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WHITE OAK CREEK WATERSHED NEWSLETTER

EMERALD ASH BORER AND OHIO'S TREES

Ohio Governor Ted Strickland reminds citizens to refrain from moving firewood as the camping season kicks off. Firewood is a major culprit adding to the spread of the ash tree-killing insect and the devastation of Ohio's ash trees.

"From our streets, to our parks, to our forests, ash trees are a staple landscape and environmental component," Strickland said. "Emerald Ash Borer threatens these valued ash trees and billions more throughout the nation, and it's important that we all remember to protect our trees by buying and burning local firewood."



Volunteers across Ohio are participating in a regional initiative to tag ash trees with signs and caution tape, reminding citizens of the importance of the state's ash tree resources. Volunteer groups plan to tag 5,000 ash trees in locales throughout Ohio, varying from municipal streets, to campgrounds, zoos and walking trails. Ohio's efforts are part of a multi-state effort to bring light to the EAB situation and the risks of moving firewood.

EAB threatens the state's 5 billion ash trees and has been found in 27 of the state's 88 counties. To slow the spread of the devastating insect, state quarantines make it illegal to move hardwood firewood and ash tree materials, which could harbor the pest, out of infested counties. Violators could face fines up to \$4,000. A federal quarantine also makes it illegal to take hardwood firewood out of the state of Ohio without federal certification.

Ash trees infested with EAB typically die within five years. The pest belongs to a group of metallic wood-boring beetles. Adults are dark green, one-half inch in length and one-eighth inch wide, and fly only from early May until September. Larvae spend the rest of the year beneath the bark of ash trees, damaging the trees' water- and nutrient-transporting tissue. When the larvae emerge as adults, they leave behind D-shaped exit holes in the bark about one-eighth inch wide.

<http://www.dnr.ohio.gov/forestry/health/eab.htm>

Upcoming Meeting

There will be an upcoming meeting about the Emerald Ash Borer (EAB) and their affects on Ohio's trees.

Who: Division of Forestry, Tri-County SWCD agencies, Farm Bureau Federations and OSU Extension offices.

When: Tuesday, June 26, 2007 at 6:00 p.m.

Where: Western Brown High School Community Room
476 West Main Street, Mt. Orab, Ohio

"The mission of the White Oak Creek Watershed Partners is to bring together local communities to enhance water quality and encourage natural resource protection."



WHITE OAK CREEK WATERSHED

A **Watershed** is an area of land from which water drains to a common water body such as a stream, river or lake. On its way, water travels across farm fields, forest land, suburban lawns and city streets possibly picking up contaminants and distributing them in the stream.

Conservation Easements

The Ohio Valley Resource Conservation and Development (RC&D) Council, serving 10 southern Ohio counties, is becoming active in acquiring conservation and agricultural easements. While Ohio Valley is working to build partnerships with agencies and organizations to promote easements, they are also working to educate the public about conservation easements and farmland preservation. The White Oak Creek Watershed Partners are working with OVRC&D toward creating a conservation easement program to protect the forest corridor adjacent to the stream.



Congress has recently approved a significant expansion of the federal tax incentives for conservation easement donations. The income tax savings from these new incentives can be significant and substantial for interested landowners. The tax incentives apply only to easement gifts made during 2007. This opportunity may not be available in the future. If you are interested in learning more about conservation easements and the current tax incentives or estate benefits, contact Brown County Soil & Water Conservation District Office at (937) 378-4424, Highland County (937) 393-1922 or call the RC&D office at (937) 695-1293.

Mussels



Below the bridges, the barges and boats, in a world at the bottom of the Ohio River, a fascinating group of wildlife struggles to survive. Some fifty species of freshwater mussels make this big river home.

Freshwater mussels contribute to the delicate balance of life in the Ohio River.

They once played important roles in our history and now serve us as silent messengers about the quality of water on which we all depend.

Did you know?

- ◆ Mussels are related to clams, snails and squid.
- ◆ Most mussels need fish to reproduce.
- ◆ Some mussels can live to over 100 years.
- ◆ The Ohio River is home to about 50 species of mussels today.
- ◆ Adult mussels range in size from the 1" lilliput to the 12" washboard.
- ◆ Natural pearls can form in mussels, usually in response to parasites.

Frequently Asked Questions

What good are freshwater mussels?

- ◆ They are food for wildlife such as fish, muskrats and otters.
- ◆ They filter and clean water.
- ◆ Some have shells with commercial value for pearls, buttons and jewelry.
- ◆ Their sensitivity to pollution makes them good indicators of water quality.
- ◆ They teach us to appreciate some of the hidden beauty of the natural world.
- ◆ They contribute to the "biodiversity" of the Ohio River.

Do people eat freshwater mussels?

Native Americans used them for food, especially when other foods were scarce, but they are not popular today. Their meat is generally tough and tasteless and is often contaminated by pollutants from their environment.

What do they eat?

Freshwater mussels feed on microscopic plants and animals filtered from the water.

Are freshwater mussels in trouble?

- ◆ Approximately 70% of North America's freshwater mussels are in need of conservation.
- ◆ 6 Ohio River species are now extinct.
- ◆ 16 Ohio River species are federally endangered.

Why are they in trouble?

- ◆ Dredging, streambank development and other activities destroy habitat.
- ◆ Water pollution and siltation affect both mussels and their fish hosts.
- ◆ Dams alter habitat and block movement of fish hosts.
- ◆ Exotic animals, especially zebra mussels, compete with native mussels.

What can people do to help save freshwater mussels?

- ◆ Get involved with activities to promote conservation measures along streams.
- ◆ Report suspected water pollution to state and federal authorities.
- ◆ Take actions to prevent spreading zebra mussels to uncontaminated waters.



Local Students Participate in Spring Water Monitoring



During the week of May 7th two local schools participated in spring water quality monitoring on White Oak Creek. The White Oak Creek Watershed Partners along with the Brown County Soil & Water Conservation District donated equipment to each school for the monitoring. The students participated in both chemical and biological monitoring at the creek.

Western Brown Science Club tested water quality on Sterling Road, south of Mt. Orab. Eastern Brown 7th & 8th grade classes monitored the water quality on White Oak Creek across from Martin's Super Valu in Sardinia.

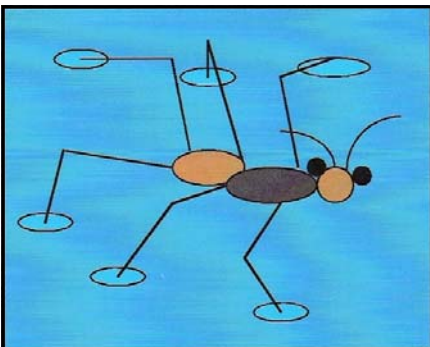
At both sites students collected water samples to test for nitrates, phosphates, temperature, dissolved oxygen and pH. The classes also used nets and seines to collect aquatic insects. Aquatic insects (or macroinvertebrates) live on the stream bottom in the substrate and stream quality can be determined by what macroinvertebrates are found. Insects found included mayflies, water pennies, caddisflies, damselflies, gilled snails, crawdads, dragonflies, a mussel, scuds, leeches and aquatic worms. All organisms show a diversity of life in the stream and demonstrate to students the overall health of the stream. According to the chemical and biological monitoring results both streams are in good condition. Additional monitoring would have to be completed to determine if the stream could meet excellent standards.



Between the two schools 71 students enjoyed time out of the classroom to learn hands-on science concepts. The purpose of the program is to promote water quality through education. Understanding nature and our water resources promotes a cleaner, healthier environment.

Water Striders

Water striders are insects that glide on the water's surface. Their legs stay on top of the water through surface tension. Air is trapped on hairs at the ends of the legs of the water striders, keeping their legs from falling into the water. If you look at one floating on the water, it looks like the ends of its legs are resting on little floating pads. These are actually small dents in the surface of the water made by the weight of the insect pushing down. Water bugs help the ecosystem. Some eat algae, which helps keep the amount of algae from becoming too high. They also provide food for other creatures.



“Working hard to protect water quality”



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My name was misspelled. My address was incorrect. I received more than one copy.



DON'T: Wait to fix a leak.

Assume little leaks only waste a little water? You can lose up to 200 gallons of water a day from a leaking toilet. And a faucet can drip 604,800 drops while you are waiting.



DON'T: Slip used motor oil into a storm sewer or bury it in the trash.

Hey slick, oil can leak into lakes, rivers and wells. Just one pint can expand over an acre of water. Take your used oil to a recycling center.



DON'T: Water your lawn at high noon.

Caught with your sprinkler on? The hot sun will evaporate the water your lawn needs. Better to water early in the day.



DON'T: Take a shortcut and use the hot water tap when cooking.

That's taboo, and it can shortcut your health. Lead can dissolve into hot water from lead pipes and solder. Cold water is better. Heat it on the stove when cooking or making baby formula.



DON'T: Toss toxins in the trash.

How tacky! Consider batteries, a common throw-away. They contain lead and mercury. Some ordinary household cleaners have other poisons that contaminate water. Here's a tip, drop them off at a special collection site.



DON'T: Use your garbage disposal all the time.

Want to show good taste after a meal? Learn to compost. Your disposal uses one gallon of water a minute. Many foods can be composted instead, making a great soil conditioner. These foods include vegetable trimmings, egg shells, coffee grounds with filters and tea bags.