
WISCONSIN STATE NURSERY PROGRAM

THE MISSION of the state nursery program is "to insure a consistent supply of high quality seedlings, of desirable forest species, at an economical price, to encourage reforestation in Wisconsin."

PURPOSE: Wisconsin's state nursery and reforestation programs create and enhance wildlife habitat, prevent soil erosion, conserve energy, provide aesthetic beauty, sequester carbon and provide future raw material for forest industry. The state's nursery program has been a leader in natural resource stewardship since 1911, producing over 1.6 billion seedlings for planting in Wisconsin. Partnerships and cooperative agreements between state, county, industry and private concerns have been built on the availability of high quality seedlings, economical seedling prices, known seed sources, and genetically superior nursery stock from the state nursery program. **A state nursery program ensures availability of an adequate supply of native tree seedlings for planting in Wisconsin.**

CURRENT STATUS: The Department of Natural Resources (DNR) produces trees and shrubs at the Wilson State Nursery in Boscobel and at the Griffith State Nursery in Wisconsin Rapids. The Hayward State Nursery in Hayward provides statewide seed processing and storage services and is a spring distribution center. The state nursery program is an important employment contributor to local communities and stimulates the statewide economy by creating secondary jobs associated with tree planting activities.

The 2012 Division of Forestry's Strategic Direction targets production at the state nurseries at 6-10 million seedlings annually for reforestation of state, county, industrial and private lands in Wisconsin. State nursery stock can only be utilized for conservation plantings in the state, and may not be utilized for ornamental, landscaping or Christmas tree production.

Financially self-supporting from revenues generated from stock sales, the state nursery program is not subsidized by the citizens of Wisconsin. The purchasers of state nursery stock pay for the Department's entire cost of production, distribution and administration of the state nursery program.

NURSERY FUNDED PROGRAMS: Several programs are funded by the sale of nursery stock from the state nursery program including:



Forestry Education and Public Awareness, specifically the K-12 *LEAF* program housed at the University of Wisconsin – Stevens Point, is supported in part by a \$0.03 surcharge on all state nursery stock sold.



The Reforestation Program in Wisconsin is one of the most successful in the nation. This is a direct result of the availability of high quality seedlings and an excellent distribution network system developed from the nursery to the landowner. This coordinated distribution system allows a large quantity of seedlings to be planted each year in April and early May. It ensures proper seedling handling from the nursery to the landowner which increases the survival of the plantations established with state nursery stock. Costs associated with the foresters' assistance are recovered through nursery stock sales.



The Reforestation Monitoring Program initiated in 2006, evaluates randomly selected public and private planting sites on a 1-, 3- and 7-year cycle. Information is collected and tracked by species, age, lifting and shipping dates, site preparation treatments, herbicide application, damage caused by insect, disease or animals and survival rates. Data will be analyzed and used to create informative management recommendations to increase reforestation activities in Wisconsin.



The Tree Improvement Program, in partnership with the University of Wisconsin-Madison, provides genetically superior seed for the state nursery program. The state nurseries provide the long-term commitment necessary to support a tree improvement program. Seed orchards have been established for red, white and jack pine; white spruce; larch; black walnut; and red oak species. Characteristics in which considerable genetic improvement has been made include; white pine

blister rust disease resistance, jack pine gall rust disease resistance, increased wood volume production, and improved stem form. Other important considerations of this program include the gene conservation efforts associated with the black walnut and red oak programs.



The Nursery Soils Research Program at the University of Wisconsin historically has been supported financially and "in-kind" by the state nursery program. This nursery soils program is the best in the nation due in large part to the excellent cooperation between the state nursery program and the University. Results achieved in this research area have included soil organic matter amendments, soil fertility management and species specific fertilization regimes. This research program has generated numerous scientific publications that have benefited both public and private nurseries across the nation.



Nursery Insect and Disease Research Programs are conducted at, and funded by, the state nursery program. This research provides practical information for control of insect and disease problems of nursery stock. Researchers from the University and USDA-Forest Service are actively involved in solving nursery insect and disease problems which in turn assists the entire nursery industry.



Seedling Physiology Research Projects, in cooperation with state universities and the USDA-Forest Service, are funded through the sale of state nursery stock. These research projects provide information regarding the physiological requirements of plants in order to tailor the nursery cultural regime to produce the highest quality nursery stock. Again, both public and private nurseries throughout the region utilize results of these research projects.



Arbor Day is a national environmental education program designed to teach students the importance of trees within our environment. Wisconsin's Arbor Day is celebrated by schools on the last Friday in April and is usually linked with Earth Day celebrations. Annually, the state nursery program provides 75,000 free seedlings to fourth grade students to plant and nurture.



Additional Benefits

- The state nurseries have developed nursery stock reservation agreements to meet the forest industry's reforestation needs in Wisconsin. This permits the state nursery program to grow the desired quality, quantity and type of seedling needed by forest industry.
- Pesticide storage facilities are located at, and maintained by, the state nurseries.
- Nursery personnel maintain reforestation expertise.
- The state nurseries program currently operates a seed extractory, which provides the majority of conifer seed sown in the state nurseries.
- The state nursery program supplies seed for direct seeding regeneration programs for public and private lands, an alternative reforestation technique.
- The state nursery program provides free seedlings to registered school and community forests. The planting of these seedlings provides decades of educational opportunities for Wisconsin's school children.

The DNR state nurseries have investment in buildings, irrigation systems, equipment and nursery stock inventories specifically utilized in nursery production operations. In 2012 there are an estimated 20 million seedlings growing at state nursery facilities.

Wisconsin has been considered a leader in the nation for reforestation practices since the CCC era. The state nursery and reforestation programs have been the backbone of Wisconsin's conservation programs by providing seedlings for planting on erodible agricultural lands. In addition, the state nurseries have contributed to the development of Wisconsin's forest industry by growing the type and quality of seedling needed to supply the industry's future raw material needs.

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