



PNPC News

~Promoting Education about Conservation and Use of Native Plants of the Southern Forest~

Editor—Barbara Stump

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Controlled Burn is a Success!

February 27, 2004, we held our first controlled burn in the Bog Garden, the wetlands we have preserved just south of the Horticulture Facility at the PNPC. The Texas Forest Service and the local fire department assisted in the demonstration, lighting the perimeter fire carefully, and they were ready to supply plenty of water if needed.

Not only was this an appropriate landscape rejuvenation strategy, but it was also an opportunity to explain fire ecology to local school children: Dr. Brian Oswald of the Stephen F. Austin College of Forestry and John Boyette (shown, right) presented a program to students from Raguet Elementary School, which is located just south of the PNPC. After the presentation, the students gathered along the property line fence to watch the proceedings in safety. According to event organizers Lance Craig from the PNPC, and John Boyette from the TFS, "...the fire



was impressive, the smoke was minimal, and the whole event was over in 27 minutes."

Why is such a burn appropriate? This unique spot at the PNPC has a long history as a bog. More than likely underlain with an impermeable Weches rock or tight clay layer, this area remains wet well into the summer. The 1-acre upland bog is now surrounded by a slightly elevated trail, with means for drainage, at the southeast corner of the

bog. This surrounding trail serves as a slight "dike" for the area. The potential to manage the level of water in the bog complements any efforts made to manage plants in it. In addition, the

encircling trail will allow controlled burns in the future to reproduce the basic ingredients associated with fire ecology in our region.

Prescribed burning is now used on over 8 million acres in the Southern US. The benefits of fire usually outweigh the negatives. Prescribed burns remove plant material that has accumulated over time, thereby reducing the risk of intense and destructive wildfires. It is also used to improve accessibility into overgrown prairies and forested thickets for wildlife, firefighters, hunters, and hikers.

Economically prescribed burning can be used to control competing vegetation and invasive species, insects that are detrimental to our landscape, and plant diseases that can be financially devastating for landowners. Prescribed burning is used to improve wildlife habitat by removing plant material low in nutrient quality and increase green growth by releasing nutrients back to the soil. It is also able to increase food supply for predators because it removes cover for ground-dwelling birds and animals.

Many of the plant species in the grassland such as Bluestem (*Andropogon* spp.) and Gayfeather (*Liatris* spp.) are dependent on occasional fires to control invasive noxious weeds and woody plant material. Invasive species will either out-compete the grass and herbaceous plant material or begin to shade it out over the years. So, it is essential that the PNPC grassland be burned occasionally to help the native grasses and herbaceous plants become well established. In this way, the PNPC hopes to provide children a visual display of what East Texas grassland should look like.

Special Trees Planted to Recognize Donors to PNPC

April 2004 marked the fourth anniversary of the PNPC at 2900 North Raguet Street in Nacogdoches. In these first formative years, several donors have been very generous in their support of the development of this native plant research center. These donors include: the George and Fay Young Foundation from Dallas; the T.L.L. Temple Foundation, Arthur Temple, and Ellen Temple, from Diboll; A. Nelson Rusche and Carolyn and Bruce Wallace from Houston; Mrs. Jesse Brundrett from Tyler; and Dr. and Mrs. Larry Walker and Mr. and Mrs. A.T. Mast, Jr. from Nacogdoches.

February 7, 2004, from 2:00-4:00 p.m. the PNPC board of advisors hosted a tree planting of specimen seedlings of the Nacogdoches County Champion cherrybark oak and clonal oaks to recognize these donors so their gifts will form a permanent legacy at the PNPC. A reception followed.

The specimen trees all have unique characteristics. The cherrybark oaks (*Quercus falcata* var. *pagodifolia*) are the result of collaboration between the SFA PNPC and Keep Nacogdoches Beautiful (KNB). These trees were grown at the PNPC from seed collected by KNB from the former Texas State Champion Cherrybark Oak, which was owned by the Jesse Austin family and located on the family farm that was part of a Spanish land grant. That tree was 89 feet tall, with a trunk circumference of 264 inches and an average crown spread of 127 feet before it died recently. Propagation of seedlings from such historic trees is an important expression of the



conservation missions of both the PNPC and KNB. These trees have deep red fall color and reddish bark, with dense foliage crowns.

Major donors planting trees February 7 were (left to right), Dr. and Mrs. Larry Walker; Mrs. A. T. Mast, Jr.; Sue Ripley; Dr. David Creech, co-director of the PNPC, and Lance Craig, PNPC Research Associate.

On February 18, 2004 representatives from the T.L.L.

Temple Foundation planted several clonal oaks at the entrance to recognize the Foundation's support of the PNPC, which has supported development of the trails and headhouse as well as plant acquisition. Shown below are, left to right, Ellen Temple; Buddy Zeagler, executive director; and Wayne Corley, assistant executive director and controller; with Dr. David Creech. The clonal oaks—Highbeam® Overcup Oak (*Quercus lyrata*) and Hightower® Willow Oak (*Quercus phellos*)—

were obtained from Select Trees of Athens, Georgia. This nursery has been applying state-of-the-art horticultural practices to develop a series of own-root vegetatively propagated oaks to provide uniformly shaped trees for wide application in the landscape industry. These clonal oaks represent their first efforts and will be in the trade this year. The overcup oaks have a pyramidal shape and the foliage turns a rich tannin brown.



The willow oak was planted in the Bog Garden, to recognize the George and Fay Young Foundation, since they made the raised wooden walkway across the bog possible, as well as the headhouse, irrigation, and interpretive signage projects.

“Go Wild” and “Go Native” with Our Environment!

Education coordinator Elyce Rodewald has had a busy spring and summer. On April 6, 7, and 13, over 2000 children participated in Bugs, Butterflies, and Blossoms, hosted by Keep Nacogdoches Beautiful (KNB), SFA Mast Arboretum, Texas Forest Service (TFS), and the Pineywoods Beekeepers Association. This activity-oriented science field day focused on trees, bees, insects, butterflies, flowers, and recycling. SFA elementary education teaching majors participate in planning and facilitating lessons at BBB to fulfill requirements for a junior-level “Teaching Science” course.

April 30, 250 middle school students from Zavalla and Nacogdoches ISDs, Christ Episcopal, and home schoolers learned environmental science by working in 12 different activity stations in three separate areas. SFA videotaped the day to stream on the SFA Web site. This new educational module was hosted by KNB, the SFA Department of Elementary Education, PNPC, HUES Geographic Information Lab, the SFA Department of Music, and the Texas Forest Service.



Then in June, Elyce and 50 volunteers ran two one-week summer camps. The first, the Sierra Cubs Summer Camp, sponsored in part by the Pineywoods Sierra Club Chapter, and the second dubbed the Mill Creek Gardens Camp are an excellent example of quality experiential learning. A total of 42 students ages 6-11 participated at \$60 each, which is just a cost-recovery rate, since the volunteers contributed their valuable time, talents, canoes, and tents to make it run smoothly. Campers honed their observation

skills as they learned about outdoor safety, snakes, wildlife, watersheds, insects, water quality, food webs, endangered plants, competition, cooperation, connections, canoeing, and so much more. These camps are held at Mill Creek Gardens, a 119-acre dedicated conservation easement used by the SFA Mast Arboretum for conservation research, thanks to the generosity of the late Elisabeth Hayter Montgomery.

We are mailing the new “Learning Excursions” brochure listing the 2004-2005 offerings to all 97 school districts in East Texas. Beginning this fall, we will be charging a \$3 fee per child to help to offset costs associated with the program. We will work with school districts where scholarships for students are essential, and some Arboretum and PNPC board members have offered to help in this regard. **To schedule a guided tour or classroom visit, call Education Coordinator Elyce Rodewald, at 936-468-1832 (erodewald@sfasu.edu).**

Contact Information

For native plant horticulture questions, call Lance Craig:
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Between newsletters, watch our Web site for updates: click on the Native Plant Center button on the Arboretum Web site:

<http://arboretum.sfasu.edu>