

9:00-10:00 AM, Registration and Welcome

10:00-11:00 AM, Paul Wagner

Soil Fundamentals

- 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)

11:00-11:15, Break

11:15-12:15, Paul Wagner

Soil Health

- 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

12:15-1:15, Lunch

1:15-2:15, Paul Wagner

Soil Biology and Ecology

- 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

2:15-3:15, Paul Wagner

Organic Fertilizer and Amendments

- 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

3:15-3:30, Break

3:30-4:30, Paul Wagner

Soil Testing and Analysis

- Review 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

9:00-11:00 AM, Mike Nadeau

Site Analysis, Design and Maintenance

- 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

11:00-11:15 AM, Break

11:15-12:15 PM, Mike Nadeau

Invasive Plant Control

- 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

12:15-1:15 PM, Lunch

1:15-3:15 PM, TBD

Compost & Compost Tea

- 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
- 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

3:15-4:15, Mike Nadeau

Mulches

- 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



9:00-9:15 AM, Daniel Ungier

Introduction

9:15-10:30 AM, Mike Nadeau

Lawn Alternatives

- Why a lawn? Expand upon the opportunities of where it's not necessary to mow, spray, irrigate or fertilize a lawn. Identify cultural conditions appropriate for these lawn alternatives.
- Discussion about plants that are used instead of lawn for low-maintenance, that require minimal input, and those that can tolerate some degree of foot traffic/play. Discussion on cultural conditions for these plants that are non-invasive species.

10:45-12:15 PM, Heather McCargo

Native Plant Selection for Ornamental and Ecological Function

- Discussion on native plants relating to their habitat/growing conditions such as; sun-well drained soils, shade-compacted or wet soils, sun-fertile soils, woodland-dry to damp soils etc.
- Plants will be highlighted for opportunities like use in Rain Gardens, Erosion Control or Pollinator Magnets and Soil Health.
- Seasonal Habits and Management

12:15-1:15 PM, Lunch

1:15-2:45, Justin Nichols

Planting Implementation & Management: Communicating with the Client

- Evaluating plant selection and habits while considering implementation practices and management. Such as, selection of certain plants' sizes or from seed done based on the plant's cultural and growth habits; when to plant certain types of plants to ensure viability and health.
- How to convey this information to a client? How to choose plant material that will help to fulfill sustainable results, which includes clients' expectations.
- How do the long-term management practices impact the budget, expectations and environment of soils, water, erosion and so forth?

3:00-4:30, Deb Perkins

Building a Sustainable Design Plan with your Client

- Developing a questionnaire for initial site and consultation visits with new client.
- Evaluate criteria at the site; topography, existing vegetation, habitat inventory, soils etc. and how that affects design decisions.
- Identify realistic goals or opportunities where cultural lifestyles can coordinate and interact with ecological processes. How is the land able to provide sustenance for both people and nature?
- Discussion on zones of property relating to sustainable approach, such as where to spend the energy and money and how much of it with timeline considerations.



Agenda: Day 3 (Track 2), October 23, 2019
Organic Lawn and Turf
NOFA Accreditation Course in Organic Land Care
Portland, Maine

9:00-9:30 AM, Jesse O'Brien

Intro to Turf

- Understand the differences and special considerations for an organic vs conventional lawn/turf
- Learn about inputs required in lawns and turf and the maintenance requirements of high-use fields

9:30-10:15 AM, Jesse O'Brien

Grass and Seed Selection

- Be familiar with the strengths and weaknesses of various grass types
- Be able to identify best grass types and seed mixes for specific uses in lawn and turf

10:15-11:15, Jesse O'Brien

Organic Nutrition for Turf

- Identify which organic products can be used as effective nutrition inputs
- Understand the role of soil nutrition on lawns and turf
- Identify and diagnose nutritional deficiencies and how to remedy those issues
- Be able to develop a soil nutrition management plan for lawns and turf.

11:15-11:45 AM, Jesse O'Brien and Chip Osborne

Open Discussion

11:45-12:30 PM, Lunch

12:30-1:45 PM, Chip Osborne

Soil Chemistry, Texture, and Biological Life

- Learn about chemistry of soil, particularly in lawn and turf, and the importance of texture
- Understand the biology in turf soil what types of biology indicate a healthy soil
- Learn the consequences of high use turf on soil health and how to alleviate symptoms of high-use turf

1:45-2:45, Chip Osborne

Insects, Weeds, and Disease

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

2:45-3:15, Chip Osborne

Maintaining Soil structure

- Learn about chemistry of soil, particularly in lawn and turf, and the importance of texture
- Understand the biology in turf soil what types of biology indicate a healthy soil
- Learn the consequences of high use turf on soil health and how to alleviate symptoms of high-use turf

3:15-4:00, Chip Osborne

Cultural Practices

- Learn about proper mowing, watering, seeding, fertilizing, composting, and compost tea applications in lawns

4:00-4:30 PM, Jesse O'Brien and Chip Osborne

Open Discussion

9:00-11:00 AM, Trevor Smith

Stormwater Management

- 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
- Select appropriate planting materials and mulches
- 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

11:00-11:15 AM, Break

11:15-12:45 PM, Alicyn Smart

Disease Control and Management

- 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

12:45-1:30 PM, Lunch

1:30-3:00, Gary Fisch

Pest Management

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

3:00-4:00, Frank Crandall

The Business of Organic Land Care

- 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

4:00-4:30, Exam Review

4:30-5:30, Exam