

### **OLC Principles and Procedures**

Participants will:

- Learn about the precautionary principle
- Be able to apply the basic principles on which the NOFA Standards are based
- Know what is required for NOFA accreditation
- Distinguish appropriately among practices and materials that are Preferred, Allowed, or Prohibited
- Follow the appropriate procedures for Emergency Non-Organic Rescue Treatment provision in the standards if needed.

### **Site Analysis, Design and Maintenance**

Participants will:

- Be able to identify the key elements of a site
- Learn about the ecology of the site from these elements
- Learn how to avoid potentially harmful land use decisions
- Understand plants and soils as an interdependent living system
- Comprehend the importance of the right plant in the right place
- Learn how to design the landscape management program to work with existing ecosystem
- Learn methods and techniques of organic land care maintenance
- Learn about the factors that affect water management
- Learn when and how to water for efficiency
- Discuss key issues with irrigation maintenance

### **Mulches**

Participants will:

- Understand why mulch is used
- Learn about the varied forms of mulch materials
- Comprehend the advantages and disadvantages of different mulch materials
- Learn the proper application of mulch materials
- Learn how different mulches affect sustainability

### **Lawn Alternatives**

Participants will:

- Learn how and why to identify areas for lawn alternatives in the landscape
- Gain knowledge of unconventional species and cultivars of plants suitable for lawn or other groundcover
- Know how to establish and maintain various lawn alternatives
- Learn how to promote this concept to a client

### **Invasive Plant Control- Michael Nadeau**

Participants will:

- Understand what an invasive plant is and the problems caused by invasive plants in both managed and natural landscapes
- Be able to identify the most common invasive plants in the Northeast region and to locate invasive plant lists for your state
- Identify common management problems and ways to solve them

- Be able to successfully remove and control the spread of invasive plants on clients' properties without causing further damage

### **Soil Fundamentals**

Participants will:

- Understand the components that makeup soil
- Understand how these components result in water movement, aggregation, nutrient cycling
- Understand nutrient pools in soil: soluble, exchangeable, total
- Learn what a soil profile is and what it means
- Learn how climate and disturbance affect soil development
- Briefly review how interactions of soil components affect plant diseases and pests
- How soil properties should be assessed (testing)

### **Soil Health**

Participants will:

- Know the definition of soil vs. dirt
- Learn the distinguishing characteristics of healthy soil: How to define "normal"
- Learn the balances needed for healthy plant growth
- Understand soil sampling procedures
- Become familiar with Soil Biology and Soil Chemistry tests

### **Soil Biology and Ecology**

Participants will:

- Learn about soil life function; impacts on diseases, pests, fertility, structure
- Understand what controls nutrient availability to plants
- Learn the consequences of human management practices on soil function
- Detecting problems with soil biology

### **Organic Fertilizer and Amendments**

Participants will:

- Be aware of the reasons that fertilizers, organic or inorganic, and amendments become necessary
- Learn basic nutrient cycles: How nutrients become available to plants
- Learn the reasons that old growth forests flourish for hundreds of years without any synthetic fertilizers, pesticides or other inputs
- Understand how nutrients are held in soil and why they are lost from dirt
- Learn what determines nutrient availability, testing for nutrients excess or lack, fixing nutrient excess or limitation

### **Introduction to Turf**

Participants will:

- Learn why organic lawn care is better than chemical based lawn care
- Be familiar with the strengths and weaknesses of various grass types
- Learn the characteristics of indicator weeds and how to control them without using poisons.
- Learn about proper mowing, watering, seeding, fertilizing, composting and compost teas in lawns
- Learn about the special needs of soil for lawns

### **Pest Management for Turf**

Participants will:

- Be able to recognize the major insect pests of turf
- Be able to know the methods for monitoring these pests' activity
- Be able to know the available cultural, chemical and biological control measures available for control of these pests
- Be able to match management tools with particular pests
- Understand the limitations for organic management of certain turf grass insect pest

### **Soil Testing and Analysis**

Participants will:

- Review 3 different sample soil analyses
- Learn how to interpret these analyses
- Learn how to make recommendations for fertility or amendment applications based upon each analysis
- Learn how to calculate the appropriate application rates for granular and liquid applications

### **Compost**

Participants will:

- Learn how compost, disease and pest suppression, nutrient retention, soil structure building and weed reduction are related
- Learn about different recipes (starting materials)
- Understand how compost management practices affect compost quality
- Understand how to make sure human pathogen, plant pathogen, pests or weed seeds can be prevented
- Be able to assess compost quality
- Learn how to use compost

### **Compost Tea**

Participants will:

- Learn why one would use compost, compost extract or compost tea
- Learn critical production factors to assure no pathogen problems
- Assessing extract / tea quality
- Learn how to use compost tea

### **Planting and Plant Care**

Participants will:

- Learn to select, prepare and plant bare root, containerized and B&B plant materials
- Follow Preferred and Allowed procedures for removing unwanted vegetation
- Be able to prepare a planting bed based on soil test recommendations using organic materials, site conditions and types of plants
- Learn organic cultural practices to maintain and enhance plantings
- Tools and equipment
- Learn how and what to consider to water most efficiently as the plant species requires

### **Pest Management Overview**

Participants will:

- Be able to understand the life cycle of the tick responsible for spreading tick-borne illnesses

- Be able to design yards to limit movement of ticks from wooded or wildlife areas into areas of the yard actively used by humans and pets
- Know that the primary method of pest management is to grow healthy plants, using principles from the rest of the course
- Understand that an essential aspect of pest management is to determine thresholds of pest abundance or damage that require treatment. This requires dialogue with and, in some cases, education of the client
- Know materials and practices that are preferred, allowed, and prohibited in the and understand the thinking behind these choices
- Learn methods of wildlife control and deterrents – deer, voles, and rabbits

### **Organic Tree Care**

Participants will:

- Learn Preferred, Allowed and Prohibited practices for organic tree care regarding fertilization, soil health in the critical root zone and pruning techniques
- Learn where to find resources which expand upon these best practices, such as ISA and ANSI AN 300

### **Pest Management of Shrubs & Trees**

Participants will:

- Be able to understand the concept of integrated pest management as it relates to ornamental plants, including its components, particularly the importance of regular plant inspection (scouting).
- Be able to recognize some of the common arthropod pests (insects and mites) that feed on ornamental trees and shrubs found in the Mid-Atlantic region.
- Be able to recognize some of the common beneficial insects (predators and parasites) encountered in the landscape.
- Be able to know the most effective cultural, chemical and biological control measures available for each pest species.

### **Energy, Pollution and Climate Change**

Participants will:

- Learn about emissions and particulate matter hazards from landscaping
- Learn about best practices to reduce fossil fuel usage in landscaping
- Acknowledge the carbon footprint of landscaping practices
- Identify the pollutants generated by landscaping practices, which include noise pollution
- Identify best practices to reduce negative impacts on human and environmental health while caring for landscapes and running an organic land care business

### **Disease Control and Management**

Participants will:

- Understand what disease is and how plants are affected by disease
- Learn the basic steps for diagnosing plant problems
- Learn about plant pathogens and disorders
- Learn the basic steps for diagnosing plant problems
- Understand the disease triangle
- Learn the importance of managing diseases through the use of cultural methods

## Hydrology and Water Management

Participants will:

- Understand and assess how water moves through natural and developed landscapes
- Identify potential sources of pollutants affecting residential landscapes
- Identify appropriate and inappropriate sites for storm water infiltration
- Design a small infiltration system by calculating necessary size and determining construction requirements
- Select appropriate planting materials and mulches

## Green Stormwater Management

Participants will:

- Learn the definition of Green Stormwater Infrastructure (GSI)
- Learn how site characteristics, regulations, and client desires shape GSI design
- Become familiar with different land-water-plant based systems through case studies
- Learn about common challenges when constructing and maintaining GSI practices
- Learn about how GSI design choices can impact maintenance of these systems

## Creating an Organic Transition Plan

Participants will:

- Establish a time-frame for transitioning a conventionally maintained property to an organic program
- Understand the tools and techniques necessary to transition a property to an organic program
- Distinguish between product-swapping and a designed organic management program
- Writing proposal for an organic transition plan

## The Business of Organic Land Care

Participants will:

- Discuss the major factors in completing an estimate including: labor costs, material costs, equipment and vehicle costs and overhead cost.
- Demonstrate the Retail Estimating Method
- Distinguish between Markup and Margin
- Use job costing to verify if your projects are profitable
- Describe what Triple Bottom Line is and how to use it in horticultural businesses