VOLUME 8, ISSUE 3

A Newsletter from the Connecticut Department of Environmental Protection

SUMMER 2008

Walking to School is Cool

More children get driven to school today than a generation ago, even those who live close enough to walk. But on October 8, 2008 many kids across Connecticut will be walking to school — because it's International "Walk to School Day." Schools in Bridgewater, Hartford, Fairfield, Manchester, Vernon, Stamford, Torrington, and Derby have all taken part in "Walk to School Day" events. If your local school hasn't done so yet, it's not too late to start planning an event for October.

"Walk to School Day" began as a simple idea – children, parents, school and local officials walking to school together on a designated day.



The bus is okay, but it's definitely cool to walk to school

It is an energizing event, reminding everyone of the simple joy of walking to school, but with many other benefits. Since schools already teach physical education, health, and environmental topics, this event is the perfect opportunity to bring these topics all together.

Health benefits of walking are easy to understand, but the benefits to air quality may be less obvious. As much as 25% of morning rush hour traffic can be school-related. Cars emit a variety of harmful air pollutants, such as particulate matter and ground level ozone. Since children's respiratory systems are not fully developed, they can be more easily impacted by these pollutants. If more children walked or bicycled to school, it would reduce the number of cars near the school at

pick-up and drop-off times making it safer for the children, reducing traffic congestion and air pollution, and saving gasoline.

After taking part in "Walk to School Day", your school or town can continue a walking program all year long. The national Safe Routes to School (SRTS) program, run (continued page 2...)

W	'hat's	Insid	le .	

Green Building Designs Win Awards
• It's A Switch
Recycling Roundup - Decluttering DEP
• Following the Paper Trail 5
What Is The DEP? 6
Composting Has A-Peel 6
Practicing Green Health 6
Ask Eartha
• P2 Calendar

Walking to School is Cool

(continued from page 1)

locally by the CT Department of Transportation, provides a variety of information as well as funding to encourage more students in elementary and middle schools to walk and bike to school. One major piece of putting together a program is to map out routes to see if there are any safety concerns. Walkability and Bikeabilty Checklists have been put together to make this step simple. Schools can apply for funding to make infrastructure improvements, like repairing sidewalks, marking crosswalks, and installing reflective sign posts, flashing warning beacons, speed bumps, and signs that show the speed of an approaching vehicle. Money is also available for education and other related activities. A total of \$7 million will be allotted to Connecticut between the years 2005-2009.

The Skinner Road School in Vernon hosted a workshop on Safe Routes to Schools in the spring. They began "Walk to School" activities in 2006 and spoke about their Walking Wednesdays – days when school buses and families can meet at an arranged location and park, allowing the children and adults to become a "walking school bus" and walk part of the way to school. Judi Manfre, School Nurse, said, "We started the SRTS program with the belief that healthier children learn better, and this belief turned into reality." From 2006 to 2007, the school demonstrated significant improvements in mathematics, reading and writing among students in the third, fourth and fifth grade. While walking and bicycling to school is not the only factor contributing to the improved fitness and academic scores, school officials believe the SRTS program is partly to thank.

Connecticut Schools that received SRTS Funding

- □ KT Murphy Elementary School, Stamford
- Bowers Elementary School and Illing Middle School, Manchester
- Naramake Elementary School and Nathan Hale Middle School, Norwalk
- F.A. Berry, Anna Rockwell, RMT Johnson, and Bethel Middle Schools, Bethel
- Horace W. Porter School, Columbia
- Northend Elementary School, New Britain
- Ludlowe Middle School, Tomlinson Middle School, and Riverfield Elementary School, Fairfield

To find out more about International Walk to School Day and the Safe Routes to Schools program, and to read case studies of local schools, visit these websites: www.walktoschool.org and www.ctsaferoutes.org.

Green Building Designs Win Awards

In recognition of the efforts by designers to promote green buildings in Connecticut, the CT Green Building Council (CTGBC) gave out six awards in early June. Buildings were grouped as "Most Intriguing" or "Intriguing" – and green designs were recognized in the residential and institutional areas as follows:

Residential

MOST INTRIGUING was awarded to the elegant but affordable Usquepaug Residence designed by Lindsay Suter AIA. This design takes advantage of a great northern view by using a lot of glass to obtain both the view and daylight without glare, but solves the heat loss potential by an effective and handsome shutter system.

INTRIGUING was awarded to the Norfolk Residence, again by Lindsay Suter AIA. This design is compact and efficient and uses natural ventilation for the building. The basic fuel for heating is a wood stove that was reduced in size due to its ability to work efficiently. The materials selected and attention to best construction practices result in a fine lesson on how to build an affordable house.

Institutional

MOST INTRIGUING was awarded to the Yale Sculpture Building and Gallery, designed by Kieran Timberlake Associates in association with BVH Engineers. The building incorporates just about every

(continued page 3...)

Green Building Designs Win Awards (continued from page 2...)





Barnard Magnet School is a learning laboratory for its students.

sustainable device and design possible, including a green roof that covers about 90% of the whole structure.

INTRIGUING was awarded to the Barnard Magnet School whose design showed a very aggressive energy program undertaken by the City of New Haven. The significance of this project, designed by Roberta Washington and David Thompson, collaborative architects, is what can be done using public funds. The project incorporates an existing school building and a fine looking addition that meets the goals of LEED Gold. Much attention has been paid to using all the building functions as a learning laboratory for its students.

INTRIGUING was awarded to the Yale School of Medicine, Sterling Hall Laboratory Wing by Svigals and Partners architects. The building design was used as an experiment by Yale to see what can be achieved using sustainable ideas in a laboratory environment. The use of daylight, recyclable materials and products that produce no off-gases and strategies to develop a better work environment sets a standard for all laboratories at the school.

INTRIGUING was awarded to the Burton Family Football/Mark Shenkman Training Center Complex by JCJ architects in collaboration with HOK Sports. This project is significant in that it is the first NCAA Athletic Sustainable project as well as the first LEED project on the UCONN Campus.

For more information on building green in Connecticut, go to www.CTGBC.org

It's a Switch

If you are looking for evidence that Connecticut's mercury product law is working, then look no further than Comus International. Comus is a New Jersey-based switch manufacturer that has dramatically reduced the amount of mercury in products sold in the United States. Bob Romano of Comus indicated that Connecticut's law had a lot to do with this reduction.

Switches are used to break or complete an electrical circuit. Comus manufactures many different types, such as those used for commercial HVAC systems, boilers and pumps.

Connecticut's law prohibited the sale of certain products containing mercury beginning in 2004. Mercury is a heavy metal that can accumulate in living tissue. Exposure to mercury, when released into the environment through spills or incineration, can be toxic to humans and wildlife, or cause other health effects such as neurological and reproductive disorders. In order to comply with the law, as well as other states' laws, Comus engineers worked on developing non-mercury switches. They have been successful for most applications. As a result, Comus reported a decrease in their use of mercury in products from nearly seven tons in 2001, to less than one ton in 2007. That represents an 87% decrease in six years!

The law has encouraged many manufacturers to develop non-mercury alternatives. Since the law took effect, manufacturers have developed non-mercury alternatives to many mercury products in including flame sensors and medical instruments. Connecticut will continue to see reductions in the amount of mercury in products resulting in less mercury that can be released to the environment.

For more information on mercury reduction efforts and more, visit www.ct.gov/dep/mercury.

Recycling Recycling



Decluttering DEP

Decluttering isn't just necessary in our homes—we need it in our offices, too. And it's not any easier to get it done at work—unless you happen to be retiring or moving to a new job. Unfortunately, it's just as likely that you will leave your boxes of files and old supplies for the next worker, so the stuff keeps piling up. You get bogged down in it and just ignore it, unless your boss declares "Spring Cleaning Day".

After 15 years at 79 Elm Street building, DEP employees were ready to clean out their file drawers and office cubicles. Commissioner McCarthy proclaimed 3 dates in May as DEP Spring Cleaning Days. She encouraged the approximately 800 employees to "Remember—we are the Environmental Agency, so recycle and reuse supplies where possible." Enhancing efficiency and productivity were the main reasons for the clean-out, but it turned out to be an opportunity to recycle tons of paper, as well as share extra staplers, rubber bands and paper clips that people had accumulated. Guidance was provided to employees on the agency's record retention plans to insure that important records and other information were retained.

For the cleanout, each floor put together a Floor Recycle Station with boxes labeled for the various items — mixed paper and cardboard as well as techno-trash like CDs, videotapes, diskettes and computer accessories, as well as transparencies, printer cartridges and batteries. A separate space was set up for the Floor Reuse Station and boxes were labeled for items like paper clips, rubber bands and binders as well as "extra office supplies" for anything from staplers and computer stands to coffee cups. Spray bottles filled with an environmentally preferable cleaner were available for employees who wanted to wipe down their desk areas.

DEP headquarters is located in a downtown-Hartford building with limited loading dock space, so it was hard to manage the fifty extra 98 gallon wheeled containers, twice as much cardboard, and the usual traffic on the dock. Also, many of the documents that DEP receives come in 3-ring binders, supplied by companies and consultants. That's a lot of paper and a lot of binders!

Binders and folders of all types were the largest category of "re-usables" saved from the trash. A very large percentage of the manila folders and almost all the hanging file folders were in excellent shape and they were recovered for re-use in supply cabinets throughout the agency. About 2,000 binders and 10 large boxes of folders are being re-used at DEP or by schools and non-profits. Gallons of paper clips and binder clips were distributed to various supply cabinets. Extra pens, paper clips and staplers now supply the copier rooms and printer areas.

DEP recycled more than 13 tons of mixed paper during May, about 20% of the previous year's total! 160 pounds of corrugated cardboard, 1000 lbs of techno-trash and computer-related items, 7 large boxes of scrap metal and a ten gallon container of batteries were all recycled during the May clean-outs.

So, what else did we find when we decluttered? Besides the cardboard boxes of files and old calendars, people found things like their rolodex from a previous job, maps from their trip to Italy ten years ago, a magnet of a doll with a porcelain face in a purple genie's outfit...and the Commissioner picked up some really nice coasters from the swap table!

Following the Paper Trail:

Everything You Wanted To Know About Paper Recycling

If your recycling bin seems like it weighs a ton, chances are you are recycling lots of paper. Paper, including newspaper, printing and writing paper, junk mail, boxboard, corrugated cardboard, and aseptic packaging (such as juice boxes), is known in the industry collectively as "fiber."

Nationally, the Paper Institute estimates that in 2007, 360 pounds of paper were recovered for every person living in the U.S. They also estimate that 36% of all the paper products produced come from recycled sources that include recycled fiber, sawdust and wood chips. Recycled paper can be made from a combination of pre-consumer, post consumer and mill ends and most of the time is combined with a percentage of virgin paper.

In Connecticut, only newspaper and corrugated cardboard (the kind with the wavy layer of paper in between two flat sheets) and white office paper (for businesses only) are mandatory fiber-type recyclables. Many towns have expanded that list (see box at right).

So let's follow the paper trail from the bin, to the processor, and back to you.

After your recyclables are picked up, they are transported to an Intermediate Processing Center (IPC) where the paper products are sorted and graded. Contaminants such as plastic, glass, staples and paper clips are mechanically removed. This is very important part of the process because these materials can cause problems for the paper mill's equipment and can affect the quality of the finished product. The paper is then baled and sent to the paper mill.

At the mill, the paper is shredded and mixed with water to form a pulp. This mixture is screened and more contaminants are removed. Deinking (or floatation) uses detergents to remove inks from the paper. If the end product will be white paper, a bleaching process is used to remove any color remaining. Paper fibers can only be recycled a finite number of times before they become too short and drop out in the process. Manufacturers adjust for the differing properties of recycled fiber in the papermaking process and may add virgin pulp to the mixture to increase its strength. The final mixture is then pressed into paper. Recycled-content paper today meets the same technical specifications as virgin paper.

For more information: www.paperrecycles.org/



Do you know what other kinds of fiber your town accepts?

Many towns take telephone directories, white paper, books, junk mail and boxboard (like cereal and cracker boxes) and aseptic packaging (like juice boxes). Also, some towns have requirements about how cardboard should be prepared. Call your local municipal recycling contact www.ct.gov/dep/recycle has a list) or check your town's website for more information. Whatever your town accepts, make sure it is clean, stays dry and is separated from bottles and cans. No greasy pizza boxes, please!

What can I do?

- Lighten the load on recycling day: Stop the junk mail (and unwanted e-mail and telemarketing calls, too!) Check out these websites:
 - www.directmail.com/directory/mail_preference/ www.catalogchoice.org www.dmachoice.org/consumerassistance.php
- Do you really read all the newspapers and magazines you subscribe to? Pick the ones you actually read and cancel the rest. Donate used magazines to nursing homes or senior centers.
- Use the library! Make use of inter-library loan instead of buying books. Most have an extensive collection of magazines and periodicals.
- If you can, use the internet to save paper.
 For example: pay bills on-line; opt out of annual reports and read important investment materials on-line; save your favorite charities the cost of mailing their newsletter and read it on-line; and finally, ask yourself do I really need to print that e-mail or all those photos?

Recycling a ton of paper saves about 17 trees! So, using less paper and fewer paper products, buying products with recycled content and recycling all you can saves trees, water and energy.

- Remember to recycle paper at home, work and school.
- Buy paper products with recycled content and look for packaging with high post-consumer content.
- Try paper made from different materials such as hemp, kenaf, or bagasse.

P2VIEW | SUMMER 2008 5

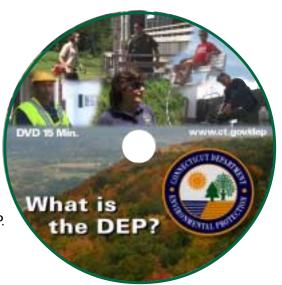


What is the DEP?

DEP recently released a 15-minute DVD on how its employees work every day to conserve, protect and improve the state's natural resources and environment. What is the DEP? takes the viewer along with DEP employees as they band eagles, take water samples from Long Island Sound, inspect gasoline storage tanks, patrol state parks and perform other interesting job activities. Also featured are students from Connecticut schools, elementary to college-age, who share how they are helping to protect the environment. The video highlights environmental stewardship and encourages the interested viewer to consider future employment with the DEP.

To view the video online, visit www.ct.gov/dep
For a copy of the DVD for your school, contact, Mae Marie Modifica at (860) 424-3538 or

mae-marie.modifica@ct.gov.



Composting Has A-Peel

Want some help with composting at home? There is information available on DEP's website, including a new brochure and downloadable videos. Visit www.ct.gov/dep/composting to find out how to build your own bin, what items you should and shouldn't compost, ways to troubleshoot problems, and more.

Practicing Green Health

Hospitals are making "green" changes that benefit patients, staff, visitors, and the bottom line. These range from putting in healing gardens, using environmentally preferable cleaners and building materials, sending unused medical supplies to countries in need and much more.

This year, five Connecticut hospitals and the DEP received awards from Practice Greenhealth (formerly H2E) for their commitment to the environment, their patients and staff, and the community.

- □ Connecticut Children's Medical Center
- □ St. Francis Hospital and Medical Center
- □ University of Connecticut Health Care
- □ Bridgeport Hospital
- □ Lawrence & Memorial Hospital
- □ CT DEP Office of Pollution Prevention

For more information, visit www.h2e-online.org





















Note: This feature offers answers to select environmental questions. Send your question to the editor's address -and watch future issues for an answer.

Dear Eartha:

I currently heat my 45-year old house with oil. While the burner was considered efficient when I moved in, it is now less efficient to the point where I am thinking of having it replaced. Since I may replace the system anyway, is it better to get a new oil furnace, or is it time for me to go for some alternative method of heating my home? Which method is most environmentally friendly? Wood, gas, oil, or coal?

> Stephanie S., Stamford, CT

In this part of the country, home heating is usually the largest household energy expense. By decreasing the amount of energy you use and choosing a cleaner source, you can save money and reduce your household's impact on the environment.

First and foremost, you need to make sure your home is energy efficient by properly insulating, replacing drafty windows and doors, etc. (CL&P and UI are offering free home energy audits and weather sealing for customers who heat their homes with electricity or natural gas. Energy audits are also available for a fee for homes that are heated with other fuels.)

If your furnace is over 20 years old, the simplest option may be to retrofit it to increase its efficiency or to replace it with a highefficiency model. Be sure to make weatherization improvements before you replace your furnace, so you don't end up installing an oversized system that won't operate efficiently — consuming more energy than needed.

A furnace's efficiency is measured by annual fuel utilization efficiency (AFUE) — which is the

ratio of heat output compared to total energy used by the heating system. Older furnaces will have a 56% - 70% AFUE compared to a 90% - 97% AFUE of the newer high efficiency ones. Newer heating systems achieve this energy savings by having sealed combustion units, avoiding the loss of heated air up the chimney and condensing flue gases in a second heat exchanger. The sealed units have an added benefit by posing no risk of dangerous combustion gases backdrafting into your home.

There isn't one type of heating system that is the best for all situations. There are many factors to consider — including the type and size of your house, the availability of different fuel sources in your location, and the complete lifecycle of environmental impacts from any fuel source (considering resource extraction, refining, transportation, etc.) In general, natural gas is a cleaner burning fuel than oil, propane or wood but it may not be the best option for your home. Be sure to research the different heating systems that are available — ask questions of reliable contractors to find out what would work best for your situation and within your budget.

There are other options that can even save more energy and prevent emissions. Groundsource heat pumps (also known as geothermal systems) use the constant temperature under the ground to warm the air in your home during the winter and cool it in the summer. Passive solar (the orientation of your home towards the south) can maximize solar heating, and thermal solar technology can be used to lower the energy required to heat up hot water for heating or other household uses.

Where can I find more information?

For home energy audits and weather sealing: CL&P customers: go to www.cl-p.com, click on "Energy Efficiency at Home," then "Home Energy Solutions." UI customers: go to www.uinet.com, click on "Your Home," then "UI Products & Services," then "Home Energy Solutions."

Both the American Council for an Energy-Efficient Economy and the U.S. Department of Energy have guides to help you decide whether or not you should replace your existing furnace and to calculate the amount of money you are likely to save each year with a more efficient system. There is also information on geothermal heat pumps and solar resources and tips on finding a good contractor. www.aceee.org/consumerguide/ heating.htm www.eere.energy.gov/consumer/ your_home

For a list of furnaces and weatherization products such as insulation, caulking, and Energy Star windows and doors that are exempt from CT Sales Tax, visit the CT Dept. of Revenue Services website at www.ct.gov/drs, type in "energy efficiency" in search box.

How to find Energy Star products, visit www.energystar.gov

For factsheets on wood stoves and outdoor wood burning furnaces, visit DEP's website at www.ct.gov/dep/owf

- Eartha



The Department of Environmental Protection is an affirmative action/equal opportunity employer, providing programs and services in a fair and impartial manner. In conformance with the Americans with Disabilities Act, DEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities needing auxiliary aids or services, or for more information by voice or TTY/TDD, call (860) 424-3000.

For a free subscription, please contact Judy Prill at (860) 424-3694 or e-mail your request to judith.prill@ct.gov. If you want to save paper and postage by reading the P2 View electronically, you can either subscribe to the listserv or view it on-line (see www.ct.gov/dep/p2).

P2 View is published by the Connecticut Department of Environmental Protection, Office of Pollution Prevention. Editor: Judy Prill; Contributors: Connie Mendolia, Tom Metzner, Nan Peckham, Mary Sherwin, Lynn Stoddard, Kim Trella.

Publication of this newsletter is funded by a grant from the U.S. EPA. The listing of websites in this publication is provided as a public service and does not constitute an endorsement by DEP.

Printed on 100% post-consumer recycled paper using water-based ink.



P 2 C A L E N D A R

A SELECTION OF ENVIRONMENTAL EVENTS

August 7, 2008 Organic Lawn and Turf Care for Professionals Wilton Public Library Wilton, CT

Strengthen your business the natural way: an introduction to natural lawn and turf management by Chip Osborne. Contact Audubon Greenwich to register at (203) 869-5272 x225 or cpennoyer@audubon.org.

August 8, 2008 Wait Until 8 SmartLiving Center Orange, CT

Event features demonstrations of energy saving products and educational seminars with trained energy experts who can help you make your home more efficient. For more information, call (866) 762-7899 or visit www.uinet.com, type in "SmartLiving Center."

October 1, 2008 Invasive Plant Symposium University of Connecticut Storrs, CT

Keynote speaker will present "A Case for Native Plants." Concurrent sessions will cover topics such as grassland and forest habitat and management and invasive control practices (including organic methods). For more information, visit www.hort.uconn.edu/cipwg or call Donna Ellis at (860) 486-6448.

August 21, 2008 Organic Lawn and Turf Course Manchester Community College Manchester, CT

The CT Chapter of Northeast Organic Farming Association (CT NOFA) is sponsoring an intensive daylong course for land care professional and municipal employees on management of lawns and athletic turf using organic methods. For more information, visit www.organiclandcare.net or call (203) 888-5146.