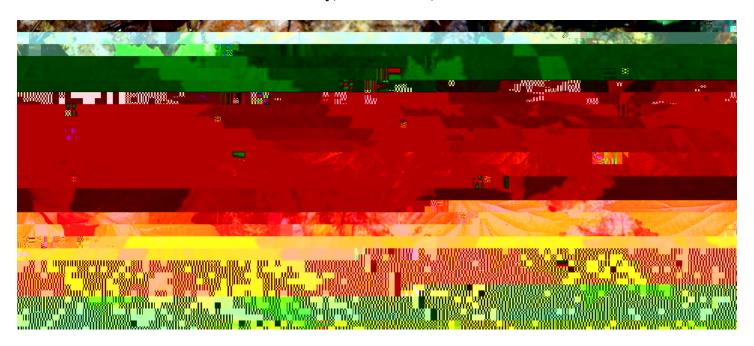
# 25 Years of Forest Ecosystem Monitoring: Trends, Patterns, and Lessons Learned

**Davis Center, University of Vermont** 

Friday, December 11, 2015











# About the 2015 Conference

This year, the theme for the conference is: 25 Years of Forest Ecosystem Health Monitoring: Trends, Patterns, and Lessons Learned

#### 8:15 9:00 Registration (Livak Fireplace Lounge)

## 9:00 9:10 Host's Welcome and Introductory Remarks (Sugar/Silver Maple)

Nancy Mathews, *Dean of the Rubenstein School of Environment and Natural Resources, University of Vermont* 

Jennifer Pontius, Principal Investigator, Vermont Monitoring Cooperative

#### **9:10 11:40 Plenary Session**

#### Long-term trends in the forested ecosystem

Fast-paced presentation of long-term trends in key ecosystem processes and components. Moderator: Steve Sinclair, Director of Forests, VT Department of Forests, Parks and Recreation

Tree Pests & Damage Barbara Schultz	Trend	Tree Growth Trends Paul Schaberg		Phenology Josh Halman		Forest Fragmentation <i>Michael Snyder</i>		
Coffee Break								
Climate <i>Lesley-Ann</i> <i>Dupigny-Giroux</i>	Acid Deposition <i>Rich Poirot</i>	Qua	ter	Mercury Jamie Shan		Soils Scott Bailey		
Coffee Break								

--- Coffee Break ---

Vermont's Big

### 12:00 1:00 Lunch (Sugar/Silver Maple)

#### 1:00 - 2:40 Contributed Presentations (Rooms listed below)

Learn about new and ongoing research, monitoring, conservation and outreach initiatives related to the forested ecosystem through several concurrent sessions of presentations.

- Silver Maple
- Livak Ballroom
- Jost

The full schedule is listed at the end of the agenda, and the abstracts are available at the registration desk.

#### 2:40 2:50 Coffee Break (Silver Maple)

#### **Concurrent Working Session Descriptions**

#### Class I Wetlands - Planning Public Outreach and Organizing for the Greatest Wetland Protection-By Invitation-

Class I Wetland designation provides the strongest protection for VT's wetlands. A Class I designation requires compelling public support, so how do we plan for successful designations for VT's most valuable wetlands? The session will start with a background on Class I wetland designations and an overview of the new process the State of VT has been developing to identify these wetlands, and then move on to the question of how we can get the public involved with the process in a positive way. In this working session we will discuss: where's the best place to start, what's the best way to organize this process, how do we get the word out, and how do we find our strongest partners.

Organizer: Danielle Owczarski, VT Department of Environmental Conservation

Room: Boulder Society

#### Exploring a Forest Indicators Dashboard -Open to All-

We explore the utility of using a coarse assessment of multiple forest health metrics to summarize the relative condition of Vermont's forests compared to historical records. This will include a discussion of additional data sets for inclusion, potential uses of such a tool, potential drawbacks of summarizing a complex system in a simple metric, and outlets for dissemination.

Organizer: Jennifer Pontius, Rubenstein School of Environment and Natural Resources and US Forest

Service Northern Research Station

Room: Mildred Livak

#### Forest-Lake Connections -Open to All-

A great deal of limnological research in Vermont has focused on agricultural impacts on Lake Champlain, however many of Vermont's smaller lakes exist in predominantly forested catchments, which may be experiencing different stressors as a result of changes in climate, atmospheric nutrient and acid deposition, and forest ecosystem changes. For example, many lakes in forested catchments in Sweden and Canada have experienced "browning" as a result of increasing DOC concentrations, reducing lake productivity and altering the balance between carbon sequestration and carbon release. Lakes may also act as "climate sentinels," providing integrated information about climate effects on watershed processes. In this session, we will bring together researchers in forestry, hydrology, and limnology to address the availability of complimentary datasets in Vermont lakes and forests and identify sites where increased data may lead to valuable insights about forest and small lake ecosystems.

**Organizer**: Peter Isles, Rubenstein School of Environment and Natural Resources

Room: Frank Livak

# Incorporating Forest Management And Stakeholder Expertise Into A Vermont-Specific Forest Management Decision Support Tool -By Invitation-

The Forest Health and Climate Research Group in the Rubenstein School at the University of Vermont is developing a tool to inform forest management in Vermont under conditions of global change. This tool is intended to be used by forest managers and stakeholders. It will be different from coarser, regional scale tools such as Tree Atlas because it will be Vermont-specific and incorporate forest management activities. The purpose of the working session is to gather input from potential users of the

tool.

Organizer: Clare Ginger, Tony D'Amato, Mary Sisock, Rubenstein School of Environment and Natural

Resources

Room: Chittenden

#### Monitoring Earthworm Invasions into Northern Hardwood Forests -Open to All-

Earthworm invasions represent a serious threat to forest health. However, resources are scarce to detect affected ecosystems and judge the degree of damage done. Volunteer networks of citizen scientists are probably the only practicable way to assess and monitor the state of the invasion in northeastern forests. In this workshop you will learn the telltale signs of earthworm invasions and how you can contribute to public awareness of this invasion and inform the forest and ecological science community by utilizing social media.

**Organizer:** Josef Gorres and Ahmed Hamed, University of Vermont

Room: Spruce

#### Overcoming the Barriers to PPSR -Open to All-

PPSR is the acronym for Public Participation in Scientific Research, otherwise known as citizen science. As citizen science has grown in popularity, some professional scientists are skeptical of the public's scientific potential. Additionally, the excitement behind the crowdsourcing trend has led to projects without support from professional scientists and with data being collected without a defined and relevant purpose. In this working group, we'll look at some exemplary projects, hear about their stumbling blocks and tips for success, as well as identify potential future projects where PPSR could be used effectively.

Organizer: Bridget Butler, Bird Diva Consulting/Cold Hollow to Canada

Room: Jost

#### Vermont Water Monitoring Council Meeting -Open to All-

The Vermont Water Monitoring Council serves to complement VMC's statewide work by convening a broad stakeholder group for whom the availability of water quantity and quality data is of significant interest. During this session, the Council will meet to discuss: 1) Recent developments regarding the State's LaRosa Partnership Program, including a presentation from a UVM Consulting Team on proposed modifications to the program; 2) updates from USGS and EPA on current initiatives (invited content will include the National Aquatic Resources Survey of EPA, and USGS' proposed High-Elevation monitoring network); 3) updates from the State regarding how the new Vermont Clean Water Act will influence water quality monitoring in VT; 4) roundtable discussion on monitoring successes from 2015.

Organizer: Neil Kamman, VT Department of Environmental Conservaew

