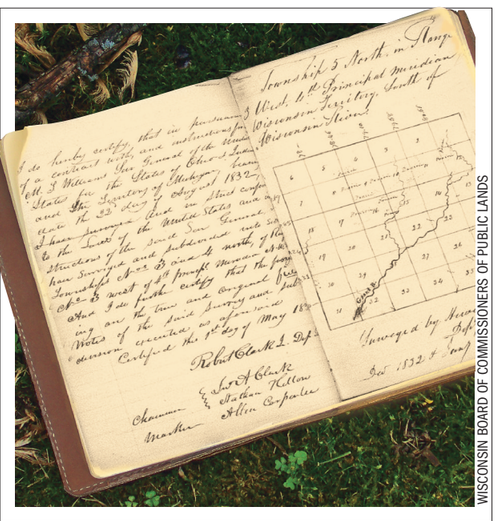
WISCONSIN'S

Land cover IN THE 1800s

What survey notes tell us about the landscape before logging, farming and development.



WISCONSIN BOARD OF COMMISSIONERS OF PUBLIC LANDS

FOREST LANDSCAPE ECOLOGY LAB, UW-MADISON

NATIVE VEGETATION 1832-1866

Tree labels below indicate the dominant and most abundant species in each class.*

- **Hemlock** *Tsuga canadensis*
  Yellow Birch *Betula alleghaniensis*
- **Sugar Maple** *Acer saccharum*
- **Aspen** *Populus tremuloides, P. grandidentata*
- **Elm** *Ulmus americana*
  Basswood *Tilia americana*
  Sugar Maple *Acer saccharum*
- **Beech** *Fagus grandifolia*
- **Cedar** *Thuja occidentalis*
- **Tamarack** *Larix laricina*
- **Jack Pine** *Pinus banksiana*
- **Red Pine** *Pinus resinosa*
- **White Pine** *Pinus strobus*
- **Red Oak** *Quercus rubra*
- **Black Oak** *Quercus velutina (includes* **N. Pin Oak** *Q. ellipsoidalis)*
- **Bur Oak** *Quercus macrocarpa*
- **White Oak** *Quercus alba*
- **Prairie**
- **Water**
- **No Data**

* Note: other species, some quite common, are contained within the dominant classes labeled. For example, these include in part in the north, balsam fir (*Abies balsamea*),white spruce (*Picea glauca*), red maple (*Acer rubrum*), white birch (*Betula papyrifera*) and ash species (*Fraxinus*). Ash and red maple are also common in the south. Also, species may occur in multiple classes, but classes are defined by the most abundant species. Wetlands are under-represented by the data.

The land area now known as the State of Wisconsin was surveyed by the federal government between 1832 and 1866. The survey was done to divide the vast public domain into lots that could be sold, or otherwise divested, to raise funds for the federal government and to encourage development. The work was done using the Public Land Survey System (PLSS), which divides land into townships of 36-square-mile sections. ■ Along the way, surveyors also recorded notes about tree species, diameters, and distance from survey corners; waterbodies, swamps, marshes, prairies, barrens and geological features; evidence of fire and windthrow; and evidence of Native American and other human activity. More recently, researchers analyzing these notes have been able to create this map to paint a picture of Wisconsin's 19th century vegetation. ■ This map may be used by ecologists, researchers and other land management agencies as they reconstruct past ecological conditions, evaluate and explain changes in the landscape over time, and plan for the future of Wisconsin's environment and economy. ■ The data were not originally collected for ecological purposes, and analysis and use of the data require understanding of the variability and possible biases in the data. Technical details analyzing these issues, classification and mapping of vegetation and disturbances, and change in vegetation and land cover since the 1800s are detailed in published journal articles by the contributors credited below and listed at landscape.forest.wisc.edu/

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WISCONSIN DEPT. OF NATURAL RESOURCES

This map was produced from work led by David Mladenoff, with Ted Sickley, Lisa Schulte, Jeanine Rhemtulla and Janine Bolliger, and with assistance from Sarah Pratt and Feng Liu. Other substantial contributors to this project include Kristen Manies, Volker Radeloff and Hong He, all while at the Forest Landscape Ecology Lab, Department of Forest and Wildlife Ecology, University of Wisconsin-Madison. We have also benefited from discussions with many colleagues who have reviewed and commented on our work. Poster designed by Thomas J. Senatori, Ted Sickley, David Mladenoff and Sarah Pratt. Funding for this long-term project was provided by Wisconsin DNR Bureau of Science Services and Bureau of Forestry. Particular thanks to Jerry Bartelt, DNR Science Services, for vision and support. Additional funds provided by the U.S. Forest Service, U.S. Geological Survey, UW-Madison, U.S. Fish and Wildlife Service and the Federal Aid in Wildlife Restoration Act, Pittman-Robertson Project W-160-P and the Wisconsin Department of Natural Resources. Thanks to the Wisconsin Board of Commissioners of Public Lands.

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