



# Organic Land Care



(203) 888-5146

[www.organiclandcare.net](http://www.organiclandcare.net)

Box 135, Stevenson, CT 06491

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## Why Reduce Synthetic Chemical Use?



### Your Environment

- Excess fertilizer and pesticides run off into our rivers and the Long Island Sound.
- Synthetic pesticides are used to kill living organisms. These include weedkillers, insecticides, rodenticides and fungicides.
- Petroleum-based fertilizers force abnormal growth at the expense of plant health.
- Some synthetic pesticides kill birds and beneficial insects as well as the pest, sometimes inviting even larger infestations later on.
- Routine or unnecessary spraying can cause organisms to become resistant to pesticides, making future infestations more difficult to control.

### Your Children and Yourself

In a review of case-control studies and case reports, childhood cancers linked to pesticides include: leukemia, brain cancer, Wilm's tumor, soft-tissue sarcoma, Ewing's sarcoma, non-Hodgkin's lymphoma, and cancers of the colorectum and testes.

(Environ Health Perspectives 106 (Suppl. 3):893-908)

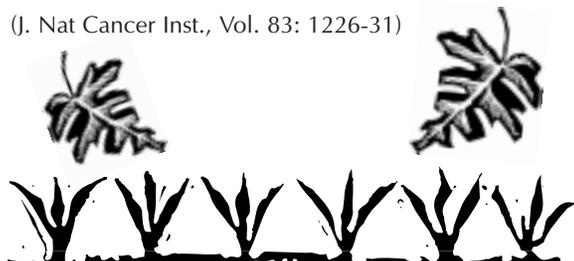
Non-Hodgkin's Type Lymphoma (the second fastest-growing cancer in the U.S.) has repeatedly been associated with use of the weedkiller, 2,4-D in studies in the U.S., Canada and Sweden.

(Rachel's Environmental Health Weekly #250)

### Your Pets

Dogs whose owners used the common weedkiller, 2,4-D, on their lawn were twice as likely to die of cancer.

(J. Nat Cancer Inst., Vol. 83: 1226-31)



## Common Sense Alternatives to Synthetic Pesticides

### Prune correctly for vigorous trees and shrubs.

- Prune and cut off dead and diseased branches.
- An improper cut, cutting too much or at the wrong time, will weaken the plants.

### Protect the tender bark and roots of your plants.

- Avoid injury due to yard work, such as shoveling and mowing.
- Wounds are entry points for insects and disease.

### Woolly Adelgids

- Hemlock trees are susceptible to infestations.
- Apply dormant oil in early April. Spray thoroughly to cover all branches.
- If necessary, spray again in early June, but avoid nesting birds.
- A small, black ladybug from Japan has been released in parts of Connecticut as a predator of the adelgid. If these become established and are effective, the adelgid may be controlled naturally. Insecticides will kill these ladybugs and prevent this natural balance from occurring.

### Gypsy Moths

- They have been controlled naturally since 1991 by a parasitic fungus.

### Eastern Tent Caterpillars

- Black Cherry trees, or genus Prunus, are susceptible to infestations.
- Learn to identify egg masses and remove them in winter before they hatch.
- Nests can be easily removed by hand.

### Black Vine Weevils

- Apply nematodes, *Heterorhabditis bacteriophora*.
- Obtain healthy nematodes from a reputable source and use them under proper conditions.
- For details, call the Connecticut Agricultural Experiment Station (CAES) at (203) 974-8600.

## White Grubs

- If you live in Connecticut, have grubs or any other insects identified for free by the CAES.
- Milky Spore may be used for Japanese and Oriental Beetle grubs, but it spreads slowly in our climate.
- The nematode *Steinernema scarabaei*, which will be commercially available soon, has shown promise in controlling white grubs. Contact CAES for more information.

## Lawn Establishment and Renovation.

- Your lawn needs to be renovated if the thatch layer is thicker than 1/2 inch.
- Renovation and seeding are best done in the fall.
- Plant only as much lawn as you need and only where it will grow well.
- A diversity of other plants can be used to improve the overall beauty and quality of your lawn.

### When seeding a lawn, use a certified first class grass seed.

- Carefully chooses a grass seed blend that is compatible with the growing conditions and is high in endophytic fungi, which deter certain surface-feeding insects.  
Endophytic fungi are toxic to some livestock and should not be used where the grasses can be foraged.
- Including clover in your seed will provide your lawn with nitrogen.
- Seed or overseed in the fall.

### Set your mower to a height of 3 inches.

- Keep the mower operating properly and the blades sharp.
- Only remove 1/3 of the grass blade at a time.
- Leaving the grass clippings on your lawn will provide it with 40% of the nutrients it needs.
- DO cut grass shorter in the late fall for easier fall cleanup.

### Apply lime only based upon soil test recommendations.

- The ideal soil pH for a lawn is 6.3 - 6.8.

- Use no more than 125 lbs. of lime/1000 sq. ft. every 6 months.
- If your soil has a low pH and high magnesium levels, use only calcitic lime, which is lower in magnesium than dolomitic lime.



## Landscapes Can Become Addicted to Routine Applications of Synthetic Chemicals

- Stop! Go cold turkey! The lawn is probably addicted and may show withdrawal symptoms.
- Pesticides kill the beneficial organisms in your soil. It will take some time to re-establish a balance.
- Thatch is a mat of dead roots and stems that accumulates at the surface. Excessive thatch is caused by quick-release nitrogen fertilizer, poor mowing and watering habits, and low microbial activity.
- Excessive thatch blocks the growth of healthy grass and provides a medium for insect pests to live. If the thatch is greater than 1/2 inch, dethatch.
- Start the conversion from a chemical to an organic lawn with an application of 1/4 inch of good quality organic compost. This application can be made in combination with core aeration which cuts through the thatch and allows air and water to penetrate the soil below.
- Once you start an organic program, be patient, you will soon see results.

## References

(some may not be exclusively organic)

- **Handbook of Successful Ecological Lawn Care** by Paul Sachs of North Country Organics
- **The Chemical Free Lawn** by Warren Schultz (Rodale Press)
- **Building a Healthy Lawn** by Stuart Franklin (Garden Way Publishing)
- **Organic Soil Fertility Management** by Steve Gilman (Chelsea Green Press)
- **Weeds and What They Tell** by Ehrenfried E. Pfeiffer (Rodale Press)
- **Start with the Soil** by Grace Gershuny (Rodale Press)

## Land Care Includes All Ground Cover, Beds, Trees & Shrubs

### Choose your plants carefully.

- Don't just plant trees, plant ecosystems! Plant groupings of several species that are compatible.
- Select well-grown and insect/disease-resistant plant varieties.
- Choose native plants that have adapted to our climate and conditions.
- Consider sunlight, soil and water requirements of the species you plant.
- Grass is not suitable for many situations. It requires lots of sun, water and good soil and is one the highest maintenance plants we can grow.
- Consider other groundcovers that require less maintenance and are more suitable for your site.

### Test your soil.

- Fertilization and liming should ALWAYS follow the soil test recommendations.
- Request organic recommendations.
- Test the soil before landscaping and every two to three years.
- The Connecticut Agricultural Experiment Station provides free soil analysis for CT residents.
- UMass and UConn also offer soil analysis for a small fee.
- Request the percentage of organic matter in the sample. It should be 3.5% or more.

### Fertilize with compost.

- Compost is the best source of minerals, nutrients and beneficial organisms.
- Make your own compost, or buy commercial compost, but find out as much as you can about what is in it and how it is made.
- If your soil test indicates a high level of phosphorus, consider using a compost tea (aerobically fermented water extract of compost) to add beneficial organisms without overloading nutrients.
- Compost can be applied any time, but spring and late summer applications are preferred.
- If you use mixed organic fertilizer, read the list of ingredients in the brochure to determine the real content. Fertilizers advertised as 'organic' may include the following ingredients, which are NOT endorsed by most organic food certification programs:

- \* non-natural ingredients like super-phosphate.
- \* harmful natural ingredients like 'natural nitrite of soda', which causes salt buildup.
- \* sewage sludge, which may contain harmful contaminants.
- Use mixed organic fertilizers only in the early spring and fall. Follow the recommendations of the soil test.

### **Water only when needed.**

- Avoid frequent, shallow watering that encourages Japanese beetle grub infestation, fungus and root rot.
- Know the cultural requirements of your plants.
- If the lawn is wet overnight with dew, allow it to dry before applying additional moisture to limit the spread of disease.
- Use a rain gauge. Vegetable and flower beds need 1 inch of rain per week to flourish.
- Use soaker hoses or a well-timed sprinkler to supplement what nature provides.
- During a drought, provide deep-root watering, especially for those trees near asphalt.
- Once a healthy lawn is established, it will need watering only after seeding or during a drought.
- An established organic lawn has a more extensive root system, enabling it find food and water even when it is dry. This enhanced root system enables the lawn to survive a dry spell.

### **Mulch saves water and controls weeds, insects and disease.**

- Mulch protects the roots and trunk from damage due to mowing.
- Mulch the entire bed with 1-2 inches of leaves, grass clippings, pine needles, buckwheat or cocoa hulls.
- Mulch to a depth of 2-4 inches around trees and shrubs, but do not allow mulch to touch the bark.

## **The Organic Land Care Committee**

Our mission is to educate land care professionals and the general public about the virtues of organic land care and about practices which:

- Maintain soil health.
- Eliminate synthetic pesticide and synthetic fertilizer use.
- Increase landscape diversity.
- Improve the health and well being of the people and web of life in our care.

## **What Is Organic Land Care?**

- Organic Land Care develops an attractive, safe, and useful landscape, using appropriate methods and materials chosen to respect the natural ecology of the land and the long-term health of the environment. No synthetic pesticides or synthetic fertilizers are used.
- Healthy soils, containing billions of interdependent organisms from earthworms to microscopic bacteria, yield plants that are healthier and pest resistant, and thus require less maintenance.
- NOFA has developed an accreditation program for land care professionals. Those who successfully complete the Organic Land Care course are on the list of accredited professionals available at [www.organiclandcare.net](http://www.organiclandcare.net) or by sending a SASE to Professional List, Box 135, Stevenson, CT 06491.
- *Standards for Organic Land Care: Practices for the Design and Maintenance of Ecological Landscapes* was published in the fall of 2001 and is updated annually. Copies are available for \$20 plus \$3 postage through the NOFA contact on the cover.

## **If You Use A Professional Lawn, Garden or Tree Service:**

- Ask for an organic program (no chemical pesticides). For best results, hire an organic land care professional accredited by NOFA.
- Ask what chemicals are applied. If they apply pesticides, ask if they have a pesticide applicator's license. Ask to see it.
- Ask for the MSDS (Material Safety Data Sheet) for each chemical they use.

### **Ask Your Garden Center to Carry Organic Products**

**Stores will respond to customer demand.**

**Members may order organic products through NOFA in bulk.**



## **NOFA Organic Land Care Publications and Membership**

- Standards for Organic Land Care: Practices for Design and Maintenance of Ecological Landscapes  
\$20 each plus \$3 S&H,  
\$12.50 each for 10 or more, plus S&H
- Citizens Guide to Organic Land Care  
\$2 each includes S&H.
- Organic Land Care Brochure-included with other orders, send SASE for it alone.
- Organic Weed Management manual  
\$ 8 each includes S & H.
- Organic Soil Management manual  
\$ 8 each includes S & H.
- Annual Membership in CT NOFA  
\$35 for individual or family  
\$100 for business  
\$150 supporting
- Donation to support the work of the Organic Land Care Committee \$ \_\_\_\_\_  
CT NOFA is a 501c3 non-profit
- Inform me of the next course in Organic Land Care

Name \_\_\_\_\_  
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**Send to:**

CT NOFA, Box 135, Stevenson, CT 06491

**[www.organiclandcare.net](http://www.organiclandcare.net)**

**or call 203 888-5146**