

## The Grass is Always Greener

Is your neighbor's lawn a sea of emerald green and your lawn brown patches and weeds? Looking at your neighbor's lawn with envy, do you wish you could improve your lawn (but not with all those chemicals)?

Each year, more people concerned about the effect of chemicals on children, pets, and the environment have begun using natural products on their lawns and are avoiding using pesticides. Integrated Pest Management (IPM) makes it possible for you to have an attractive lawn while reducing the amount of fertilizer used and reducing and possibly eliminating the use of pesticides. The following IPM methods can improve the aesthetics and vigor of your lawn while monitoring and controlling pests. (We mean insects and weeds, not the neighbor's kids and dog!)

**Select the Right Grass** – Select the correct seed mixture for the amount of use and level of care you anticipate for your lawn. Kentucky bluegrass and perennial ryegrass require regular fertilization and watering. Fine leaf fescues such as chewings, creeping red and hard fescues, require less maintenance and are more drought tolerant. There are even several types of grasses that contain an endophyte that does not harm the grass but provides resistance to surface-feeding insects. A reputable seed company can guide you in your seed selection.

(continued on next page)

# CORN GLUTEN MEAL

## **A Fortunate Failure**

An important breakthrough in lawn care was discovered about 15 years ago by accident. While using leftover cornmeal to study a fungus found on golf course turf, a researcher from lowa State University discovered that the protein part of the corn (gluten) inhibited root growth. While his experiment was a "failure" for its original intent, this researcher had found a natural "weed and feed" product. Corn gluten meal contains 10% nitrogen by weight and can be used as a pre-emergent control for crabgrass, dandelions, and other weeds. Both powder and pelleted formulas are available under a variety of trade names. If your local garden center does not carry it, you can try a store that sells animal feeds.



## The Grass is Always Greener (continued from cover)

**Know your Soil** - Have your soil tested so you can determine soil pH and existing nutrient levels. Both the University of Connecticut (UCONN) and the Connecticut Agricultural Experiment Station (CT Ag Station) provide soil-testing services for the homeowner. Soil test results will include recommendations for fertilizer and lime if needed. Follow the recommended rates and do not over-apply, particularly fertilizer. It is best to apply slow-release fertilizers, such as organic fertilizers, in late spring and/or

in September. Fast release fertilizers are best used in cooler weather. Do not fertilize after October 15th. If your soil is compacted, core aerate it in the spring, late summer or fall, or any time the soil is moist.

**Mow Right** – Mow frequently when the grass is growing fast in the spring and fall so you do not remove more than 1/3 of the leaf blade at each cutting. Keep the blade sharp and do not mow when the grass is wet. Leave the clippings on the lawn – they do not contribute to thatch and they recycle up to 50% of the available nitrogen back to lawn. Mow grass to a height of 1.5 to 2 inches in the spring, gradually raising the grass height in the late spring to 3 inches in the summer, and gradually lowering it again to 1.5 to 2 inches in September.

**Water Wisely** – To reduce the need for water, plant drought-tolerant

grasses, such as fescues, and add compost or composted manure to sandy soils to hold the moisture. Water deeply and infrequently. Avoid light frequent waterings, which encourage the grass to become shallow-rooted. The best time to water is from 5:00 a.m. to 8:00 a.m. The second best time to water is in the evening after the dew has fallen. Grass can survive without watering by going dormant. (It will appear straw-colored and does not grow.) However, dormant grass may be susceptible to injury from weeds, disease and insects and it is essential that you monitor your lawn to discover pests before injury occurs.

**Scout for Pests** – Scout your lawn monthly for signs of trouble (insects, weeds and disease). Here are a few alternatives to pesticides for control of these pests.

• Insects - Bacillus thuringiensis (Bt) is a biological control effective at managing sod webworm and cutworms. Milky spore and beneficial nematodes are non-chemical options for managing grubs. Proper timing of these products is essential to their effectiveness.

 Weeds – Mowing high can help crowd out germinating weeds, particularly annuals. Some weeds can be hand-pulled or spot sprayed with natural lawn care products. Corn gluten meal, a non-chemical control for crabgrass, can be applied in September and again in the early to mid-spring for first time use. Maintaining good fertility will promote a vigorous, dense lawn that will help crowd out weeds.

Tolerance and acceptance of some imperfections is needed with a natural lawn.

• Disease – Diseases often occur because of poor lawn maintenance practices. Avoid overfertilization and do not mow the grass when it is wet. It is best to water in the early morning when the grass is naturally wet from dew. Avoid watering in the evening during humid, hot weather, since this can enhance disease development. Leave grass clippings on the lawn to maintain fertility and suppress some diseases.

Tolerance and acceptance of some imperfections is needed with a natural lawn. It may take several seasons to see results. There may be some weeds or occasional brown spots but overall your lawn will be less dependent on pesticides. And best of all, you can enjoy your lawn without using all those chemicals!

## FURTHER RESOURCES:

How do I get my soil tested? Both UCONN and the CT Ag Station offer soil-testing services. UConn: (1-877-486-6271 toll free) or www.canr.uconn.edu/plsci/stlab.htm CT Ag Station: (1-203-974-8521) or www.caes.state.ct.us

Want more information on lawn care? UCONN and the CT Ag Station are good resources for information on lawn care and plant pests. You can even send them a sample of an affected plant to diagnose or an insect to identify. UCONN: (toll-free 1-877-486-6271) or www.hort.uconn.edu/IPM (turfgrass IPM section) CT Ag Station: (toll-free 1-877-855-2237) or in New Haven area (1-203-974-8500) or www.caes.state.ct.us Also, you can visit DEP's website for fact sheets on mowing and management of grass clippings at www.dep.state.ct.us/wst/compost/grass.htm

What if I want to hire a professional? Interview lawn service companies in your area to determine if they offer IPM services. Make sure the company holds a valid state license to apply commercial pesticides (even if it is using IPM) and that the staff is trained and certified. The company should fully explain their strategy and which materials they plan to use on your lawn. If you have questions on pesticides and licensing of applicators, call the DEP Pesticides Division at (860) 424–3369.

P2 VIEW | SUMMER 2001

# Paint Passes Environmental Test with Flying Colors

Applying new topcoat to Navy helicopter.

Sikorsky, a division of United **Technologies Corporation,** recently delivered a helicopter to the Navy painted with an environmentally friendly **topcoat.** This new coating contains no VOCs (volatile organic compounds) or HAPs (hazardous air pollutants). VOCs are a contributor to Connecticut's visible air pollution problem, also known as smog. HAPs are known to have negative human health impacts. Both categories are a high priority for elimination or reduction in the state.

In order to control the air pollution problem, standard types of coating are limited to a maximum of 3.5 lbs. VOC per gallon to be in compliance with state and federal environmental regulations. Sikorsky's standard coating contained four chemicals targeted by the federal government for reduction or elimination whenever possible. These chemicals are Methyl Ethyl Ketone (MEK), Methyl Isobutyl Ketone (MIBK), Xylene, and Toluene.

Sikorsky, located in Stratford,

Connecticut, decided to completely eliminate these chemicals in their new coating. Company personnel worked with their coatings supplier over a four-year period to develop the new topcoat, which must perform up to rigorous military standards. The result is a coating that exceeds all state and federal environmental regulations for painting aircraft.

In addition to eliminating these chemicals the new coating is significantly lighter than its predecessor, which means the aircraft will have better performance. In eliminating organic solvents, the paint is now non-flammable.

The Navy took delivery of the first helicopter painted with the new coating in December 2000 and it is currently undergoing evaluation tests. The paint must pass exacting standards, as the lives of our military personnel depend on its performance. The helicopter was painted in three shades of gray to help it blend into the ocean environment over which it will be flown in a variety of missions.

## WHAT'S NEW IN P2?

## A Fish Tale

What business operation is able to be successful, educational, and good for the environment? The Red Cliff Fish Hatchery, on a Wisconsin's south shore of Lake Superior, operated by the Red Cliff Band of the Lake Superior Chippewas. They began this hatchery 6 years ago with lake trout; it was very successful and has now expanded to include brook trout, walleye, and an experimental sturgeon program. The hatchery produces and ships approximately 80,000 mature fish, 6"-12" in length, each year to help stock Lake Superior.

What makes this hatchery different from others is the way its ponds and effluent are managed. Most hatcheries let their waste effluent flow into a series of different tanks and artificial ponds where the solids are settled out and the excess nutrients are consumed. These ponds are usually in large grassy fields with cement bottoms. This typical system does not allow for species diversity, while the Red Cliff system is completely different. Their effluent flows into a constructed wetland, where the solids, nitrogen and phosphorus are used in a productive natural habitat, with great species diversity.

The second advantage of the Red Cliff system is that there are no settling tanks to fill up and need dredging. Dredging produces solid waste that needs to be disposed of, if this is not done properly it can be a serious environmental problem. The Red Cliff operation running as a "living machine" does not produce a solid waste and improves the surrounding habitat.

P2 VIEW | SUMMER 2001

### CT E 0 R E E E

JULY - OCTOBER 2001

Work in Hartford? Bicycle to Work Breakfasts



June 29, July 27, August 31, September 28, October 26 Join your fellow bicycling commuters for a free breakfast and register for prizes on Riverfront

Plaza, which overlooks the Connecticut River in Hartford. Sponsors include the Capitol Region Council of Governments, American Lung Association, Dept. of Public Health, Dept. of **Environmental Protection, Dept. of Transportation, ALL** ABOARD! and CT Bicycle Coalition. One or more raffles will be held to distribute premiums donated by area bike shops and a new bicycle purchased through the generosity of citizen donations. For more information and to connect with others who commute by bicycle in your area visit the CRCOG website at www.crcog.org or contact Sandy Fry at CRCOG at 522-2217.

SEPTEMBER 17 - 23, 2001

## Pollution Prevention Week

This year's theme for this national celebration and promotion of pollution prevention is "Shop for a Better Environment". As part of the celebration the DEP will be sponsoring events that will be open to the public. Please call the DEP Pollution Prevention Office at 860-424-3297 for more information.



JUNE - SEPTEMBER 2001

P2 Lecture Series



DEP sponsors a monthly lecture series on pollution prevention topics. Lectures are held from 11:00 a.m. to noon in the Phoenix Auditorium, DEP Building, 79 Elm St., Hartford. All lectures are free and open to the public. For additional information, contact Lynn Stoddard at 860-424-3236.



### Earth Day Volunteers Clean Up Tons of Junk

On Earth Day weekend, volunteers pulled up everything but the kitchen sink from New **Haven area rivers and beaches.** The 15th annual Source to Sound Clean-up, sponsored by the Quinnipiac River Watershed Association (QRWA), mobilized 308 volunteers and collected a total of 55,990 pounds of refuse, including a motorcycle, light pole, shopping carts, old stove, metal debris and tires. But the best find was the illegal dumper they caught in Wallingford as he attempted to drop a bucket of glass in the river.

Volunteers turned the dumper over to authorities. Since 1979, the QRWA has been increasing the public's awareness about the Quinnipiac River and its value as a natural resource. Along with sponsoring citizen action activities like the Source to Sound Clean-up, they have educational programs, encourage recreational use of the river, and advocate strong wetland protection. For more information, visit their website www.grwa.org or call (203) 237-2237.



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 Elm Street Hartford, CT 06106-5127 http://dep.state.ct.us Arthur J. Rocque, Jr., Commissioner

The Department of Environmental Protection is an affirmative action/equal action 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, fax or e-mail your request. If you prefer to receive the newsletter electronically, send your e-mail address to: judith.prill@po.state.ct.us or fax it to (860) 424-4081.

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

PAID HARTFORD CT PERMIT NO. 4313

PRSRT STD

US POSTAGE

