

CROSSECTION

Spring



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Special Points of Interest

- * Wetlands are important to humans and wildlife!
- * Points to ponder about West Nile Virus.
- * Sign up today for the Grand River Cleanup/ Canoe Float!
- * Have your kids learn to be a Farmer for a Day in our day camp!
- * Teacher workshop opportunities available-find out more on Pg. 3!

WETLANDS IN OHIO

Known by various names, such as swamps, marshes, fens, and vernal pools, wetlands are basically wet lands! They are often transition zones that lie between dry land and waterways, but some are more isolated. Wetlands are greatly influenced by the presence of water at or near the surface, and are areas of abundant and diverse plant and animal life. They come in many shapes and sizes – and they are not always wet year-round. Water levels in wetlands fluctuate constantly depending upon rainfall, snowmelt and other weather conditions. Some may be dry most of the time, and others may not dry out completely even in years of drought.

Three indicators of wetlands include: 1) the presence of plants that grow in saturated conditions (called hydrophytes) 2) soils that lack oxygen 3) water at or near the surface during some part of the growing season.

Function and Value of Wetlands

Flood Control - One of the greatest economic benefits of wetlands to society, and probably one of the least known benefits, is that of flood control. Wetlands catch, store, and slowly release runoff, especially important during storms. The vegetation in wetlands also slows down flood waters, thus reducing the intensity of downstream flooding.

Water Quality – Wetlands and wetland plants are efficient sinks and traps for sediment and other pollutants that are washed off the land. Runoff from the land is caught in wetlands, and kept from degrading the quality of surface and groundwater, including our drinking water. Wetland plants filter nutrients from passing water and use them in their own metabolism.

Products from Wetlands – Ohio wetlands provide a variety of products used by humans, including: fur, peat, berries, lumber, fish and game. Wetlands act as nurseries for young fish and are critical to Lake Erie fisheries. Of the 200 species of fish found in the Great Lakes, about 90 percent are directly dependent upon wetlands for some part of their life cycle.

Recreation & Aesthetics – Wetlands are unique and beautiful areas that offer many opportunities for recreation. Hunting, fishing, canoeing, bird watching, hiking and nature photography are some common activities associated with wetlands. Because of their beauty and abundance of wildlife, they often improve the quality of life in areas where they are preserved. ♦

Information from Ohio Wetlands brochure, by National Audubon Society and OEEF

WETLANDS IN LAKE COUNTY

Mentor Marsh, Mentor - The Mentor Marsh was designated a National Natural Landmark in 1966 and occupies an ancient abandoned channel of the Grand River. A beech-sugar maple forest occupies the higher elevations bordering the marsh, while a mixed oak swamp forest can be found at the eastern edge of the preserve. Upon visiting the marsh, it is quite evident that the most dominant plant species is reed-grass or Phragmites, an emergent wetland plant. Although Phragmites is an extremely invasive, non-native species, the area still provides habitat for a great diversity of wildlife species. This is a popular spot for birdwatchers during the seasonal migrations of songbirds and waterfowl. For more information, check out www.cmnh.org/naturalareas/mentor.html

Arcola Creek Marsh, Madison – Arcola Creek Marsh is one of the last two remaining “estuarine” marshes along Ohio’s Lake Erie shoreline. Arcola Creek is an important breeding ground for several species of fish. Many different kinds of waterfowl frequently rest on the marsh during migration, and the water smartweed which is abundant at Arcola Creek is an important food for waterfowl. Numerous pairs of wood ducks and mallards breed in the estuary. Great blue herons and green herons are commonly observed at the marsh. Additionally, there are a number of rare plant species found in the marsh, such as Beach Pea, Sea Rocket, Seaside Spurge, Purple Sand Grass, False Dragonhead, Northern Poison Ivy, and Hard-stem Bulrush. For more information, visit <http://friendsofarcola.freesevers.com/> ♦

Fish Sale!



Do you have a pond? Lake SWCD's Fish Sale will be the perfect way to stock your pond!
When: Oct. 23, 2003
Keep your eyes open for more information in our next newsletter!

HOMEOWNER'S GUIDE TO THE WEST NILE VIRUS

A Feature Article by Terry Kent, Supervisor of Mosquito Control Program, Lake County Health Department



By now we all know that the mosquito borne West Nile Virus has firmly established itself in Ohio. In 2002, there were 431 human WNV cases reported with 7 human cases from Lake County. With that mentioned plus the approach of warmer weather our thoughts turn to how we can control our #1 summer pest, the mosquito. Since the emergence of WNV in the US in 1999 mosquito control agencies and individual citizens have banded together to fight this deadly disease.

The best way to avoid being bitten by a female mosquito is to stop them before they reach the adult stage. Homeowners can do this by means of "source reduction." We need to eliminate all breeding areas that hold water for a period of 7 to 10 days. This includes: 1. Removing tin cans and buckets; 2. Children toys and pools; 3. Scrap tires; 4. Boat covers; 5. Drain or fill low areas; 6. Clean roof gutters; 7. Change bird bath once a week; 8. Other water-holding containers.

Residents can protect themselves by avoiding wearing scented perfumes and colognes, being outside at dusk and dawn when mosquitoes are most active, and wear light colored clothing. When using a repellent containing DEET follow directions carefully. Homeowners can treat standing water in their yards by using ivory liquid dish soap or vegetable cooking oil.

Each year the Health District receives calls regarding wetlands and mosquitoes. On going studies will give us a clearer

picture as to whether or not wetlands are a major breeding source. We know, to a certain extent, that nature provides its own mosquito control. Natural predators such as dragonflies, mayflies, diving beetles and frogs help control mosquito activity. Biological control can also be achieved by stocking waters with Gambusia (mosquito fish), blue gill, guppies or any surface feeding minnow. What is known of wetlands is that controlling emergent vegetation plays an important part in controlling mosquito development.

The Health District will continue picking up dead crows and blue jays until 2 "positive" birds are found. Birds must be dead less than 48 hours and in "good" shape (Not all dead birds will be picked up and sent for testing). The Health District will also continue to "trap" adult mosquitoes and send them to the Ohio Department of Health for disease testing. The Health District averages 700 trap collections for summer. Lake County residents who have standing water in their yard, and is too large to treat on their own, can call the Health District. Permission is needed before we can enter the property. Further, any resident wanting to know our adult spray schedule can call our hotline at 440-350-2088 or 440-918-2088.

Lake County residents who have any questions regarding the Health District Mosquito Control Program can call 350-2543. By working together we all can enjoy a safe and happy summer! ♦

WETLANDS GO BY MANY NAMES

Peat bogs: acidic wetlands with little water flow in or out and substantial accumulations of undecomposed organic matter. They can be found scattered throughout the northern two-thirds of Ohio.

Fens: alkaline wetlands that develop where cold, mineral-rich, oxygen-deficient groundwater comes to the surface. Like peat bogs, they accumulate substantial quantities of undecomposed organic matter. Fens can be found mostly in the western half of the state.

Wet prairies or meadows: grassland wetlands that often have saturated soils in the root zone, but may be without standing water for most of the year. They are found mainly in the western half of the state.

Marshes and scrub-shrub wetlands: frequently or continuously flooded wetlands. Many scrub-shrub wetlands are populated with Buttonbush and other woody plants, while

marshes are populated with soft, herbaceous plants that grow out of the water. They are found scattered throughout the state.

Swamps: usually contain trees or shrubs and are often associated with slow-moving sections of streams or rivers. They can be found in the floodplains of our many Ohio rivers and streams.

Floodplain wetlands and periodically flooded bottomland forests: these wetland areas are integral parts of Ohio's many streams and rivers. They are critical to maintaining water quality and completing the habitat needs of stream-dwelling organisms.

Vernal pools: small, very shallow depressions that fill with water from Spring rains and snowmelt, but are dry most of the rest of the year. These wetlands are of special importance to amphibians. They can be found throughout the state, mostly in forested areas. ♦

Ohio Wetlands brochure, by National Audubon Society and OEEF

GRAND RIVER CLEANUP AND KAYAK RAFFLE!

Mark your calendars! The Grand River will receive a dose of litter control on **Saturday, June 14, 2003, from 8:00 am - 1:30 pm**. Canoe floats are scheduled for the morning and will be in two groups. The cleanup will encompass over 16 river miles! Private canoes are welcome, but at your own risk. All canoers must be 18 years of age or older. Persons under 18 will conduct river bank cleanups. All volunteers are welcome!

Lunch, prizes, safety equipment and cleanup equipment will be provided! **Grand River Partners will be raffling off a kayak also!** To make reservations or buy raffle tickets, contact Chad Knisely, Grand River Partners, Inc. @ 440-639-4773. ♦



EDUCATION UPDATE...

FARMER FOR A DAY! -DAY CAMP FOR KIDS



A one-day camp is planned to introduce students to life on a farm. During the one-day summer camp children, ages 7-12, will participate in hands-on activities to learn more about the complexity and interdependence of agricultural, environmental, economic and cultural issues. Participants will plant seeds, learn about plant growth, learn about growing food, learn where food comes from and discuss how people of the world grow food. Additionally, children will visit a petting farm to learn about the care and use of farm animals.

Farmer for a Day will be held three different dates – July 15, July 30, and August 15 at Spring Hill Farm Market located on Rt. 84 in Geneva. The \$10 registration fee includes lunch and beverages. **Pre-registration is required.** For more information and to request a registration form, contact Amy Knisely at 440-350-2730 or Hope Swank at 440-466-7480, or log on at www.lakecountyohio.org/soil/education2.htm ♦

UPCOMING TEACHER WORKSHOPS!

WONDERS OF WATERSHEDS EDUCATION WORKSHOP— EARN CREDIT, GET PAID!

Lake and Geauga SWCD's are offering a summer education workshop – *The Wonders of Watersheds*, August 4-8, 2003, with the help of an OEPA Grant. **Two graduate credits** will be offered to interested teachers and a **stipend** will be awarded to each participant. Teachers will be exposed to issues within the major watersheds of Lake and Geauga Counties. Call Lake SWCD for more information.

AGRICULTURAL AWARENESS IN THE CLASSROOM—EARN CREDIT!

Agricultural Awareness in the Classroom is a 2-day workshop which will expose educators to the curriculum *Project Food, Land and People*. The workshop will take place on July 21-22, 2003, at the Geauga SWCD office in Burton, Ohio. Day 1 will focus on the Project Food, Land and People 700+ page curriculum guide of hands-on, interdisciplinary lessons. Educators will become more familiar with the guide as they participate in several hands-on, cooperative learning lessons. Project Food, Land and People lessons correlate with state proficiency test learning outcomes. Participants will receive this valuable curriculum guide after completing the 2-day workshop. On Day 2, we will visit several local agricultural establishments in Geauga County, including Sage's Orchard, Lawson Dairy and Feed, and O'Rielley Equipment.

Class size is limited—so register early! This workshop is open to educators who teach in Geauga, Lake, and Ashtabula Counties. 1 optional graduate credit will be available through Ashland University. Keep your eyes open for an information brochure in the near future, or call Lake SWCD for more information.

EXPLORING THE WORLD AT YOUR DOORSTEP— SCHOLARSHIP AVAILABLE

Lake SWCD is offering 1 scholarship to a Lake County teacher to attend this year's Ohio Federation of Conservation Districts Education Workshop. Deer Creek State Park will be the site for this year's workshop. Dates are August 12-14, 2003. This statewide workshop attracts teachers and soil and water educators from across Ohio. All teachers (K-12) are encouraged to attend. The workshop is an annual event, held in different parts of the state each year. It's a wonderful opportunity to gain many new ideas to enhance your lesson plans. Sessions include interesting field trips on various subjects. The workshop qualifies for continuing education credits with Ashland University. Please call Lake SWCD for more information. **Scholarship deadline is May 12; registration deadline for the workshop is June 2, 2003.**

For registration or more information about any of these workshops, log onto our Conservation Education web page at www.lakecountyohio.org/soil/education2.htm ♦

WHO WANTS TO BE A CONSERVATIONIST?

Test your own knowledge of environmental issues by playing "Who Wants to be a Conservationist?" Quiz classmates, colleagues, fellow employees, and your family! Look for the correct answers inside this newsletter! Look on our website for brief explanations!

1. Another name for plants that are found in wetlands, and adapted to wet conditions.

- A. Hydrophytes C. Water plants
B. Hydric D. Anaerobic

2. Fish that are able to travel between fresh and salt water are called _____.
Salmon is an example.

- A. versatile C. anadromous
B. flexible D. hydric

3. In wetlands, _____ plants grow with their roots under water in the soil, but the stem and leaves stick up above the surface of the water.

- A. submergent C. submersed
B. emergent D. None of the above

4. Since wetland soils have little oxygen, wetland plants have adapted special air spaces, called _____, for transporting oxygen from their leaves down through their stems and to their roots.

- A. transporters C. aerenchyma
B. xylem D. stomata

5. Another name for soil that is saturated with water and therefore lacks oxygen.

- A. Loamy soil C. Wet soil
B. Hydrophytic soil D. Hydric soil

6. Trees that grow in wetlands have adapted a secondary root system that pokes above the surface of the water for gas exchange called _____.

- A. pneumatophors C. buttresses
B. adventitious roots D. prop roots

7. A common invasive plant species found in wetlands is _____.

- A. Arrow arum C. Water lily
B. Phragmites D. Pickerel weed

8. Because of the lack of oxygen, many organisms living in the soil must carry out _____ respiration (meaning without oxygen).

- A. aerobic C. synthetic
B. anaerobic D. Adventitious

9. Which native Ohio species relies exclusively on forested wetlands to breed.

- A. Spotted salamander C. Wood Duck
B. Wood Frog D. All of the above

10. Which is not a prey for wetland dragonfly larva?

- A. Mosquito larva C. Tadpoles
B. Dobsonfly larva D. Minnows



BIO-BLITZ AT MENTOR MARSH

Ever wonder what exactly lives in a marsh? Join the Cleveland Museum of Natural History and the Ohio Conservation Alliance for a Bioblitz - a survey of the living organisms in an area in a given amount of time – on May 9, 2003. Professionals and educators will collect, identify, examine, and count the living organisms found in Mentor Marsh and the surrounding forested area! We will show you how it is done and why. At the end of the day, we will tally up the number of species that have been found and identified. The program is free to classes grades 3 and up, groups will be scheduled for a 1 hour time period between 10 am and 4 pm. For more information or to schedule your class, call Kathleen Reilly at (216)231-8002. ♦

STREAM MONITORING WORKSHOPS

Are you interested in an excellent outdoor, hands-on experience to learn about the natural values and environmental benefits of our rivers and streams? Then join the Stream Quality Monitoring Project of the Ohio Division of Natural Areas and Preserves' Scenic Rivers Program. Attend one of the following workshops in order to learn more about this volunteer monitoring program.



- **Chagrin Scenic River - Old River Farm Picnic Shelter, Thurs., May 15th, 5-7 pm**
- **Grand Wild and Scenic River - Hidden Valley Picnic Shelter, Thurs., May 22nd, 5-7 pm**

For more information or to reserve a spot, contact: Billie Jagers (330) 527-2961 - Stream Quality Monitoring Coordinator. ♦

LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

125 E. Erie St., Painesville, OH 44077

•440-350-2730 (main number) •FAX 440-350-2601

Toll-free •298-3334 ext. 2730 Madison/Perry

•918-2730 Cleveland/Western Lake County

•1-800-899-LAKE outside Lake County only

Office Hours: Mon.-Fri. 7:30 am-4:00 pm

•**E-mail: soil@lakecountyohio.org**

•**Web site: www.lakecountyohio.org/soil**

AL BONNIS, District Conservationist, NRCS	350-2730
PAM BROWN, District Secretary/Treasurer	350-2730
DAN DONALDSON, District Administrator	350-2030
CHAD EDGAR, Urban Stream Specialist	350-2032
AMY KNISELY, Education/Information Coordinator	350-2033
JOHN NIEDZIALEK, Western Reserve RC&D Coordinator	350-2034
BRETT RODSTROM, Urban Resource Technician	350-2092
MATTHEW SCHARVER, Resource Protection Tech.	350-2031

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 - Ohio Federation of Soil & Water Conservation Districts
 - Lake County Farm Bureau
-

AN EQUAL OPPORTUNITY EMPLOYER

All Lake SWCD and USDA programs and services are available without regard to race, age, gender, national origin, political beliefs, color, religion, disability, sexual orientation, or marital or family status.

The public is invited to attend Lake SWCD's monthly Board meetings, held the fourth Wednesday of each month at 7:00 pm at 125 East Erie St., Painesville. Meeting announcements appear under the public agenda in the News-Herald. Please call in advance to let us know you will be attending.

Lake County Soil & Water
Conservation District
125 East Erie St., Painesville, OH 44077

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