



POLLUTION PREVENTION VIEW

VOLUME 6, ISSUE 4

A Newsletter from the Connecticut Department of Environmental Protection

FALL 2006

How Does Our Garden Grow?

At the Connecticut Department of Environmental Protection (DEP), we try to lead by example -- we recycle, compost and buy clean energy to power our headquarters in Hartford. That's why you will find native, non-invasive plantings in the garden beds on either side of the front entrance at 79 Elm Street in Hartford. It's a small but important example of how we can help preserve part of our state's natural heritage.



Most of the plants that we selected for the DEP gardens are native to New England and all are native to some part of the eastern United States. They are accustomed to the type of soil and the amount of rainfall that we have here in Connecticut. A plant species is considered native if it was present in a state or region before the arrival of European settlers.

We wanted the garden to be an example of a native planting in an urban setting, as well as being easy to maintain and interesting to the passer-by. There were a number of restrictions that had to be taken in account when we chose the plants, including shallow soil depth, a predominately shaded location, strong winter winds, no permanent irrigation system, and a limited budget. The plants that were selected share some common growing characteristics, satisfy the existing restrictions, and look attractive with each other in a somewhat naturalistic way.

To improve the site before planting, we mixed compost into the existing soil with the help of the Knox Parks Green Crew. Compost adds organic matter, improving soil texture and providing essential nutrients to the plants. We ordered the plants from a local nursery that carries many native species.

When the plants arrived, we had a team of DEP volunteers ready to plant, water and add mulch to the garden. The mulch, which was 50% recycled brush and 50% pine bark, will minimize the need for weeding and help keep moisture in the soil.

For more information, including a list of the plants in DEP's garden, go to www.dep.state.ct.us/whatshap/nativegarden.htm or contact Judy Prill at (860) 424-3694.

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How Does Our Garden Grow? (continued from pg. 1)

Where can I get more information on planting native species?

- Connecticut Botanical Society: www.ct-botanical-society.org/garden/index.html
- The Arboretum at Connecticut College: www.conncoll.edu/ccrec/greennet/arbo/nativeplant.html

How would I find out if a plant is an invasive species?

- DEP's Non-Native Invasive Plant Species Program: www.dep.state.ct.us/cgnhs/invasive.htm

Where can I obtain native plants?

- DEP's Native Tree and Shrub Availability List: www.dep.state.ct.us/burnatr/wildlife/pdf/ntvtree.pdf
- New England Wildflower Society's Native Plant Nurseries: www.newfs.org/
- If you don't see the native plant species that you want at a nursery, ask them if they would be willing to order them for you from a wholesaler. Please don't take uncommon plants from the wild – many of our most beautiful plants are now endangered because they were collected for garden use.

Note: It is illegal to collect any plants from state-owned lands without a permit.

Cleaner Marinas

Many people don't realize that water that runs into storm drains usually does not get treated at a sewage treatment plant. When rain, melting snow and water from activities like car washing flows over roads, parking lots, lawns, and sidewalks, it carries oil, debris, soil and other pollutants from those surfaces directly into our rivers, lakes and Long Island Sound. This stormwater runoff can make the water unhealthy for fish and people.

The Department of Environmental Protection (DEP) has undertaken an initiative to reduce polluted stormwater runoff in Connecticut. The goal of the initiative is to improve stormwater quality through compliance with the General Permit for the Discharge of Stormwater Associated with Industrial Activities. The Permit requires stormwater sample data be submitted to DEP. Based on analysis of that sampling data, industries with historically poor stormwater quality, such as marinas, were selected for the initiative.

Stormwater sampling data from marinas have shown that they exceed permit monitoring goals for copper, lead, zinc, and aquatic toxicity. Marina activities such as sanding, scraping, chemical stripping, and power washing, appear to be significant sources contributing to poor stormwater quality. When these activities are performed without proper containment, collection and proper disposal, the resulting residual wastes and wastewaters are released to the ground, contaminating stormwater discharging from the site.

DEP chose 15 marinas to evaluate as part of the initiative. Each marina failed to fulfill at least one, in most cases several, of the basic requirements of the Stormwater General Permit. Common violations included failure to: (1) prepare a Stormwater Pollution Prevention Plan that meets the minimum requirements of the Permit; (2) perform inspections; (3) conduct training; (4) collect annual samples; and (5) keep and maintain records. DEP is currently upgrading its Stormwater Permit guidance documents and will take action to ensure that these matters are addressed.

Currently, there are approximately 66 marinas registered for the Stormwater General Permit. According to industry data there are over 240 marinas within the state of Connecticut. Phase two of the initiative will focus on facilities that have not registered. For more information, call William Oros, DEP Industrial Permitting and Enforcement Division, (860) 424-3823 or to download the Permit, go to www.dep.state.ct.us/pao/download.htm#WaterGP

DEP's [Connecticut Clean Marina Guide Guidebook](#) is available to help the industry comply with environmental laws and to prevent pollution. The Department is working closely with the Connecticut Marine Trades Association to update the guide to include the regulations pertaining to the pressure washing of boat bottoms to provide outreach and education to the industry.

For more information, go to www.dep.state.ct.us/olisp/cleanmarina/index.htm

Get On Board With Pollution Prevention



Boat owners as well as marinas can play an important part in keeping our water clean and even though the boating season may be coming to an end, it is still not too late to become a DEP "clean boater."

DEP's "Action Guide for Boaters" is filled with tips on how boaters can make a difference in protecting the environment and keep the state's waterways clean. You will find information on environmentally preferable ways to wash the topsides of your boat, maintain the boat hull, engine and battery, care for teak, how to reduce hazardous waste, sewage and waste disposal and recycling. In addition, there are also sections on the sensitive habitats of Long Island Sound, respecting wildlife and boating safety.

This summer, DEP employees distributed the guide at state boat launches. They also asked boaters to pledge to do their part to keep our environment clean. In return for their promise, participants received a "clean boat" sticker and an oil spill kit that includes an absorbent pad and disposal instructions.

So as you prepare your boat for winter, take some tips from the Guide:

- When sanding or scraping your boat, make sure to capture the particles in a tarp and/or use a vacuum sander.
- Use environmentally preferable products for cleaning your boat instead of cleaners containing harsh chemicals that can be harmful to human and aquatic life.
- If you use antifreeze when winterizing, choose the non-toxic propylene glycol (orange/ pink color) instead of ethylene glycol (blue-green/greenish yellow).
- Using a reusable cover is environmentally preferable. However, if you do decide to use shrink-wrap, please recycle it at the end of its useful life. If your marina does not have a shrink wrap recycling program, ask them to start one (they can contact the DEP Recycling office at (860) 424-3237 for more information) or contact a company that recycles it, such as Dr. Shrink, (800) 968-5147, www.dr-shrink.com.

For a copy of the guide or more information on DEP's Clean Boater Program, please call (860) 434-8638 or visit www.dep.state.ct.us/olisp/cleanmarina/ct_clean_boater.htm

Recycling Roundup

Good Things Come In No Packaging



Product packaging serves many purposes -- it protects the contents, makes shipping and handling easier, prevents tampering or theft, conveys information, and of course, gets your attention. But as you may have noticed, we seem to be buried in packaging trash. About one-third of all the trash that's thrown away in the United States is packaging alone!

But packaging isn't just a disposal problem, it costs you money. The Environmental Defense Fund estimates that \$1 of every \$10 spent on food goes to packaging. And if you have ever attempted to open products that are surrounded by rivets and that hard plastic casing, most of us would agree that it could be downright dangerous.

As a consumer, you control not only what you spend your hard-earned dollars on but also where you spend them. A well-crafted, constructive letter has more influence than you think. Use your power as a consumer to demand that manufacturers and retailers make products you buy more environmentally preferable. For tips on how to write an effective message, go to www.consumerworld.org/pages/company.htm

Here are some tips to limit packaging waste and use your money to pay for the product and not the package:

- Consider refillable containers or buy in bulk quantities on items that have a long shelf life or you use often. Some stores allow you to bring in containers for things like shampoo and vegetable oils.
- Can you get the same item that meets your needs with less packaging or recyclable packaging? For example, buy food in containers that can be recycled (i.e., glass or metal and usually #1 and #2 plastics). Corrugated cardboard is a mandatory recyclable, but many towns also take cereal boxes or paper milk cartons. Call your town to be sure.
- Watch packaging on take-out and convenience food items. Can you bring your own cup to your favorite coffee shop? Can you get your take-out sandwich in foil instead of polystyrene foam?

New and Improved Gas Cans



Is it time to replace your old gas can? If you haven't purchased a gas can in the past year, it's a good idea to invest in one of the newly designed cans, marked "Spill-Proof and CARB approved". (CARB, the California Air Resources Board, is a government agency that has established standards, regulations and test methods for a variety of products, including gas cans, in an effort to reduce air pollution.) These are available at hardware, home improvement, lawn and garden and marine stores and cost approximately \$7 - \$21. Unlike the typical older gas cans that most of us have been using, these new models are made of a non-permeable material, have no vents and have a spout that remains closed when not in use.

The older style cans allow gasoline vapors to be released into the environment contributing to ground level ozone and air pollution. Storing these cans in the shed or garage poses a health treat to you and your family since the fumes can irritate lungs and aggravate the respiratory system. In addition to air pollution concerns, a significant amount of gasoline is also spilled each year when refueling lawn mowers and other equipment. This spillage contaminates our watersheds.

DEP is encouraging the use of the new spill-proof cans since they prevent gasoline spills and air pollution, resulting in improved air and water quality right in your own backyard, home, garage and throughout Connecticut. Old gas cans may be disposed of with household trash or at a Household Hazardous Waste collection. Make sure that you use up all of the gasoline first if you dispose of your old can in the trash. And remember — never pour gasoline down the drain or on the ground.

Want more information? Check out the Spill-Proof Gas Cans brochure on the DEP website at www.dep.state.ct.us/air2/consumer/gascan.pdf

For a list of Household Hazardous Waste collections, visit www.dep.state.ct.us/wst/hhw/hhw.htm

Solid Waste Management Plan — Update On Progress

The draft of the Proposed Amendment to the State Solid Waste Management Plan was completed in June after more than a year of hard work by DEP staff, R.W. Beck Associates and the members of the External Stakeholder Committee. The Plan addresses solid waste management issues affecting Connecticut as well as many opportunities for pollution prevention. Although information about the Plan was posted on the DEP website throughout the entire process, the next step was to give the public additional opportunities to learn about the Plan and provide input on the final document.

The DEP made the Plan available on our website and in July over 400 copies were sent out on CD to state and local government officials, solid waste and recycling facilities, environmental organizations and community groups. In addition, three informational meetings were held in Hartford, Waterbury and Groton in late July and early August and three public hearings took place in Hartford, Bridgeport and Norwich in August. The DEP received over 70 written or oral comments about the Plan from the public and private sectors.

The comments to the draft Plan will be summarized in the Hearing Examiner's Report to DEP Commissioner Gina McCarthy sometime this fall. If the Commissioner accepts the Report, the Proposed Amendment will be revised accordingly and adopted as the State Solid Waste Management Plan. The Plan will then serve as the basis for solid waste management planning and decision making for the short and long term future.

For more information, see www.dep.state.ct.us/wst/solidw/swplan/index.htm or contact Tess Gutowski at (860) 424-3096.

WHAT'S NEW IN P2?

from the Connecticut DEP

Organic Land Care DVD



DEP has produced a DVD that provides information for municipalities interested in learning more about organic land care. The 7^{1/2}-minute DVD defines organic land care and describes its benefits and potential challenges. The DVD highlights the experience of two Connecticut towns implementing it on their playing fields, including on-location interviews with Cheshire's Parks and Recreation Director and Granby's Director of Public Works. Also featured is footage from the University of Connecticut's Research Farm where different fertilizer formulations are being tested.

For more information, contact Judy Prill at (860) 424-3694 or judith.prill@po.state.ct.us.

State Goes To Green Cleaning



State agencies in the executive branch will be buying and using environmentally and health-friendly cleaners as a result of Executive Order 14 signed by the Governor on April 17, 2006. The order cites exposure to harmful chemicals contained in cleaning and sanitizing products as well as releases into the environment from their wastes and byproducts as reasons to go green. The Department of Administrative Services (DAS), with Public Health and DEP, will publish policy and guidelines to provide direction to state agencies in carrying out the green cleaning initiative.

For more information, see:
[www.ct.gov/governorrell/cwp/
view.asp?A=1719&Q=312904](http://www.ct.gov/governorrell/cwp/view.asp?A=1719&Q=312904)

or contact Cynthia Shea at DAS, (860) 713-5278.



Note: This feature offers answers to select environmental questions. Send your question to the editor's address -- judith.prill@po.state.ct.us and watch future issues for an answer.

Dear Eartha:

I am considering buying a hot tub but I am concerned about the environmental and health impacts of chlorine. Is there an environmentally preferable alternative?

— Henry G.,
Bristol, CT

While the thought of taking a soothing and relaxing soak in a hot tub sounds like an ideal activity, there are a number of things to consider before deciding to purchase one. It is understandable that you are concerned about chlorine, since it is a harsh chemical that can pose health and environmental risks. Too much chlorine, either inhaled or absorbed through the skin, can cause skin irritation, eye irritation, coughing and difficulty breathing; and discharging chlorine to surface waters can be toxic to plants and animals. However, it is also critically important to keep the water in your hot tub sanitized so you do not expose yourself to bacteria such as *Cryptosporidium*, *Giardia*, *E. coli* and others.

There are some products on the market that can be used in hot tubs to minimize the amount of chlorine, including ozonators and ultraviolet (UV) systems, both of which kill bacteria, but generally have to be used in conjunction with a certain amount of either chlorine or bromine. Ozonators inject ozone gas into the spa water and contain an ultraviolet light bulb or an electronic device that converts oxygen to ozone. By using an ozonator, you will be able to keep your bromine or chlorine concentration at the low end. UV systems use shortwave

ultraviolet light and can be used for residential use; but they too need to be bolstered with chemicals such as hydrogen peroxide or potassium iodine, which needs to be combined with an oxidizer, such as chlorine. Each of these systems can significantly reduce the use of chlorine as the primary disinfectant. It's best to check with a pool and spa company to determine what would be best for you and your particular hot tub.

Hot tubs typically hold 400 gallons of water and need to be drained a few times per year. Draining the wastewater to a sewer system is preferred, since it is most protective of the environment, but if this is not possible, draining to the ground is also permissible. Either way, you must test the pH, bromine and chlorine levels in the water and meet the limits set by the CT DEP in the Swimming Pool General Permit. Residential hot tubs do not need to be registered with the DEP, but homeowners are still required to comply with the regulations. Currently, if discharging to the sewer system, the pH must be between 5.5 – 10.0, and the bromine and chlorine limit is 1.0 mg/liter; if you are discharging to the ground surface, the pH must be between 6.5 – 8.5, and the bromine and chlorine less than 1.0 mg/liter. DEP is considering raising the limits for bromine and chlorine discharged to a sewer system, so please check the General Permit on the DEP website at www.dep.state.ct.us/pao/download.htm#WaterGP. To avoid wasting water, drain only when necessary, repair any leaks and be certain jets are aimed properly so that water is not streaming out of the tub.

Energy use is another factor to consider before purchasing a hot tub, especially with today's increasing costs. Buy only energy efficient hot tubs. An average sized energy efficient tub consumes 5 – 7 kWh per day, while a poorly insulated inefficient one can use 12- 18 kWh per day. To further reduce your energy costs use a foam cover with an insulating value of R-12 or better and make sure that the cover and tub lip fit snugly. You can also add an additional floating thermal blanket to help retain heat. This inexpensive plastic blanket is used underneath the hard cover. The hard cover keeps the cold air out and the thermal blanket keeps the heat in the water, so it also reduces water evaporation. It works on the same concept as a double pane window. Check the condition of the cover since once it becomes water logged, it loses a lot of insulation value and doesn't work as well to stop heat loss.

Another energy saver is to set the hot tub heater thermostat to 102° F. If your hot tub has a timer, you can reduce operating costs if you only heat the water during the periods when you'll actually be using it. Setting the heater timer to come on and heat the tub 20 minutes or so before you'll be using it and turning the heater off when you come out.

There is no denying how relaxing a dip in a hot tub can be, so if you decide to buy one, consider all of the ways to reduce chemical, water and energy use so the impacts to the environment, your health, and your wallet are minimized.

- Eartha



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For a free subscription, please contact Judy Prill at (860) 424-3694 or e-mail your request to judith.prill@po.state.ct.us. 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.dep.state.ct.us/wst/p2/).

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P 2 C A L E N D A R

A S E L E C T I O N O F E N V I R O N M E N T A L E V E N T S

October 12, 2006
Invasive Plant Symposium
Wallingford

The Symposium seeks to draw together members of nursery and landscape professions, conservation organizations, town commissions, gardeners, and the public into a discussion of the challenges presented by invasive plants. For more information, visit www.hort.uconn.edu/cipwg or call Donna Ellis, UCONN Cooperative Extension, at (860) 486-6448.

P2 Lecture Series

DEP sponsors a lecture series on pollution prevention topics. Lectures are free, open to the public, and are held in the Phoenix Auditorium, DEP Building, 79 Elm St., Hartford. For additional information, contact Mary Sherwin at (860) 424-3246 or go to www.dep.state.ct.us/calendar/calendar.htm.



October 25, 2006, 10:00 AM

Organic Land Care

Benefits and challenges for municipal lands, such as ballfields and parks. Learn what some CT towns are doing and view DEP's new DVD.

November 2-3, 2006

Strategies for Institutionalizing Sustainability in Higher Education Yale University, New Haven

Dialogue about groundbreaking campus sustainability initiatives; network with sustainability professionals, faculty and students from the region; and explore innovative solutions for campuses. The two-day conference will be an engaging mix of plenary sessions, issues fora, workshops, and field trips, sponsored by the Northeast Campus Sustainability Consortium.

For registration information, visit www.yale.edu/sustainability/consortium.htm or call (203) 432-0465.

Hold a Recycling Event on November 15 -- www.americacyclesday.org