

# Forests and Climate Change: Creating Climate-Smart Woodlands

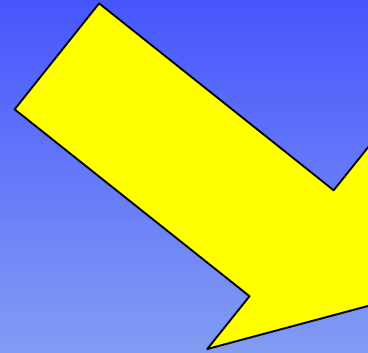
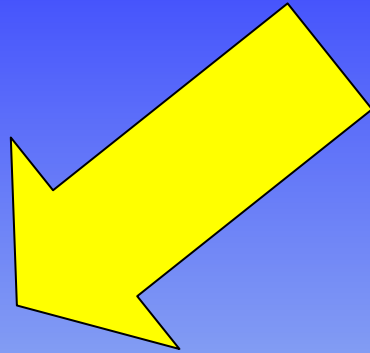
**Kennebec Woodland Partners**

**October 21, 2010**

**Ethel Wilkerson**



# Climate Change

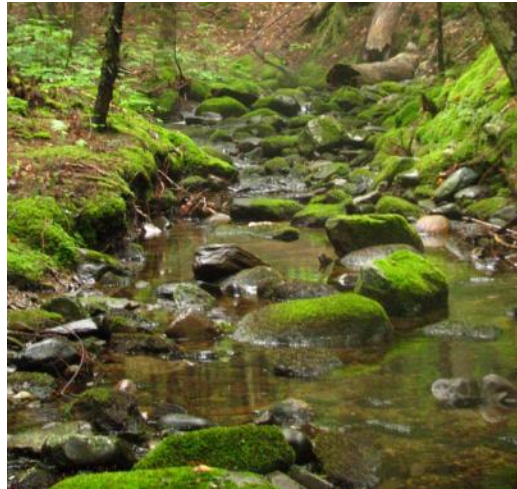
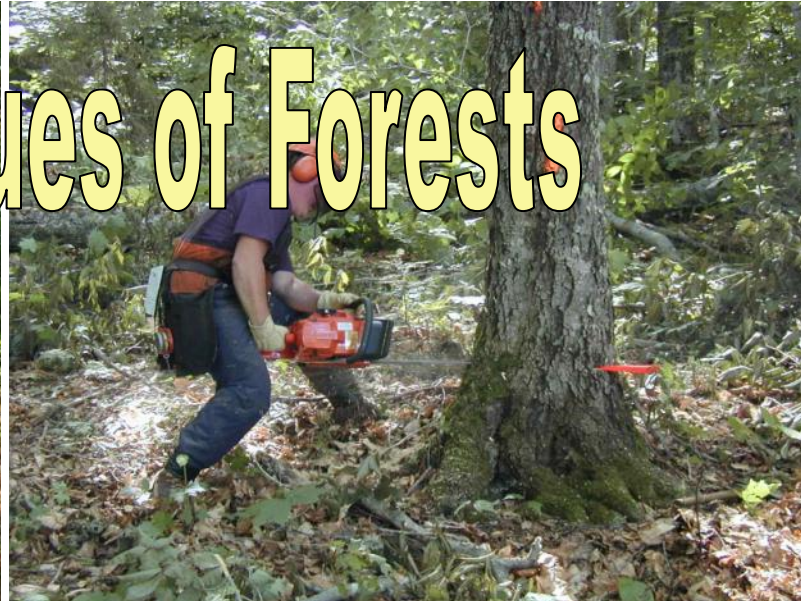
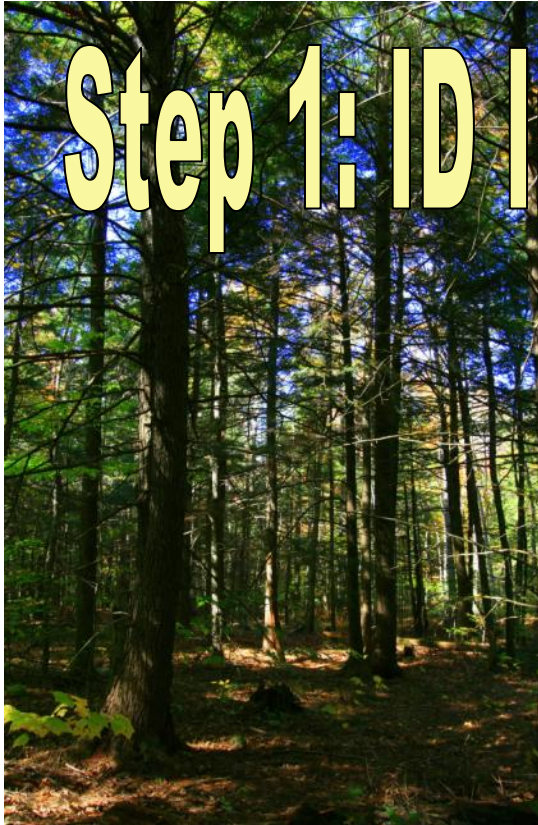




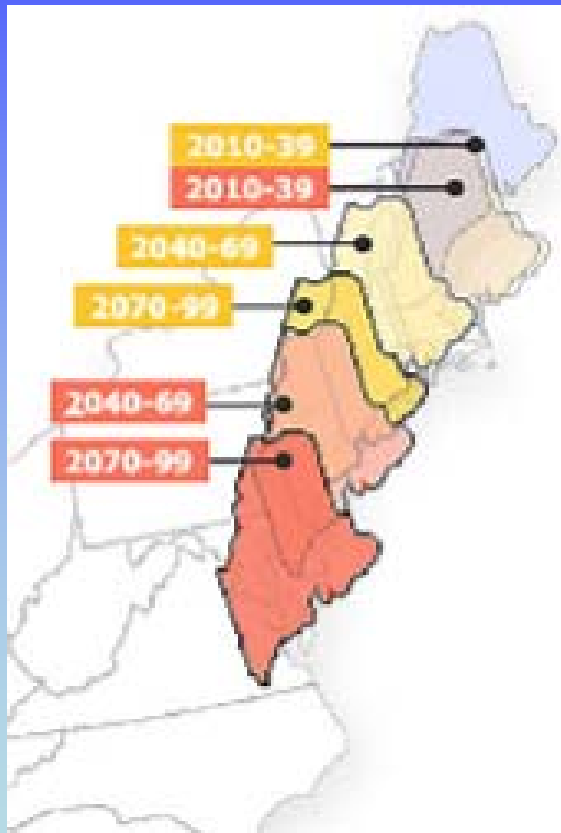
# Key Steps

- 1) What values do you want to sustain?**
- 2) How are these values vulnerable to climate change?**
- 3) What can we do about it?**

# Step 1: ID Important Values of Forests



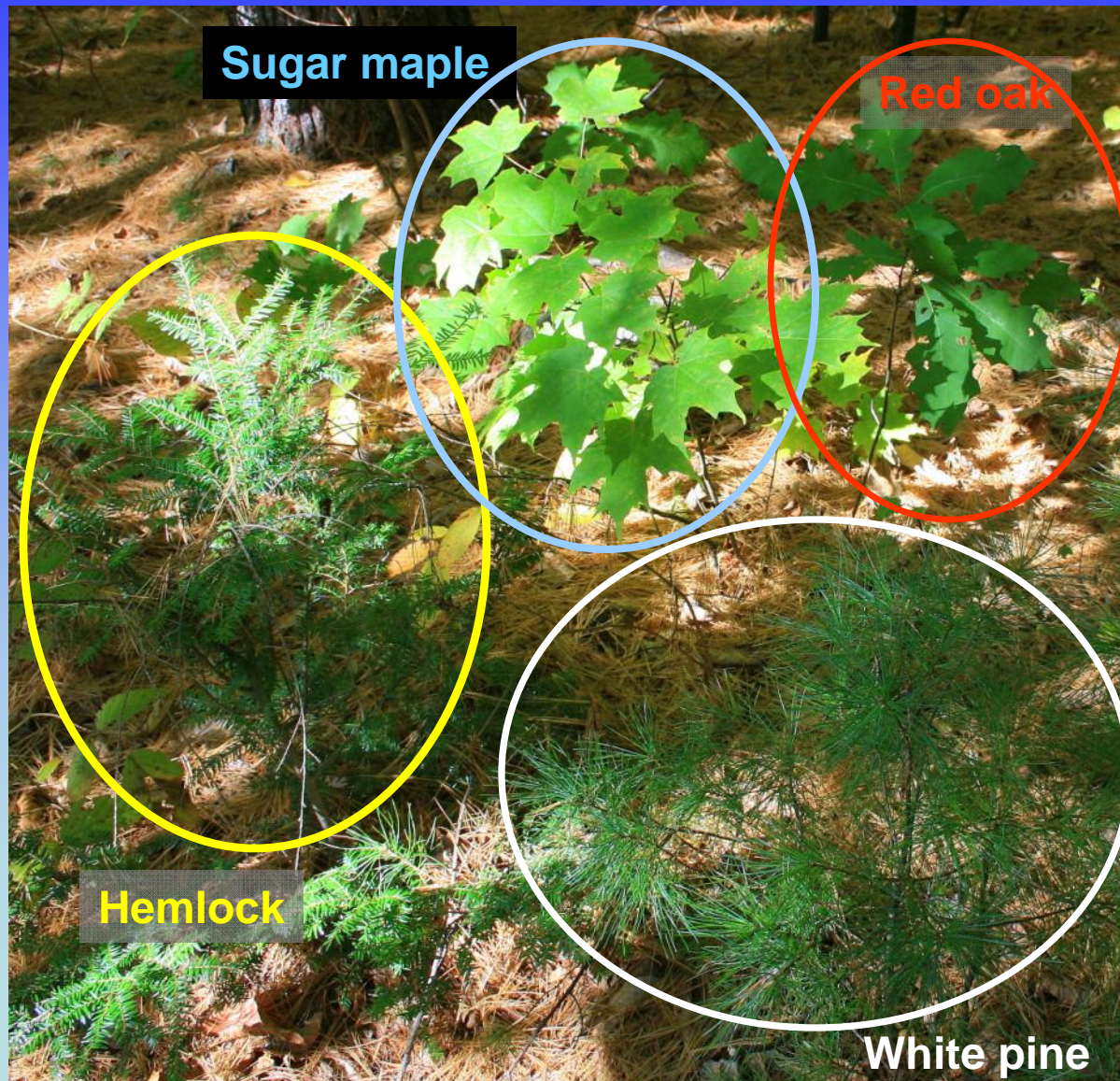
# Step 2: Vulnerability Assessment



# Step 3: Actions

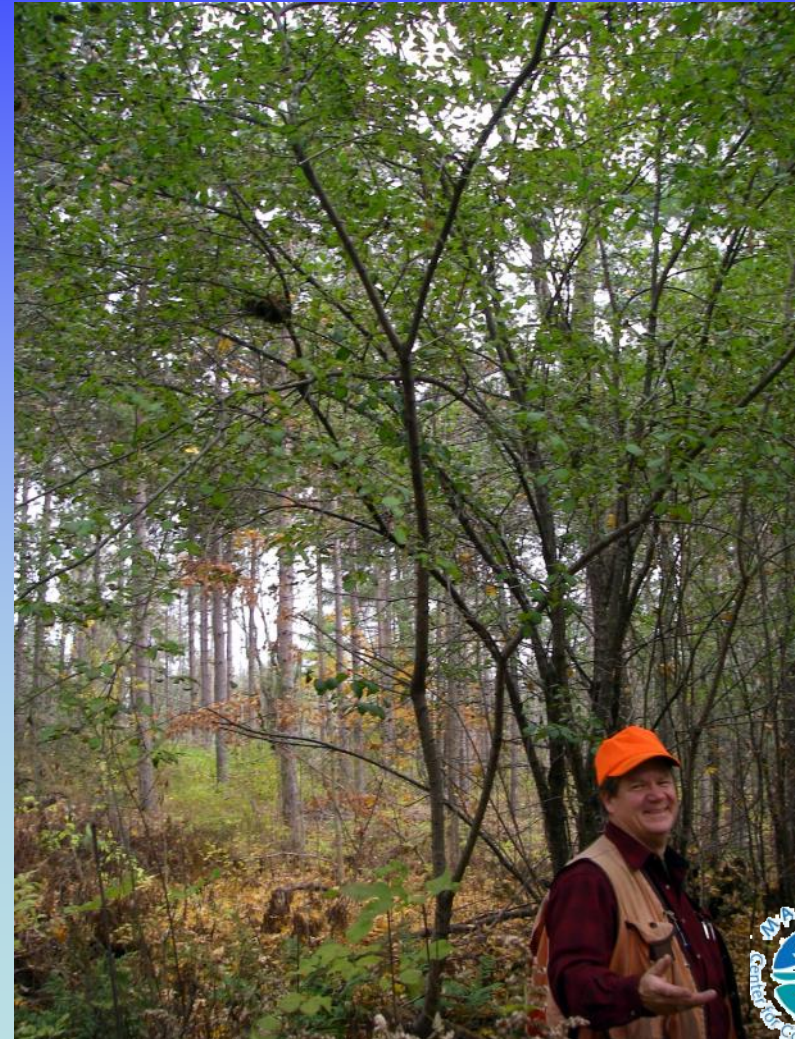


# Manage for the likely future of the forest

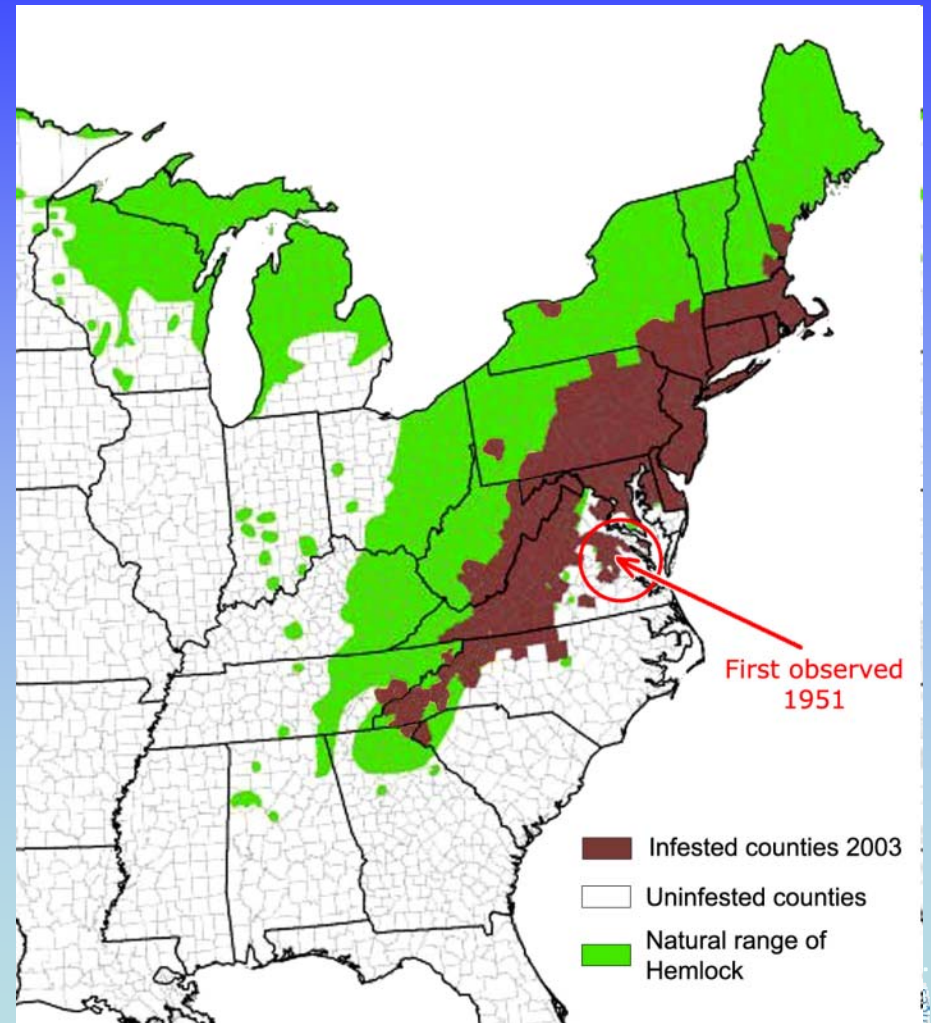
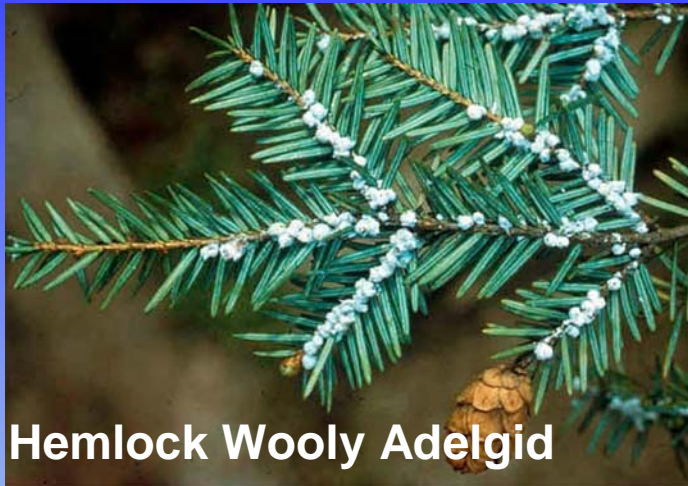




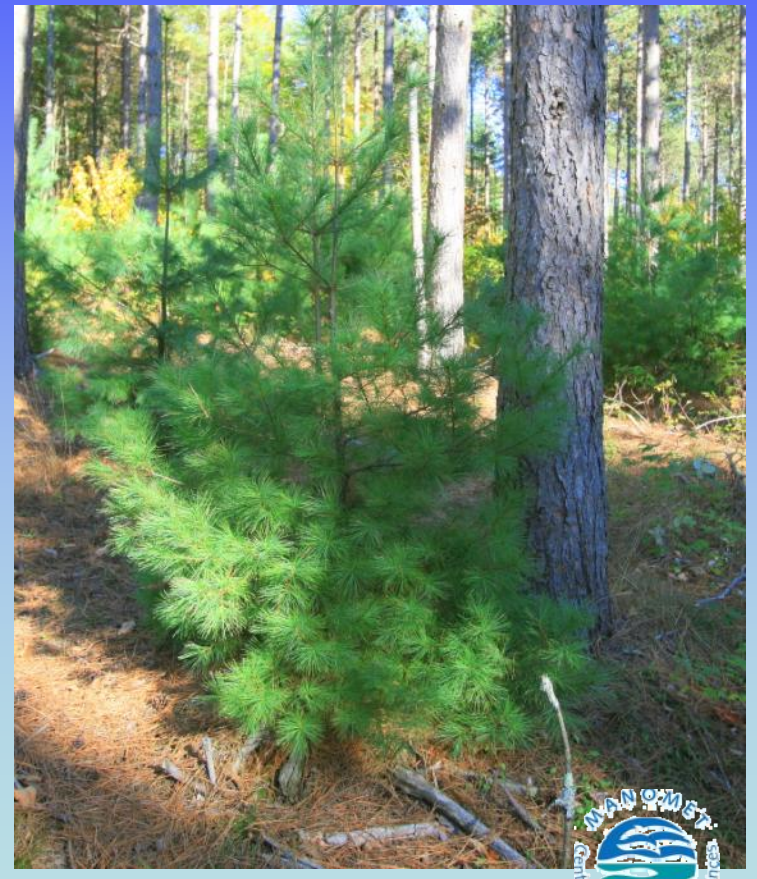
# Regenerate native species



# Track new threats



# Diversify species & age classes





## Allen-Whitney Memorial Forest: Climate Change Adaptation Plan

By: Ethel Wilkerson, Hector Galbraith, Andrew Whitman, Si Balch

*Manomet Center for Conservation Sciences*

### Introduction

Working forests are a prominent and important feature of Maine's natural landscapes, and are critical to maintaining the state's natural resources, economy, and social customs. Successful management of these forests has long included minimizing the effects of stressors such as disturbance events, invasive species, and pests. A new and important stressor, global climate change has recently begun to exert its effects on New England's natural landscapes and species and is having local impacts on how Maine's forests grow, change, and need to be managed. To manage these resources successfully, we need to be able to *adapt* our management practices to the changing conditions. From a land management perspective, adaptation to climate change consists of developing strategies and management options that will help land owners and forest managers plan and prepare for the changing climate to ensure that Maine's forests continue to provide benefits for future generations.

Climate change will alter many aspects of forests and forest management, and although managers and landowners cannot control the changes in climate (i.e. warmer temperatures, altered precipitation, etc) we are not helpless in shaping the future condition of our forestland. The goal of climate change adaptation in working forests is not to stop changes in climate or preserve the current composition of plant and animal species as they exist today, but to safeguard the ecological functions and diverse services and benefits provided by forestland. Understanding the potential impacts of climate change on our landbase provides us with an opportunity to modify existing management practices and develop new management strategies to ensure that forestland continues to provide valuable habitat, a sustainable supply of forest products, and a safe and enjoyable place for people to recreate.



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# Coming Soon!!!



# Questions?

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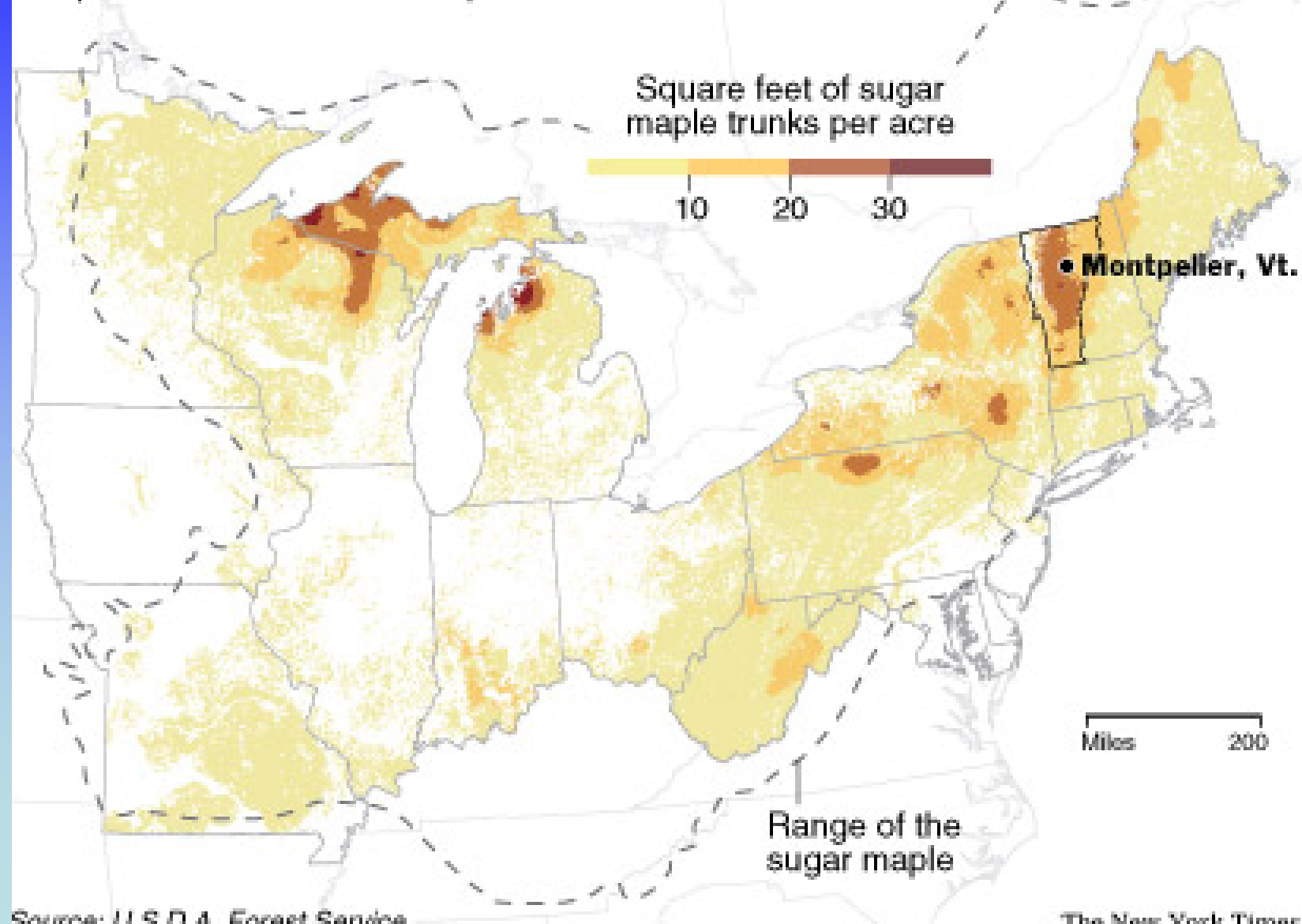


Science at Work  
*for a*  
Sustainable World

Special Thanks:  
Dorr Family Foundation  
New England Forestry Foundation

# Sugar Maple Tree Distribution

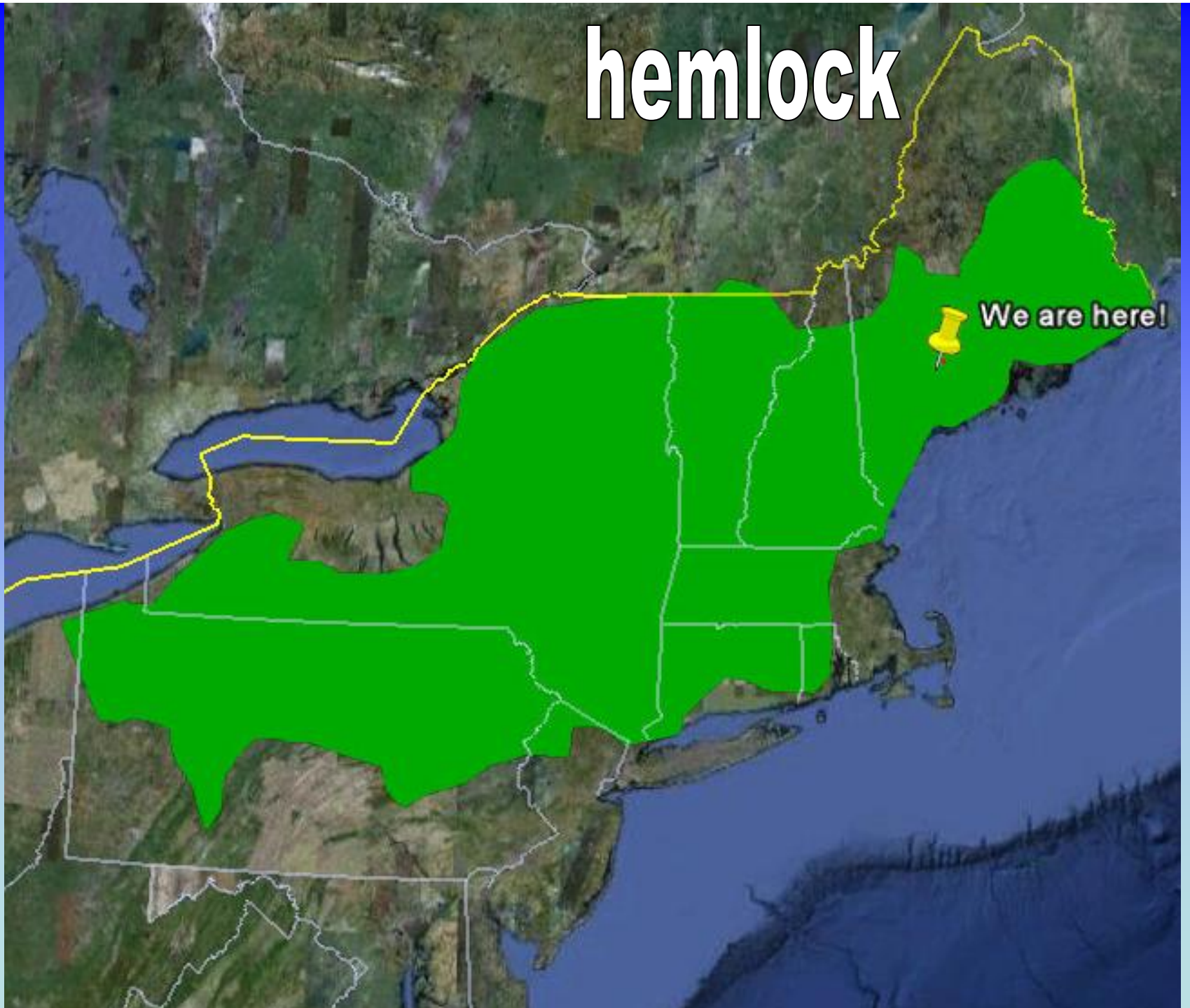
Sugar maple tree sap, which can be processed into syrup, is generally collected when below-freezing nighttime temperatures and mild daytime temperatures cause the sap to flow.



Source: U.S.D.A. Forest Service

The New York Times

# hemlock



We are here!

# Red oak





# white pine

