque made from the same type of wood as that of the contest tree. They also present the winner with a copy of National Audubon Society Field Guide to North American Trees.

Photography Contest – Photography contests provide a great way to make the public aware of your SWCD and what you do. To successfully hold a contest you must set a theme, provide a timeline and guidelines, select winners, and decide on prizes and ways to promote the contest. Winning photos are often displayed at SWCD annual meetings.

- **Athens SWCD** used their winning photo and top honorable mention winners to create a beautiful calendar. http://www.athensohiotoday.com/celebrate/athens-swcd-announces-photo-contest-winner/article_e95eae36-f2e8-11e1-817b-001a4bcf887a.html
- **Summit SWCD** displays their winning entry on a billboard. <http://www.copley.oh.us/news/latest-news/summit-swcd-photography-contest.html> .
- **Jefferson SWCD** uses the photos in just about everything they do with marketing – flyers to advertise programs, brochures, blank note cards as meeting favors, the header on their newsletter. Official “judges” determine the top five entrants in each category, and then annual meeting participants determine the final winners. Here is a copy of their rules.

COUNTY FAIR PROGRAMS

County fairs can be an ideal place to promote your SWCD through personal contact or via unmanned displays, exhibits, flyers, or educational models. It always helps to have a “hook” to capture fairgoers attention and kindle an interest in what you have to share. For example, offer a prize, provide free water and a place to sit, have a quick and easy activity for kids, such as making a seed mosaic or getting their picture taken with a cute farm animal or on a toy tractor.

DISTRICT OWNED OR MANAGED OUTDOOR LEARNING CENTERS

Several SWCDs own and/or manage outdoor learning centers where they can demonstrate best management practices, host school programs and special events, and promote natural resource conservation.

- **Ashland SWCD** – Hazel Willis Woods – http://www.ashlandswcd.com/index_files/Page435.htm
- **Delaware SWCD** – Natural Resources Park at the Delaware County Fairgrounds – <http://www.delawareswcd.org/>
- **Meigs SWCD** – Conservation Area – <http://www.meigsswcd.com/conservation-area.html>
- **Seneca SWCD** – Miller Farm – <http://senecaswcd.com/2012%20Miller%20Farm%20Brochure.pdf>
- **Tuscarawas SWCD** – Norma Johnson Center – <http://www.tuscsoil.com/njc/>

EARTH DAY CELEBRATIONS

Traditionally Earth Day has been observed on April 22. Senator Gaylord Nelson of Wisconsin came up with the idea for a peaceful educational event, and his dream became a reality on April 22, 1970. Now Earth Day is an annual event celebrated throughout the world. Many of the activities conducted by SWCDs such as water festivals, canoe floats, stream clean-ups, and poster contests can easily be re-titled and fine-tuned to fit the Earth Day theme. Some good online resources for planning an Earth Day event can be found at:

- <http://greenliving.nationalgeographic.com/planning-earth-day-event-2925.html>;
- <http://www.allcrafts.net/earthday.htm>;

EDUCATIONAL TOOLS

Models – Most SWCDs have available a variety of educational models for use in bringing natural resource concepts and processes to life for their audiences. Most common are the EnviroScape Watershed model and the Drinking Water and Waste Water Treatment model (<http://www.enviroscapecom/models.html>). The Ground Water Flow Simulator (<http://www.envisionenviroed.net/>) helps teach concepts such as fractured bedrock, confined and unconfined aquifers, artesian wells, and ground water recharge and discharge. The Streamulator provides insights into stream dynamics and the value of riparian buffers. Each SWCD has their own policy for demonstrating or lending out their models.

Portable Exhibits – Several SWCDs have interactive educational trailers or other portable exhibits that can be used for special events such as county fairs, school programs and teacher workshops, water festivals, and other community events. Several examples include:

- **Butler SWCD** – The World Beneath Your Feet, Soil and Water Educational Trailer <http://www.butlerswcd.org/Education/Trailer/Trailer.html>
- **Delaware SWCD** – The World Below the Tree Roots inflatable soil tunnel <http://www.delawareswcd.org/>
- **Franklin SWCD** – Journey Through the Soil painted canvas tent, a dry stream model, and a soil erosion simulator are just a few of their interactive exhibits. <http://www.franklinswcd.org/programs-and-services/youth-education/youth-presentations/>
- **Muskingum SWCD** – Aquatic Education Trailer – <http://www.muskingumswcd.org/education/education.html>
- **Erie Basin RC& D** – S. K. Worm allows for basic audience interactivity. The model moves and talks; activated either by a push button interface or from live takeover controlled by an instructor. Designed to help third grade students meet their Ohio Department of Education (ODE) Benchmarks for Earth and Space science, the model will teach soil composition, soil conservation, soil diversity, and renewable energy. The model can also be used at events to educate the general public on the importance of soils in our environment, including fairs, field days, day camps, and other venues. The S.K. Worm model is available for rental by educators and other groups. A trailer painted with an environmental mural transports the model. [Order Form](#), [Rental Form](#), [Coloring Book](#), [Activity Book](#).

Kits for Loan – Lending trunks are great, compact, mobile resources. They contain a variety of resources for a particular topic and can be loaned out to educators for a specific period of time. In

addition to books and posters, trunks should contain items that students can touch, smell and hear as well as supplies for hands-on activities. Examples of trunk themes include agriculture, forestry, recycling, soils, water quality, nonpoint source pollution, and more.

- **The ODNR/Division of Wildlife** has developed a number of trunks that can be borrowed from their District Offices on a variety of different species.
Click Here to download the brochure
- **Seneca SWCD** has a variety of lending trunks shown on their education resource brochure.
<http://senecaswcd.com/2012%20Education%20Prog%20Brochure.pdf>

ENVIROTHON

The Envirothon is a competitive, outdoor academic team event for high school students. Teams consist of five students, all from the same high school or home school organization and they are tested on their knowledge and skills related to soils and land use, forestry, wildlife, aquatic ecology, and current environmental issues. Five area (or regional) competitions are held in April and May, with the top 4 teams from each event progressing to compete in the Ohio Envirothon in June. In addition to the outdoor tests, Ohio Envirothon teams must also prepare and present an oral presentation on a specific environmental issue. The winning team from the Ohio Envirothon advances to represent Ohio at the North American Envirothon, which is held in a different state or Canadian province each summer.

- Several of the Areas host their own Envirothon web site:
 - <http://area1envirothon.org/>
 - <http://www.area1envirothon.org/>
- The Ohio Envirothon site
<http://www.dnr.state.oh.us/default/education/envirothon/default/tabid/8652/Default.aspx>

FIELD DAYS

Field days can be held for a variety of reasons such as demonstrating conservation tillage practices, pasture management, controlled drainage structures, pond maintenance, and more. When planning an event, it is helpful to form a committee and talk with staff from your SWCD or others who have held similar events as to what made their program successful. Sample field day flyers below:

- Coshocton SWCD conducts a forestry field day and a pasture walk –
<http://www.coshoctoncounty.net/agency/swcd/fielddaysworkshops.php>

(FOR) 4R TOMORROW NUTRIENT STEWARDSHIP EVENTS

The goal of this program is to educate and engage *all* water quality stakeholders to reduce the amount of excess nutrients making its way into Ohio waterways by applying fertilizers from the right source, at the right rate, at the right time, and in the right place. The program targets crop farmers, livestock farmers, fertilizer dealers and custom applicators, homeowners, the lawn care industry, municipal wastewater treatment facilities, and developers. This campaign can be promoted at Farmer Breakfasts, community events, county fairs, and through a variety of marketing strategies.

- **The Athens SWCD** featured 4R Tomorrow programs at their county fair –
http://www.athensohiotoday.com/news_briefs/swcd-fair-booth-to-showcase-water-quality-solutions/article_7d601964-da64-11e1-8766-0019bb2963f4.html

LAND LABS

Quite often schools approach SWCDs looking for assistance in developing a school “land lab.” The ODNR Division of Soil and Water Resources produced a motivational video and guide book on land lab development in the 1990s. Each SWCD was given multiple copies of each, and several copies are available on loan from the Division Environmental Education Section.

- **The ODNR Division of Wildlife** sponsors a “Wild School Sites” program. More information is available on their web site, including grant opportunities for land lab development. http://www.dnr.state.oh.us/Home/wild_resourcessubhomepage/Educator_Resources/Wild_Schoolsplaceholder/resourceswildschoolsdefault/tabid/5821/Default.aspx

POND CLINICS

Many SWCDs hold free pond clinics to provide the general public with information on pond construction, maintenance, safety, stocking, aeration, weed control, and nuisance wildlife.

- **Clermont SWCD** holds an annual pond clinic – <http://www.clermontcountyohio.gov/nr0312pondclinic.aspx>
- **Allen SWCD** offers a downloadable pond management guide on their website at <http://www.allenswcd.com/publications/PondManagementGuide.pdf>

RAIN BARREL WORKSHOPS

A rain barrel is a container used to collect and store rainwater from your roof that would otherwise be lost to runoff and diverted to a storm drain or out onto your property. The water in the rain barrel can then be used for watering your landscape. A variety of different rain barrel events are held by different SWCDs. Some Districts sell rain barrels; others offer “make your own” rain barrel workshops, while others promote rain barrel yard art contests.

- **Geauga SWCD** offers a brochure describing the function of rain barrels and the yard art program – http://geaugaswcd.com/yahoo_site_admin/assets/docs/RainBarrel_Brochure_2010.209130358.pdf
- **Lake SWCD** holds rain barrel construction workshops in collaboration with their county park district – <http://www.lakecountyohio.gov/swcd/Residents/RainBarrels.aspx>

RAIN GARDEN DEMONSTRATIONS AND SEMINARS

A rain garden is a shallow depression that is planted with deep-rooted native plants and grasses. Gardens are positioned near a runoff source like a downspout, driveway or sump pump to capture rainwater runoff and stop the water from picking up pollutants and transporting them to the sewer system, and eventually our streams, rivers and lakes. SWCDs provide technical assistance in designing and installing rain gardens – often providing demonstration rain gardens with signage to describe this practice.

- **Warren SWCD** promotes its rain garden program with an informational brochure that is downloadable on its web site <http://www.co.warren.oh.us/warrenswcd/owners/info.pdf>, as well as a list of suggested Ohio native rain garden plants <http://www.co.warren.oh.us/warrenswcd/owners/plants.pdf>

SCHOLARSHIPS

SWCDs offer a variety of different scholarship programs encouraging students to attend outdoor education camps as well as helping support college students interested in studying natural resource topics.

- **Geauga SWCD** as well as many other SWCDs sponsors a Forestry and Wildlife Conservation Camp Scholarship. The camp is held at FFA Camp Muskingum in Carroll County. http://geaugaswcd.com/education_programs
- **Miami SWCD** offers a \$750 scholarship to college students majoring in agriculture or natural resources. <http://www.miamiswcd.org/>
- **Montgomery SWCD** offers a college scholarship program as well as a scholarship to attend Forestry Camp. Both applications can be accessed on their web site. <http://www.montgomeryswcd.org/Scholarships.htm>
- **Ashtabula SWCD** offers two \$500 scholarships established to provide financial assistance to high school graduates pursuing college or college students of Ashtabula County majoring in a natural resource field. <http://www.ashtabulaswcd.org/Education/Education.htm>

SCHOOL PROGRAMS

Most SWCDs spend considerable time working with schools and developing school programs. Of utmost importance when working with schools is basic awareness of the current academic content standards established by the Ohio Department of Education (<http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=1705&ContentID=126258>). Each district's program is unique, tailored to meet the needs of partnering teachers, and supplemental to the local curriculum. Listed below are some examples of the most common SWCD school-related programs and activities, and links to resources and information such as lesson plans, promotional brochures, etc.

Classroom Presentations – District staff may be asked by local schools to do classroom presentations on soils, water quality, conservation, geology, agriculture, pollution, ground water, stormwater runoff, and more. Some SWCDs have designed brochures that explain their programs and what areas of the curriculum they complement.

- **Crawford SWCD** educational program listing: <http://www.crawfordswcd.org/education.html>
- **Geauga SWCD** offers a downloadable Conservation Education Brochure, along with links to teacher guides that include pre and post assessments and correlations to the current academic content standards. http://www.geaugaswcd.com/education_programs

Student Contests – SWCDs sponsor several different contests for school students.

- **Poster Contest** – One of the most common contests is the Soil and Water Stewardship Poster Contest, coordinated by the OFSWCD Auxiliary in conjunction with the NACD Poster Contest. The annual theme is the same as Soil and Water Stewardship week. SWCDs promote the program and choose winners locally. The top poster in grade categories is sent to be judged during Summer Supervisor School, and the high scoring posters are sent on to be judged at the national level. Some SWCDs add their own special twist to the competition.
 - **Franklin SWCD** requires that students create their poster on recycled paper. Some SWCDs distribute paper grocery sacks to be used for the posters.

- **Pickaway SWCD** features their winning poster on a billboard for the whole community to enjoy. <http://www.pickawayswcd.org/education.html>
- **Soil Judging Contest** – Some SWCDs host soils judging competitions for their local FFA chapters. Information about the **Licking SWCD** soils judging program is described: <http://www.lickingswcd.com/services-and-information/lcswcd-programs/education-and-outreach/school-age-educational-programs/ffa-soil-judging>
- **Other Contests – Hamilton SWCD** offers a poster and essay contest, recycled sculpture contest, rain barrel art contest, and “Caring for Our Watersheds” competition. <http://www.hcswcd.org/contests.html>

SOIL AND WATER STEWARDSHIP WEEK

In 1955, the National Association of Conservation Districts began a national program to encourage Americans to focus on stewardship. Stewardship Week is officially celebrated from the last Sunday in April to the first Sunday in May. The program relies on locally-led conservation districts sharing and promoting stewardship and conservation activities. Districts provide conservation and stewardship field days, programs, workshops and additional outreach efforts throughout their community to educate citizens about the need to care for our resources. Each year the NACD selects an annual theme, and provides materials that can be purchased and used by churches, schools, and in community programs. More information is available on the NACD web site:

<http://www.nacdnet.org/stewardship>

TEACHER WORKSHOPS

Scheduling workshops for teachers can be challenging because of their wide range of interest levels, grade levels, and degrees of expertise. Carefully consider timing, offering professional development credits, correlating to the current academic content standards

(<http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=1705&ContentID=126258>), and partnering with neighboring SWCDs to increase your probability of success. It is also helpful to work with your local Education Service Center.

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

- **National Programs.** Some SWCDs feature national programs in their teacher workshops, such as Project WILD and Aquatic WILD (coordinated in Ohio by the Division of Wildlife), Project Learning Tree (coordinated by the Division of Forestry) and Project WET (coordinated by the Division of Soil and Water Resources). Workshop information is available at <http://ohiodnr.com/tabid/9521/Default.aspx>
- **The Black Swamp Educators Extravaganza** is a multiple day teacher workshop coordinated by several northwest Ohio SWCDs. It offers sessions and field trips on a variety of topics each June. More information is available from Wood, Lucas, or Ottawa SWCDs.
- In addition to featuring national “projects,” **Hamilton SWCD** offers educator workshops on vermicomposting, stormwater, soils, and more. <http://www.hcswcd.org/teacher-workshops.html>

TOURS – DRIVE-IT-YOURSELF, BUS, WALKING, AIR, CANOE

Tours can be an important part of your SWCDs outreach efforts, targeting elected officials, landowners, school groups, contractors, and the general public. Myriad variations on tours exist,

including air tours, bus tours, canoe tours, and drive-it-yourself. Listed below are several examples of tours offered by different SWCDs.

- **Madison SWCD** organized a land and water bus tour for public officials highlighting agriculture, alternative energy, and water quality. Stops included a local farmers' market, community garden, and nature preserve. Information on their tour is available in this newsletter: <http://co.madison.oh.us/swcd/Conservation%20QuarterlySummer12.pdf>
- **Muskingum SWCD** hosted their first ATV Conservation Tour on Saturday, July 14, 2012. Invitations to this conservation tour included Muskingum County elected officials and community members. The tour highlighted nine locations where practices have been installed with assistance from the SWCD and NRCS offices. <http://muskingumswcd.org/events/ATVConservationTour.html>
- **Mercer SWCD** partnered with local groups to put on the Grand Lake St. Marys watershed drive-it-yourself tour. Stops featured dredging demonstrations, a nature park, a dairy, and nutrient management practices. <http://www.lakeimprovement.com/drive-it-yourself-tour>

WATER FESTIVALS

Water festivals come in all shapes and sizes targeting the general public or school groups from a specific watershed or county. Most feature displays, hands-on activities, food, and informational handouts. The Groundwater Foundation in Lincoln, NE offers a variety of resources on how to plan and conduct a successful water festival. <http://groundwater.org/>

- **Several SWCDs in southwest Ohio** participate in the Children's Water Festival at the University of Dayton. This YouTube video gives a taste of what a water festival entails. <http://www.youtube.com/watch?v=5OtnmwflWRM>

WATER QUALITY MONITORING INITIATIVES

Water quality monitoring (WQM) programs can be conducted with a variety of groups and organizations. The purposes of these monitoring programs vary, as well as the methods, data collection, and reporting techniques used. Ohio EPA coordinates a "Credible Data Program" designed to encourage and oversee the collection, analysis and use of data collected by volunteer individuals and organizations. Information on the different levels of credible data, training programs, and rules are available at: <http://www.epa.ohio.gov/dsw/credibledata/index.aspx> .

Biological Monitoring – ODNR's Division of Watercraft coordinates a stream quality monitoring (SQM) program on Ohio's scenic rivers and provides training for volunteers. SQM volunteers fill out assessment forms for their assigned stations a few times per year, which helps the division prepare a cumulative index value for each stream station. These values rank a stream's health as excellent, good, fair or poor at the time of monitoring, and are a direct result of the diversity of collected macroinvertebrates. Assessment forms are compiled into a yearly report. Many SWCDs are involved with biological monitoring for educational purposes with school, scout, or watershed groups.

- **Trumbull SWCD** – Stream Watch biological monitoring program for schools – <http://www.swcd.co.trumbull.oh.us/pdfs/Stream%20Watch%20program%20flyer%202.pdf>
- **Licking SWCD** recruits and trains volunteers for their "Stream Team" to increase awareness of local water resources and connect county residents to their local environment. <http://www.lickingswcd.com/news/2012/05/29/volunteer-for-stream-team>

Chemical Monitoring – A number of companies and organizations provide resources for chemical monitoring. The *Healthy Water, Healthy People (HWHP)* water quality educators guide and test kit manual offer a good starting point when planning a chemical monitoring program.

- **Information on Ohio's HWHP program** is available through Ohio EPA <http://www.epa.state.oh.us/oeef/EnvironmentalEducation.aspx> .
- **The national program is coordinated through Project WET** and Hach International. <http://projectwet.org/water-resources-education/water-quality-education/>
- **Butler SWCD** partners with several other agencies to coordinate the Butler County Stream Team. <http://www.butlercountystreamteam.org/> This group monitors for nitrates, total phosphorus, conductivity, bacteria, total dissolved solids, pH, and turbidity.

Physical Monitoring – Ohio EPA's Division of Surface Water conducts physical assessment of streams using their Qualitative Habitat Evaluation Index. A manual is downloadable from their web site. <http://epa.ohio.gov/portals/35/documents/QHEIManualJune2006.pdf> Some of the parameters they assess include stream substrate, in-stream cover, stream morphology, bank erosion, riparian width, and velocity. A less rigorous physical assessment program is detailed in this US EPA site. <http://water.epa.gov/type/rsl/monitoring/vms41.cfm>

Following are several additional water quality monitoring resources.

- Izaak Walton League of American Monitoring Site: <http://www.iwla.org/index.php?ht=display/ContentDetails/i/709/pid/1976>
- Adopt a Stream Foundation Streamkeepers Program: <http://www.streamkeeper.org/aasf/Welcome.html>