



SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Northeast Soil Survey Region

Project Partnerships Support Integrated Soils, Vegetation, and Forest Mensuration Surveys in Southern New England

Purpose

Scientists from the Northeast Soil Survey Region, Rhode Island NRCS, Connecticut NRCS, Rhode Island Department of Environmental Management, Forest Service (State, Private, and Tribal Forestry), Northeast New York Service Area, City of Providence—Providence Water, and the University of Rhode Island have partnered together to conduct locally integrated soils, vegetation, and forest mensuration surveys. Forest mensuration surveys involve measurement and quantification of trees and forests. This partnership will provide data and information to the land managers in southern New England interested in challenges and benefits of forest stewardship and forestry practices with further implications for wildlife habitat management.

Background

Two programs, the NRCS Ecological Site Inventory Program and the Forest Service Terrestrial Ecological Unit Inventory, provide the essential protocols for plant species data collection, maps, and descriptions as well as a catalog of interpretations to describe the essential nature, dynamics, and distribution of ecosystems, in general.

Prior to the field season, partners conducted several meetings that resulted in the following:

1. An agreement upon common protocols integrating the sampling of soils, vegetation, and land use history;
2. A stratified-sampling strategy—currently focusing across sites of well-drained soils throughout Rhode Island and eastern Connecticut; and
3. An informal data-sharing agreement to warehouse data in the participating agencies' appropriate databases, including the National Soils Information System, Ecosystem Dynamics Interpretive Tool, Dirt to Trees to Wildlife, and Terrestrial Ecological Unit Inventory.



During this field season, several representatives from NRCS, the Forest Service, the Rhode Island Department of Environmental Management, and the University of Rhode Island participated in 20 integrated plot surveys conducted or ongoing in Rhode Island and eastern Connecticut (fig. 1).



Figure 1.—As part of the forest survey, Dr. Nels Barrett, senior regional ecologist (Northeast Soil Survey Region), measures the diameter of a white pine tree trunk.

Key Outcomes

The fundamental information provided by these integrated soils, vegetation, and forest mensuration surveys is necessary for a wide range of activities, such as project planning, forest resources and ecosystem assessments, monitoring, analysis, research, and management.