



Designing with Native Plants

Overall Objectives of Native Plant Trust's Online Courses:

- Provide students a series of short modules (usually 5-15 minutes or less), which cover a specific topic related to plant science in an engaging, creative, and concise way.
- Each module conveys the basic fascination of plants and their environment, but also gives very practical, hands-on examples of why it's important to understand more about plants and how such understanding can be applied in important ways to every-day garden maintenance and garden design.
- Courses are not graded, but successful completion of this course will earn 1 elective credit toward a Certificate in either Field Botany or Native Plant Horticulture and Design through the Native Plant Trust. Students should complete all activities in order to receive credit.

Structure of the Course:

The course is five units. The course format enables students to complete units at their own pace. All materials and assignments are accessible on the Moodle website on the first day of the course. From past course student feedback, we estimate that each unit's activities should take 3-5 hours total to complete.

We recommended that you complete the materials in the order in which they are presented. You can always revisit older material. Click on the titles of the activities to access them (or the icons to the left). As you complete each activity (at least viewing them, or in the case of Discussion Forums, posting to them), the course will automatically check off that activity as done.

First Thing to Do in the Course:

View the Tutorials on "How to Use Moodle" and "How to Contribute to Discussion Forums" on the Introduction webpage.

This course offers several ways in which students can continually communicate with staff and with each other:

- **News Forum:** Offering course news and announcements from the Society
- **Plant Chat:** A discussion forum for sharing plant-related resources; students can post links, videos, articles, and event notices here. General questions, thoughts, and ideas about plants or this course are also welcome.
- **Help Forum:** Here, you can contact staff and your classmates for help with any aspect of the course you find difficult, including technical issues, problems interpreting assignments, etc.
- Students can always communicate with staff via email at education@newenglandwild.org.



Activities for Introduction to Designing with Native Plants:

Unit 1: Introduction

Here is all you need to know about how to get the most out of Introduction to Designing With Native Plants, plus some background on the course creation. You'll learn tips for identifying plants in the field, an important skill for understanding their distribution in nature and potentially in your garden. We'll discuss the value of choosing native plants. Noted landscape designer, Thomas Rainer, will discuss the aesthetics and ecology of gardening with native plants.

General Background on the Course – Everything you need to know

Assignment 1: Please Introduce Yourself – Practice using a Discussion Forum and introduce yourself to your classmates

Tutorial – How to Use Go Botany to Identify and Learn About Plants

A Few Questions to Assess Your Current Experience – An informal exercise that provides a baseline for measuring your learning.

How to Use Go Botany to Identify and Learn About Plants – A tutorial on using our plant identification website

Slideshow: An Introduction to Plant Groups – Learn how to recognize general groups of plants

Video: How to Observe Plants Closely – Tips for noticing features of plants in the field

Handout: A Handy Worksheet for Identifying Plants in the Field - Here is a fillable, electronic form that you can print out or fill in on your computer or mobile device in the field or at home

Slideshow: What Is a Native Plant and Why Do We Care? Learn how botanists define the term “native”

Readings: The Value of Native Plants and Alternatives to Invasives

Video: Thomas Rainer Lecture on Gardening with Native Plants

Assignment 2: Go Out and Identify a Native Plant – Share your discovery with the Discussion Forum

Unit 2: Laying the Foundation: Mapping Your Site

Here, you'll use a questionnaire to identify and articulate your goals for your planned garden. You'll look carefully at the overall context of your site to choose a placement for your garden. And you'll explore online mapping resources that help you further understand your site. Based on your goals and the placement you have chosen, you'll learn how to create an informative base map, to scale, of your site.



Slideshow: What Is Sustainable Gardening? Learn the attributes of ecologically healthy gardens
Resource: Useful Books on Garden Design and Growth – A great list compiled by the instructors and past students

Assignment 3: Please Add Your Own Favorite Books – Contribute your suggestions to the Discussion Forum

Questionnaire: Identify Your Goals for Your Garden – Use this handy worksheet, designed by Anna Fialkoff

Slideshow: Choosing a Location for Your Garden – How best to place your garden to meet your goals

Video: Introduction to Surveying and Mapping a Site – Anna Fialkoff and Lauren Weeks explain how to create a map of your site, using Lincoln Station Park as an example

Video: More Demonstrations of Site Survey and Basemapping – Another short primer on mapping a different site

Video: Translating Your Field Sketch into a Base Map – Anna shows how to create an accurate map to scale

Assignment 4: Make a Basemap of Your Site – Post your map to the Discussion Forum

Unit 3: Assessing Your Site Conditions and Choosing Your Design Style

Now that you've chosen a specific site and size for your planned garden, you'll assess the conditions of that site in more detail. Learn how to evaluate your soils--the foundation of your garden. Next, you'll get an introduction to designing gardens. You'll visit a nearby garden to evaluate what you like and don't like about its design(s). And you'll create a concept diagram that will bring your base map to life using your own creativity.

Slideshow: Assessing Your Site Conditions – Learn about soils, moisture, and light

Reading: Assessing the Soils of Your Site – How to determine the nature of your soils

Video: Assessing Your Garden's Soil Texture – Mark Richardson shows how to perform the “mason jar test.”

Resource: Labs That Can Test Your Soils – A guide to Extension Programs in the Northeast

Resource: Mapping the Larger Context of Your Site – Visit state mapping sites to explore features of your chosen site.

Assignment 5: What Is the Texture of Your Soil? Conduct the “mason jar test” on your own soils and report your findings to the Discussion Forum

Slideshow: An Introduction to Garden Design – Anna Fialkoff takes us on a tour of a variety of garden design styles

Video: Some Lovely Garden Ideas – A short, inspirational video to spur your creativity

Resource: Some inspiration from Frederick Law Olmsted – Provided by former student, Joe Barrett

Assignment 5: Visit a Public Garden Near You for Inspiration – Take a trip to a local garden (even if it's winter, there will things to see!) and note what you like and don't like using a Garden Questionnaire

Assignment 6: Share Your Garden Visit – Report your trip to the Discussion Forum

Slideshow: Creating a Concept Diagram – Anna Fialkoff explains how to lay out the basic form of your garden

Assignment 7: Please Share Your Concept Diagram – Post it to the Discussion Forum



Unit 4: Choosing Plants for Your Garden

Here, you'll begin to think about your garden as an ecosystem that interacts ecologically with other organisms and land features on the landscape. Become an astute observer of the wildlife that uses plants. Learn how to choose plants that will fit best into the community you are creating, given their preferences for particular climates, light environments, and soil conditions. Come up with a plant palette that will provide visual interest and ecosystem services throughout the year!

Video: Choosing Plants and Structures That Benefit Wildlife – A short Growing Wisdom video with former Horticulture Director at the Society, Scott LaFleur

Assignment 8: Go Out and Identify Some More Plants in the Wild – Practice your Go Botany skills

Reading: Plants and Their Pollinators – Learn about plant pollination strategies at this U. S. Forest Service website

Slideshow: How Are Insect Pollinators Doing? - Learn why pollinators are in the news these days

Reading: More Information on Systemic Pesticides – The role of chemical pesticides in pollinator decline

Resource: Places to Buy Pesticide-free Plants – Purchase the healthiest plants for your garden

Reading: Why To Select Plants Grown from Seed – The advantages of seed-grown plants over vegetatively propagated ones

Resource: Building a Bird-Friendly Garden – Some attributes that will attract a diversity of birds

Resource: Wildlife You May Not Want to Attract to Your Garden – How to deter deer and ticks

Resource: Find the Plants Best Suited to Your Site and Goals – A set of plant lists for a range of garden site conditions

Video: Selecting Your Plant Palette – Anna Fialkoff and Mark Richardson take us on a tour of their favorite plants at Garden in the Woods

Assignment 9: Post Your List of Plants to Plant – Use the Discussion Forum

Unit 5 - Creating a Planting Plan and Installing Your Garden

Now, you'll really dig in with design. You've carefully chosen your plant palette, so you can create a planting plan and finalize plans for your great garden. You also get tips on how to choose the healthiest plants at a nursery. Horticulture staff will demonstrate how to plant those trees, shrubs, and herbaceous species in such a way that they will thrive for years.

Slideshow: How To Create a Planting Plan – You've selected your plant palette; now, learn from Anna how to turn your concept diagram into a blueprint for your garden

Resource: Planting Plan Software – Prefer to use a computer over a pencil? Here are some software programs you could use

Assignment 10: Share Your Planting Plan – Get feedback from Anna and your classmates

Slideshow: Choosing Your Plants at a Nursery – Mark Richardson explains how to select the best plants given your site conditions, and how to correct common problems



Video: Selecting Your Tree at a Nursery – Mark Richardson explains the features (good and bad) to look for when choosing trees

Video: How to Plant Your Tree – Mark Richardson demonstrates the right way to establish a tree so that it grows up healthy and strong

Video: Native Plant Propagation at Nasami Farm – Former intern, Emily Davis, shows us some of the herbaceous plants being propagated at our native plant nursery

Video: Planting Small Shrubs and Herbaceous Plants – Mark Richardson demonstrates how to plant shrubs and plugs of herbaceous plants

Slideshow: How Did the Lincoln Station Garden Turn Out? We revisit Lincoln Station Park to see how the plants are doing