

The bottom section of the cover has a dark blue background with a pattern of white water droplets of various sizes. A white wavy line separates this section from the grass above.

# NOFA Organic Lawn Care Guide

A Publication of the Northeast Organic Farming Association's  
Organic Land Care Program

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The recommendations in this publication are not a substitute for pesticide labeling. The label is the law; read it and follow the instructions before applying any pesticide. No product discrimination is intended by the authors or their institutions. No endorsement of any products mentioned or criticism of unnamed products is implied.

January, 2013



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# Foreword

*Jenna Messier*

In the Fall of 2012, the NOFA Organic Land Care Program was notified by the Long Island Sound Futures Fund (LISFF) that they would be funding the proposal, “Establishing a NOFA Organic Lawn Care Certificate Program.” We are very grateful for this opportunity to participate regionally to reduce non-point source pollution in the Long Island Sound by educating lawn care service providers about healthier methods of growing lawns and turf.

This new course and book allows the NOFA OLC Program to continue educating professionals and consumers about the benefits and methods of organic land care, which is the mission of our program - ***to extend the practices and principles of organic agriculture to the places where we live our daily lives.*** This project further endeavors to create public awareness that “Organic lawns and gardens keep our water clean!”

I would like to thank Judy Preston from the Long Island Sound Study/CT Sea Grant for originating this project proposal. I am grateful to Diba Khan-Bureau from Three Rivers Community College for initiating our partnership which led to this project. Chip Osborne and Frank Crandall have taught sections of our Accreditation Course for years and also serve on the OLC Advisory Committee. Their enduring support and guidance has been critical for the development and direction of the program.

Lastly, I would like to thank Melissa Gabso for her vibrant graphic design work. The graphics that appear in this book, and on our public awareness campaign’s bumper stickers and lawn signs all beautifully demonstrate the connection between grass and water which we seek to protect.

Jenna Messier  
NOFA Organic Land Care Program Director  
CT NOFA, Oxford, CT  
January 11, 2013



# Surf and Turf

Making Environmental Connections Between Landscaping and Long Island Sound

Judy Preston

The landscaping trade is part of a growing trend and a growing industry that focuses on *sustainability*. According to the National Gardening Association, the number of nationwide households that use only all-natural fertilizer and insect and weed controls increased from an estimated 5 million in 2004 to 12 million in 2008, and is projected to keep growing – even in this economy. *Lawn and Landscape Magazine* cites sustainable business practices as the number one trend for 2013, claiming that sustainability is “driving the future of the green industry, because it’s what customers want, and it’s the right thing to do.”



Connecticut and New York played an important role in the early establishment of the lawn care phenomenon in the United States.

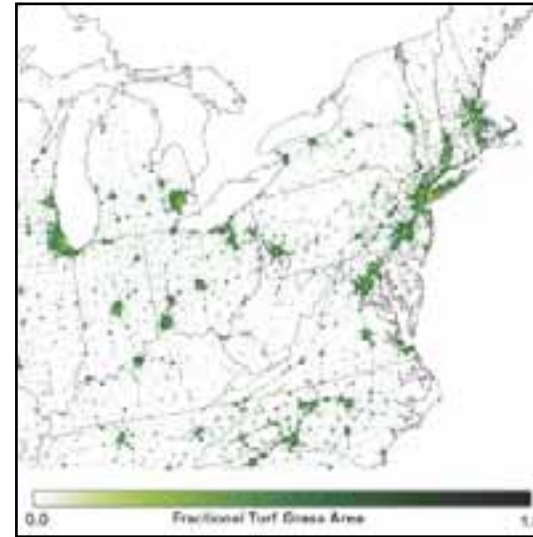
Lawns are a part of the American cultural psyche, and New England was central to the beginnings of this trend. The first three patents for mowers established in 1868 came from New York and Connecticut inventors; by 1885, America was building 50,000 lawnmowers a year and shipping them to every country on the globe!

In addition to the model lawns established early on in the United States through the homes of our early presidents (Washington’s Mount Vernon and Jefferson’s Monticello), 19th century Landscape Architects, including Frederick Law Olmsted, emphasized a suburban landscape that included houses set back from the street, with lawns and trees intended to exemplify the pastoral ideal of America as a garden.

Our love affair with this landscape is not insignificant: each year over 382,850 acres of land are converted into lawns in North America. In fact, turf grasses now cover an area about the size of the New England states in the U.S., and 75% of that is in residential lawns.

Consumer interest in sustainability stems from growing concern about the environment, and public health issues for kids and pets associated with the use of chemicals on lawns. Unsustainable landscaping practices include those that result in excess nutrients and pesticides from fertilizers either washing off lawns and garden landscapes and getting into our streams and rivers and, ultimately, Long Island Sound, or leaching through the soil and making it to the Sound via groundwater.

Long Island Sound is downstream from every maintained lawn, and four centuries of development and population has swollen the Sound's burden of nitrogen to 91,000 tons a year, a 128% increase over the estimated 40,000 tons that flowed to the Sound before European settlement.



This NASA generated map shows satellite-derived estimates of the fractional turf grass (lawn) area across the northeast USA in shades of green. The scientists who produced the map estimate that more surface area is devoted to lawns than to any other single irrigated crop in the country.

Estuaries provide 75% of America's commercial fish catch and 80-90% of the recreational fish catch.



Long Island Sound is an estuary – where fresh waters mix with ocean waters – that is nationally recognized for its important biological resources.

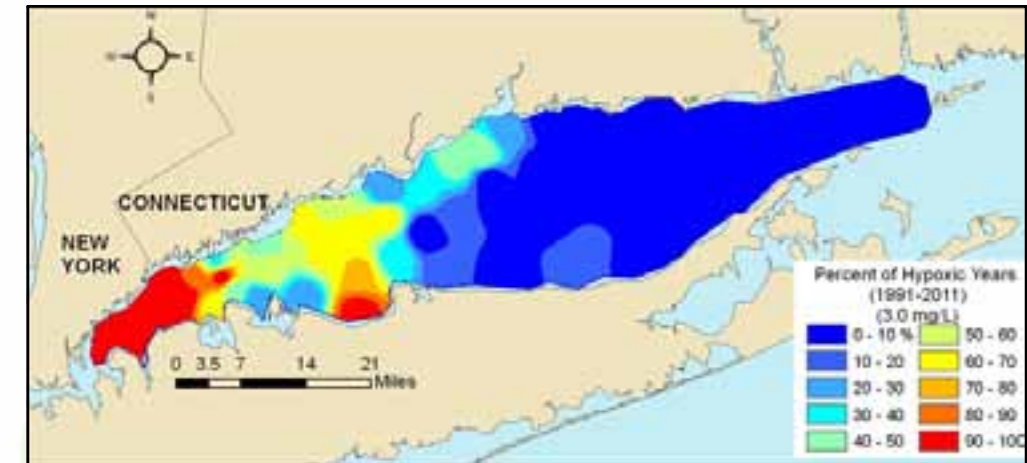
Nitrogen is easily dissolved in water and once transported to the waters of Long Island Sound the excess can lead to low dissolved oxygen, fish kills, an over abundance of problematic species, such as algae blooms, and the loss of sea grasses that support important animal species, such as scallops. Unfortunately, this condition, known as hypoxia, is not unique to Long Island Sound: over 300 U.S. coastal water bodies now experience stressful or lethal oxygen levels that threaten commercial and

recreational fisheries. In fact, hypoxic events have increased nearly 30-fold since 1960.



Reducing nitrogen inputs from all sources - including lawn and landscaping fertilizer - will ultimately benefit Long Island Sound and the many species - including our own - that benefit from a healthy estuary.

Significant efforts are being made to address the environmental and economic impacts of too much nitrogen getting into Long Island Sound. The Long Island Sound Study (LISS) is a multiple agency, multi-state partnership that seeks collaborative solutions to pressing environmental issues facing the Sound. The Environmental Protection Agency (EPA) coordinates this effort through its LIS office in Stamford, Connecticut. LISS funding made this publication, and the Organic Lawn Care Certificate Program possible, by working with CT NOFA.



**Hypoxia** is a condition where there isn't enough oxygen in the water. This forces fish to either swim away or die and can suffocate plants living in the water. Hypoxia occurs when there are too many nutrients – particularly nitrogen – in the water.

Sustainable landscaping represents an exciting growth opportunity within the green industry that provides both economic *and* environmental incentives. The Organic Lawn Care Certificate is a marketable credential that can help you sell your services and protect Long Island Sound - and that's a marketable message!