

WHAT IS THE FREEDOM LAWN INITIATIVE?

The Freedom Lawn Initiative is about protecting the health of your family, your pets, and local wildlife. By keeping your lawn free of synthetic pesticides and fertilizers, you prevent exposure to toxins and also prevent polluted runoff from entering the Farmington River.

While pesticides can be directly toxic, fertilizers pollute by providing an overdose of nutrients to streams and ponds. The result is excessive growth and decay of plant life, which depletes water of oxygen and can suffocate aquatic animals.

If you maintain a Freedom Lawn, you help protect a precious resource—clean water. Remember, runoff from lawns ends up in your local waterways. Reducing your yard runoff and keeping it free of contaminants really makes a difference!

If you decide that you would like to take the initiative to begin a Freedom Lawn, or currently have one, please consider signing our pledge. It's a simple way to support the preservation of your precious drinking water.

I pledge voluntarily to not use pesticides and synthetic fertilizers on my lawn:

Name: _____

Address _____

City, State, Zip _____

Lot Acreage _____

As a business owner, I pledge to not use pesticides and synthetic fertilizers on my business property.

Business Name: _____

Business Owner: _____

City, State, Zip _____

Lot Acreage: _____

Please send form to: FRWA, 749 Hopmeadow Street, Simsbury CT 06070

Or sign online: www.frwa.org/pesticides.html.

PESTICIDE RISKS

TO CHILDREN:

- The small body mass and rapid growth of children make pesticides more dangerous for them than for adults. Pesticide exposure to children increases the odds of various cancers, including leukemia, brain cancer, and soft tissue sarcoma.
- Parental exposure to pesticides increases odds of birth defects in fetuses.

TO ADULTS:

- Pesticides are linked to increased risk of cancers including, breast, prostate, kidney/bladder, eye, and colon-rectum; Parkinson's disease; and damage to various body systems such as the endocrine, nervous, and immune systems.

TO PETS:

- Like children, most pets have a smaller body mass than you do and are more susceptible to health problems from pesticides. Four lawn applications a year of 2, 4-D doubles a dog's risk getting of canine malignant lymphoma.

TO BIRDS:

- Diazinon and the common lawn-care ingredient 2,4-D, are very toxic. Just one granule or seed treated with diazinon can kill a small bird. Use of 2,4-D on golf courses and sod farms was halted in the 1990s but it is still used by some homeowners.

TO AQUATIC LIFE

- In fish, some pesticides interfere with normal hormone function during development, triggering deformities and stunted growth and contributing to declines in fish populations.
- In amphibians such as frogs, just 0.1 part per billion of atrazine, the most commonly used herbicide in the U.S., causes severe changes in sex organ development.

PESTICIDES IN OUR WATER

GROUNDWATER & WELLS:

- The top 5 selling lawn-care pesticides are all listed by the state of California as having the potential to contaminate groundwater.
- Homeowners may unknowingly contaminate their own well water based on the chemical's water solubility, its ability to bind to the soil and its persistence in soil over time.
- *While pesticide use is heavy in Connecticut, there is no ground or surface water monitoring that is currently conducted to detect contamination.*

DRINKING WATER:

- Long periods of exposure to chemically contaminated drinking water can be associated with chronic health problems.
- Once drinking water is contaminated, it can be very costly to remove the contaminant and drilling a new well does not guarantee that the new water source will be clean because of the connectivity of ground water.
- Expensive specialized filters remove pesticides from residential water. NOTE: Bottled water is not regulated as strictly as tap water. Also, some brands come from public water supplies.
- Wastewater treatment plants do not treat for pesticides.



READY TO TAKE ACTION?

You can do two things right away.

1. Flip this brochure over for lawn care tips.
2. Please let us know you are helping. Sign our Freedom Lawn Pledge online at www.frwa.org/pesticides.html. (There's additional information about the Freedom Lawn Initiative there too.) **It's simple, fast, has no strings attached and costs nothing!**

And feel free to call us at 860-658-4442. We'd love to hear about your Freedom Lawn!

ONLINE RESOURCES

There are many groups that you can visit online to learn more about organic lawn practices and the dangers of chemical fertilizers and pesticides.

Here is a small list of online resources:

- [Beyond Pesticides](http://www.beyondpesticides.org/): www.beyondpesticides.org/
- [CT NOFA \(Northeast Organic Farming Association\)](http://www.ctnofa.org/): www.ctnofa.org/
- [Environment & Human Health](http://www.ehhi.org/): www.ehhi.org/
- [NOFA Organic Land Care](http://www.organiclandcare.net/): www.organiclandcare.net/
- [Pesticide Action Network](http://www.panna.org/): www.panna.org/
- [Safe Lawns & Landscapes](http://www.safelawns.net/): www.safelawns.net/
- [US EPA Pesticides Page](http://www.epa.gov/pesticides/): www.epa.gov/pesticides/

FRWA informational brochures online:

- Do you know how to control lawn grubs organically? If not, check out "**De-Grub your Lawn Organically**"
- For a little fun, think about what your lawn weeds say about your lawn. Look at "**Lawn Weeds & Your Lawn**"
- Do you know how to cut your lawn to shade out weeds and keep your grass at optimal health? Find out the "**Green Rules for a Green Lawn**"
- Need some professional help? We have a list of Organic Land Care Professionals on our page too!

FRWA Partners in this effort include the tireless efforts of Jason Rupaka, the Town of Plainville, and the Salmon Brook Watershed Association.

LAWN CARE TIPS

WEED CONTROL

When beginning a Freedom Lawn, you may be frustrated with the weeds. To alleviate this problem, it is safe to apply a corn gluten product in early fall and spring, this product acts as an effective weed suppressant

MOWING

- Keep grass 3-4" high.
- Leave grass clippings on the lawn. They help absorb and retain moisture. Also, they decompose quickly, providing 1/3 to 1/2 the nutrient needs of your grass.
- Keep mower blades sharp, and rotate your mowing patterns.

SEEDING

- Seed early fall or spring with fescues and/or ryes
- Consider using endophytic-enhanced grasses (contains a fungus that enhances the success of the plant) - some are naturally toxic to pests.

ORGANIC FERTILIZER TECHNIQUES

- The best fertilizer is free: just run your lawn mower over fallen leaves in the autumn, grinding them up. This puts nutrients and organic matter into the soil to help build up the lawn, and make it softer under foot.
- Other alternatives to chemical fertilizers: using clean compost; using organic fertilizers that are low in nitrogen (nitrogen runoff can contribute to fish kills); and growing clover to provide free nitrogen that's less likely to run off.

AERATION

- After years of mowing, walking, and play, lawns can become very hard. Aeration may be the best way to improve the lawn's health and reduce contaminated runoff.
- Aeration means poking holes in the turf so that water, oxygen and nutrients can reach the root zone. Depending on the size of your lawn, you can use a pitchfork, aeration shoes, or a power aerator.

LAWN CARE TIPS (CON'T)

WATERING

We do not recommend watering but if you must, make sure the water seeps deep into the ground. This encourages roots to grow deep, thus requiring less water. Early morning is best for watering. Lawns peak and look best in early spring and fall when lawns go dormant in middle of summer do not to waste water on grass. A well-established lawn should not need water.

ORGANIC FERTILIZER TECHNIQUES

- The best fertilizer costs nothing; just run your lawn mower over the leaves grinding them as they come down in the fall. This puts nutrients and organic matter into the soil, thus helping build up the lawn, and making it healthy and softer under foot.
- Add clean compost too, and if you must use fertilizers, make use of organic ones that are low in nitrogen. This saves water bodies from hypoxia (a loss of oxygen) that causes fish to die.
- Clover provides free nitrogen

INSECT CONTROL

- For grubs, chinch bugs and sod webworms, apply beneficial nematodes. These microscopic worms prey on pesky worms and grubs that destroy lawns.
- For Japanese beetle problems, Milky Spore Powder (a species-specific bacteria) can be applied in a grid pattern on the lawn for effective and long-lasting control.
- Both of these biological controls are completely safe for people, pets and beneficial insects.
- For a two page guide on organic grub control please visit: <http://www.frwa.org/pesticides.html>



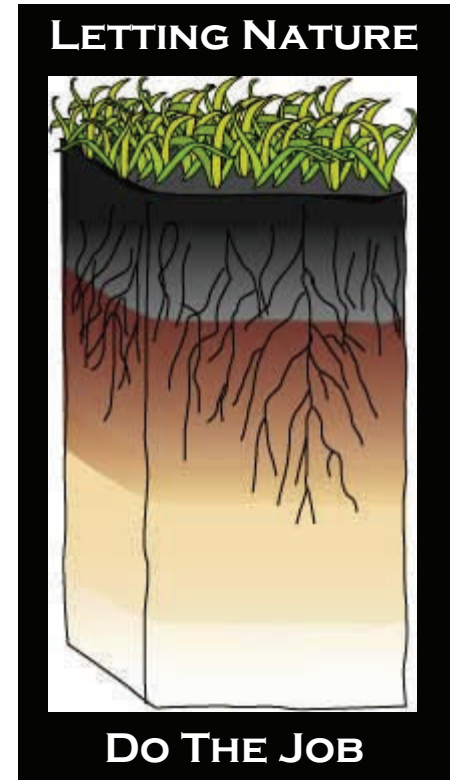
FREEDOM LAWN'S SEASONAL "TO-DO" LIST*

SEASON:	WHAT TO DO:
Early Spring: March 15 to April 15	Remove winter debris; overseed thin areas; obtain soil test (can be done during any season); de-thatch if necessary
Mid to late Spring: April 15 to June 15	Overseed weedy or thin areas; aerate if needed, while adding soil amendments if necessary; begin mowing if grass is above 3" in height; leave grass clippings
Summer: June 15 to Aug. 15	Continue mowing to maintain 3" lawn height; irrigate as needed, up to 1"; avoid irrigation during extreme heat
Late Summer: Aug. 15 to Sept. 15	Repair damaged lawn areas; mid-August, look for white grubs and apply nematodes if necessary; apply natural fertilizer to prep soil for winter months
Early to mid-Autumn: Sept. 15 to Nov. 1	Decrease manual watering; stop watering completely as temperatures drop and rainfall increases; apply lime as indicated by soil test
Late Autumn: Nov. 1 to Dec. 1	Remove leaves during peak leaf drop; shred remaining leaves into lawn; mow grass short (2") once growth has slowed
Winter: Dec. 1 to early March	Continue shredding remaining leaves into lawn; no nutrients or organic matter application is necessary during this time

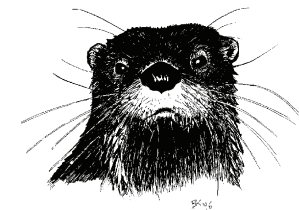
*This information was adapted from the NOFA Organic Lawn and Turf Handbook.



FRWA FREEDOM LAWN INITIATIVE



REDUCING PESTICIDE USAGE IN THE FARMINGTON RIVER WATERSHED



The Freedom Lawn Initiative is a project of the Farmington River Watershed Association.
www.frwa.org (860) 658-4442