



# LOWER PENINSULA EXPERIMENTAL FOREST

Newaygo and Wexford County, Michigan



The 3,400 acre (1,376 ha) Lower Peninsula Experimental Forest, made up of the Pine River and Newaygo Units, was formally established in 1954. The forest was initially used for silvicultural research, studies of chemical release of overstory hardwoods in pine plantations, and growth and yield of northern hardwoods under different stocking levels. The Pine River Unit, located in the southwest corner of Wexford County, contains 2,760 acres. The Newaygo Unit, located in Newaygo County, contains 640 acres. The experimental forest is a collection site for the National Atmospheric Deposition Program (NADP). Because of its diversity of forest types, it has potential as a replicate for regionwide field studies.

## Assets:

**Scientists:** 1 Northern Research Station scientist is involved with the NADP research.

**Scientific support:** 1 technician supports the work of the scientist.

**Cooperators:** Huron-Manistee National Forest.

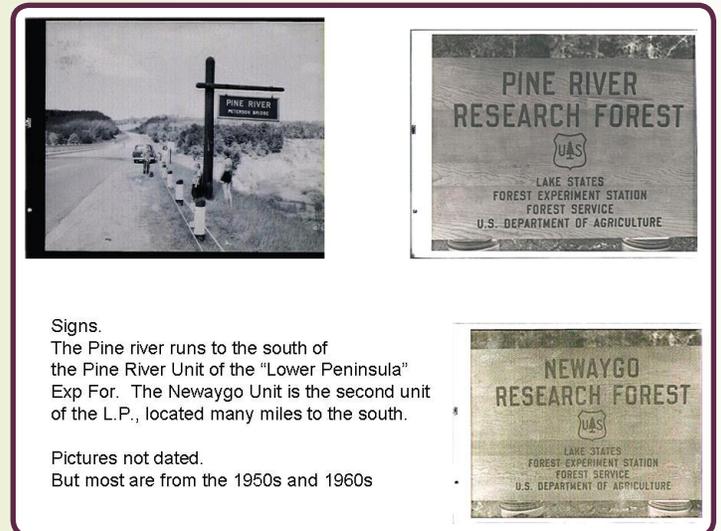
## Needs:

**Annual operating costs:** \$10,000

**Critical needs:** None

**Long-term needs:**

- Develop accurate GIS database, including physical and vegetative features and research locations



### Signs.

The Pine river runs to the south of the Pine River Unit of the "Lower Peninsula" Exp For. The Newaygo Unit is the second unit of the L.P., located many miles to the south.

Pictures not dated.

But most are from the 1950s and 1960s

**The Lower Peninsula Experimental Forest is administered by:**

U.S. Forest Service, Northern Research Station

271 Mast Road, Durham, NH 03824

Key Contact:

John Brissette, 603-868-7632, email [jbrissette@fs.fed.us](mailto:jbrissette@fs.fed.us)

## More About the Lower Peninsula Experimental Forest

**Location:** Lat. 43°25' N, long. 85°40' W

The Lower Peninsula Experimental Forest is located in Newaygo and Wexford Counties in Michigan about 65 miles north of Grand Rapids, MI.

**Vegetation:** The Lower Peninsula Experimental Forest consists of 2 separate parcels: the Pine River Unit and the Newaygo Unit. In the Pine River Unit, the following 3 natural forest types prevail: oak, aspen (ranging from pure stands to mixtures with oak and maple), and second-growth northern hardwoods. The oaks are mainly pin, white, northern red, and black oak. Considerable areas of pine, including red, jack, and eastern white, have been planted. In the Newaygo Unit, mixed white pine-oak type is the principal forest type. This unit also contains about 160 acres (65 ha) of plantations, most of which are red pine, with several acres of jack and white pines.

**Climate:** The average temperature on the Lower Peninsula EF in January ranges from 10 to 28 °F (-12 to -2 °C). In July temperatures typically range from 55 to 82 °F (13 to 28 °C). The average rainfall is 32 inches (80 cm) and snowfall 72 inches (183 cm).

**Research—past and present:** Studies in the Pine River Unit include herbicide release of pine plantations, growth and yield of northern hardwoods, and municipal sewage sludge fertilization of aspen sprouts and pine plantations. In the Newaygo Unit, research evaluated prairie restoration and removal of red pine stands planted on prairie sites, as well as changes in insects and vegetation as the prairie comes back, with emphasis on the endangered Karner-blue butterfly.

**Research opportunities:** Although no new studies have been installed on the Lower Peninsula Experimental Forest since 1981, there is potential for a range of ecological and management experiments. Early silvicultural studies have been measured, reported, and discontinued. Plans for future research will be developed over the next few years.

**Facilities:** In Wexford County, Michigan, there is a 30 acre (12-ha) site commonly called the Wellston Field Laboratory, which consists of an 80-m<sup>2</sup> building, a shop and garage, and a flammables storage building. A National Atmospheric Deposition collection site is located here. Also on the site is a 2 acre (0.8-ha) cleared area enclosed with a deer-proof fence. Currently, this facility is maintained and used by the Huron-Manistee National Forest.



More information can be found at: <http://www.nrs.fs.fed.us/ef/locations/mi/lower-peninsula/>