



Year 2000



Progress Report of Activities

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Rose Lake Plant Materials Center

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Who We Are

The Rose Lake Plant Materials Center (PMC) is a branch of the United States Department of Agriculture, Natural Resources Conservation Service. It is one of 26 plant materials centers located throughout the United States. The Center is located near East Lansing, MI. Areas served include Indiana, Michigan, Ohio, Wisconsin, and smaller portions of Illinois and Minnesota

What We Do

It is our mission to use plant materials and state-of-the-art plant science technology to solve natural resource problems and meet the objectives of environmental programs. Our program emphasizes using native plants. We develop, test and release superior adapted plants to commercial growers along with production and management technology. Our mission addresses five major objectives:

- Water Quality Maintenance and Improvement
- Erosion Control
- Forage and Pasture Improvement
- Wildlife Habitat Improvement
- Restoration of Native Habitats

A brief summary of year 2000 accomplishments follows. For a complete account of all activities, request the 2000 Technical Report of Activities.

Native Perennial Legume Ready for Release

Desmodium paniculatum and *Desmodium glabellum* (Tick trefoil) are ready for release from the Rose Lake Plant Materials Center to commercial growers.



Marion Germplasm Dillenius' tick-trefoil

Desmodium is intended for use in wildlife food plots as an alternative to introduced plant species. Seed from *Desmodium* species is used as a food source by upland game species and songbirds.

The seed was collected in 1988 by Mark Widrechner from Grant County, Wisconsin; B.H. Roundtree from Marion County, Illinois; and William Semeyn from Alcona County Michigan.

These three releases were selected from forty-nine collections of tick trefoil assembled from 8 states and 16 Major Land Resource Areas. The three releases were selected for survival, emergence, vigor, and foliage abundance.

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Greenhouse Expansion



The greenhouse at the center has doubled in size. The staff dedicated many hours to this project. The greenhouse now features computer controlled overhead mist irrigation, heated floors, temperature, humidity control, heated benches, flood benches and lighting system. Most of the expansion was paid for through reimbursable agreements. This new space and technology give the PMC the needed additional options for the 50+ species that may be growing in the greenhouse at any given time.

International Activities



Top left to right: Richard Hungerford, Juan Miria, Frank Cousin, Ignacio Avila, Keith Martell, Bottom, Left to right: Dave Burgdorf, Odilia Tapia, Margarita Gaytan, Sergio Perez, Adolph Slaughter, Adolfo Lopez, Malaquias Flores

When the Mexican government needed conservation help, NRCS was there! Technological/scientific exchange were provided to government officials, government technicians, university technicians, local landusers, and interested public participants. Large press

conferences were held to hear the recommendations made by the group.

The area was primarily agriculture, consisting of coconuts, mangos, papayas, local native corn, pumpkins, melons, cattle, Jamaica, sesame, coffee, bananas, and honey. The group was amazed at the state of the natural resources base. They found a great need for conservation practices in the area. The entire conservation effort has a lot to be proud of.

Developing Native Plants That Meet Resource Needs

Native species are needed for conservation and wildlife plantings, and restoring wetlands. There is a high demand for native plant materials that will stabilize inland shorelines, eroding streambanks, and disturbed areas such as mined lands and roadsides. NRCS would like to restore a portion of this land to native vegetation, but have been hindered by a lack of commercial sources of native plant materials.

The Rose Lake PMC staff has been working with MACD and MDNR to develop native seed sources, along with the necessary establishment and production technology. It takes an average of 15 years to develop a proven cultivar. However, if demand is high, early release procedures have been developed that speed up the release process. Eight species currently under development are shown below, with those closest to release shown first.

- Little Bluestem
- Indiangrass
- Big bluestem
- Switchgrass
- Prairie sandreed
- Big bluestem - forage
- Elderberry
- Canada wildrye

Along with plant development, studies that have been or will be conducted on each species to determine such things as methods to break seed dormancy, methods for successful stand establishment, residue management and fertility practices to increase viable seed production.

Big Bluestem forage study



There is a need for improved varieties of Big Bluestem adapted to the Great Lakes States for pasture seedings and other uses. Selections based on survival, vigor, foliage production, seed production, insect damage, disease damage, winter dormancy date and spring green-up have been made. These selections are now being compared to the most currently used varieties in the different states. Superior performing plants will be released to commercial growers.

New Manager



John Rissler, PMC Manager

John Rissler was selected as the new Manager of the Rose Lake Plant Material Center. John has held positions with NRCS in Oklahoma, Missouri, and New York. Most recently, John was a Tribal Resources Conservationist to the Muscogee (Creek) Nation in Okmulgee, OK. John grew up in Oklahoma. He has also lived in Pennsylvania, Montana and Arizona. John is dedicated to quality service. If you have ideas on how to improve the service of the Plant Materials Center, John wants to know. He is looking forward to building on the good things happening here and working with all the partners in the Great Lakes states. Feel free to give him a call or stop by the PMC.

Outreach Activities

The Plant Materials Programs strikes a special cord when working with American Indian tribes. The center has provided thousands of plants to tribes. Sweetgrass, White sage, Northern White Cedar, Black ash, White corn and Tobacco have been the main interests. We are also working on wild rice, wild ginger and other species as needed by the tribes. These plants have become hard to find on tribal lands. This effort will increase the supply and assist them in preserving their culture.



American Indian baskets made of Sweetgrass

Reimbursable Partnerships

Reimbursable agreements have greatly added to the Plant Materials Program. We currently have agreements with Isle Royal National Park, Apostle Island National Lake Shore, Sleeping Bear Dunes, and Grand Mere State Park. These agreements include the growing of plants and related technology development. These projects have allowed the center to grow even through the tough budget years. We are able to gain technology using funding from non-NRCS funding sources.