

*Rose Lake
Plant Materials Program
Summer 2008
Newsletter*



Why is Ash preservation important?

That is a question often asked when the Plant Materials Center staff or Plant Materials Specialist presents information on the Ash Seed Collection Initiative. Some answers to that question include preservation of genetic diversity within the various *Fraxinus* species; providing genetic resources for developing resistance to the Emerald Ash Borer; providing a mechanism for assuring the survival of important plant species in the landscape; and a host of other good “biological” reasons. One aspect of Ash preservation that is often overlooked is the affect that the loss of Ash, especially Black Ash, would have on the culture of many Native American groups.

Dave Burgdorf, Plant Materials Specialist, presented information on the Ash Seed Collection Initiative at a Tribal meeting last April. At least eight tribes from Michigan, Indiana, and Wisconsin were represented at that meeting. Among the presenters at that meeting were several basket makers, who use Black Ash wood to create the baskets that are as beautiful and artistic as they are practical. The basket makers described the process of locating and harvesting Black Ash trees in the wetlands, making strips of ash wood, and creating the baskets with all the detail of an artisan. A special emphasis was placed on teaching the young people in their tribes the techniques and art of material preparation and basket weaving.



Rose Lake Plant Materials Center works with Fort Custer Military Training Center to propagate and install native forbs and grasses.

The Rose Lake Plant Materials Center has had an excellent working relationship with Fort Custer Military Training Center, located in Southwest Michigan near Augusta, for the past four years. The PMC has assisted the Fort in efforts to renovate a training area that had become overgrown with woody plants and other undesirable plant species by providing technical assistance in site preparation and propagating warm season prairie grasses for the site.

In 2007 the Fort and the PMC initiated a project to collect and propagate approximately 100 species of forbs, cool season grasses, and sedges that are native to the Fort, and re-introduce those plants onto the training area. In addition to introduction to the training area, the PMC assisted the Fort in establishing seed production blocks of 24 species that were of special interest to the Fort Custer environmental staff.

Seeds were collected by cooperators at Native Connections, a native seed supplier in southwest Michigan. Seeds were sent to the PMC for cleaning, stratification, and propagation. Those efforts resulted in 77 species of forbs, grasses, and sedges being propagated and installed at the Fort.

Plants were installed as plugs into existing vegetation using a modified tree planter. The planter had a no-till coulter and furrow opening system which allowed the plants to be transplanted into existing vegetation. This system provided minimal disturbance of the soil, good root to soil contact, and minimal moisture loss. Timely rains following planting helped insure good plant survival.

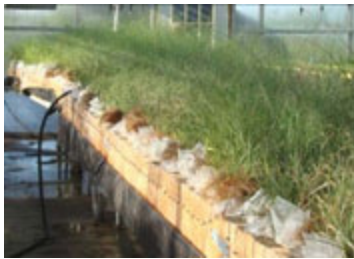


Vegetative Barrier field planting installed in Allegan County, Michigan

In 2007 the Michigan NRCS Plant Materials Committee toured a Vegetative Barrier field planting that was installed in 2002 at the Michigan State University Kellogg Biological Station in Southwest Michigan. As a follow-up to that tour the Committee placed a priority on establishing an additional planting to provide training on planning and installation of the practice, and evaluate the practice under different field conditions.

In November of 2007 the Rose Lake Plant Materials Center established 900 linear feet of *Miscanthus sinensis* vegetative “sod strips” in the greenhouse. Each sod strip was 3-in wide and 6-ft long. A layer of plastic was installed over a wire frame, and coconut fiber was placed inside the plastic. A peat based potting media was used to grow the *miscanthus*. *Miscanthus* vegetative material was excavated from a source block maintained at the Rose Lake PMC. *Miscanthus* crowns were placed at 3-in intervals within each sod strip. The *miscanthus* was allowed to grow in the greenhouse until it was transported to the field location for installation in May of 2008. Each sod strip had good root development and the strips did not break apart while being handled.

The field planting in Allegan county was planned according to the NRCS Vegetative Barrier (601) Practice Standard and adjusted to accommodate the landowner’s planting and spraying equipment. Two watersheds in the field were treated with the practice, using three vegetative barriers in each watershed. Two trenches, approximately 18-in apart, were created at each barrier location with a walk behind trencher. The vegetative sod strips were placed in the trenches and soil was moved back into the trench. NRCS personnel from several field offices participated in the planting, which took approximately four hours. Survey measurements were taken above and below each barrier on a grid pattern. Survey measurement will be repeated several times over the next five years.



Plant Materials Program partners with Logan County, Ohio Health Department to address constructed wetland vegetation.

The Logan County, Ohio Health Department contacted Plant Materials Specialist Dave Burgdorf for plant recommendations on a residential septic system constructed wetland. Through a series of discussions with the Health Department, Ohio NRCS Plant Materials Committee, and the local NRCS Field Office, a study was developed to evaluate several plant species for effectiveness in a constructed wetland situation.

The Rose Lake Plant Materials Center propagated prairie sandreed, prairie cordgrass, sweetgrass, Canada blue-joint, and wool grass for the project. Each species was planted in three different areas of the wetland, representing the inlet, middle, and outlet areas of the wetland. The Ohio NRCS Plant Materials Committee and the Logan County NRCS Field Office, in coordination with the Logan County Health Department installed the plantings in May. Evaluations will be taken on the project for the next five years to determine survival, spread, and vigor of each species.



Equipment Training conducted at Rose Lake Plant Materials Center

The Michigan NRCS Major Land Resource Area (MLRA) soil scientists came to the Rose Lake PMC for training on the use of a Kubota tractor with backhoe they will be using for MLRA activities. A representative from Capital Equipment and Supply provided training on the use of the tractor and backhoe, emphasizing safety aspects of the machine and discussion of the controls. Fred Gasper, NRCS engineer, presented a discussion on trench safety which included determination of utilities, preventing cave-ins, and personal protective equipment. Each participant operated the backhoe in order to become familiar with the machine and its controls.

A representative from the Michigan Truck Safety Council provided training on securing equipment on a trailer. He covered how to determine the capacity of the truck/trailer, methods for securing cargo to the trailer, types of binders (chains, nylon straps, tighteners) and provided hands-on training using the Kubota tractor with a truck/trailer from the PMC. Each participant loaded and unloaded the tractor/backhoe, and was shown how to secure the unit to the trailer.



Desmodium Seed Production Improved with Deer Exclusion Fence

The Rose Lake PMC released Grant Germplasm Panicleleaf Tick-Trefoil and Alcona Germplasm Dillenius Tick-Trefoil in 2006. As a wildlife habitat enhancement plant, the tick-trefoils attract a number of mammals and birds, including deer. Seed production of the two releases in 2006 was adequate to meet the needs of commercial growers, but 2007 production was down due to heavy deer browse.

Deer browse was becoming an issue early in 2008, so the decision was made to install deer exclusion fence around each production field. Production fields are 0.1 – 0.2 acres in size, so installation was relatively easy to do and the fields can still be accessed for spraying and weed control. The fence is a standard rolled fence that is 4-ft high, and secured in place with “T-Posts.”

2008 seed production appears to be excellent for both releases. The plants are about 5-ft tall with flowers and seed pods developing. Seed will be harvested with a plot combine this fall.



Seed Collection Reminders!

The Rose Lake PMC is asking NRCS and other conservation partners to locate and collect seed or vegetative material of the following species: Buttonbush, Broomsedge Bluestem, Coralberry and American Wild Plum. Autumn is a good time to collect seeds, fruits, or vegetative materials of these species for these evaluations.



Buttonbush
Cephalanthus occidentalis L.

Buttonbush is a swamp/marsh shrub. It likes to grow where there is water all or most of the year.



Broom sedge Bluestem
Andropogon virginicus L.

Broom sedge Bluestem is found on low fertile soils. The inflorescences are orange in the fall.



Coralberry
Symphoricarpos orbiculatus Moench

Coralberry is typically found in low thickets along woodland edges. Coralberry has clusters of small red berries along a skinny arching branch.



American Wild Plum
Prunus Americana Marsh.

American Wild Plum is a tall, deciduous, thorny shrub to a small tree common in native thickets along stream bottoms and coulees.

Ash seed – as part of the Ash Seed Collection Initiative. Go to www.Ashseed.org for identification and collection information.

National Ash Seed Collection Initiative

← Example Ash Species →

Green Ash
(*Fraxinus pennsylvanica*)

Black Ash (*Fraxinus nigra*)

www.ashseed.org

White Ash
(*Fraxinus americana*)

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Resident Sand Hill Cranes



For several springs now, we have had a pair of sand hill cranes show up at the center. The last two years they have hatched two chicks each year, but we figure the hungry coyote had them for lunch, because it is always just the pair. This year we have had trouble with the sand hills fighting with their reflection in the office windows. It is amazing that they haven't broken the windows, they hit it so hard. Our NRCS State Biologist, Lynn Sampson, thinks they may be trying to mate again, since they lost their chicks, and they take the reflection in the glass as their rival. It makes for interesting bird watching.



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