

BOONEVILLE PLANT PRESS

Newsletter from the Booneville Plant Materials Center
Booneville, Arkansas
November 2011

Center Happenings

Fall activities are in full swing here in Booneville as we gear up to host several upcoming trainings at the PMC. The Xerces Society will be holding a Pollinator Workshop in May. In April, the PMC will be hosting the Pasture Ecology I training course for field office staff. We are also looking forward to celebrating the 25th anniversary of the Booneville PMC (which was founded on April 12, 1987). Here's to the next 25 years!

Sincerely, [The Booneville PMC Staff](#)

Alley Cropping with Shortleaf Pine and Switchgrass: PMC Staff collects Year 2 Data

Plant Materials staff collected measurements on the center's agroforestry plots on November 1. The PMC has been studying the influence of growing switchgrass (*Panicum virgatum* L.) between rows of shortleaf pine (*Pinus echinata* Mill.) in an agroforestry study plot. Single and double rows of shortleaf pine were planted in January of 2006, with the switchgrass being planted in April of the same year.

The goal of the study is to determine whether agroforestry producers in western Arkansas, eastern Oklahoma, and southwestern Missouri could potentially integrate switchgrass into their operations without affecting tree growth. (Continued on pg 2)



Joel Douglas collects a "grab sample" of harvested switchgrass to determine moisture content



Study examines interactions between switchgrass and shortleaf pine

(Agroforestry continued)

The switchgrass produced may potentially provide added value to producers as a forage or biofuels crop. PMC staff along with Joel Douglas, Regional Plant Materials Specialist, harvested the switchgrass plots in alleyways. Tree heights and diameters were measured by Ray Stoner, Regional Forester, and George Rheinhardt, Arkansas State Forester. Last year's measurements indicate that there were no significant differences between trees grown with or without switchgrass in the alleyways. Collected data is being shared with researchers in North Carolina who are studying similar aspects of biofuel and agroforestry production.



From left to right: Eddie Pratt and Joel Douglas harvest biomass from a control plot (no switchgrass)



From left to right: Dale Goff, Ray Stoner & George Rheinhardt measure height and diameter of shortleaf pine trees

Staffing Update

Alayna Jacobs was hired in October to fill the position of Assistant Plant Materials Center Manager.

She is a New Mexico native and earned her Bachelor of Science degree with a major in Natural Resources: Rangeland Ecology and Management and a minor in Plant Sciences at the University of Arizona in Tucson. She has worked as a Rangeland Management Specialist and Soil Conservationist in Arizona and Arkansas field offices and has also worked at the Tucson Plant Materials Center. She is excited to be here and looks forward to working with both NRCS personnel and partners.



Alayna Jacobs

'Bumpers' Eastern Gama Grass Seed Sorting Improved

The Booneville PMC recently purchased an Oliver 30-MA gravity seed separator to better serve demand for 'Bumpers' eastern gama grass seed.

"We want to make sure that we deliver high quality plant materials to our partners. The gravity separator is a great tool that allows us to do that better," says Randy King, PMC Manager.

Eastern grama grass is a distant relative of corn. Gama grass seed has a long ripening period, producing seed from June-September. This makes collecting fertile seed difficult, as seeds on the same stalk mature at different times. The caryopsis (seed) is surrounded by a cupule, or a hard fruit-casing. Seeds are similar in size and, until now, it was difficult to determine whether the cupule contained fertile or aborted seed.

The gravity seed separator allows the fertile, heavy seed to be quickly sorted from the lighter seed that will not germinate. Using the sorted heavy seed will improve success rates in field plantings in the future.



Dale Goff (left) feeds unsorted 'Bumpers' Eastern Gama Grass seed into the gravity separator while Eddie Pratt adjusts output parameters

About Us:

The Dale Bumpers Small Farm Research Center is home to: The USDA, Natural Resources Conservation Services- Booneville Plant Materials Center and the USDA Agricultural Research Service. We are located at: 6883 South State Hwy 23, Booneville, Arkansas 72927. You may contact us at (479) 675-5182, Fax: (479) 675-5466. Our hours are from 8:00 A.M. to 4:30 P.M., Monday thru Friday. **If you would like a tour of the Center please call to schedule an appointment.** Our staff members are: Randy King, Manager, Alayna Jacobs, Assistant Manager, Debbie Orick, Office Assistant, Eddie Pratt and Dale Goff, Biological Science Technicians. The primary service area of the Center encompasses 53 million acres of Arkansas, Oklahoma and Missouri.



Our Mission Statement:

The mission of the Natural Resources Conservation Service, Plant Materials (PM) Programs is to develop, test, and transfer effective state-of-the-art plant science technology to meet customer and resource needs. NRCS PMC activities are consistent with the objectives of the current United States Department of Agriculture (USDA) and NRCS Strategic Plan namely to provide timely and effective vegetative solutions for identified resource needs.

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