



# Year 2004



# Progress Report of Activities

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Jimmy Carter Plant Materials Center

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## Who We Are

The Jimmy Carter Plant Materials Center (PMC) is a branch of the United States Department of Agriculture, Natural Resources Conservation Service. It is one of 26 plant materials centers located throughout the United States. The Center is located on the Northwest corner of Americus in Southwestern Georgia and is approximately 40 miles North of Albany. Areas served include Georgia, Alabama, South Carolina, North Carolina and parts of Tennessee and Florida.

## What We Do

It is our mission to use plant materials and state-of-the-art plant science technology to solve natural resource problems and meet the objectives of environmental programs. Our program emphasizes using native plants. We develop, test and release superior adapted plants to commercial growers along with production and management technology. Our mission addresses three major objectives:

- Native Grasses for grazing lands that support sustainable agriculture
- Native plants for water quality (riparian forests, conservation buffers, filter strips, constructed wetlands, and streambanks)
- Conservation tillage (green manure, organic gardening, carbon sequestration, and winter cover)

A brief summary of year 2004 accomplishments follows. For a complete account of all activities,

Request the 2004 Technical Report of Activities at the above address.

## SOURCE-IDENTIFIED RELEASE OF THREE NEW NATIVE GRASSES FOR THE CAROLINAS

Newberry Germplasm Indiangrass [*Sorghastrum nutans* (L.) Nash.] is a native perennial warm season grass from Newberry County South Carolina. It is a tall robust native which produces dense foliage with an attractive golden panicle of blooms. This new germplasm was released through a cooperative effort with the Jimmy Carter PMC USDA-NRCS, USDA-USFS, and the South Carolina Native Plant Society. Its primary use will be to restore eroded areas in Francis Marion and Sumter National Forests in South Carolina with a well adapted native grass. Other uses include conservation buffers, wildlife habitat improvement, and urban landscape improvement.

Union Germplasm Purpletop [*Tridens flavus* (L.) Hitchc.] is a native perennial warm season grass from Union County South Carolina. Purpletop also known as tall redtop is a slender inconspicuous grass until fall when it produces brilliant purple panicles. It was released through the same cooperative effort as the Newberry germplasm. Restoration work in Francis Marion and Sumter National Forests will be the main use of this plant with other uses similar to the Newberry material. Durham Germplasm Switchgrass (*Panicum virgatum* L.) is a perennial rhizomatous warm season grass from Durham North Carolina. It is a tall vigorous grass which produces a whitish panicle of blooms in the fall. The Jimmy Carter PMC in

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cooperation with the North Carolina USDA-NRCS released this plant especially for North Carolina. It will be used for soil conservation, restoration, conservation buffers, wildlife habitat improvement, and urban landscape improvement.



**Newberry Germplasm Indiangrass**

## **JIMMY CARTER PLANT MATERIALS CENTER IMPLEMENTS HOMELAND SECURITY MEASURES**

Utilizing new **Homeland Security funds**, the PMC installed several security items in 2004. The office building which houses the PMC staff, Area 3 staff and state training/conference facility was equipped with a new security and alarm system. Three new outside lights were emplaced for security and safety reasons around the office, seed house and tractor / equipment sheds. New locks and security screens were installed on the oil and pesticide houses. All PMC propane tanks were secured with fencing and

barbed wire. New techniques to improve computer and vehicle security were also initiated. These improvements were achieved through the involvement of PMC, PMS, Area 3, and IT staff.



**New Propane Tank Fences**



## PMC BEGINS NEW STUDY TO HELP RESTORE NATIVE PLANT UNDER STORY COMMUNITY TO SOUTHERN LONGLEAF PINE ECOSYSTEM

The longleaf pine ecosystem of the Southeast is one of the most threatened in the United States. The loss of longleaf pine forests and related plant communities not only jeopardizes the extant plant species but also the native fauna that depend on the resources and structure provided by the vegetation. In summer and fall of 2004, the PMC staff began collecting seed of under story species in Southwest Georgia. Old growth longleaf pine sites were selected that exhibited species diversity especially for legumes, composites and grasses. The following is a list of taxa collected in 2004: Pineywoods Dropseed *Sporobolus junceus*, *Helianthus radula*, Little Bluestem *Schizachyrium scoparium*, *Lespedeza angustifolia*, *Lespedeza hirta*, *Lespedeza virginica*, Wiregrass *Aristida stricta*, Grass Leaved Golden Aster *Pityopsis adenolepis*, Blue Sage *Salvia azurea*, Sweet Goldenrod *Solidago odora*, *Crotalaria purshii*, Pencil Flower *Stylosanthes biflora*, Scurf Pea *Psoralea canescens*, Sensitive Brier *Schrankia microphylla*, Goat's Rue *Tephrosia virginiana*, Dollar Plant *Rhynchosia reniformis*, Wild Indigo *Baptisia lanceolata*, Black-Eyed Susan *Rudbeckia hirta*, *Andropogon gyrans*.



### Seed Collection of Longleaf Pine Under Story Plants in Worth County Georgia

These seed will be planted to increase fields in Americus for future use in Southwest Georgia for restoration of a unique under story plant community.

### Outdoor Classroom for Southwest Georgia Schools

Several years ago an "Outdoor Classroom" was established in Early Co. for Southwest Georgia schools. The Flint River S&WCD sponsored the classroom and Tommy Davis of Arlington provided the land. The classroom contains a boardwalk through a pond cypress- black gum savanna wetland typical of Southwest Georgia. The property also contains transitional upland sites. This diversity in flora and fauna allows the classroom to encompass and teach principles of several environmental science disciplines. Partners from state and federal agencies have provided personnel to instruct the students in botany, ecology, water quality, zoology, soils, forestry and general environmental science. Participating agencies are NRCS (PMC& Field Offices), Army Corps of Engineers, Georgia DNR, Georgia Forestry Commission, and the Georgia Soil and Water Conservation Commission.



On April 21 - 22, 2004 the PMC made several presentations to 21 students of Westwood School of Mitchell County and 30 students of Elaine Dickerson School of Calhoun County. The PMC manager covered plant identification, plant ecology, plant/animal relationships and wetland structure as they relate to various topics in biology class



### **Instruction to Westwood School in Plant Ecology**

### **Congressman Sanford Bishop Visits Jimmy Carter PMC**

On September 3, 2004 Congressman Sanford Bishop visited the PMC. After a tour of the center with special emphasis on the potential utilization of the PMC natural areas as an environmental resource center, Mr. Bishop gave a keynote speech to approximately 75 people from the Sumter County area. He stated the importance of agriculture to the region and how the NRCS was an important part of the USDA delivery system to the public. He went on to mention some of the work conducted by the PMC and the Georgia plant material specialist and how it benefits conservation in the state and the entire Southeastern U.S.



### **Congressman Bishop Delivers Keynote Address**

### **PMC Hosts Wildlife Field Day and Native Grass Summit in September**

September 21 the Georgia Plant Materials Specialist and the PMC hosted a Wildlife Field day which showcased plant material technology for wildlife habitat improvement. Participants included NRCS, USDA-USFS, Ga. DNR, Ga. Soil & Water Conservation Commission, wildlife product vendors, nurserymen, and area landowners. Techniques for establishing plant material to enhance wildlife food and cover, nesting sites, and structure were emphasized by the wildlife biologists and specialists. September 30 a Native Grass Summit was conducted by the Georgia Plant Materials Specialist. NRCS, USDA-USFS, Ga. DNR, USF&WS, Tuskegee University, Clemson University, Fort Valley State University, Ga. Soil & Water Conservation Commission and the Ga. Native Plant Society representatives exchanged ideas concerning the beneficial use of native grasses in the Southeastern U.S. Topics included the use of native grasses in forage systems, field borders, wildlife habitat improvement, restoration, roadways, and urban landscapes.



**Don Surrency Explains Study at Wildlife Field Day**



**Leon Brooks, (L) district conservationist and H. Jerome Jones, (R) landowner, Willow Oaks Farm**

### **PMC Assists with Outreach Initiative**

H. Jerome Jones, landowner, is using plant materials from the Jimmy Carter PMC to improve wildlife habitat and to control soil erosion on critical slopes adjacent to the newly constructed duck pond. Native grasses such as switchgrass, indiagrass, little bluestem in addition to other non-native species will be planted to enhance quail habitat. ‘Dove’ Proso millet, sunflower, ‘Atlantic’ coastal panicgrass will be planted for dove. Food plots and conservation buffers are also planned. The assembly of plant materials for this project involved not only the Jimmy Carter PMC in Americus, but also Brooksville (FL) and Cape May (NJ) Plant Materials Centers.



**Demonstration of Natives at Native Grass Summit**

## WILLOW OAKS FARM



### DOVE FIELD

Donald Surrency, plant materials specialist discusses plant materials plan with H. Jerome Jones, landowner. Dove field has been planted with 'Dove Proso' Millet and 'Atlantic' Coastal Panicgrass.



### DUCK POND

Critical areas around pond such as, edges, roads, steep banks, etc. will be planted to native warm season grasses developed by the plant materials program.



Surrency reviews plant materials (seed) allocations with Mr. Jones that will be used for critical area stabilization and wildlife habitat improvement.



Ervin Hart, SCT for the NRCS Augusta Service Center reviews conservation plan. The plan provides the latest plant technology developed by the plant materials program as it pertains to planting guides, and sources of plant materials.



**Willow Oaks Farm in Columbia County. (Pumpkin Center Community) and owned by H. Jerome Jones is the site of a plant materials outreach project. New plant releases and native grasses are planned for erosion control and wildlife habitat improvement.**

### **About this Publication**

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