



United States Department of Agriculture National Reforestation, Nurseries, and Genetic Resources Program

J.W. Toumey Nursery: The Future Grows Here

The J.W. Toumey Nursery
in Watersmeet, MI, is the last Forest Service nursery east of the Mississippi River that supplies a full range of services to national forests. The nursery was established in 1935 to meet reforestation needs in the national forests of Michigan's Upper Peninsula and northern Wisconsin.

Tree Improvement Programs
To maintain seed resources for the future, the nursery and the Oconto River Seed Orchard established a grafting program for superior and disease-resistant trees.



Nature works with the nursery providing excellent growing conditions, including sandy soils and deep, insulating snow cover. At full capacity, the nursery can produce 8 million bareroot seedlings on 66 acres annually.

Seed Services
The nursery is home to the Eastern Region seedbank and essential to seed management. Seed collected from forests and orchards is cleaned, stored, and tracked in a database. The seed is used to grow locally-adapted seedlings.

Restoration Assistance
The nursery plays a key role in regional restoration efforts by supplying bareroot and containerized seedlings for research, wildlife plantings, and erosion control. Trees, shrubs, and native plants are grown based on national forest plans.



The nursery grows and receives a variety of high-quality seed from different sources, such as this smooth oxeye. Seed must be extracted, cleaned, dried, and stored in a manner that ensures viability.

Conservation Education
Nursery employees share their expertise through workshops and educational tours. On request, seedlings are provided to help promote conservation education.



Seedling viability is ensured during growth and shipment by sampling moisture levels. The J.W. Toumey Nursery has two shade houses and three greenhouses that can produce 400,000 containerized tree seedlings and native plants annually.

Enhancing forests and habitat...

Bottlebrush grass is frequently found on the Ottawa National Forest. This grass is grown at the nursery for a project to increase seed.



The nursery provides vigorous planting stock that will outcompete other vegetation and invasive species.



The Huron-Manistee National Forest was the first to use seedlings from the nursery to restore critical habitat for the Kirtland's warbler. The endangered Kirtland's warbler only nests in jack pine forests in the North Central States and the Province of Ontario.



The nursery grafts orchard trees that show increased resistance to white pine blister rust. The harvested seed is used to grow disease-resistant seedlings for forest restoration in the Chequamegon-Nicolet and Superior National Forests.



The nursery stores seed for many forests, such as this Missouri short leaf pine seed for the Mark Twain National Forest.



Native shrubs provide an excellent food source for wildlife. The Allegheny National Forest uses silky dogwood to enhance wildlife habitat.

Welcoming challenges...

For the past two decades, the traditional role of Forest Service nurseries has grown to include providing native plant species that meet the needs of ecosystem restoration.

These species present propagation challenges to nursery staff. The J.W. Toumey Nursery thrives on innovation. We welcome your challenges—large or small.



The nursery produced milkweed plants for habitat restoration in the Ottawa National Forest. Monarch butterfly caterpillars found homes in the greenhouse on the seedlings, their only food at this stage of life.



Starting with just a handful of fruits, the nursery produced seedlings to enhance butterfly habitat in the Ottawa National Forest. The threatened northern blue butterfly only lays its eggs on dwarf bilberry plants.



The nursery is helping to develop an active recovery program for vulnerable species, such as this Douglas hawthorne.

Changing environment...

The climate change predicted in the Eastern Region may affect the distribution of many plant and tree species. As these unknown changes occur, skills and knowledge will be needed to provide the best quality seed and seedlings.

The J.W. Toumey Nursery is preparing for these challenges by:

- Providing seeds from seed zones that are adapted to local needs
- Working with disease-resistant seedlings and plants
- Propagating native species for restoring habitats
- Developing staff skills and knowledge to meet changing conditions



Red oaks grown at the nursery provide diversity and support healthy forests that are more likely to thrive under stress.