# Manhattan Plant Materials Center

Manhattan, Kansas

A newsletter in support of the Plant Materials Program for Colorado, Kansas, Nebraska, and Oklahoma

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## Vote for America's National Tree

The Arbor Day Foundation is sponsoring a historic vote for America's National Tree. You can vote for the tree of your choice by logging onto the Arbor Day site at http://www.arborday.org. By taking part in the voting process you can show your understanding of the importance of trees and of just how many blessings America's trees really do provide. In diversity alone, America is blessed with more than twice the number of tree species as in all of Europe. Several of our native trees can be found in nearly every state, and some genera include dozens of native species.

The Arbor Day Foundation web site has a lot of information concerning tree care, educational programs, conferences, and tree planting instructions. The site also has an identification section that displays leaf and seed drawings of numerous trees.

So log onto the Arbor Day web site and help America pick its National Tree.

CAST YOUR VOTE TODAY!!

# Cribwalls for Shoreline Stabilization at Cheney Reservoir

Cheney Reservoir is located in south central Kansas and has experienced significant shoreline erosion since its construction in the 1960's. A four-year reimbursable agreement was signed in 2000 with the Bureau of Reclamation to investigate and develop alternatives to addressing shoreline erosion. Of the different shoreline treatments applied in April 2000, live cribwalls appear to be providing the greatest protection.

What exactly are cribwalls? Live cribwalls are box-like structures placed along the shoreline. They are trenched in at a depth slightly below the bottom of the lakebed so as to prevent any undercutting. An erosion control fabric is placed in the bottom and along the back of the trench before the cribwall is set in place. This help prevents wave action from eroding behind the cribwall.

Once the cribwalls are set in place, they are partially back-filled with medium sized diameter rock (9 inch diameter rock minimum). Willow cuttings are then placed above the rock, so that the basal ends will root into the back slope. The willows are then covered with backfill. The sloped backfill is then seeded to herbaceous mixture.

Once the vegetation becomes established, it re-enforces the structural component of the cribwall. The presence of the vegetation also provides more of a natural appearance along the shoreline compared to using an all-structural component such as rock riprap.

## **Biology of Seed Smut of Switchgrass**

slahoma

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Seed smut fungus is a common disease in seed production fields of Blackwell and Cave-in-Rock cultivars of switchgrass in the Central U.S. Research to determine if other cultivars of switchgrass are susceptible to this disease was initiated by D. L. Stuteville (Forage Crop Pathologist-KSU) as a continuation of research initiated by a grant from the Kansas Crop Improvement Association. Reaction of the switchgrass cultivars to inoculation by the smut causing fungus was evaluated for two years after inoculation with smut spores. Seed of switchgrass cultivars of Blackwell, Cave-in-Rock, Kanlow, Pathfinder, Shelter and Summer, were planted in May of 1996 along with smut spores. No infection was noted in 1997. Switchgrass plants in replication one were re-inoculated in 1998 during a rain soaked period in July. During the growing season in 1999 one or more smut infected seed heads were noted on all cultivars except Kanlow. Infection in 2000 was more widespread among the susceptible cultivars. Kanlow was still smut free in 2000. Seven plots of uninfected susceptible plants in 2000 supports the earlier observation that this fungus spreads rather slowly in a field setting.

#### Native Grass Seed Quality Workshop

A one-day seed quality workshop was held February 28, 2001 in Omaha, Nebraska. Tim Gutormson, President of Mid-West Seed Services, organized all aspects of the workshop. Approximately 80 participants from 10 states and Manitoba were present for the workshop. Speakers for the morning

session discussed seed quality as it relates to stand establishment, seed fill, storability and seed testing. The morning session generated a number of questions and some

discussion among the participants concerning seed quality issues. After lunch exhibits by seed producers and seed cleaning equipment companies could be viewed. Afternoon speakers discussed improving flowability, use of indent seed cleaners, sources of variation in seed testing results, and seed law and labeling issues. The workshop ended with demonstrations of the use of seed blowers, dividers, and determining pure seed units. A station was also available that demonstrated preparation, dividing seed, and evaluating stains for a tetrazolium test. A final station demonstrated the reading of a typical germination test.

Mid-West Seed Services, Inc. has a web site at http://www.mwseed.com that tells about all their services and training opportunities provided by the company.

#### Next Plains and Prairie Forestry Association Conference Scheduled

The seventh biennial conference on Agroforestry in North America and the Annual Conference of the Plains and Prairie Forestry Association (PPFA) will be held August 13-15, 2001 in Regina, Saskatchewan. There will be a preconference tour leaving from Winnipeg August 11th and ending in Regina on August 12th. For information on registration and program activities visit the following web site: http://www.ca/pfra/aftappfa.htm

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