



ARGONNE EXPERIMENTAL FOREST

Three Lakes, Wisconsin



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The 6,499 acre (2,631 ha) Argonne Experimental Forest is located within the Chequamegon-Nicolet National Forest in northeastern Wisconsin and was established in 1947. The primary vegetation types on the forest are northern hardwoods, mixed lowland conifers, and jack and red pine. The primary objectives of most studies here are to learn how to bring second-growth northern hardwoods under management. Information from studies on the Argonne Experimental Forest has been used to develop management guides for northern hardwood forests in the Lake States. These guides are the primary source of management information throughout the region. The Argonne also serves as an excellent demonstration site for landowners and land managers interested in managing northern hardwoods. Thousands of land managers from the United States and Canada have toured and been trained at the Argonne Experimental Forest.



Assets

Scientists: 3 Northern Research Station scientists conduct studies here.

Scientific support: 2 technicians and/or professionals support the work of these scientists.

Cooperators: Chequamegon-Nicolet National Forest, Wisconsin DNR, University of Wisconsin, Michigan Technological University

Needs

Annual operating costs: \$39,379

Critical needs: Updated ecosystem classification and stand inventory maps

Long-term needs: Field lab (dry) with living quarters - \$800,000

The Argonne Experimental Forest is administered by:

U.S. Forest Service, Northern Research Station
5985 Highway K, Rhinelander, WI 54501

Key Contact:

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More About the Argonne Experimental Forest

Location: Lat. 45°45' N, long. 89°0' W

The Argonne is located about 15 miles southeast of Three Lakes, WI, in the northeastern portion of the state.

Vegetation: The vegetation types on the Argonne Experimental Forest vary according to the soil type. The Iron River loam supports northern hardwoods dominated by sugar maple, yellow birch, basswood, and hemlock. Other species found mixed in this type are white ash, black cherry, quaking aspen, northern red oak, and American hornbeam. The Carbondale peat supports mixed lowland conifers dominated by black spruce and tamarack. Jack and red pine, quaking aspen, and paper birch dominate the Tawas sand. Most stands of trees on the Argonne are second-growth and even-aged, though there are small areas of old-growth northern hardwoods on the forest.

Climate: The climate is continental, with an average annual temperature of 41°F (5 °C). Summer maximums of 90°F (32 °C) are common and winter minimums can reach (-40 °F) -40 °C. Average annual rainfall is 33 inches (813 mm), mostly occurring during the growing season. Snowfall averages 61 inches (1,524 mm) per year. The growing season averages about 100 days.

Research—past and present: Research on the Argonne began in 1947. The primary objective of most studies is to learn how to bring second-growth northern hardwoods under management. The Cutting Methods study (comparing nine different types of cutting) is replicated and is the highest priority study on the forest. More recently, this study has been used to examine the carbon storage consequences of long-term forest management. A new large-scale multidisciplinary study, in collaboration with the Wisconsin Department of Natural Resources, has been added that examines methods to promote old-growth characteristics in second-growth forests.



Research opportunities: The Argonne provides an opportunity to study the silviculture and ecology of the three main vegetation types. The active studies provide opportunities to compare treatments of many components of the forest.

Facilities: There is a small field station located on the Argonne, but the building is without water, heat, or bathroom facilities.

More information can be found at: <http://www.nrs.fs.fed.us/ef/locations/wi/argonne/>