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ETPMC News



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ETPMC News is a semi-annual publication of the USDA/NRCS East Texas Plant Materials Center in Nacogdoches, Texas

East Texas PMC Hosts Plant ID Training



The East Texas Plant Materials Center (ETPMC) hosted two plant identification training workshops on June 18 and 19. On June 18, twenty Texas Parks and Wildlife Department (TPWD) employees attended the training. The following day, Natural Resources Conservation Service employees from east Texas received the same training. Participants were

shown a video explaining the Plant Materials program, encouraged to assist with plant collections for evaluations, and the process of producing seeds of native plants. A field session on common plant species of East Texas covered: identification, season of growth, type of reproduction, and plant characteristics. Each person received a book 'Common Flora of East Texas' developed by the ETPMC staff. Mike Stellbauer, NRCS Zone 4 Range Specialist, and Rob Ziehr, NRCS Texas Plant Materials Specialist, assisted Center staff during the training sessions.

Field Expansion Begins at ETPMC



The Center has been working with its partners, National Forest and Grasslands of Texas (USFS), Deep East Texas and Northeast Texas associations of SWCDs, Arthur Temple College of Forestry and Agriculture (SFASU), Louisiana Association of SWCDs, and Southern Forest Research Station (USFS) to increase the acreage under cultivation. The increase is needed to allow field rotation, isolation for certified seed production, increased seed production, and permit additional projects of technology development and plant evaluations. Currently the Center has a little over 26 acres in cultivation; the increase will allow use of an additional 42 acres. The Center would especially like to thank USFS personnel; Fred Salinas, Eddie Taylor, Kathy Duncan, Ron Thill (Ret) and Jim Guilden

Time for Seed Collections

The NRCS Plant Materials Program selects conservation plants and develops innovative planting technology. The Plant Materials Centers rely on NRCS Field Offices, conservation partners, and individuals to provide seed/plant collections for evaluation and development. Detailed plant descriptions and photographs of the 2008 Plant Collections are available on the Texas NRCS website (<http://www.tx.nrcs.usda.gov/technical/pmc>).

To begin the seed collection process, go to the website listed above and click on "Plant Materials Collection Guide". This webpage contains tips on proper collection of seed. If collecting a grass specie, click on "Determining Seed Fill in Grasses". At the bottom of the Collection Guide page, print out the "NRCS-ECS-580;Plant Collection Information Sheet". The ECS-580 needs to be completed for every collection sent to the Center. This sheet includes location and physical characteristics of the seed collection site. After reading the "Collection Guide" and printing out the ECS-580, go back to the Plant Materials page and click on "Plant Collections and Field Plantings - 2008". There will be a list of the plant species to collect for the East Texas Plant Materials Center. Click on one of the plant species. This link will go to a page which describes the morphological characteristics of the plant, how to collect seed, and descriptive photos. At the bottom of the page, there is a link to a Plant Collection Species Guide. The collection sheet for that species has more photos for plant identification. After printing out the seeded reference materials locate potential collection sites in the Field Office service area and watch as the plants begin to mature and develop seed. For example, big bluestem seed will fall or shatter off the seedhead if left too long. Seedpods of forbs will dry out and shatter or break open and sling their seed to the ground.

One of the frequent questions about collecting is how much seed to harvest. If possible, collect at least a rounded handful of seed. Also, don't put seed in a plastic bag. The plastic cuts off air circulation to the seed. Instead, use a paper bag for collection samples. The Center has paper seed collection envelopes we will send out to people who are collecting seed. After collecting the seed, let the sample dry for a few days at room temperature before sending it and the accompanying ECS-580 to the Center.

Seed collecting is a vital part of the Plant Materials program. There is some preparation and time involved. However this is offset by the benefit of learning to identify plants, an important part of conservation activities. Below are the four species to collect in 2008 for the East Texas Plant Materials Center.

Big bluestem (*Andropogon gerardii*)

Habit - Big bluestem is a native warm season perennial grass which grows between 4 and 6 feet tall. The plants begin producing seedheads in late summer.

Leaves - The long, flat leaves are arranged alternately on the stems. The leaves are rough to the touch.

Seedhead - Big bluestem has a distinctive seedhead. The racemes are arranged in two or three per seedhead and resemble a turkey foot. The seedheads vary in color from green, yellowish, or purple.

Habitat and Range - This grass is found in undisturbed area and is an indicator of prairie remnants. This species is adapted to deep, fertile soils but also grows on shallow, gravelly ridges during wet periods.



Blackeyed Susan (*Rudbeckia hirta*)

Habit - Native warm season perennial forb reaching 1 to 3 feet tall; flowers May to September; reproduces by seed and rootstock.

Leaves - alternate, simple, longer than broad, margins are toothed.

Flowers - one flower per stem, petals range in color from yellow to orange, the center is brown

Habitat and Range - dry plains and prairies, disturbed sites, occurs throughout Texas except the Trans-Pecos region





Swamp sunflower (*Helianthus angustifolius*)

Habit – native warm season perennial reaching 3 to 6 feet tall; flowers in early fall; reproduces by seed and sprigs

Leaves – slender, alternate, simple, covered in short, stiff hairs creating a very rough texture, almost fleshy to the touch

Flowers – many, bright yellow, 1-2 inches in diameter, dark purple disks in center

Seed – 3 to 4 mm long, flattened, dull black, mottle with tan

Stems – slender with rough hairs, branched at the top with each branch ending in a flower

Habitat and Range – throughout east Texas and Louisiana in low, disturbed sites, open flat woods and some upland areas, prefers moist areas



Coneflower (*Echinacea spp.*)

Habit – native warm season perennial forb reaching 1 to 4 feet tall; flowers May to June; reproduces by seed and rootstock

Leaves – alternate, hairy, varies from long and narrow to oblong or oval, veins are prominent

Flowers – in heads, solitary at end of stem, vary in color from purple to red

Stems – slender, rough, hairy, 3 to 8 inches long

Habitat and Range – dry plains and prairies; disturbed sites, sandy, gravelly, or limestone soils



ETPMC STAFF:

Jim Stevens – Manager
Max McCormick – WAE
Melinda Brakie and Alan Shadow – Soil Conservationists

The East Texas Plant Materials Center (ETPMC) is part of the Natural Resources Conservation Service (NRCS), United States Department of Agriculture. The ETPMC is a joint venture between Soil and Water Conservation Districts in east Texas and northwestern Louisiana, NRCS, Stephen F. Austin State University, and US Forest Service. The ETPMC is located at the Stephen F. Austin Experimental Forest near Nacogdoches, Texas.

The mission of the NRCS Plant Materials Program is to develop and transfer plant materials and plant technology for the conservation of natural resources. In working with a broad range of plant species, including grasses, forbs, trees, and shrubs, the program seeks to address priority needs of field offices and land managers in both public and private sectors. Emphasis is focused on using native plants as a healthy way to solve conservation problems and protect ecosystems. Center personnel also develop research projects and technical reports for use in developing technical guidelines for agency personnel and landowners on the use of plant materials in various conservation practices. For more information about the East Texas Plant Materials Center, contact Jim Stevens, Manager.

We're on the Web!

<http://www.tx.nrcs.usda.gov/technical/pmc/index.html>

Notable quote:

"Out of the long list of nature's gifts to man, none is perhaps so utterly essential to human life as soil." – Hugh Hammond Bennett

Construction of Shielded Sprayer

Controlling warm season, annual grasses in warm season, perennial grass fields is an ongoing struggle at the East Texas Plant Material Center (ETPMC). Few herbicides offer control of these weedy pests without damaging the crop, and pre-emergent herbicides applied in early spring have not provided season long control. Crabgrass, goosegrass, and signalgrass are very aggressive species that can dominate fields if left unchecked. To combat these pests, Max McCormick, biological technician, has constructed an adjustable width, shielded sprayer that will allow Center personnel to use broad spectrum herbicides such as glyphosate between the crop rows, instead of traditional cultivation. A shielded sprayer will allow the application of herbicides between rows without contacting the leaf area of the crop. This should help provide season long control of weedy species and reduce the amount of time spent manually weeding evaluation plots and seed production fields.



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