

# YardScaping...

for a healthy Maine

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[www.yardscaping.org](http://www.yardscaping.org)



for a healthy Maine

# The YardScaping Partners

- Allen, Sterling & Lothrop
- Bar Mills Ecological
- Breakwater School
- Carroll Associates, Landscape Architects
- Casco Bay Estuary Partnership
- City of Portland
- Congress of Lake Associations
- Friends of Casco Bay
- Friends of Scarborough Marsh
- Gnome Landscapes, Design & Masonry
- Jacobs Edwards and Kelcey
- Kennebunkport Conservation Commission
- LakeSmart Program
- Libby's Landscaping and Greenhouse
- Lisa Cowan, studioverde landscape architecture + design
- Maine Board of Pesticides Control
- Maine Department of Agriculture, Conservation & Forestry
- Maine Department of Environmental Protection
- Maine Landscape & Nursery Association
- Maine Organic Farmers & Gardeners Association
- Maine Soil & Water Conservation Districts
- Maine State Planning Office
- Maine Volunteer Lake Monitoring Program
- Natural Resources Conservation Service
- New England Organics
- O'Donal's Nurseries
- PJC & Company Ecological Land Care

The  
Partnership  
is very  
diverse!



# YardScaping

- A new paradigm?
- Some call it “Sustainable Landscaping” or “Ecological Landscaping”
- We want to keep it simple
- <http://youtu.be/cwaSKjymQDc>



# YardScaping Mission

- YardScaping hopes to inspire Maine people to create and maintain healthy landscapes through ecologically based practices that minimize reliance on water, fertilizer and pesticides.



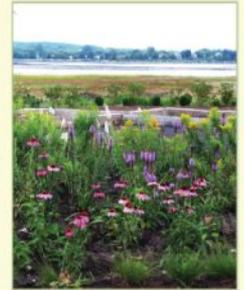
## YardScaping Gardens at Back Cove

### LOW MAINTENANCE PLANTS

**You can grow low maintenance plants like these in *your* yard.**

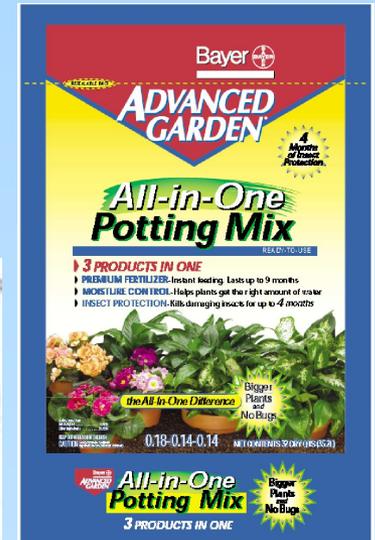
The trees, shrubs and perennials you see here:

- ◆ resist pest problems
- ◆ thrive in Maine
- ◆ are non-invasive
- ◆ grow back each year
- ◆ require less water
- ◆ require less fertilizer



*Want to get involved or learn more?*  
**Visit [www.yardscaping.org](http://www.yardscaping.org)**

# Maine pesticide use more common than perceived



•No endorsement intended or implied

# What are pesticides?



- Bleaches, *Lysol*, pine oil



- Weed & Feed, *Roundup*



- Rat & mouse baits



- Plant disease controls

•No endorsement intended or implied

# What are Pesticides?

- Sevin, Pyrethroids, *Raid*



“Organics” like pyrethrum

Biological Controls

- Wood preservatives



•No endorsement intended or implied

# These are Pesticides?

- Plant incorporated protectants
  - Have the *Bt.* Crystalline protein engineered into them



•No endorsement intended or implied

# EPA exempt pesticides



- Some pesticides have been deregulated by EPA
  - Exempt from Federal registration
  - Must be registered by State of Maine
  - Exempt from toxicity testing
  - NOT risk free
- Ingredients in some of these products:
  - Rosemary oil
  - Peppermint oil
  - Thyme oil
  - Clove oil
  - Wintergreen oil
  - Cinnamon oil
- No endorsement intended or implied

# What are the risks?

- **Wintergreen oil –**
  - highly toxic,
  - not recommended during pregnancy,
  - causes dermatitis,
  - inhalation hazard
- **Cinnamon oil –**
  - powerful irritant and
  - even worse sensitizer



## Introducing EcoSMART FLYING INSECT KILLER

Now there is a new, organic, fast-killing insecticide that is **safe to use around children and pets**. Unlike other insecticides, it is made from organic plant oils and kills bugs naturally to better protect your family. Plus, there's no pesticide residue. It's safe. It's effective. It's smart. Naturally.

To learn more about the EcoSMART story, as well as our products and technology, please visit us at [www.ecosmart.com](http://www.ecosmart.com).

### FRESH NATURAL SCENT SIGNALS IT'S WORKING.

#### DIRECTIONS FOR USE:

**SHAKE WELL BEFORE USING. READ ENTIRE LABEL AND USE ACCORDINGLY.**

**FLYING INSECT TREATMENT:** Kills flies, gnats, mosquitoes, moths, wasps and other flying insect pests on contact. Hold container upright and aim nozzle away from person. Press button firmly to spray. Direct spray at flying insects, contacting as many insects as possible. Spray in short 2-3 second bursts.

**NOTE:** When used indoors, wipe away excess product.

**PRECAUTIONARY STATEMENTS:** We recommend good safety practices when using any insecticide, such as avoiding contact with eyes and skin. If product gets in eyes, flush with water for at least 15 minutes. If on skin, wash with soap and water. If irritation persists, contact a physician.

**PHYSICAL HAZARDS:** Contents under pressure. Keep away from heat, sparks and open flames. Do not puncture or incinerate container. Exposure to temperatures above 130° Fahrenheit may cause container to burst.

**STORAGE & DISPOSAL:** CAUTION: Keep out of reach of children. Store in a cool, dry area away from heat or open flame. When container is empty, recycle if available. Do not puncture or incinerate.

**LIMITATION OF LIABILITY:** EcoSMART makes no warranties of merchantability or of fitness for a particular purpose, nor any other express or implied warranty except as stated above. Buyer assumes all responsibility for safety and use not in accordance with label, directions and precautionary statements.

EcoSMART represents that this product is a Minimum-Risk pest control product, and qualifies for exemption from EPA registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

#### Active Ingredients: Organic Plant Oils

Peppermint Oil .....	2.00%
Cinnamon Oil .....	1.00%
Sesame Oil .....	1.00%
Other Ingredients* .....	96.00%
Total .....	100.00%

\*Water, Wintergreen Oil, Isopropanol, Canola Oil, Lecithin, Carbon Dioxide

Questions or Comments? Call **1-877-723-3545**  
24 hours a day, 7 days a week



Manufactured for  
**EcoSMART TECHNOLOGIES, INC.**  
3600 Mansell Road, Suite 150  
Alpharetta, GA 30022

MADE IN USA

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•No endorsement intended or implied

# Caveat emptor!

**For Release:** 09/10/2012

## **FTC Takes Action Against Companies Marketing Allegedly Unproven Natural Bed Bug and Head Lice Treatments**

**Cedar, Cinnamon, Lemon Grass, Peppermint, and Clove Oil? There's No Proof They Will Eradicate Bed Bugs, Agency Says**

The Federal Trade Commission filed deceptive advertising charges against two marketers of remedies for bed bug infestations, who allegedly failed to back up overhyped claims that they could prevent and eliminate infestations using natural ingredients, such as cinnamon and cedar oil. One marketer also allegedly made misleading claims that its products were effective against head lice.

In one of the two cases, [RMB Group, LLC](#) and its principals have agreed to settle the charges relating to their "Rest Easy" bed bug products. In the case against Cedarco Industries, Inc. and others, challenging their marketing of "Best Yet!" bed bug and head lice treatments, the defendants have not settled, and the FTC is beginning litigation against them.



# What about home remedies

- Home chemistry is not recommended by the BPC
- Many of the materials used seem “safe” because we eat them or use them on our skin
- Exposure routes may be different
- What we eat may not be safe to breathe

## • Example



### •6. Eucalyptus oil

- A great natural pesticide for flies, bees and wasps. Simply sprinkle a few drops of eucalyptus oil where the insects are found. They will all be gone before you know it

# From Medline Plus – NLM NIH

- <http://www.nlm.nih.gov/medlineplus/druginfo/natural/700.html>
- Eucalyptus oil is **UNSAFE** when it is either taken by mouth or applied directly to the skin without first being diluted. Taking 3.5 mL of undiluted oil can be fatal. Signs of eucalyptus poisoning might include stomach pain and burning, dizziness, muscle weakness, small eye pupils, feelings of suffocation, and some others. Eucalyptus oil can also cause nausea, vomiting, and diarrhea.

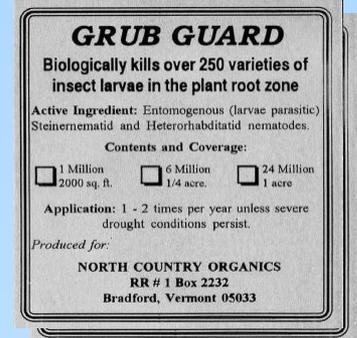
**Pregnancy and breast-feeding:** Eucalyptus seems to be safe for pregnant and breast-feeding women when used in food amounts. But don't use eucalyptus oil. Not enough is known about safety during pregnancy or breast-feeding.

**Children:** Eucalyptus oil is **UNSAFE** for children. It should not be taken by mouth or applied to the skin. Not much is known about the safety of using eucalyptus leaves in children. It's best to avoid use in amounts larger than food amounts.

# What products are NOT pesticides?

- Insect parasitic nematodes
- Rodent or insect traps
- Beneficial insects or mites

•No endorsement intended or implied

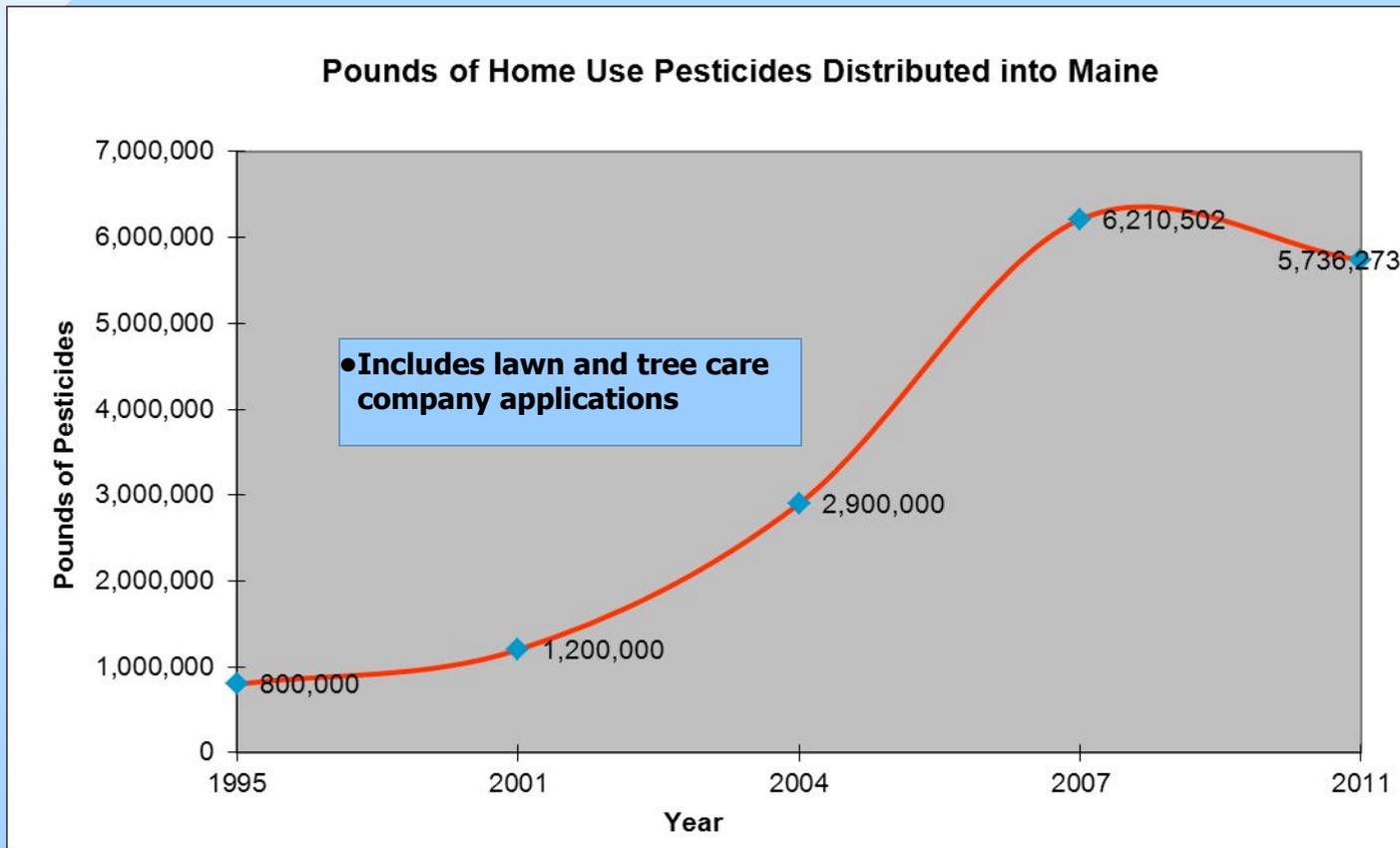


# What does registration mean?

- Not a safety guarantee
- Reasonable certainty of no harm, but NOT risk free
- Must read and follow the label to manage the risk



# Have we finally hit the top of the curve?



# BayScaping Project

- Friends Of Casco Bay did some detective work in 2001, 2002, 2003, 2005, 2006, 2008 and 2009
- Sampled runoff water from intensive lawn care areas in Cumberland, S Portland, Westbrook, Falmouth, Yarmouth, Brunswick, Freeport, Portland and Cape Elizabeth & Back Cove area



# Friends of Casco Bay Sampling

## – Pesticide residues detected in surface water

- Diazinon up to (2.6 ppb)\*\*
- 2,4-D up to (36.4 ppb)
- Dicamba up to (4.1 ppb)
- MCPP up to (26 ppb)
- MCPA up to (0.45 ppb)
- Clopyralid up to (0.91 ppb)
- Propiconazole up to (0.075 ppb)
- Chlorothalonil up to (0.22 ppb)
- Found Excess Nitrogen & Phosphorous in most samples



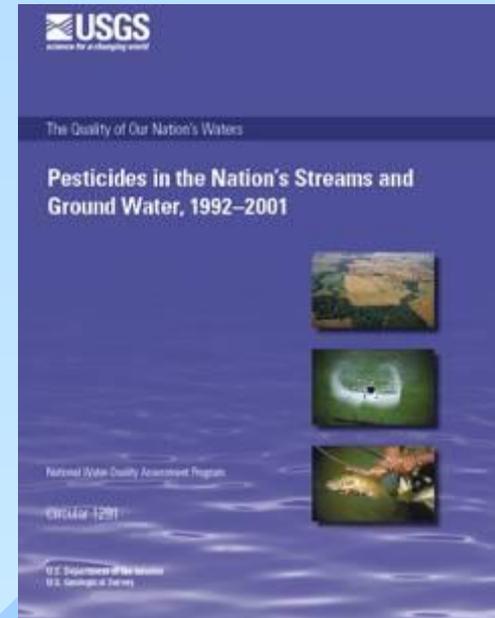
•\*\*Values in red exceed Aquatic Life Criteria

## – Pesticide residues detected in sediments

- Bifenthrin up to (37 ppb)
- Permethrin up to (47 ppb)

# USGS National Water Quality Assessment – 2006 Report

- Sampled urban streams
  - Insecticides occurred more frequently in urban streams than they did in agricultural area streams
  - Herbicides detected in 99% of Urban stream samples
  - Phosphorous found at same levels as in agricultural streams
    - 70% of those samples exceeded the EPA level for causing excessive algal growth



# The Ten-ets of YardScaping

- Promote buffers
- Promote appropriate plants - native plants and non-invasive alien plants
- Reduce lawn area
- Reduce runoff
- Reduce reliance on pesticides, fertilizers and water
- Promote low input lawns and landscapes
- Promote YardScape diversity
- Create wildlife habitats
- Right plant, right place, right use
- Commonsense pest management (IPM)



## YardScaping Gardens at Back Cove

### LOW INPUT YARD CARE

**When it comes to gardening,  
less is usually more.**

Low input yards require a little more brain, a lot less brawn and leave you with more free time:

- ◆ plant drought and pest tolerant plants
- ◆ mow lawns at the highest setting and leave the clippings
- ◆ replace lawn with shrubs or wildflowers
- ◆ mulch plants to keep moisture in and weeds out



**Want to get involved or learn more?  
Visit [www.yardscaping.org](http://www.yardscaping.org)**

# Use site appropriate, non-invasive plants

- Native plants are often well adapted
  - Fewer problems, less work, more rewards, but not all are problem free, e.g., viburnums
- Invasive plants are easy to grow but crowd out native vegetation
  - Our local forest habitats are changing rapidly
  - Invasive plants can ruin wildlife habitat



Beautiful Native Shadbush



Problematic Native Viburnum



Deadly Invasive Oriental Bittersweet

# Right plant, right place, right purpose

- Choose plants based on the area to be planted not just for their color
- Select plants that thrive under existing conditions rather than trying to alter the conditions to meet the needs of a plant
- Minimize disturbance of the existing landscape



Wild Cranberry Bog

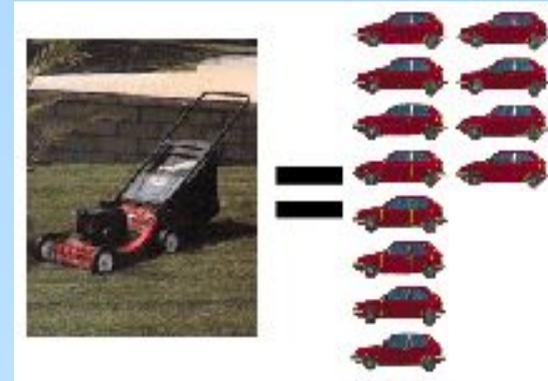
# Use a diversity of plants & grasses

- Monocultures lead to disasters
- Diversity leads to less noticeable damage from pests and disease
  - Incorporate many layers of plant types
    - Trees
    - Shrubs
    - Ground covers
    - Perennials, and
    - Lawns



# Reduce lawn area

- Reduces
  - Water & air pollution
  - Water usage
  - Maintenance
  - Costs
  
- Gives
  - More free time



Mower exhaust = 11 small cars' exhaust

One hour on riding mower = 400 miles



# Use low input plant varieties

- Fine fescue or tall fescue instead of Kentucky bluegrass and ryegrass



- Pagoda dogwood vs flowering cherry



- River birch vs paper birch



# Protect lakes & streams with buffers

- Preserve existing landscape
- Winding paths
- Don't mow to lake's edge
- Leave the duff



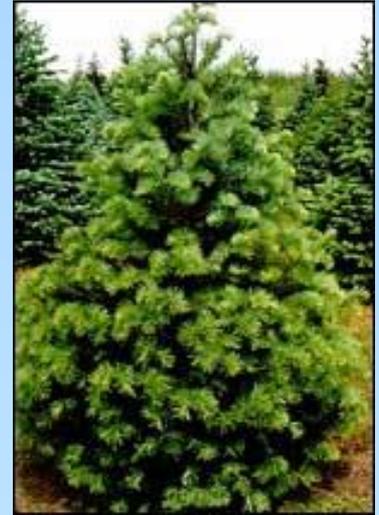
# Reduce runoff

- Reduce amount of pervious (hard) surfaces
- Create rain gardens or install rain barrels
- Direct water into vegetated areas



# Reduce reliance on pesticides, fertilizers and water

- Grow plants that are resistant to insects & diseases
- Use plants that tolerate low fertility
- Use drought resistant plants



White Fir



Sweet Fern

# Use common sense pest management

- Integrated pest management
  - Know your pest
  - Pick it, trap it or exclude it
  - Know the good bugs
  - Mow, prune or water
  - Use pesticides as last resort



# Back Cove Project

- Building a YardScaping demonstration area



<http://www.yardscaping.org/demo/portland.htm>

# Where to learn more

The screenshot shows the homepage of YardScaping.org. The browser title is "YardScaping: Home Page - Mozilla Firefox". The address bar shows "www.yardscaping.org". The page features a banner with a watering can and the text "for a healthy maine". A navigation menu includes "Home", "Contact Us", "Get Involved", and "About Us". A search bar is located in the top right corner.

**PROGRAM INFORMATION**

- Why YardScape?
- Landscapes
- Lawns
- Problems
- Resource Room

**Welcome to YardScaping**

Can anything be more satisfying than a fertile carpet of green grass? How about a healthy landscape that features less lawn and beautiful plantings—all grown without the excessive use of pesticides, fertilizers, and water?

Whether you've been wringing your hands over Japanese beetles or you're tired of slaving away on your lawn, **YARDSCAPING** is for you.

Join the growing number of Mainers who have decided to change their yard care ways—for the health of the environment, people, and wildlife.

**New Publication** – [Five steps to make your piece of the planet a healthier place to live.](#)

**Be a YardScaper: Plant a sign in your yard today!**

**Portland's YardScaping Gardens at Back Cove are complete and ready for your enjoyment!**

**QUICK TIPS**

- GotPests.org
- IPM: The Yard Saver
- Sustainable Plant Selection
- Plants to Avoid
- Native Plants: Where to buy 'em;
- Hiring a Landscape Professional
- Ecological Yard Care Resources [PDF]

**LINKS**

- YardScaping Experts
- BayScaping
- Healthy Lawncare Tips—Cumberland County Soil & Water Conservation District
- Kennebunkport Conservation Commission—Lawns for Lobsters
- Grass Seed Sources
- Maine Board of Pesticides Control
- University of Maine Cooperative Extension
- LakeSmart
- Congress of Lake Associations
- The Friends of Casco Bay
- Maine Soil and Water Conservation Districts
- The University of Maine Cooperative Extension Water Quality
- ThinkBlueMaine.org
- Portland Water District
- PlantNative

<http://www.yardscaping.org>

# Where to learn more

The screenshot shows the 'Got Pests?' website in a Mozilla Firefox browser. The browser's address bar displays 'www.maine.gov/agriculture/pesticides/gotpests/index.html'. The website's header features the 'Got Pests?' logo and a navigation menu with 'Home' and 'Contact Us'. A search bar is located in the top right corner. The main content area is divided into several sections:

- GOT PESTS?**: A sidebar menu with links to 'About Got Pests?', 'Is It Really a Pest?', 'Pest Solutions', 'A Word About Pesticides', and 'Want to Know More?'. Below this is an 'ASK THE EXPERT' button.
- Home**: A section titled 'Got Pests?' with a paragraph explaining that pests can be insects, weeds, fungi, mice, and other animals, and that users should know their enemy and, most importantly, know that it is an enemy, not a beneficial or harmless plant or animal.
- Do you know the name of your pest?**: A section with a text input field and a 'Go' button.
- If not, select from the options below.**: A section with a heading 'Where is it found?' and a grid of eight categories: HOME, LAWNS & YARDS, TREES & SHRUBS, FLOWERS, FRUIT, VEGETABLES, PEOPLE & PETS.
- What kind of pest is it?**: A section with a heading and a grid of four categories: WEED, PLANT DISEASE, BUG, OTHER CRITTER.
- QUICK FIND**: A sidebar menu with links to 'Bed Bugs', 'Invasive Pests', 'Late Blight of Potatoes/Tomatoes', 'Mosquitoes', 'Ticks', and 'What's New?'. Below this is a 'LINKS' section with various organizational links.

At the bottom of the page, a yellow banner contains the text: 'It is the policy of the State of Maine to minimize reliance on pesticides. The Maine Department of Agriculture and the Maine IPM Council encourage everyone to practice integrated pest management and to use pesticides only as a last resort.'

www.gotpests.org

# YardScaping...

## Protecting the beauty of Maine

