Portsmouth Sustainable Land Care



The free online book, <u>Introduction to Organic Lawns and Yards by Sarah Little, PhD</u> is an excellent guide to help you navigate maintaining your yard with organic practices. Begin with the following excerpts to learn about why sustainable landscaping is important, and the benefits of following the <u>Northeast Organic Farming Association's Standards for Organic Land Care</u>.

The terms sustainable, ecological, and organic as applied to landscaping are closely related but not synonymous. The word "sustainable" is a general term that means meeting the needs of the present without compromising the ability of future generations to meet their own needs. Ecological landscaping refers to landscaping with a respect for natural ecosystems.

Organic landscaping encompasses both these concepts and, in addition, it is guided by a specific set of ecological principles and practices, including the avoidance of synthetic pesticides and fertilizers, as laid out in the NOFA Organic Land Care Standards:

- landscaping for beauty, function, and nature;
- using only natural materials;
- designing to conserve energy, water and materials;
- increasing biodiversity;
- removing invasive plants and encouraging native plants;
- enhancing ecosystem functions; and
- fostering healthy relationships between people and their natural environments.

There are plenty of examples of beautiful organic properties throughout the northeastern United States. The NOFA Organic Land Care Program has trained over 2000 organic landscapers from over twenty states and maintains an <u>online listing</u> of accredited professionals.

Checklist For An Eco-Friendly Property

- o Keep pesticides off your lawn and gardens. Using only non-toxic materials on your property reduces the health risk to yourself, your family, your neighbors and your local environment. NOFA OLC provides an article on their website entitled, "Why Organic?"
- o Use non-synthetic fertilizers from natural sources. Synthetic fertilizers are made in a chemical process that uses fossil fuel and contributes to global warming. Use of synthetic nitrogen fertilizer greatly increases the amount of nitrogen entering the global nitrogen cycle which has a serious negative impact on the organization and functioning of the world's ecosystems, including accelerating the loss of biological diversity and decline of coastal marine ecosystems and fisheries. The use of synthetic phosphorus fertilizers has its own set of problems, in particular its contribution to the eutrophication of fresh water lakes and ponds, and the limited global supply of phosphate rock
- o Reduce water use. In many cities in the Northeast, 50% of the drinking water goes to lawns and landscapes. Over 75% of Massachusetts' rivers are flow stressed because of water withdrawals for these residential uses.
- o Increase biodiversity. Biodiversity is the key to a healthy ecosystem on any scale, from backyard to global. Biodiversity increases the stability of ecosystems, reduces the need for intervention, and makes them, from an aesthetic viewpoint, much more interesting. The earth is currently losing species at a rate that rivals mass extinctions in our geologic record. You can use the American Museum of Natural History's site as a starting point to read about why biodiversity is important. You can look to the National Wildlife Federation to learn how to increase biodiversity in your own back yard.
- o Care for your lawn... Mow high, 3"-4"; leave grass clippings on lawn; water infrequently, if at all; encourage a bit of white clover; fertilize with compost; and overseed bare spots in fall and early spring. Rake your lawn, but not your woods: let leaves, nature's own mulch, stay and compost in place.
- o Make and use compost. Compost has many advantages as a soil amendment and it is less likely to cause pollution of the local and regional environment than fertilizers, even organic ones. Incorporating compost improves turf, shrub and shade tree performance in marginal or poor soils. Good quality compost improves soil structure, reduces runoff and compaction, enhances biodiversity, increases water and nutrient retention, increases microbial activity, supplies nutrients, helps suppress and prevent plant diseases, detoxifies certain pesticides, and inactivates and kills potential human pathogens. Look to the EPA for information on making compost.
- o Test your soil. If you want your property to look its best, to save money, and to protect the environment even more, do an easy soil test before you apply anything at all. A soil testing lab will help you figure out how much of which fertilizers and nutrients to apply for optimum results. Look up your State's soil testing lab.
- o Remove invasive plants. Invasive plants grow quickly and spread easily and often reduce the biodiversity of whole ecosystems. Learn about invasive plants, how to avoid spreading them, and how to remove them from your own property. In the U.S., a good place to start is at the National Invasive Species Information Center.

- o Garden with native plants. Native plants are site adapted and usually require little to no watering, fertilizing or pesticides. Stunning gardens can be made entirely with native plants. Since native plants are, well, native, it's best to find a local conservation group who works with natives. If you live in the Northeast U.S., a good place to start is the New England Wildflower Society.
- o Grow food. Organically raised fruits and vegetables, grown close to home, will become more valuable as current trends in climate change, energy cost and availability, and human health play out in the future. Organic practices allow edible and decorative plants to be grown together. There are many ways to incorporate food plants and vegetable gardens into your landscape. Blueberry bushes are native, decorative and delicious. Many fancy lettuces are as pretty as annuals. More and more land care professionals offer vegetable garden installation as a service.

Pest Management

If you find yourself faced with a pest problem that must be managed it is important to avoid use of products that can harm beneficial organisms in our landscapes. The vast majority of insects in your yard are helpful. They provide valuable ecosystem services that benefit us like pollination, pest control, soil aeration, nutrient recycling and more. Organic IPM is a least toxic way of managing pests. There are five main steps.

First, identify the pest.

Second, learn about the pest's biology.

Third, determine the level you are able to tolerate.

Fourth, modify your habitat to deter the pest.

Fifth, monitor pest abundance and damage, if any.

Often times after following these steps, control measures are not needed. Some least toxic controls include exclusion, traps, handpicking, vacuuming, water sprays, and judicious pruning. If a pest still remains above tolerance levels after implementing these options, then an organic compatible product may be considered. This would include OMRI certified and minimum risk (25(b) exempt) products. Follow all label directions exactly to avoid harming beneficial and non-target organisms. See Organic Alternatives for product suggestions.

LAWN CARE RESOURCES

10 Steps to Healthy Organic Turf

Organic Turf Care Cultural Practices

Organic Fertilizer Fact Sheet

NATIVE PLANT RESOURCES

Native Plant Trust Garden Plant Finder

Soak Up The Rain

NH List of Invasive Species

NH Invasive Plant Species Watch List

New Hampshire Comprehensive Invasive Plant List