Notes From the Director
By David Creech

With so much happening, it’s hard to know where to start. First, there’s a new garden brewing! Basically, a donor with a vision is tapping the energy that has made SFA Gardens what they are. We now have eight acres across the street from the Ruby M. Mize Azalea Garden to manage and nurture – good soils, nearby water, and a high canopy pine and oak forest to work with. Plant excitement is building. 2011 is going to be a stellar year on that side of the street. Plants, plans and people are coming together to make something special. We’ve hired Brad Waguespack as a “temporary hire” to handle things on the ground and he’s taken to the challenge with gusto. Stay tuned.

We have just survived one of the worst droughts ever. Why our garden missed so many rains, I don’t know. The challenge to keep things alive was discouraging. Plants that we never thought would need a drink did. Our old conifer collection – which hasn’t been under irrigation in years started to go south. Lucas Schneider managed to throw together hoses and pipe to keep things alive. Once again, maintenance gets an A+ at the Ruby M. Mize Azalea Garden. Duke Pittman and crew have kept the place weed free – and now we’re giving the canopy a facelift, an effort to get a little more sunlight into the forest here and there. With our collection growing, we’re making plans to move a few plants around a bit this winter while they’re still small enough to make the move. We’ll be tackling the same thing in the Mast Arboretum with Dawn and Lucas leading the charge.

The PNPC continues to prosper. The first year of “Treehenge” on Austin Street is over - and every weeping druid-like bald cypress there survived! Four to six gallons of water per plant per day did the trick. Next year, they should make it on their own. The green roof pavilion still looks great – an east Texas prairie on a roof – and this may be the only green roof in the world designed to deal with an annual burn! We will run this through all the proper channels first, of course. A best-of-the-best tree and shrub collection will be going in nearby. This winter, we will be planting another 1000’ of LaNana creek stream bank in an effort to create a half-mile forested, streamside management zone that will logically connect all of the gardens here at SFA.

Which brings me to educational programming; the numbers speak for themselves. Whether it’s a workshop on soil testing, how to make a wreath, or how to graft fruit trees – it’s all about managing a garden resource for students, faculty, and visitors. As I’ve aged a bit, I’ve come to realize that it may be our work with kids that ends up being our main contribution to this university and community. We’re here to educate, enlighten and entertain. I have to admit that I wasn’t thrilled at first with the idea of thousands of children scampering through our garden beds. Elyce Rodewald and Kerry Lemon are the pied pipers keeping everything under control. I’ve been won over. Connecting kids to the environment, to nature, to the excitement of horticulture may be the best thing we do.

Which brings me to critical mass: can a university garden stay relevant during tough economic times? In the academic world – botanical gardens, arboreta, and horticulture gardens are part of life in the Deep South. The investment in facilities - greenhouses, nurseries, gardens, and labs - is often substantial and student numbers may not be as high as in other disciplines. For administrators, it can all add up to quite a tempting target. It’s happening everywhere. With budget cuts the norm, is it possible to stay viable and healthy? The answer is yes! Gardens that survive and thrive have a common thread - plants, plans, and people. Some call it excitement; others call it energy. A horticulture program – a university garden – is one that’s relevant to the nursery and landscape industry is the one that prospers. Whether it’s new plants, research results, educational programs, or discovering new ways to propagate and grow plants - it all becomes part of the message to those who manage the budgets in Austin. Having university, city, regional, and industry support doesn't guarantee survival, but it helps. We plan to survive; we’ll keep planting, and you keep enjoying the SFA Gardens!
Earth Science Explorations are in full swing at the Pineywoods Native Plant Center. Fifth graders from Nacogdoches ISD participate in hands-on activities to become a water drop in the water cycle, stop erosion, and observe fossil creatures that were alive millions of years ago. They also answer the question “What is the greatest treasure at SFA Gardens?” We keep some of this mysterious fortune in a treasure chest and allow the students to touch without looking and they quickly determine that the greatest treasure is soil. Without our rich soil, there would be no plants and no garden.

I have no formal training in soil science, but I have to agree with the fifth graders that soil is indeed a great treasure. My fascination with soil started as a child when I never missed an opportunity to squish my toes in the mud or feel the cool cascade of sand through my fingertips in the backyard sandbox. As a teenager, I would visit a nearby golf course at night just to walk through the sand traps (always raking out the footprints as I went, of course). As an adult, I have explored the texture, structure and behavior of mud found at the bottom of Galveston Bay, the Neches River and Boykin Springs in relation to their effects on one’s complexion. And not unlike an otter, I have never met a mudslide that I did not like. Most recently, I have marveled at the layers of soil revealed at my home in San Augustine County as a giant trench was gouged into the earth to make room for a natural gas pipeline. The familiar red clay gives way to gray and then a surprising stripe of yellow appears. Further down the trench, a dusty-gray, smooth and silky clay hides beneath the deep black swath of the creek bed. I contemplate the history revealed in this trench. A sand dollar and a shark tooth reveal the presence of long-ago oceans, but then what? What trees or prairie grasses have pushed their roots into this fertile place? Where in this 15-foot profile did people appear? Who hunted, farmed or lived on this land before me? I notice that the roots of what used to be pines, shagbark hickories, and red oaks only reach about 18” into the uppermost layer of soil. How amazing is it that this thin layer of “skin” provides nourishment for not only my forest and my garden, but for all plant life; really, for our entire planet?

We are fortunate in the Agriculture Department at SFA to have Dr. Leon Young (a.k.a. Dr. Red Dirt). He is the director of the Soil, Plant and Water Analysis Laboratory, and he truly appreciates this complicated mixture of minerals, nutrients, organic matter, water, and air that we call soil. He uses interesting words like spodosols, histosols, parent material, peds and profiles. He understands the significance of pH and levels of calcium, magnesium, phosphorus, nitrogen, potassium, and sulfur. More importantly, he enjoys sharing his knowledge and has offered to present a soils seminar “Soils in Your Garden” on February 3, 2011 from 6:30-8:30 pm in Room 110 of the Agriculture Building. We hope you will join us to take your love of soil to the next level.

In the meantime, we invite you to learn some intimate details about the greatest treasure in your garden by taking a soil sample to SFA’s Soil, Plant and Water Analysis Laboratory located in the Agriculture Building. A regular soil test analyzes nitrate nitrogen, extractable phosphorus, potassium, magnesium and sulfur. A complete soil test also looks at the concentration of iron, zinc, copper, and manganese. Recommendations for soil amendments will be made based on your proposed crop. Cost is minimal ($10-15) and sample bags are available at no charge. For more information, visit http://ag.sfasu.edu/ and click on Facilities and Services or call the Laboratory at 936-468-4500.

**Soil Lagniappe**

*The microbe actinomycetes produces a chemical that gives soil its “earthy” smell.*

If you examined a 3’ x 3’ square of soil about 2 inches deep, you might find about 100 snails and slugs, 3,000 earth worms, 100,000 mites, 5 million nematodes, 100 billion fungi, and 10 trillion bacteria.

*The proposed Texas State Soil is the Houston Black series. It occurs on 1.5 million acres in the Blackland Prairie, which extends from north of Dallas south to San Antonio.*

A single inch of soil can take hundreds to thousands of years to develop.

*Desert soil from the Sahara can be carried by the wind thousands of miles across the Atlantic Ocean.*

The largest forest organism is not a tree, but a giant fungus that spreads underground in Oregon’s blue mountains for nearly 4 square miles.


Heaven is under our feet as well as over our heads. *Henry David Thoreau*
This past September 22nd, we lost one of our favorite and most devoted SFA Gardens supporters. Theresa Ammons Reeves left this garden world for the heavenly arboretum. After teaching in the Pasadena, Texas school system from 1947 through 1977, she and her husband, Leslie, retired to beautiful Nacogdoches. From that time on she created lovely gardens around her home and was noted for her Southern hospitality. She was known for repaying modest horticultural deeds with gracious lunches. The memorial service for Theresa was a tribute to her green thumb and giving spirit. Quoting from the program for this moving remembrance: “Her generosity touched everyone that knew her, whether with sharing plants or flowers or freshly made cookies and preserves.”

When asked his thoughts about Theresa Reeves, Greg Grant replied: “Mrs. Reeves was a real gardener. Whether vegetables, flowers, or lawn, there wasn’t anything in her yard that she wasn’t interested in or asking about. I cherish the family heirloom strain of pole snap beans that she shared with me. I’ll always think about her when I’m growing and picking them. Two springs ago she asked me if it would be possible to graft a Japanese persimmon onto a young native persimmon that had sprouted next to her driveway. I assured her that not only was it possible but that I’d be glad to do it for her. I explained that the only type of grafting I was close to proficient with was inlay-bark grafting and that the graft wood would have to be taken during the winter. Of course that winter I forgot and didn’t realize it until spring came and it was too late. I assured her I wouldn’t forget again. So this past winter I collected wood from my mom’s seedless, non-astringent ‘Fuyu’ persimmon and tucked it away in the ice box. This past spring I snuck into her yard and grafted her young persimmon. Luckily the graft took. I kept going back to check on it, prune off the native suckers, and stake and tie the vigorous new Asian scion. She was generally gone when I was there but of course she noticed. It was the fastest growing graft I’ve ever done and grew to ten feet tall in one season. It’s taller than the 20 year old parent tree it came from! It was a magic garden of course. Weeks before she passed away, she called with an invitation to feed me lunch. I’ll sure miss her. She loved flowers. I think she loved vegetable gardening and fishing the most though. Everybody that knew her will miss her. And of course everybody that drives by will miss her corner garden.”

In 1998, Theresa created an endowment in honor of her husband to enable the SFA Mast Arboretum (now grown to the SFA Gardens) to bring in horticultural speakers for our monthly lecture series. We are pleased to announce this is now the Theresa and Les Reeves Memorial Lecture Series. The endowment allows us to bring in noted lecturers from around the country to share horticultural research and expertise with SFA students, SFA Gardens volunteers, and the gardening public. Thank you for your thoughtful generosity, Theresa. You set the standard high for us. We are eternally grateful.

A Celebration of a Dedicated Gardeners Life
By Barb Stump and Greg Grant

Theresa Reeves stands amongst the flowers in her garden.
Everybody loves sugar, right? I sure do. Nobody, save a hummingbird, has a sweeter tooth than me. I got it from my momma who likes to both cook and eat sweets. Did you ever stop to think where sugar comes from? In colder climates it may come from sugar beets, but in the South and much of the world, it has always come from sugar cane (Saccharum officinarum).

Sugar cane is a perennial grass from tropical Asia. Due to its tender nature, it must be protected from freezing temperatures in order to survive. It's generally only root hardy in zone 8b or areas where the ground doesn't freeze.

In the early days of the rural South, everybody used “ribbon cane” syrup as a sweetener as well as a “sopping” for biscuits and such. There wasn't money for or access to granulated sugar so cane syrup was used to make such Southern sweets as syrup pie, syrup cookies, syrup candy and taffy, and popcorn balls. My mom and I can put away the syrup candy with peanuts; while my oldest brother, Doice, will eat the whole pan!

So what's the difference between ribbon cane syrup, cane syrup, molasses, and sorghum syrup? Ribbon cane syrup is made from old syrup making cultivars of sugar cane. Cane syrup can be from old syrup making types or from modern sugar making types. Molasses is typically a product from today's sugar industry. Before the sugar is granulated and bleached, it is molasses. Some of it gets carted off for animal feed, some for human consumption. As a matter of fact "brown sugar" that you purchase today from the grocery store is bleached white sugar that is sprayed with molasses. Sorghum syrup is made from a whole different plant. Sorghum (Sorghum bicolor) is an annual from Africa that is typically grown in more northern areas where it was hard to keep sugar cane alive during the winter. Most folks in the Deep South are adamant that ribbon cane syrup is superior to sorghum syrup, but it has its devoted fans as well. Even though its preference is divided by cultural lines, it's really a horticultural line that divides the two. Sorghum is the only choice for colder climates with shorter growing seasons while tropical sugar cane is only suited for areas with mild winters and long growing seasons. I come from sugar cane people.

Sugar cane is normally replanted every three to four years as the number of stalks increases but their size greatly diminishes. The "seed cane" used to propagate sugar cane is no seed at all as sugar cane is sterile and doesn't produce seed. Technically it is propagated from stem cuttings. Seed cane can be obtained directly from a sugar cane farmer or from a roadside produce stand in the fall. The Heritage Syrup Festival in Henderson has seed cane for sale each year as well. This folk festival is always celebrated the second Saturday in November. It’s important that you obtain seed cane before freezing temperatures freeze the buds along the stem. In colder parts of the South, stalks of seed cane are piled and "bedded in" under a blanket of soil and sometimes mulch to protect them from freezing. After all danger of frost in the spring, the stalks are uncovered and planted in trenches in rows for the cane crop. In milder parts of the South, the stalks are planted in the fall but of course run the risk of freezing if the ground freezes. Thanks to milder winters of late, I plant mine in the fall but always save some stalks just in case. Fall planted cane starts growing earlier in the spring and makes larger plants. Sugar cane is typically fertilized and irrigated, as the goal is to make long tall canes with lots of juice. In the old days, the cane was planted in moist bottom lands and fertilized with...
Raising Cane, Con’t.

cotton seed meal. Some say you can taste commercial fertilizer or chicken litter in the syrup if you use them but I know some folks that do it anyway. Theoretically you shouldn’t be able to taste it.

My dad says every fall he looked forward to hog killing time when they’d wake up to a breakfast of fresh pork spare ribs, eggs, and biscuits all covered with home grown ribbon cane syrup. Most families would go through several barrels or many buckets of syrup during a year’s time. Unfortunately my dad is the only one left in my family that still loves ribbon cane syrup (other than me of course). I’m a seventh generation East Texan, all who dined on cane syrup I bet. Most of the youngsters today won’t chew the cane or eat the syrup. All the city folks say it tastes too strong. Much of what you can buy today is actually cut with corn syrup to make it milder for the non-believers. Many of my nephews will only eat artificially maple-flavored corn syrup. A few will eat real maple syrup though. Unfortunately corn is a Midwestern crop and sugar maples are Northeastern crop. It’s a shame that more folks don’t love home grown ribbon cane syrup any more. After all, it’s an important part of our sweet southern heritage.

By next year I plan to have my great-grandparent’s old syrup mill back up and running. All I need now is a firebox and a syrup pan. Now that Mr. Swindle has retired I’m having my syrup made in Chireno by Mr. Jay Smith. Producing ribbon cane is one of the most labor intensive crops in agriculture. Even though it’s killing me, it’s a sweet way to go. Cutting it and stripping it is the biggest chore of all. I can always use help!

For more information visit: sugarcanemills.com to read more about different cane varieties and old time syrup making in general.

Southernmatters.com for great information on making syrup and other such southern matters.

DURST TALYOR HISTORIC HOUSE AND GARDENS

SUGARCANE EVENT

JANUARY 8, 2011
8:30 - 12:00

LIVE ENTERTAINMENT, GAMES, AND HISTORIC DEMONSTRATIONS.

PANCAKES PROVIDED BY THE NACOGDOCHES KIWANIS CLUB ALONG WITH HOMEMADE RIBBON CANE SYRUP.

FOR MORE INFORMATION, CONTACT BRIAN BRAY, NACOGDOCHES HISTORIC SITES

Dear Friends,

It is with great sadness that we report the loss of another dear friend to the Gardens. Mike Stump, Barb’s husband, passed away the morning of November 28th. Mike was active in many things including Friends of Historic Nacogdoches, Inc, the Westminster Presbyterian Church, and served as President of the Texas Chapter of the Azalea Society of America, as well as all-around friend and supporter to the Gardens. Mike’s smile and warmth will be missed by all. Memorials can be made to Westminster Presbyterian Church, 903 North Street, Nacogdoches, Texas 75961; Friends of Historic Nacogdoches, P.O. Box 630411, Nacogdoches, Texas 75963; LOVE Inc., P.O. Box 630423, Nacogdoches, Texas 75963.

-SFA Gardens Staff
We just had one of those special moments at the SFA Gardens. After the North American Maple Society conference in Dallas, we had an unscheduled visit from some notable maple experts. Peter Gregory and Hugh Angus of The Westonbirt Arboretum in Gloucester, England, and Sharon Nelson, President of the North American Branch of the Maple Society, and her husband Ted visited SFA Gardens in early November.

Peter Gregory is retired manager of the world-famous Westonbirt Arboretum in Gloucestershire, England. He has researched maples and other trees for more than 40 years. He began a career in tree research with the Forestry Commission Research Division and conducted various projects for more than thirty years, including provenance studies, species trials, and experiments on various plant establishment techniques, especially on difficult areas such as exposed sand dunes, mountain slopes, peat bogs and infertile soils. Peter managed the Royal Forests of Yardley Chase and Salcey in Northamptonshire before being appointed as Manager of Westonbirt Arboretum, one of the largest collections of trees in the temperate world, especially famous for its wonderful variety of maples of all species, ages, shapes and sizes. He has continued his studies of maples since his retirement, becoming Chairman of the international Maple Society, which he helped found in 1990, and is Editor of the Society’s quarterly journal. He is recognized internationally as one of the leading authorities in all aspects of maples. Mr. Gregory lives in Cirencester, England where he enjoys photography, climbing, tennis and squash, in addition to his devotion to maples. His 4th Edition, revised, of the Vertrees Japanese Maples was just released this March.

Hugh Angus has worked for the Forestry Commission for 32 years, 23 of those at Westonbirt, The National Arboretum in the UK. He was Curator at Westonbirt, but, in the last few years he has worked as the Head of Tree Collections, one of the finest and largest tree collections in the world today. During this time his work has taken him to such places as China, Japan and North America. In 2009 he was elected as Chairman of the Maple Society. While only here for six or seven hours, they were awed by the collection of maples we’ve managed to assemble here in 25 years. In fact, one point was made. Our Texas-grown trees are big for age. In fact, Peter said he would have to rewrite several descriptions in his next edition. For example, our ‘Tiny Tim’ is not so tiny. Its 8’ tall – listed in Maples as reaching four to five feet at maturity. Texas heat must be good for growing maples! As we strolled through the collection, I had Peter wave the wand on our nomenclature questions. Is that really Beni Komachi or not? While several were outright wrong, there were many he would approach, check the label and say, “I cannot dispute this. Yes, it looks right.” Well, that’s good enough for me. Now when encountered by other visitors eager to let me know this maple is this or that and not what the label says, I can now say “Well, Peter Gregory said it was correct!” That should end the debate.

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**Mark Your Calendars - Seminars ‘n Such**

- **February 3, 2011** - Soils in Your Garden - 6:30pm
- **February 26, 2011** - Garden Mechanics for Dummies - 9am
- **March 25-26** - Birding with Cliff Shackelford (tentative dates)
- **April 16, 2011** - Garden Gala Day - Plant Sale - 9am
- **July 23, 2011** - Turfgrass for Dummies - 9am
- **September 10, 2011** - Garden Design - 9am
- **October 1, 2011** - Fabulous Fall Festival - Plant Sale - 9am
- **October 15, 2011** - Learn to ID Your Trees - 9am
- **December 3, 2011** - Deck Your Halls - Wreath Making - 9am

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**Azalea Trail 2011**

**March 12- April 2, 2011**

**Saturday, March 12—Azalea Symposium: “The Wonders of Deciduous Azaleas”**
Lectures in SFA Agriculture Building; tours of the Ruby M. Mize Azalea Garden to inspire participants with landscape uses for these beautiful and showy tall plants.

**Saturday, March 26 - Little Princess Tea Party**
Two seatings in Ruby M. Mize Azalea Garden Council Ring. Times and ticket sale dates, to be announced in next newsletter.
Confessions of an Indiscriminate Composter
By Dawn Stover

Have you ever had an odd thought strike you at a random moment, and then repeat itself over and over until you have to do something about it? I can’t recall the moment, but the thought of the words “Indiscriminate Composter” just won’t leave me alone. Maybe it would have been the name of my rock band had I been musical, or my blogging alter ego could I find the time to blog. Perhaps truly, it is my superhero name and instead of the power to fly, stop bullets, or use my lasso of truth after chasing villains in my invisible plane, I have the power to compost. Indiscriminately. I think I need a cape.

If you think about it, composting could really be considered a super power that everyone possesses. Composting creates nutrients, beneficial microorganisms, humus or humic acid, and soil conditioner for all types of soil — especially difficult ones like clay or sand. It keeps valuable kitchen and yard waste out of the landfill. Compost feeds the soil, feeds plants and in a round about way can end up in the landfill. Compost feeds the soil, feeds the earth, plus I really hate sending things to the landfill. At the very least, you have learned a few ways to recycle some things that might have otherwise ended up in the landfill. As silly as this article is, I hope that you have learned a few ways to recycle some things that might have otherwise ended up in the landfill. At the very least, you might have learned that composting isn’t quite as technical as it’s made out to be. Even lazy, oops I mean indiscriminate people like me can compost like a superhero. Remember: compost happens!

Unique Ways to Recycle in the Garden

- Layer cardboard boxes or newspaper under mulch for superior weed suppression
- Shred pine straw and leaves with the lawn mower or chipper and use as FREE mulch
- Use old shoe laces or pantyhose to tie up staked plants
- Old CD’s hung with fishing wire deter birds from ripe veggies
- Use gallon milk and water jugs as mini greenhouse in early spring to protect newly set veggie plants
- Water houseplants with dirty water from fish tanks when cleaning
- Use baby food jars and medicine bottles to save seeds for the next year
- Old tires make wonderful raised beds for vegetables and annuals
- Use cardboard egg cartons to start seeds. Break apart egg cups and plant carton and all. Toilet paper and paper towel rolls work too!
- Affix mismatched china saucers and cups to posts for elegant birdfeeders
- Old bathroom fixtures make unique planters in the garden
- Donate used pots to schools or Master Gardener programs
Dr. Creech, the Texas Chapter of the Azalea Society of America, and a semi-retired doctor-nurseryman, and I have been working the phones, e-mails, and highways between here and Georgia to bring you more delightful deciduous azaleas. This new crop is destined to add light and color to the new 8-acre front garden of the SFA Recreational Trails and Gardens—just across University Drive from the Ruby M. Mize Azalea Garden. We have ordered 18 species and 11 selections or cultivars bred by cutting-edge nurserymen in our Southern region. Just to whet your appetite, here are a couple of the most intriguing names of the latter: ‘Lemon Drop’, ‘Lollipop’, ‘Millennium’, ‘Popcorn’, and ‘Snowbird’. As we get these established and they bloom, I’ll be sharing photos of them in future newsletters. Here I would like to highlight two unique species that will carry on our Rhododendron genus plant evaluations.

First, a deciduous species azalea called ‘Red Hills azalea’ (*Rhododendron colemanii*). This early May-blooming (we think) white or pink trumpet-shaped flower with a small yellow blotch blooms after the leaves open. Like many native azaleas, the flowers have just five petals and the stamens and stigma protrude a long way from the throat of the flower. The flowers are born in clusters of five or more. This new species was named in 2008 by Ron Miller of Pensacola, Florida, and documented by Thomas Ranney of North Carolina State. The introduction was published in the *Journal of the American Rhododendron Society*. It is naturally found in the upper Coastal Plain of Alabama and Western Georgia. We hope it will flourish in our Zone 8b heat, humidity, and acid soils.

Even more unique is the true lepidote (scaly-leaved) Chapman’s Azalea (*Rhododendron minus* var. *chapmanii*). This joins our small group of half a dozen other lepidote rhodies in our trials to assess heat-tolerance for these majestic evergreen plants. Up North the rhododendrons reach heights of 15-20 feet, filling a niche in their landscapes often filled in our older Southern home-sites by a big camellia. Our new chapmanii is a much more compact version, reaching three feet in height in 10 years. The trusses of four to 12 funnel-shaped pink flowers are loosely held in clusters. This plant is native to Florida, but we have had success with other Florida natives, so we are trial-ling this in our new area, along with the “Texas Azalea” I mentioned last newsletter. What we have learned from our rhododendron trials so far is that these waxy-leaved large shrubs need to be planted high in filtered shade, must have PERFECT drainage but receive regular water until established (about two years), and mulched with acidic organic matter (such as pine straw).