

# Ecological Forestry Workshop

Incorporating principles of natural disturbance and stand dynamics into silviculture

Monday, November 16 and Tuesday, November 17, 2009  
Rutgers University's EcoComplex, Columbus, New Jersey

## Day 1: Monday, November 16

- 7:45am – 8:30am**      **Registration and Continental Breakfast**
- 8:30am – 9:00am**      **Welcome and Introductions**  
Michael Catania, President Conservation Resources Inc.  
Workshop Introduction and Overview
- 9:00am – 10:00am**      **Keynote Lecture**  
Jerry Franklin, University of Washington  
Incorporating Ecological Forestry Principles into Stand Management
- 10:00am – 10:15am**      **Break**
- 10:15am – 11:00am**      **Keynote Lecture Continued**  
Jerry Franklin, University of Washington  
Ecological Forestry in a Landscape Context: Matrix Management
- 11:00am – 11:45am**      **Audience Question and Answer**
- 11:45am – 12: 45pm**      **Lunch (provided)**  
Amy Cradic, Asst Commissioner of Natural & Historic Resources, NJDEP  
The Role of Ecological Forestry in Meeting New Jersey's Ambitious  
Climate Change Goals
- 12:45pm – 1:45pm**      **Perspectives on Fire Adapt Ecosystems**  
Bob Mitchell, Jones Ecological Research Center
- 1:45pm – 2:15pm**      **Audience Question and Answer**
- 2:15pm – 2:30pm**      **Break**
- 2:30pm – 3:30pm**      **Habitat Considerations**  
Nathan Klaus, Georgia Department of Natural Resources
- 3:30pm – 4:00pm**      **Audience Question and Answer**
- 4:00pm – 4:30pm**      **Overview of Field tours and End of Day One**  
Bob Williams, LandDimensions Engineering Inc.
- 6:30pm**      **Dinner-Networking and Informal Discussions**  
*(Dinner is include for those registered for the field tour during Day 2)*

**Day 2: Tuesday, November 17, 2009**

**7:00am – 7:30am      Registration and Continental Breakfast**

EcoComplex

**7:30am – 8:00am      Review Concepts and Plan for the Day**

**8:00am – 8:15am      Board Buses for Field Sites**

**8:15am – 11:30am    Field Sites**

Site 1: Pitch pine/oak stand that was commercially thinned in 2007. Discuss ecological forestry concepts in a field context.

Site 2: Pitch Pine / Shortleaf stand with 50 year history of prescribe fire. Discuss natural regeneration and tree retention.

**11:30am – 12:30pm    Lunch (provided)**

Site 3: Atlantic white cedar restoration on Great Egg Harbor River

**12:30pm – 2:50pm    Field Sites**

Site 4a: Pine/Oak Shortleaf Pine/Pitch Pine growing in association with tree oaks. Discuss pitch pine regeneration and mid-story shortleaf pine thinning.

Site 4b: Older age class short leaf/pitch pine. Discuss hardwood removal, pre-commercial thinning of mid-story overstocked shortleaf pine and return of fire.

Site 5: Visit young pitch pine / shortleaf pine naturally regenerated after gypsy moth mortality. Discuss fire intensity of the various prescribed fire treatments, and future tree regeneration issues.

**5:00pm                      Return to EcoComplex**

This workshop builds upon an ongoing training program on ecological forestry organized by the Conservation Forestry Network, US Forest Service Northern Research Station, Conservation Resources Inc, NJ Pinelands Commission, NJ Audubon Society, LandDimensions Engineering Inc, Forest Guild, the New Jersey Chapter of the Society of American Foresters , and numerous other partners. The Conservation Forestry Network aims to improve forest practices across North America by bringing together experts, land managers, stakeholders and decision makers to learn, shape, and share innovative practices across the diverse range of American forests and communities.

## Ecological Forest - Field Tour Schedule

### Site One:

Visit a pitch pine/oak stand that was commercially thinned in 2007. This was a 50 year old stand that has been fire excluded its entire life. Fire has been returned in March of 2009. Participants will evaluate the response of the forest and long term trajectory of these stands. The treatment is 110 acres in Burlington County, NJ. Fire excluded unthinned stands remain immediately adjacent. (*1 ¼ travel time – 45 min discussion time*)

### Site Two:

Pitch Pine / Shortleaf stand with 50 year history of prescribe fire. Some over-story 100 year old plus. Recent stand history includes a commercial selection harvest in January, 2006, prescribe burn post treatment 2006 and March, 2009. Two age classes with a shrub tree oak component. Discuss history, results and future as well as natural regeneration process (Stoddard - Neel Approach - North) Retaining oldest trees in stand. (*20 min travel – 45 min discussion time*)

### Lunch Site:

Atlantic white cedar restoration on Great Egg Harbor River

This is a forested wetland site that had hardwood and brush harvested that successfully replanted back to native Atlantic white cedar four years ago. We'll see both natural and planted regeneration, as well as discuss remnant, older age class groups that were protected and retained. Atlantic white cedar is a globally-threatened forest ecosystem. (*1 hour travel – 45 min discussion*)

### Site Three (A):

Atlantic County, NJ - Pine/Oak Shortleaf Pine/Pitch Pine growing in association with tree oaks. Evaluate selection pine over-story removal next to selection oak removal. Discuss pine regeneration and mid-story shortleaf pine thinning. Target is a mix maturing stand with multiple age classes. The site experienced harvests, pre-commercial thinning, and return of fire throughout 1990's and 2000's. Discuss results and forest structure after 18 years of management. (*½ hour travel – 45 min discussion*)

### Site Three (B):

Older age class short leaf/pitch pine. 100 year plus - Two age classes. Discuss hardwood removal, pre-commercial thinning of mid-story overstocked shortleaf pine and return of fire. See both treated and untreated conditions. (*10 min travel – 45 min discussion*)

### Site Four: (If Time Permits) (Wrap-Up)

Visit young pitch pine / shortleaf pine naturally regenerated after gypsy moth mortality - harvest 35 years ago. Shortleaf pine legacy trees were retained in this 100 year old stand. The stand has had pre-commercial thinning and return of fire. Discuss six (6) year old treatments, recent burn results and untreated stands. Discuss future ecological objectives and timber objectives. Discuss fire intensity of the various prescribed fire treatments, and future tree regeneration issues.