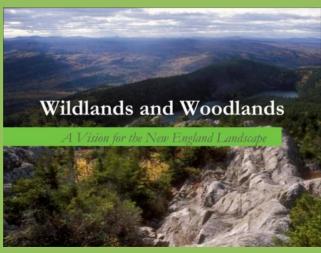
Harnessing Conserved Land for Science and Adaptive Management



David A. Orwig







W and W framework of actively managed woodlands and wildland reserves provides major research opportunities

Documenting current forest structure & long-term dynamics of diverse forests Evaluating the consequences of diverse management compared to reserves

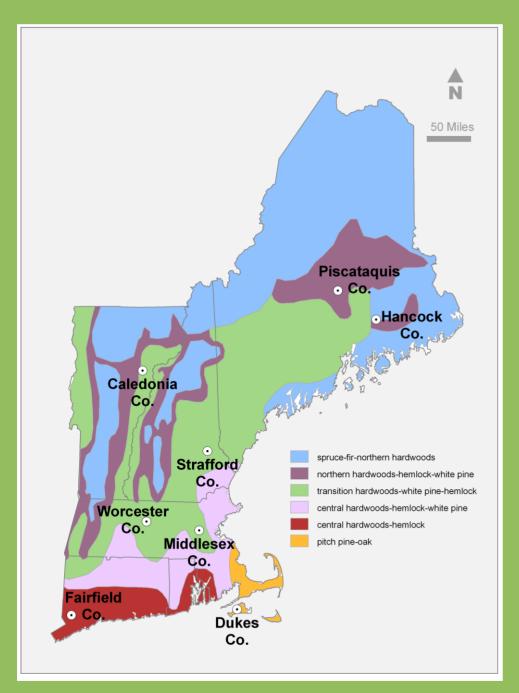
Not a new concept, but few examples exist that explicitly compare managed and unmanaged forests

We initiated a wide-ranging forest monitoring program to be *used by* and *Attract participation from* a diverse array of landowners, organizations, and Researchers so that they can provide the rigorous long-term data needed





Emerging W & W Stewardship Science network 8 pilot sites, diverse partners: collaborations



8 pilot sites, diverse partners: collaborations between private citizens, towns, land trusts, conservation organizations, foundations, universities, and state governments.

The sites represent a wide range of sizes and forest types located in remote wildlands to rural and suburban woodland locations. Varied objectives

All used W & W science protocol

Over 450 plots established!

Recent Activity

Presented poster at Ecological Society of America Meeting in August

Stewardship science talk at upcoming Land Trust Alliance Rally

Recently held a W & W Stewardship Science workshop at Highstead

Discussed protocol, aided participants in plot establishment and sampling

Citizen Science can be a benefit to Conservation efforts





W & W Stewardship Science Web site: http://harvardforest.fas.harvard.edu/wwscience/

Wildlands and Woodlands Stewardship Science

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Wildlands and Woodlands Stewardship Science





Why Stewardship Science?

There are remarkably few rigorous, long-term evaluations of how forestry and conservation management practices affect forests in the eastern United States.

Managers frequently conduct operations to control forest structure or composition, improve wildlife habitat, remove invasive species, or influence biogeochemical processes without comparing their results with unmanaged areas nearby. Conversely, research projects in unmanaged areas are seldom coupled for analysis with adjacent, actively managed lands.

What is Stewardship Science?

Interested? Get Involved

Stewardship Science is just one part of the <u>Wildlands and Woodlands</u> forest conservation vision for New England. With the Stewardship Science initiative, we have created a simple, easy-to-use protocol to establish permanent, paired research plots in conserved woodlands and wildlands. Results from these studies can shed light on the long-term impacts and effectiveness of management practices that seek to:

- · promote certain characteristics (e.g. specific species, assemblages, or structure, etc.)
- enhance ecosystem services (e.g. carbon sequestration, water production, etc.)
- vield desired products (e.g. biomass, quality timber, etc.)

The project not only provides valuable ecological and silvicultural insights, but is also an exciting outreach tool for engaging students and the public in the importance and enjoyment of ecological research. All involved gain longer-term perspectives on ecological processes, land stewardship, and land conservation.

Ongoing Work

Over the past 2 years, a growing number of groups throughout New England have begun employing the Stewardship Science approach to enhance a wide variety of scientific, educational, and management objectives on



Serve as valuable reference for Initiating plots- step by step methods and manual; example data sheets

Data submitted from groups across New England and stored

Highlight the growing network of users In NE advancing scientific, educational and management objectives

W & W Stewardship Science paper *Forthcoming*!