



Kent Environmental Council

September 2007

KEC Forum to Focus on Innovative 'Sharing Streams' Program

According to its proponents, it has the potential to reconstruct how science is taught at the high-school level in the state of Ohio. The program, which is being implemented at Kent Roosevelt High School, uses issues within the Cuyahoga watershed as a springboard for education.

To help the community learn more about the new approach, the Kent Environmental Council's Fall Forum will focus on "Igniting Streams of Learning in Science." The event is set for October 8 in the Roosevelt High School cafeteria at 7:30 p.m. Admission is free.

The Igniting Streams program is a long-term, collaborative and interdisciplinary one developed by professors at three of the institutions of higher learning within the Cuyahoga watershed: Hiram College, Kent State University and the University of Akron. Teams from nine high schools within the watershed area were selected. Kent Roosevelt was among the 10 teams that participated in a two-week residential program at Hiram College in June 2007. Funding was provided by a grant from the Ohio Board of Regents.

Each team was charged with developing a "learning object" using the tools and strategies acquired during their residence at Hiram College. For its learning object, the Roosevelt team proposed the development of a course in environmental science, consisting of eight "learning modules" to be given during the spring semester of 2008. This proposed class would be directed at the high school's juniors and seniors who do not plan on majoring in science at the college level.

According to Chris Carman, chemistry teacher at Roosevelt, the

title of the project was chosen to anticipate and build upon the media attention that will be directed at the Cuyahoga watershed in 2009, the 40th anniversary of the "igniting" of floating debris at the mouth of the Cuyahoga River in 1969. This sentinel event (though the Cuyahoga was not the only river that caught fire, nor

*Kent Environmental Council
Fall Forum: Igniting Streams
of Learning in Science*

*October 8 - 7:30 p.m.
Roosevelt High School Cafeteria*

Admission Is Free

was that the first time) focused public attention on water quality issues across the United States at that time, culminating in the passage of the Clean Water Act and the creation of the Environmental Protection Agency.

This same event also spurred various members of the Kent community to form the Kent Environmental Council as a way to put words into action at the local level. One of the first projects for the newly formed KEC was improvement of public access to the Franklin Mills Riveredge Park, which had become a dumping ground for debris and an eyesore. Efforts were directed toward trail improvements and the planting of hundreds of trees and shrubs, which continue to provide a natural oasis in the center of town.

Presenters at the forum will be Carman; Dr. Dennis Taylor, professor of biology at Hiram College; Mary Lou Holly, director of the Faculty Professional Development Center at

KSU; Diane Balog, KSU science education major; and Kristin Gabella, Joel Hawksley, Sarah Jackson, Faris Hakim Norashiddin and Sarah Tesmer, students from the Roosevelt Igniting Streams program.

Carman began teaching at Roosevelt in 2005 after teaching for seven years at Hamilton High School in Hamilton, Ohio. He currently teaches CP Chemistry and Supermarket Science and recently moved to Kent with his wife and daughter Anna. Taylor has a bachelor's degree in biology from Hiram College and a doctorate in ecology from Cornell University. Holly is a professor in the KSU College of Education and has been director of the Faculty Professional Development Center since its creation in 1998.

Make plans to attend the forum to learn more about this exciting collaborative effort involving higher education and secondary-level students and teachers as they lay the groundwork for exciting changes that will engage a broad spectrum of students in science education through local watershed problem-solving.

Inside . . .

Climate Change	2
Park District Levy Plans	2
Environmental Roundtable Forum	2
Main Street Kent Update Report	2
Cuyahoga River Clean-Up	3
Park District Final Community Meeting	3
Ohio Solar Tour	3
Quote from <i>Vital Signs</i>	3
Grant Proposal Deadline Reminder	4
KEC Membership Reminder	4

Abrupt Climate Change: Past, Present, Future Consequences for Planet Earth

The effects of abrupt climate change can be seen in the Earth's ice sheets and glaciers, Lonnie Thompson, professor of geological sciences at Ohio State University said at a recent meeting in Columbus. Such structures, said Thompson, preserve long, high-resolution histories and provide multiple lines of evidence.

Thompson's research includes drilling ice cores from glaciers around the world to retrieve climate data going back thousands of years. He has led more than 50 expeditions during the last 30 years in the world's polar regions as well as in tropical and sub-tropical ice fields.

What really stands out, Thompson said, is how unusual the last 50 years have been compared to at least the last 2,000 and perhaps the last 5,000 years. He just returned from Quelccaya ice cap in Peru, where he measured dust and air trapped in the ice cores back to 315 A.D. The ice cores are brought back in yard-long metal tubes and stored in an OSU freezer for analysis.



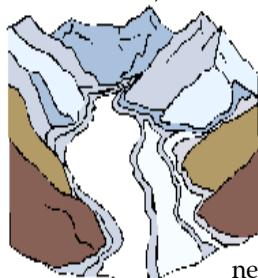
Thompson also has drilled ice cores from Alaska, Greenland, Mt. Kilimanjaro, Nepal and Tibet.

Photos of ice core sections presented at the meeting clearly showed some abrupt changes—from clear ice to dark (dust), to cloudy ice, as precipitation and temperatures varied over the centuries. Carbon dioxide concentrations in the atmosphere, measured first in

1958, now come 80 percent from the burning of coal, oil and natural gas.

Today, carbon dioxide is 380 parts per million and rising. The fourth assessment by the International Panel on Climate Change predicts a 3.5- to 8-degree Fahrenheit temperature rise by the year 2100. Greenland warmed 3.6 degrees in the last 50 years.

Before-and-after photos of a variety of glaciers document how they have retreated. Thompson expects that Glacier National Park, with 100 glaciers in 1932,



will have no glaciers by 2040. The Arctic sea ice decline has intensified. By 2040, the Arctic may be

nearly devoid of the summer sea ice that polar bears depend on for survival.

The sea level is rising at the rate of one inch in 10 years, due to thermal expansion of the ocean. Over time, this will change the maps of Florida, the Gulf of Mexico and New York's Long Island. Thompson indicated that the social impact could be large. He added, however, that "we are not good at addressing gradual changes, absent a crisis."

He ended his presentation with a quote from Martin Luther King Jr.: "We are now faced with the fact that tomorrow is today. We are confronted with the fierce urgency of *now*. Procrastination is the thief of time, lost opportunity." *What will we change? When?*

For more information on Thompson, see the July 2007 issue of *Smithsonian* (pp. 66-74).

Park District Planning Levy Fund-Raiser

Come play a game of Monopoly—with real money—and help the Portage Park District raise money to help the district launch a successful levy campaign. The levy, for which the millage has not been determined, would appear on the ballot in November 2008.

To launch a successful campaign, fund-raisers are needed to pay for advertising and promotion of the levy. Two such events are a game of Monopoly and a silent auction on October 27, at 6 p.m. at Our Lady of Perpetual Help Church, 342 Chillicothe Road, Aurora. Tickets are \$25. Hors d'ouvres, beer and wine will be available.

Both activities should be lots of fun and will bring together people from all over the county who appreciate the special nature of Portage County.

Main Street Kent Update Report

Since it began eight months ago, Main Street Kent continues to make important strides toward its goals. The following is a brief update:

- *Trash Cans.* The new trash cans have arrived and are available for use. Thanks to the Burbick Foundation and the city of Kent for their financial contributions.
- *Whitewater Park.* Main Street Kent, the city of Kent and the Parks and Recreation Department are studying the possibility of a whitewater park on the Cuyahoga River. The park would be designed for activities such as kayaking, swimming, tubing and canoeing. A draft design is expected by early next year.
- *Events.* One of the new events this year occurs in the evening on October 11 when the Clydesdale horses parade through downtown Kent.

For more information, go to www.mainstreetkent.org.

Save the Date! October 29

Portage County Environmental Roundtable Fall Forum

The Portage County Environmental Roundtable Fall Forum is set for October 29 at 7:30 p.m. Location to be announced. Topic is "Tributaries of the Cuyahoga and Mahoning Rivers." Emliss Ricks will talk about the Mahoning River and Eagle Creek, Chris Craycoft, executive director of the Portage County Park District, will talk about the Cuyahoga River and Breakneck Creek.

Volunteers Retrieve Tires, Trash During Cuyahoga River Cleanup

More than 70 volunteers converged on the Cuyahoga River in the former dam-pool of the Munroe Falls dam to remove accumulated tires, car parts and other trash. Kent Environmental Council members and others joined forces for the cleanup on September 9. Other participants included Kent city officials; residents of



Volunteers bring tires to a collection point at the mouth of Fish Creek.

The clean-up was sponsored by Portage and Summit counties; the Kent, Stow and Munroe Falls city governments; the Northeast Ohio Four County Regional Planning and Development Organization; the Ohio Environmental Protection Agency; the Summit County Soil and Water Conservation District; and Metro-Parks, Serving Summit County.

"Public awareness of the damage of dumping tires and car parts in the river has increased greatly," said Ann Ward, chairperson of KEC. "And now that the river is flowing freely, it will tend to clean itself. We just gave it a little boost this year."

Kent, Stow and Munroe Falls; and students from Kent State University. The Kent State students were part of the university's Super Service Saturday program.

Local participants brought canoes or rowboats to transport old and abandoned tires from deeper water to collection points; many tires were wrestled out of the mud by hand and rolled to the banks to be picked up and hauled away. An estimated 150 tires were retrieved, along with miscellaneous trash.

Park District Offers Final Chance for Citizen Input on Preservation Plans

If you want to share your ideas about preservation of special areas of Portage County, your last chance to do so will be on September 26 at 7 p.m. at the Portage County Gardeners Center, 5154 S. Prospect Street (S.R. 44).

The meeting will focus on the southern part of the county (Rootstown, Ravenna, Randolph), though anyone from any part of Portage County is welcome to come. Comments are not limited to any particular area of the county.

This session and previous ones, said Portage Park District Executive Director Chris Craycroft, have been very helpful in generating thoughts about what is special about Portage County and which areas need to be identified for protection. Such protection would involve a variety of tools—from the purchase of land to the use of conservation and agricultural easements. Park accessibility for bicycle transportation has been discussed at previous meetings.

Annual Ohio Solar Tour to Rise Again

Get a close-up view of renewable-energy systems and energy-efficient buildings during the 2007 Ohio Solar Tour October 5-7. A total of 30 guided public tours and open-house sites in every corner of the state will be available for viewing. The annual tour, organized by clean-energy advocate Green Energy Ohio features tours to homes, businesses, schools, parks and other public sites that use the newest and best that solar electric, solar thermal, wind turbine, green design and other energy-saving technologies have to offer.

Discover how your neighbors are reducing their energy bills, increasing their energy independence, and helping to address climate change in Ohio. Learn about energy efficiency, talk with homeowners and experts, and learn how solar technology works, what it costs and why it makes sense.

The tours are free and open to the public. Some tours feature free shuttle transportation and lunch. Reservations are required for some tours. Download the regional-tour guidebooks at www.GreenEnergyOhio.org. If necessary, scroll down the page to the heading "2007 Solar Tour Guidebooks" and find the region of the state for which you want a guidebook. Click where indicated to start the download process. The books contain site information, photographs of the sites, directions and everything else needed to take the tour.

Green Energy Ohio is coordinating this annual event along with the American Solar Energy Society's National Solar Tour, in what has become "the largest demonstration of installed renewable energy technologies and energy-efficient building practices in

See SOLAR, p. 4.

“The window to prevent catastrophic climate change appears to be closing. Some governments are starting to redirect their attention away from climate change mitigation and towards staking their claims in a warming world. Canada is spending \$3 billion to build eight new patrol boats to reinforce its claim over the Arctic waterways. Denmark and Russia are starting to vie for control over the Lomonosov Ridge, where new sources of oil and natural gas could be accessed if the Arctic Circle becomes ice free-fossil fuels that will further exacerbate climate change. These actions assume that a warming world is here.”

From Vital Signs 2007-2008, a report from the Worldwatch Institute..

SOLAR

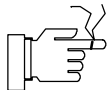
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the United States," according to a Green Energy Ohio announcement of the tours. Statewide sponsors include the Ohio Department of Development's Office of Energy Efficiency, the Cleveland Foundation, Duke Energy and the Gund Foundation.

The Northeast Ohio Solar Tour features tours in Cleveland, East-of-Cleveland, Wayne County, Oberlin, Akron, Youngstown and Mansfield.

Stops on this tour are NASA Glenn Research Center Tour (October 5), Cleveland Metro Tour (West and East) [October 6], East-of-Cleveland Tour (October 6), Akron Metro Tour (October 7), Wayne/Holmes County Tour (October 6), Oberlin Tour (October 6), Mansfield Tour (October 7), Youngstown Tour (October 7) and Knox County Tour (October 7).

The remaining regional tours are Northwest Ohio, featuring tours in Toledo, Bowling Green and Sandusky; Central Ohio, featuring tours in the Columbus Metro area, Delaware, and Grove City; Southeast Ohio, featuring tours in Athens and Hocking counties; and Southwest Ohio, featuring tours in the Cincinnati Metro area, Dayton, Oxford and Yellow Springs.



The **deadline** for submission of grant proposals to KEC is **October 1**. For more information, go to www.kentenvironment.org.



KEC Membership Reminder . . .

Please take the time and energy to check your mailing label for the current status of your KEC membership.

If you see **REN** above your name and address, KEC is reminding you that it is time to **RENEW** your membership. A return-addressed envelope will be attached to the newsletter for your convenience. You can indicate your support of KEC at the following membership levels:

Sustaining, \$45; Family, \$35; Individual, \$25; Golden Buckeye, \$15; Golden Buckeye Family or Couple, \$25; Student, \$10

If you see OK on your label, you are a **member in good standing**. Thank you for your trust and support!

The letters **CC** mean that KEC has sent you a **complimentary copy** this month. Please consider joining KEC at any membership level you find appropriate. Make your check payable to Kent Environmental Council, and mail it to: Kent Environmental Council, P.O. Box 395, Kent, OH 44240.

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Kent Environmental Council . . . on the Web at www.kentenvironment.org