DEN
The DendroEcological Network

A new online database of tree-ring and ecological information for scientists and managers

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BACKGROUND

The study of tree rings (dendrochronology) provides a powerful tool to understand tree growth and the response of trees to a range of environmental influences (e.g., stand suppression and release, stress response to drought and other disturbances). Although useful, collecting and analyzing tree rings can be time consuming and involve the use of highly specialized equipment (e.g., microscopes, electronic micrometers, etc.) for accurate measurement and interpretation. Foresters and ecologists are often interested in understanding tree growth for many species across varied landscapes – a difficult and expensive undertaking for any one person or group. To overcome these limitations, we created the DendroEcological Network (DEN) (https://www.uvm.edu/femc/dendro) - an easily searchable online database of tree ring and associated ecological data from sites across the northeastern forest. On it users can explore, locate and download dendroecological data by scrolling through regional maps depicting sample plot locations, or toggling through links for data organized by species, states, and projects. Through its user-friendly interface, the DEN provides an open access repository for the discovery, exploration and *sharing* (consider adding your work) of dendroecological data by ecologists, conservationists and managers for evaluations of forest health and productivity.

USE BY SCIENTISTS AND MANAGERS

Allows users to compare growth:
• among species (e.g., which are growing best/worst)
• among sites (e.g., your site versus others nearby or regionally)
• for spatial patterns (e.g., where is growth best/worst)
• for temporal patterns (e.g., when was growth best/worst)
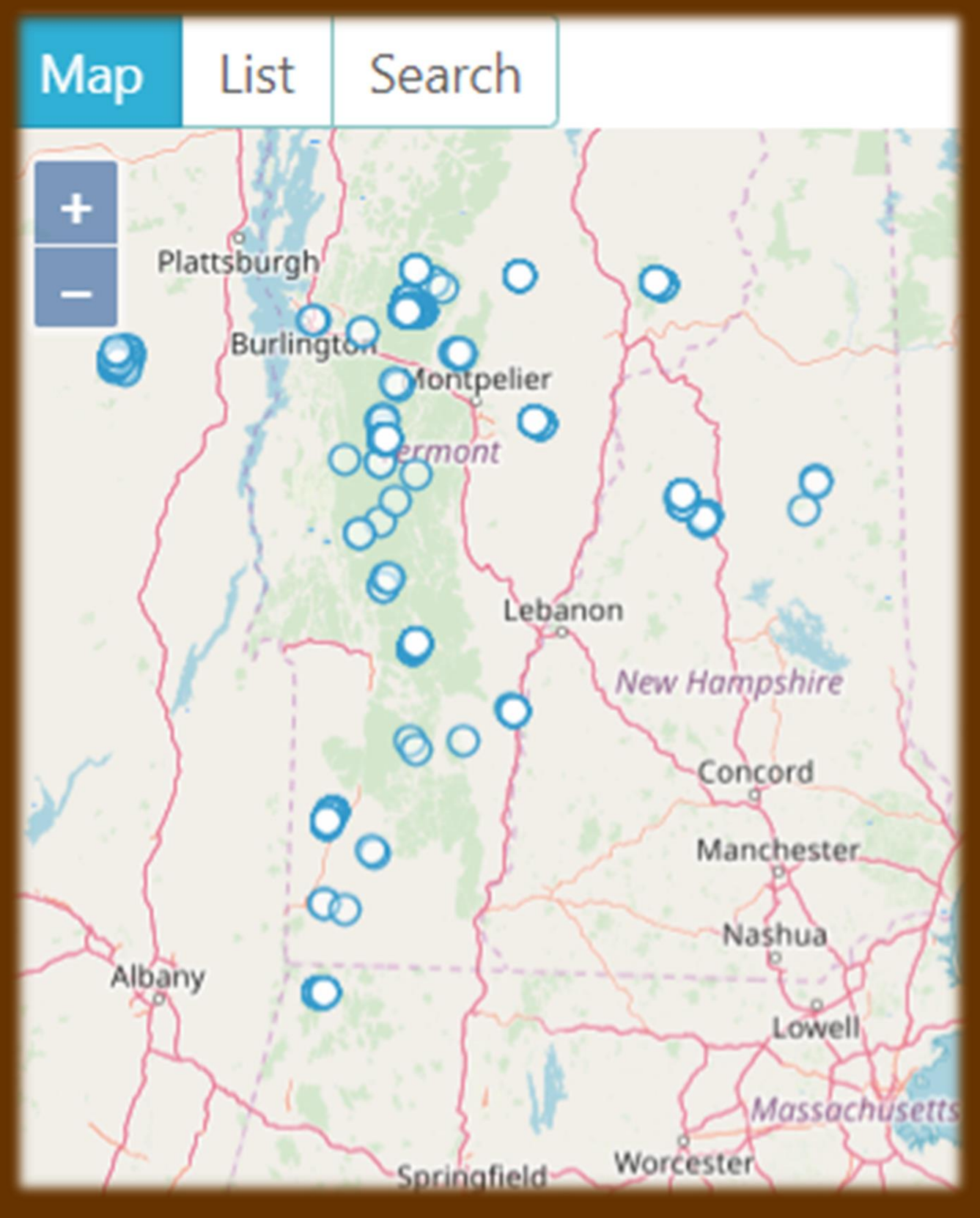• with potential environmental drivers (e.g., temperature and precipitation)

WHY CONTRIBUTE YOUR DATA TO THE DEN?

• Long-term archiving of dendrochronological and ecological metadata
• Meet granting agency requirements
• Facilitate comparison with other large datasets (e.g., ITRDB, FIA)
• Data sharing with ecology, conservation and management, silviculture, modeling, dendrochronology and environmental science communities
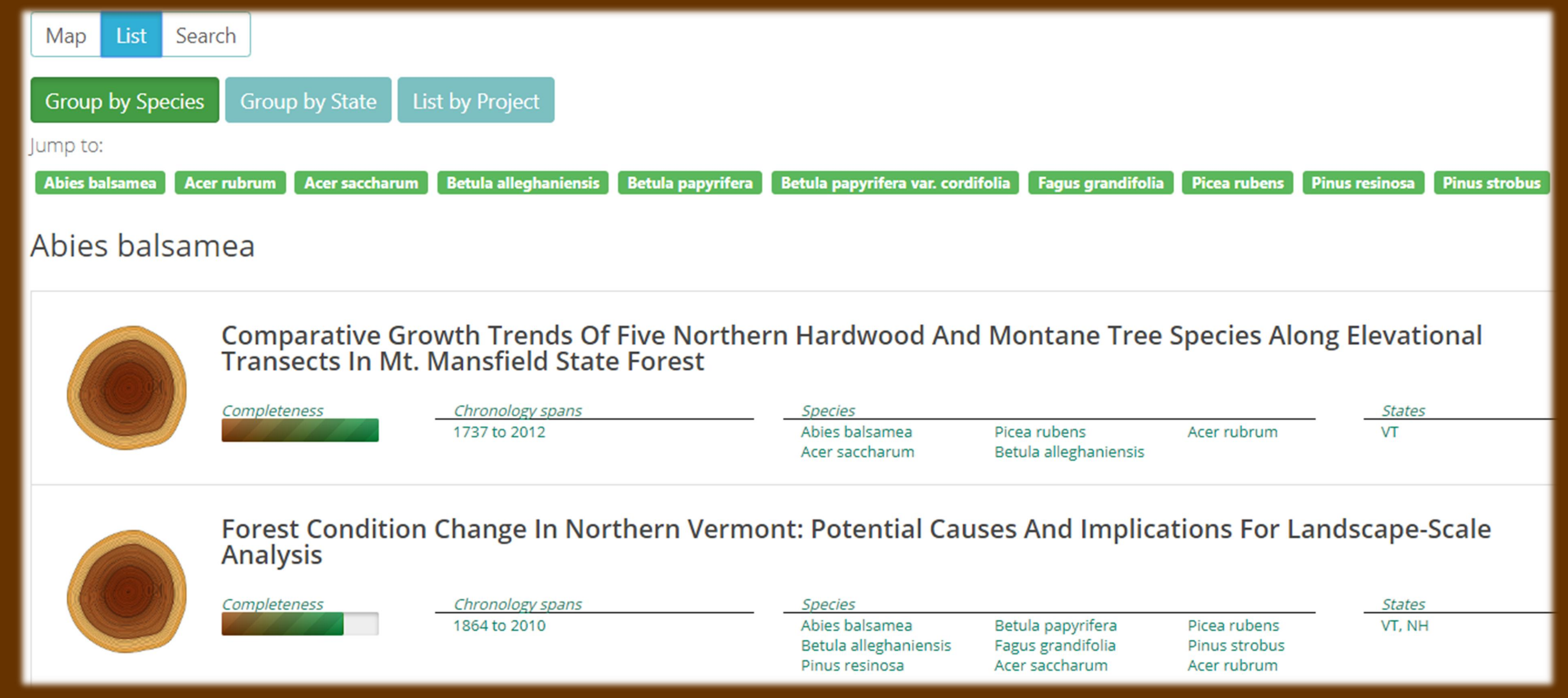
Core data | Tree data | Ecological data | Statistics | Manuscripts

DEN
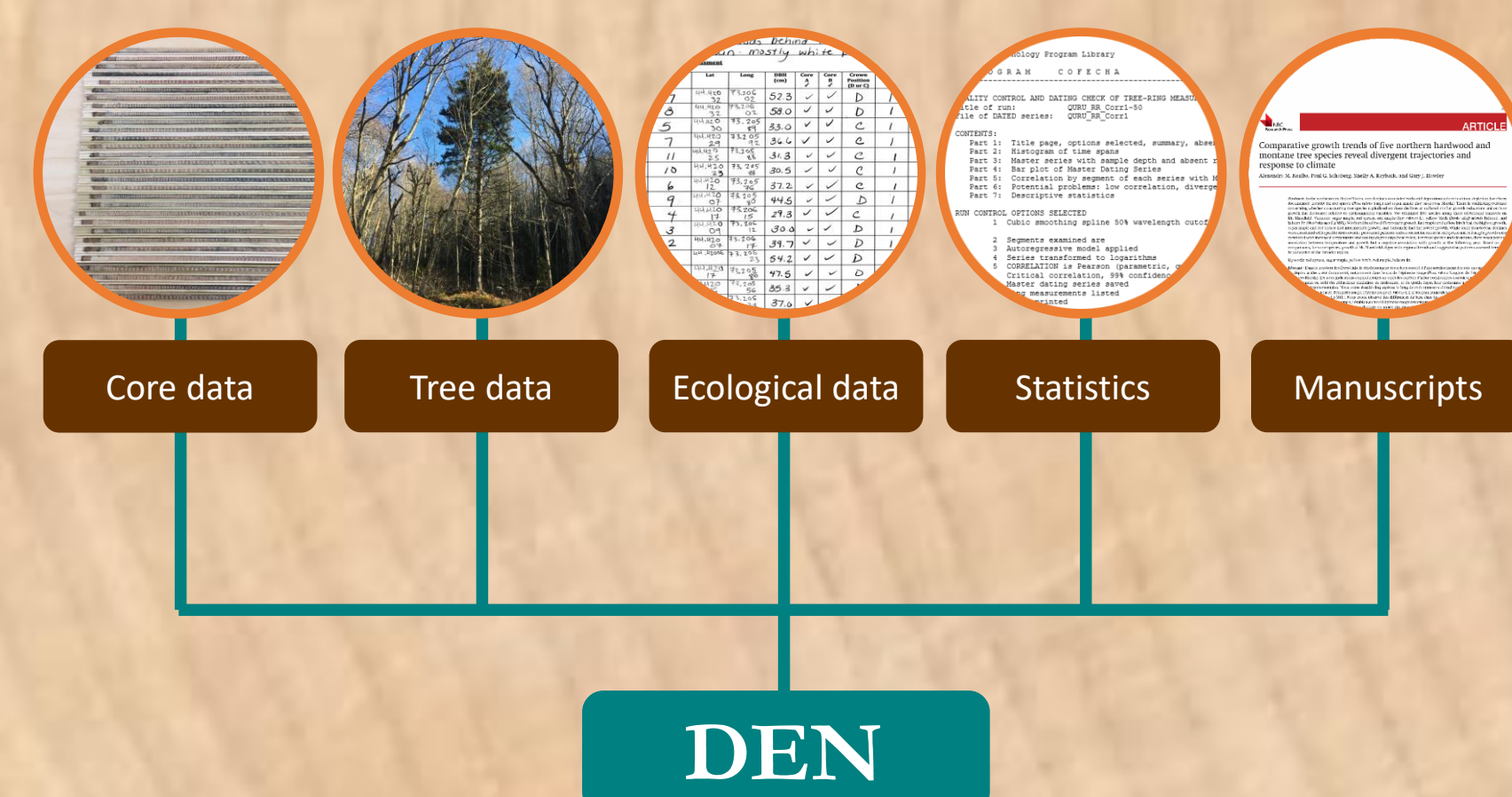
EXPLORE AND DOWNLOAD DATA WITH A USER-FRIENDLY INTERFACE
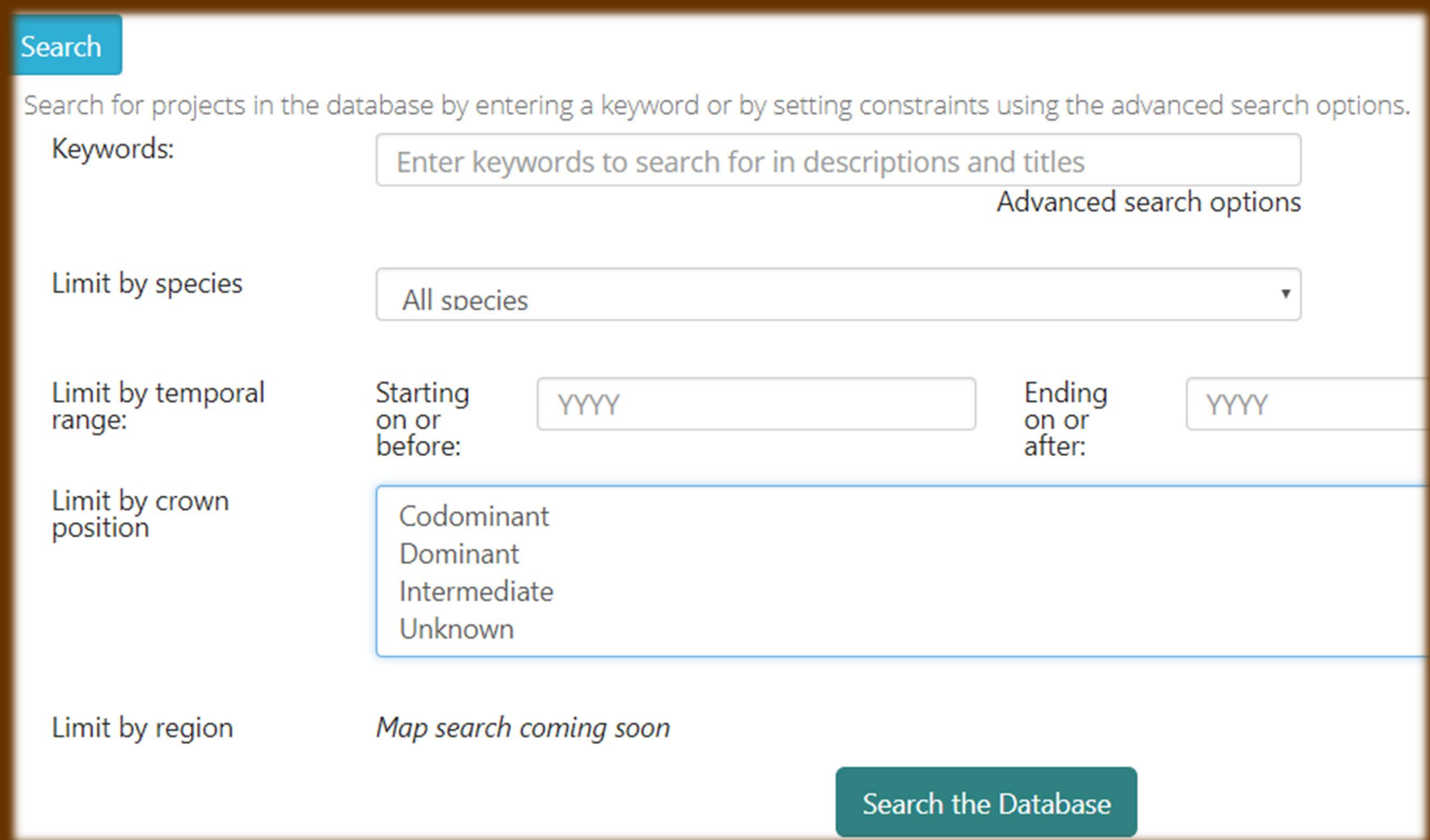
Search projects via interactive map
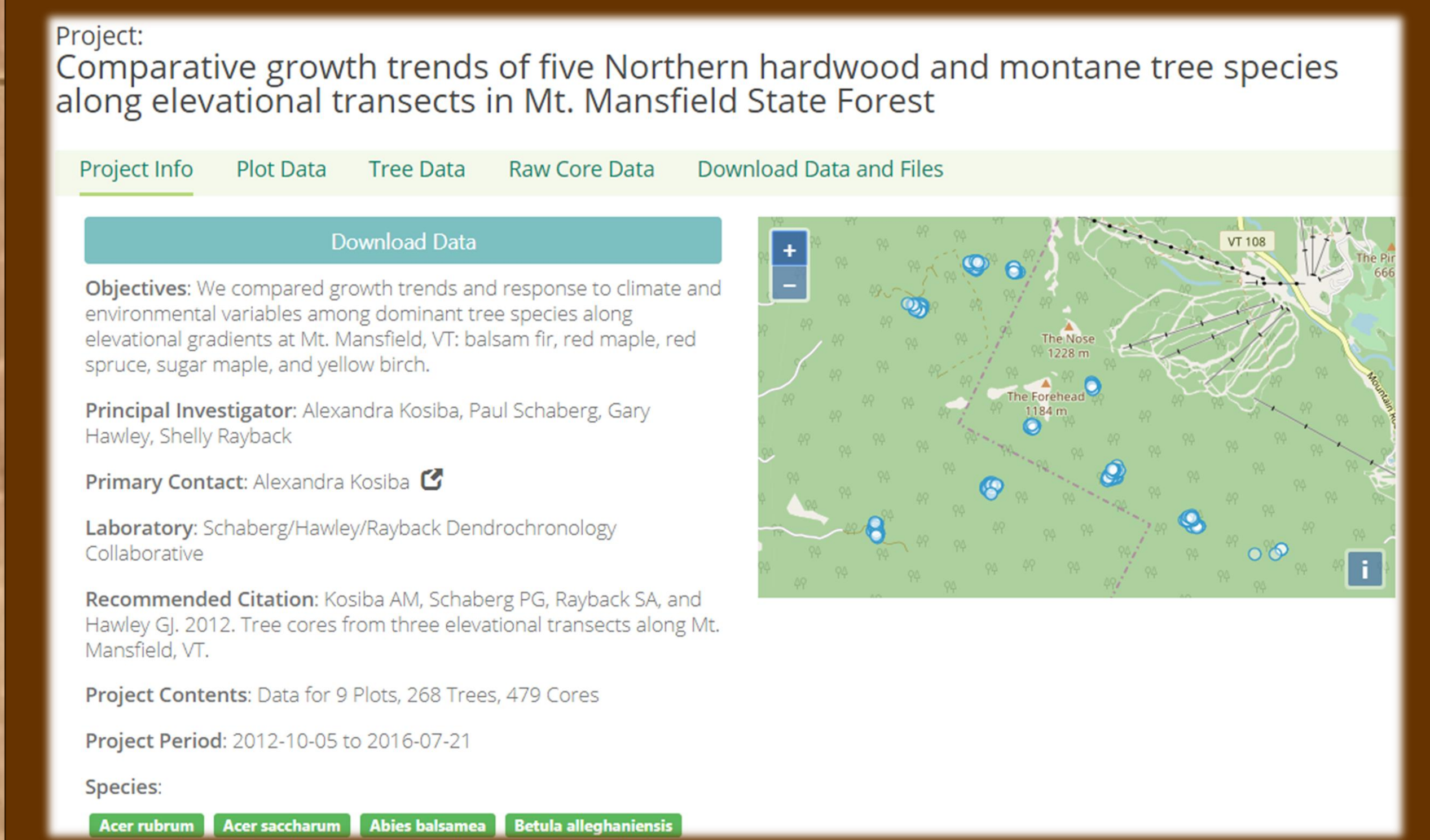
Investigate data by species, location, project

Map | List | Search

Group by Species | Group by State | List by Project

Jump to:
Abies balsamea | Acer rubrum | Acer saccharum | Betula alleghaniensis | Betula papyrifera | Betula papyrifera var. cordifolia | Fagus grandifolia | Picea rubens | Pinus resinosa | Pinus strobus

Abies balsamea

Comparative Growth Trends Of Five Northern Hardwood And Montane Tree Species Along Elevational Transects In Mt. Mansfield State Forest

Completeness | Chronology spans 1737 to 2012 | Species: Abies balsamea, Acer saccharum, Picea rubens, Betula alleghaniensis, Acer rubrum | States: VT

Forest Condition Change In Northern Vermont: Potential Causes And Implications For Landscape-Scale Analysis

Completeness | Chronology spans 1864 to 2010 | Species: Abies balsamea, Betula alleghaniensis, Pinus resinosa, Betula papyrifera, Fagus grandifolia, Acer saccharum, Picea rubens, Pinus strobus, Acer rubrum | States: VT, NH

Explore database by keyword, species, temporal range, crown class

Search

Search for projects in the database by entering a keyword or by setting constraints using the advanced search options.

Keywords: [Enter keywords to search for in descriptions and titles]
Advanced search options

Limit by species: All species

Limit by temporal range:
Starting on or before: YYYY
Ending on or after: YYYY

Limit by crown position:
Codominant
Dominant
Intermediate
Unknown

Limit by region: *Map search coming soon*

Search the Database

Access detailed project data: methods, plot and tree data, statistical files (COFECHA, R), metadata, completeness record

Project:
Comparative growth trends of five Northern hardwood and montane tree species along elevational transects in Mt. Mansfield State Forest

Project Info | Plot Data | Tree Data | Raw Core Data | Download Data and Files

Download Data

Objectives: We compared growth trends and response to climate and environmental variables among dominant tree species along elevational gradients at Mt. Mansfield, VT: balsam fir, red maple, red spruce, sugar maple, and yellow birch.

Principal Investigator: Alexandra Kosiba, Paul Schaberg, Gary Hawley, Shelly Rayback

Primary Contact: Alexandra Kosiba

Laboratory: Schaberg/Hawley/Rayback Dendrochronology Collaborative

Recommended Citation: Kosiba AM, Schaberg PG, Rayback SA, and Hawley GJ. 2012. Tree cores from three elevational transects along Mt. Mansfield, VT.

Project Contents: Data for 9 Plots, 268 Trees, 479 Cores

Project Period: 2012-10-05 to 2016-07-21

Species:
Acer rubrum | Acer saccharum | Abies balsamea | Betula alleghaniensis

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THE UNIVERSITY OF VERMONT COLLEGE OF ARTS AND SCIENCES | US FOREST SERVICE | USDA | FEMC Forest Ecosystem Monitoring Cooperative | THE UNIVERSITY OF VERMONT RUBENSTEIN SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES