

# 2006



United States Department of Agriculture  
Natural Resources Conservation Service

# Progress Report of Activities

Issued February 2007

**Manhattan, Kansas, Plant Materials Center**

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## Seeking Vegetative Solutions to Conservation Problems

### Who We Are

The Manhattan Plant Materials Center (PMC) is one of 27 centers nationwide that uses plants to solve natural resource problems. The Manhattan PMC is owned and operated by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) and offers services to a diverse region of the heartland including Kansas, Nebraska, northern Oklahoma, and northeastern Colorado. It is located on 169 acres of sandy loam soil in the Kansas River Valley, south of Manhattan, Kansas.



### What We Do

The mission of the Plant Materials Program (PMP) is to develop and transfer state-of-the-art plant science technology to meet customer and resource needs. This includes the production of improved varieties of plants for commercial use, and the development of plant science technology for incorporation into the electronic Field Office Technical Guide (eFOTG). Plant and technology development objectives of the Manhattan PMC include:

- Water quality improvement
- Erosion control
- Range and pasture improvement
- Native American outreach
- Plant variety selection and production

# Program Highlights for 2006

## Foundation Seed Production

The Manhattan PMC maintains a variety of native grass and forb fields for foundation seed production. Native grass varieties include:

- Kaw big bluestem
- Pete eastern gamagrass
- Osage Indiangrass
- Cheyenne Indiangrass
- Aldous little bluestem
- Cimarron little bluestem
- Garden sand bluestem
- Bend sand lovegrass
- El Reno sideoats grama
- Blackwell switchgrass
- Kanlow switchgrass
- Barton western wheatgrass
- Pronghorn prairie sandreed



Aldous little bluestem



Midas false sunflower

Native forb varieties include:

- Midas false sunflower
- Sunglow grayhead prairie coneflower
- Prairie Gold maximilian sunflower
- Nekan pitcher sage
- Kaneb purple prairie clover
- Kanoka round-head lespedeza
- Eureka thickspike gayfeather
- Reno Germplasm Illinois bundleflower
- Riley Germplasm Showy partridge pea

## Career Intern, R. (Alan) Shadow, Joins East Texas Plant Materials Staff

R. (Alan) Shadow joined the Manhattan PMC July 11, 2005, as a career intern. Alan will be transferring to the East Texas Plant Materials Staff at Nacogdoches, Texas, in April 2007, for the next phase of his training.

While at the Manhattan PMC, Alan has become familiar with the activities and management of the Center. Projects have included a giant sandreed and rhizomatous switchgrass improvement studies, acid scarification of Illinois bundleflower and round-head lespedeza to determine maximum germination, preparation of plant fact sheets, planting guides, and photo library.



Alan shares study during a PMC tour.



# Program Highlights for 2006

## AiKiRuti Healing Garden



CeCe Earth and Robert Starck



CeCe Earth with Tribal members

A small seed can grow into great things. That is the symbolic idea behind the Winnebago Tribe of Nebraska's AiKiRuti Healing Garden. AiKiRuti (pronounced I-key-ru-dee) is a project that started small with the hope of growing into something big and beautiful. AiKiRuti means "helping hand". The AiKiRuti Healing Garden hopes to lend a helping hand in fighting drug and alcohol abuse within the Winnebago Tribe and their community. The Healing Garden will provide a space where visitors can find spiritual and cultural strength. It will also provide a place where all members of the community can come together and learn more about the Winnebago Tribe's culture and heritage.

The first phase of the Healing Garden began in 2002 when over 100 varieties of indigenous plants significant to the Winnebago people were planted at the one-acre site in Winnebago, Nebraska. Members of the community worked together to clear the land and prepare the site for planting. The Nebraska Loess Hill RC&D worked with the Manhattan PMC to supply plant materials for the garden. Additional plant materials were provided in 2006 to diversify the seeding.

The AiKiRuti organization wants to move into the second phase of the healing garden soon. This involves building a Cultural Learning/Visitors Center. The Center's goal is to provide a place of cultural discovery for members of the Winnebago Tribe and provide an opportunity for non-Native Americans to participate in cultural and educational activities alongside members of the Tribe.

## Modoc Cypress Study

Monitoring of the Modoc Cypress Study began in 2006 with some unexpected results. The trees in the planting were gone; reduced to short stubs with little or no vegetation. As replanting of the trees commenced, the culprit of the destruction watched carefully from the sidelines. Due to the dry conditions the last couple of years in western Kansas, jack rabbits found the tree plantings to be very tasty. Protective cages were installed around the newly planted trees. The study will continue to evaluate the Modoc Cypress as a conifer for use in windbreak plantings.



# Program Highlights for 2006

## Nebraska Plant Materials Committee Updates Long-Range Plan

The Nebraska Plant Materials Committee met in August to review and make needed updates to the Nebraska Plant Materials Long-Range Plan (LRP). The final draft has been prepared and should be distributed in early 2007.

LRPs are developed to direct plant materials activities at the state level. The plan identifies, prioritizes, and integrates customer resource and program needs. The LRP will help facilitate the development and transfer of plant technology to address priority concerns. The Nebraska, Oklahoma, Colorado, and Kansas LRPs are used to develop the PMC LRP.

The Nebraska LRP identifies three goals:

Goal 1 – Identify and evaluate plants and develop technology for their successful establishment and maintenance to solve natural resource conservation problems which include improving air and water quality as well as enhancing wildlife resources.

Goal 2 – Provide plant materials and plant technology that is economically feasible for solving conservation problems.

Goal 3 – Provide equal access for all Americans to the PMP.

## Manhattan Plant Materials Center Tours

Tours allow the center staff to share the function of the Manhattan PMC; including the maintenance of foundation seed fields and the ongoing plant studies.

Tours of the Manhattan PMC are available Monday through Friday during regular business hours. Advance reservations are required for group tours.



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### **PMP Web site:**

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