Rose Lake Plant Materials Center
2009 Annual Report of Activities

Ford Field Park Streambank Stabilization Project

This project involved the stabilization of the streambank along the Lower Rouge River as it passes through Ford Field Park. The problems of the Lower Rouge River were highly visible at the park including eroding streambanks, trees falling into the river, and picnic tables and debris floating down the river.

In November of 1998, John Lambert, City of Dearborn Parks Commissioner, Dave Burgdorf, Frank Cousin and Sean Duffey from the NRCS; and the Wayne County Conservation District hosted three soil bioengineering workshops during this restoration. People from all over enjoyed and learned from the soil bioengineering workshops. The highlight of the workshops was always the on-site workdays.

To date approximately 900 feet of shoreline has been stabilized using soft bioengineering methods including live fascines, brush mattress and vegetative geogrids. The benefits of soft engineering include:

- Soft engineering is aesthetically pleasing because they incorporate trees, bushes, flower and grasses along the stream.
- Soft engineering provides wildlife habitat, protective cover, corridors and homes for birds and small animals.
- Soft engineering improves water quality by filtering overland run off into the river.
- Soft engineering provides fish habitat
- Soft engineering reduces maintenance costs.

←Before→

←Installation→

←Result→

New Plant Release – Marion Germplasm Dillenius' Tick-Trefoil

The Rose Lake Plant Materials Center has completed the release of a conservation plant that is an excellent food source for wildlife. The Plant Materials Program will now make seed from the plant, Marion Germplasm Dillenius' tick-trefoil (*Desmodium glabellum*), available to commercial seed producers.

The Rose Lake Plant Materials Center in East Lansing began selecting and field testing Marion Germplasm Dillenius' tick-trefoil in 1989. The plant was selected for use in wildlife food plots. It is adapted to the Great Lakes region and grows well in dry, sandy, open woods and slightly shaded areas. Seed for the Marion Germplasm Dillenius' tick-trefoil was originally collected in Marion County, IL.

Marion Germplasm Dillenius' tick-trefoil is a native member of the pea family and produces seeds that are a food source for song birds, upland game birds, small rodents, wild turkey, rabbits, groundhogs, and livestock and is also an excellent deer browse. The plants grow up to 47 inches tall and produce flowers that bloom between mid-summer and early fall.

Seed of Marion Germplasm will be made available to commercial seed producers through the Michigan Crop Improvement Association. Contact Dave Burgdorf, NRCS-MI Plant Materials Specialist, to request Marion Germplasm seed.

Dillenius' tick-trefoil

Marion Germplasm seed production

Rose Lake PMC Hosts PM Program Training

The Rose Lake Plant Materials Center hosted a two-day training class on the NRCS Plant Materials Program. The students included NRCS District Conservationists and Soil Conservationists, RC&D Coordinators, Conservation District employees, and administrative staff. The focus of the training was to provide an overview of the Plant Materials Program and specific ways in which the students could use the Program in their roles within NRCS, RC&D, or Conservation District.

Dave Burgdorf, NRCS-MI Plant Materials Specialist, led the discussion on the role of the Plant Materials Committee, emphasizing the need for NRCS field staff to work with the committee to conduct Plant Materials projects. Using the Committee to coordinate Plant Materials projects will not only benefit the local Field Office, but make the information gathered from those projects available to other offices throughout the PMC service area.

The students were given training in calibrating a grain drill for planting native prairie grasses (see pictures below). The students also learned how to do vegetative propagation of sweetgrass, which led to a discussion on the role of the PM Program in working with Native American Tribes.

The second day of the training included visits to field planting sites at the Kellogg Biological Station near Battle Creek, MI. Jane Herbert, MSU Extension Educator, hosted a discussion on a shoreline stabilization project that the PM Program helped plan and install in 2001. The class also visited a field planting of vegetative barriers used to control concentrated flow in crop fields.

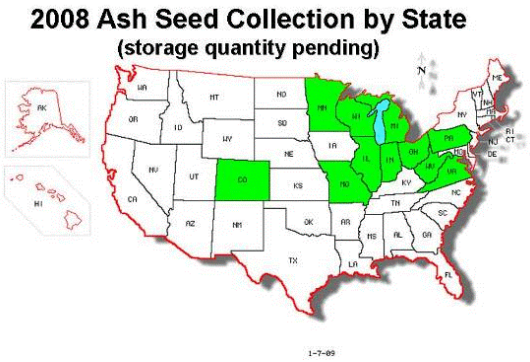
Sergio Perez demonstrating the art of planter calibration

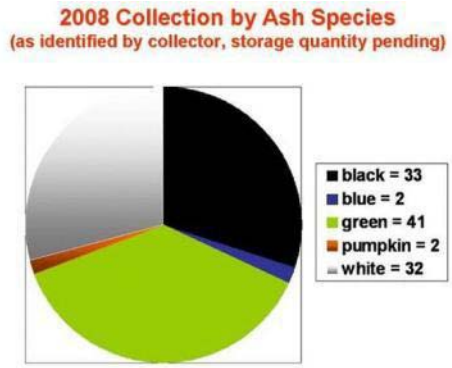
Ash Seed Collection Initiative a Success in 2008

The Rose Lake Plant Materials Program has coordinated the National Ash Seed Collection Initiative since 2005. The Initiative was in response to the devastation to Ash tree populations caused by the Emerald Ash Borer. Interest in the program has been strong since its inception and 2008 was no exception. Through collection efforts of NRCS field offices, Conservation District staff, Native American tribes, and volunteers from the public the Rose Lake PMC received almost 150 Ash seed samples. After initial screening by PMC staff 110 samples were sent to the U.S. Forest Service Laboratory in Georgia for X-Ray analysis.

2008 was a good year for ash seed production which provided opportunities for collectors to send samples to the PMC. Ash seed production is not consistent from year to year. Green Ash and White Ash often produce seed every two or three years, and Black Ash will often produce seed every six to eight years.

Information on plant identification and collection procedures is available at www.ashseed.org.





Plants as Habitat for Native Pollinators

A planting was established at the Rose Lake PMC to demonstrate usage of flowering plants – especially native shrubs and perennial forbs – for the creation of habitat for important beneficial insects, i.e., pollinators and predators and parasites of crop pests. The habitat planting included locally appropriate genetic stock. Native herbaceous plants were chosen based on field work conducted by scientists at Michigan State University. Shrubs were chosen in consultation with local and regional experts based on genera known to be important sources of pollen and nectar for bees and other pollinators. This project was planned and coordinated with the Xerces Society, which also provided partial funding for the project.

A simulated field border (linear planting of perennial herbaceous and woody plants) was established at Rose Lake PMC. Species were arranged in anticipated order of bloom with earliest bloomers at southwest end. Species and transplant dates are shown in the table below. Plants in this demonstration generally flowered in the order anticipated. Native bees were observed near flowering plants throughout the summer.

Selected plants for use by native pollinators. Rose Lake PMC. Native Herbaceous Plants – Planted in rows 1-ft apart, 2-ft spacing between plants within row. Two rows of 5 plants per species.
Native Herbaceous Plants
Early Flowering → Late Flowering. Transplanted 10 July 2008
Wild strawberry – *Fragaria virginiana*
Golden alexanders – *Zizia aurea*
Prairie spiderwort – *Tradescantia ohiensis*
Tall white beard-tongue – *Penstemon digitalis*
Hairy penstemon – *Penstemon hirsutus*
Butterfly milkweed – *Asclepias tuberosa*
Culver's root – *Veronicastrum virginicum*
Eastern purple coneflower – *Echinacea purpurea*
Black-eyed susan – *Rudbeckia hirta*
Yellow giant hyssop – *Agastache nepetoides*
Wild Bergamot – *Monarda fistulosa*
Missouri ironweed – *Vernonia missurica*
Blue Lobelia – *Lobelia siphilitica*
Showy goldenrod – *Solidago speciosa*
Hairy goldenrod – *Solidago hispida*
Riddell's goldenrod – *Oligoneuron riddellii*
New England aster – *Symphyotrichum novae-angliae*

Woody Plants
Early Flowering → Late Flowering. Transplanted 19-20 June 2008
Serviceberry – *Amelanchier sp.*
Sandbar willow – *Salix interior*
Buttonbush – *Cephalanthus occidentalis*
Common elderberry – *Sambucus canadensis*
Redbud – *Cercis canadensis*
Swamp rose – *Rosa palustris*
American wild plum – *Prunus americana*
Michigan rose – *Rosa setigera*
Chokecherry – *Prunus virginiana*
Common ninebark – *Physocarpus opulifolius*
Meadowsweet – *Spiraea alba*

Simulated field border established 2008

Prairie spiderwort flowers

Who We Are:

There are 27 Plant Materials Centers nationwide, each serving a particular geographic area. The Rose Lake Program serves Indiana, Michigan, Ohio, and Wisconsin. It also serves portions of Illinois, Minnesota, New York, and Pennsylvania.

Program Emphasis:

The activities of the Rose Lake PMC are guided by a long-range plan. Priority work areas include plant releases, seed and plant production, and plant technology development.

The mission of the NRCS Plant Materials Program is to develop and transfer effective state-of-the-art plant science technology to meet customer and resource needs. The Rose Lake Plant Materials Center was established in 1958 to develop plant materials and plant technology for use in natural resource conservation activities.

Rose Lake Plant Materials Center Staff:

John Leif – Manager

John Durling – Agronomist

Sergio Perez – Biological Sciences Technician

Elaine Gerona – Office Assistant

Gail Bischoff – Biological Sciences Aide

Plant Materials Specialist:

Dave Burgdorf

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