

Rose Lake
Plant Materials Center



Winter Newsletter
2006

Fall Harvest Activities



The Rose Lake PMC Staff, in coordination with seed production partners completed harvest of 13 seed production fields. Production fields of Southlow Michigan Germplasm warm season grasses were harvested in cooperation with the Michigan Department of Natural Resources. Switchgrass, Big Bluestem, Little Bluestem, and Indiangrass fields were harvested with a combine or brush harvester. Prairie View Germplasm warm season grasses, the newest releases from the Rose Lake PMC, were harvested in cooperation with the Indiana Department of Natural Resources. The Rose Lake PMC provided a combine harvester and a seed drying unit to harvest and handle Big Bluestem, Little Bluestem, and Indiangrass.



The large volume of seed produced from the harvest has necessitated several changes in the way seed is handled and stored. Seed from small acreage fields can be handled using small cloth bags. However, the larger field sizes and high productivity of the Southlow and Prairie View fields required the change to bulk handling of the seed. Rose Lake PMC staff modified combine equipment to transfer seed directly from the combine to a grain wagon. The wagon was modified with a dryer floor and fan system to facilitate efficient seed drying without placing seed into cloth bags. Seed from the Prairie View fields were placed into large bulk bags that can be moved with a fork lift and transported on a pallet.



New Crib Wall Construction at the PMC



Building Expansion at the Rose Lake Plant Materials Center has taken on slope stabilization. The Plant Materials Center staff has constructed a black locust log crib wall. The crib wall is constructed the same as a vegetative log crib wall but without the dormant vegetation. The black locust logs were harvested from the area through an arrangement with the MIDNR last winter. The crib wall construction took place this fall. The wall is 6 foot high and 48 feet long and 5 foot wide, held together with reinforcing rod pins. The inside of the crib was filled with large field stone and old concrete along with compacted soil. To keep the fill materials from sifting out between the logs, a geo-textile fabric was attached to the inside front of the crib. The whole system will be allowed to settle throughout the winter and next summer until the rest of the building expansion is completed. Black locust logs were also used for the poles of the expansion. Stop out at the PMC and see the construction. It can help you get a better understanding of what is involved with installing a vegetative crib wall, if you ever plan one with a landowner. The PMC staff will be happy to share their experiences concerning the installation.

Ash Seed Collection

Ash seed being collected at the Rose Lake PMC is destined for the National Center for Genetic Resources Preservation in Fort Collins, Colorado. The seed is from throughout the Great Lakes Region.

Here's the background: Emerald ash borer, an Asian insect first noticed here in 2002, has attacked and already destroyed millions of trees of the genus *Fraxinus* in Southern Lower Michigan and adjacent areas in Ohio, Indiana, and Ontario, Canada. The PMC entered into an agreement with the National Center for Genetic Resources Preservation to collect and store seed and preserve germplasm.

“Contingency Planning” is how one might describe the ongoing ash seed collection effort at Rose Lake PMC. This effort will insure the preservation of a diversity of ash genetic material. Already seeds of four species have been collected from public, private, and tribal lands.

More information is available at:

<http://www.mi.nrcs.usda.gov/programs/pmc.html>

NRCS State picnic at Rose LakePMC



Michigan's State Conservationist John 'Jack' Bricker welcomed everyone to the Employee picnic



The BBQ team



Field tour demonstrations were part of the day's activities

The Rose Lake PMC hosted a NRCS-Michigan picnic and field day on August 17, 2005. Approximately 150 NRCS employees, retirees, and their families attended the event. The picnic and activities were coordinated by the NRCS-Michigan State Office Fun Team (SOFT). The NRCS-Michigan Leadership team operated the grills, PMC staff coordinated parking and those attending brought food to share. John Leif, PMC Manager, John Durling, Agronomist, and Sergio Perez, Bio-Science Technician, led tours of the PMC. Tom Ward, NRCS State Forester, Betsy Dierberger, NRCS State Grazing Lands Specialist, and Will Bowman, NRCS Soil Scientist made presentations during the tours. In addition to the field tours, the SOFT team provided activities for the children, door prizes and recreational activities for those in attendance.



Betsy Dierberger, State Grazing Lands Specialist



Tom Ward, State Forester



Will Bowman, Soil Scientist

Technical Specialists from the State Office gave presentations on the tour

Eastern Gamagrass Study Established

Eastern gamagrass is a perennial, warm season grass with good forage yield and quality. It has potential for grazing and conservation planting.

Natural seed dormancy presents a barrier to gamagrass establishment, however, dormancy may be broken with wet-chilling, but handling wet seed while maintaining cold temperatures is laborious.

Rose Lake PMC is investigating whether seed planting may be timed to break dormancy naturally. Seeds are being planted at 15-day intervals without any pretreatment. Plantings started in October 2005 and will continue through the fall, winter, and spring as conditions allow. In collaboration with NRCS State Grassland/Forage Specialist, Betsy Dierberger, plots have been established at the Rose Lake PMC and at three other Michigan locations.

Howard and Mary Jo Straub provided plot space on their dairy farm 30 miles northwest of Rose Lake. (Howard is president of the Michigan Grazing Lands Conservation Initiative and a director of the Michigan Forage Council.) Plot space was also provided by the Michigan State University Agricultural Experiment Station at the Agronomy Farm in East Lansing and at the Lake City Experiment Station in Northwest Lower Michigan.



Rose Lake Agronomist, John Durling

PMC Partnership with Michigan State University Entomology Project

For the past two years the Rose Lake Plant Materials Center, along with NRCS Michigan Plant Materials Specialist Dave Burgdorf, has provided input on a project conducted by Michigan State University entomologist Dr. Doug Landis. Dr. Landis is evaluating native plants as hosts for beneficial insects that will reduce the impact of insect pests. PMC Manager John Leif presented information about the Plant Materials Program at the MSU Native Plants Field Day in August.

The next phase of the research will involve field research plots on fields around the State of Michigan. Dr. Landis will coordinate efforts with PMC staff, NRCS State Biologist Lynn Sampson and NRCS Water Quality Specialist Ruth Shaffer to locate field sites and establish field experiments. One outcome of the project will be the update of job sheets for the use of plants to encourage beneficial insects. This may also provide guidance to Field Office Staff on using these techniques in EQUIP and CRP projects.



John Leif (PMC Manager) presenting at the Native Plant Symposium, Michigan State University

New Shadehouse

The transition for plants from the greenhouse to the field can be difficult, especially in areas where temperature, wind speed, and light intensity extremes are common. The Rose Lake PMC uses a shade house structure to ease that transition between the greenhouse and the field. Plant production requirements at the PMC had outgrown the old shade house structure, so a new structure was constructed in 2005. The new structure is 34' X 48' with a single shade cloth panel stretched across an arched frame. Overhead irrigation allows for good water management and eliminates hoses and sprinklers on the floor of the structure. Small water containment tubs were placed in the shade house to accommodate wetland plants and plants in large containers that required additional water.



FOR MORE INFORMATION

Visit our Plant Materials website to find more information on using plants to solve conservation problems.

<http://Plant-Materials.nrcs.usda.gov>

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