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SFA Gardens News

Notes from the Director

By Dr. David Creech

I've been running back and forth to China for over a decade, and this past August, Janet and I were just plain eager to get out of town. We'd had just about had enough of this Texas drought, heat and garden misery! For most of the summer, I woke up thinking "why do I live here?" So, my idea was leaving it all behind and head to China and let our cheerful SFA Gardens staff deal with it. Surely, when I returned things would be better. It struck me as a good plan.

Most of my work in China has something to do with either blueberries or nurseries. My collaboration is primarily with Professors Yin Yunlong, He Shan and Yu Hong, all three working at the Nanjing Botanical Garden in Nanjing, China. My time there is usually a dawn to dark adventure of travel, meetings and farm visits. I give a seminar or two, attend conferences and conventions, and interact with Government officials and businessmen. All really nice folks excited about the nursery



Janet Creech looks on as a worker mists plants.

industry or the opportunity for growing a brand new crop in China: blueberries. While it's a grueling schedule, I do get time to visit some pretty amazing places.

One of our first stays was Lianyungang, a small prefecture of about five or six million people on the east coast of China several hours north of Shanghai. It is a coastal plain with a busy port and nearby forested mountains, pleasant breezes and moderate temperatures.

If you haven't been to China, you need to know that eating is a big deal. Banquets are part of everyday Chinese culture. Big slices of time are spent eating, getting ready to eat, or having just eaten. Most of these feasts take place in private rooms in restaurants or hotels with a large lazy susan spinning slowly in the middle of the dining table. One dish or another glides past each guest, handy for a quick chopstick capture of the morsel, or not. Janet and I have learned to face with good cheer an endless delivery of Chinese dishes where our main question for each is, "Now, just exactly what is this?" Suffice it to say that my Chinese friends find our USA chicken fried steak - baked potato - and dessert approach to life rather boring. They may be right. Personally, I found roasted crickets to be a special treat and stuffed fried cicadas were a surprise. I generally skip the squid eye soup, and picking out a live snake for the evening fare has never been high on my list. Janet has an out; she's vegetarian - '素食者'(su shi zhe). This always creates excitement

with our hosts who go out of their way to bring on an endless course of vegetable dishes. No banquet is complete without a round of toast-



Sanyuan Temple in the Yuntai Mountain Range

ing, mostly cheery oratory to each other, our past experiences, our good friendships and all the future cooperation ahead. At one of our banquets, there was a large flat screen TV on the wall, no sound, just the China News Network running news segments by on the screen. During the meal, I caught a glimpse of a newscast on the fires of Texas and lo and behold, there was a Nacogdoches fire truck rolling by. I'm thinking "Good grief! We're ten thousand miles away and maybe that's my house on fire!" Well, I learned later it was Bastrop, that my house wasn't on fire and Nacogdoches fire trucks had been sent to deal with the mega-fire in the Lost Pines area. Halfway around the world to get away from the Texas climate, and here it is on China TV as a reminder. Go figure.

On this last trip, one spot near Lianyungang stands out. The name of Huaguoshan means a place rich in flowers and fruits. It's the high-

Notes, cont.

est mountain of the Yuntai Mountain Range (about 2500') and it's a beautiful protected scenic region. There are more than 100 scenic spots in the mountain range, most connected with the story of the Monkey King. A central feature is the Sanyuan Temple on the mountainside. It was initially built during the Tang Dynasty (618-907 A.D.) and statues of the Gods of Heaven, Earth, and Water are in the temple. What captured

my attention, however, were two ancient Ginkgos on the temple grounds, one a male and the other a female, and both were planted around 1100 years ago. They were adorned with red prayer flags – messages visitors send to the Gods for good fortune and good health. Old trees in China are revered; they are often registered provincially and nationally. Most are marked with a plaque or commemorative stone. On this

mountain, there were nineteen ancient Ginkgos, most planted 800 to over 1000 years ago. While the temples have been destroyed several times and rebuilt, the trees still stand – testimony to their tenacity and longevity. So, when folks ask “why are you planting so many bald cypress?” - I usually say, “Well, this tree will answer that question in a thousand years.” Let's keep planting.

By George, He Did It! By Greg Grant

It was around 1971, and I was a student in Mrs. Sandra Field's class at Mozelle Johnston Elementary School in Longview Texas. I can't remember if Mrs. Fields gardened then or not, but she later became an outstanding gardener with a beautiful yard. In an ironic twist of fate, Mrs. Fields later took one of my Stephen F. Austin horticulture classes. It's certainly an odd feeling teaching your teacher!

My love of gardening and teachers was already firmly rooted by fourth grade. “Miss Mozelle” Johnston, an avid gardener herself, appointed me “keeper of the class terrarium” in first grade as a way of nurturing my budding interest. She also gave me lessons in painting flowers and frequently sent starts of her own plants home with me to adopt as my own. I suppose this was when the seeds of my horticultural career were first planted. But I wanted more, much more.

One of my favorite events at school was when we got to peruse the flimsy catalog of children's books available to us and actually pick out something to order (with our parents approval and money, of course).

One day I was wishing Jeannie, the prettiest girl in the class, would look at me instead of her boyfriend Bill, when Mrs. Fields passed out the latest book list. I skimmed over the normal male-child subjects like baseball and track stars and suddenly stopped at a description of a young boy who loved flowers and had a secret garden in the woods. This was it! This was going to be MY book. It just wasn't normal (at least not in East Texas) for a young boy to be enamored with plants. And it certainly wasn't normal to share this interest with the other students. “Cooties” are one thing, but a boy that likes flowers? Now that's just weird! But now, I would have a kindred spirit...

another little boy who liked plants. What a relief.

The books all arrived one day boxed in bulk as usual. But this time, my special book was hiding among them. Mrs. Fields handed them out one by one. Like the others being adopted around the room, mine appeared nothing special. It wasn't very big and it was a soft paperback like all the rest. You've heard the old saying, “don't judge a book by it's cover,” right? It's quite true. But in this case, the cover did hold a secret. Staring me straight in the eyes was a photograph of a pleasant looking African-American man who liked plants, all plants. Up unto this point, the flower lovers in my life were all women. But this man turned out to be more than a flower lover. This man was



George Washington Carver

George Washington Carver.

I must have read it a hundred times. The boy was born into slavery around 1864. He never knew his mother or his father. Little George wanted to go to school so bad that he set out on his own to find a grade school for colored children. He thrived on learning. As a boy, he learned how to cook, how to sew, how to paint, and most importantly how to garden. Everything about nature interested him.

After catching up and finishing school, he was finally accepted into college only to be turned away upon arrival because of his race. He eventually found a college to accept him and began to study art. After being convinced that he couldn't make a living, even as a talented artist, he transferred to Iowa State College of Agriculture and Mechanic Arts to study science, eventually becoming the first African-American on their faculty.

After impressing all his colleagues and finishing up a master's degree, Booker T. Washington talked him into accepting a teaching job at Tuskegee Normal and Industrial Institute in Alabama. George jumped at the chance to help the poor, impoverished black farmers in the South.

He spent the rest of his career studying how to make both the rural farm and farmstead a more profitable and pleasurable place. Most of you have probably heard about his work with peanuts and sweet potatoes. He synthesized hundreds and hundreds of products from them to help provide an expanding marketplace for the farmers cotton replacement crops.

But these were merely the most publicized

By George, con't

works. He developed numerous products from pecans, soybeans, and cowpeas as well. "Dr. Carver," as his students called him, wanted to find plants that were easier to grow. He was an active advocate of improving the soil with composted organic matter and nitrogen fixing plants. He showed families how to make their own paints from native Alabama clays for painting their houses and barns. He also created over five hundred dyes and pigments from twenty-eight different kinds of plants. This true revolutionary was an active advocate of civic and home beautification as well. In addition, he actively promoted the harvest and consumption of edible wild plants to supplement the pantry during hard times. And continuing his life long love of cooking, he provided hundreds and hundreds of recipes for both cultivated crops and wild harvests.

And he wasn't happy just coming up with answers. He was consumed with the idea of spreading his "gospel." For those skeptical farmers that wouldn't come to the school for his monthly lectures, he fashioned a traveling experiment station, The Jessup Wagon, to bring the result demonstrations



George Washington Carver extensively promoted sweet potatoes as an alternative crop

to them. He didn't stop there though. He went on to travel the country giving lectures on his work and ideas, even speaking to the United States congress. And off course doing all of this while being made to ride in the back of the train, eat his meals in separate rooms, and enter his hotels through the back doors.

And if all this wasn't enough, he left his life savings, including pay checks he seldom cashed, to a foundation to continue his teachings, and all his possessions to a museum dedicated in his honor. George Wash-

ington Carver received numerous honors in his lifetime and even more afterwards. He was remembered with stamps, coins, books, presidential medals, honorary degrees, schools, and even a national monument. However, scholars on the subject today claim his achievement were overstated. They claim he was put on a pedestal higher than he deserved. But you know something? These people didn't know him. I did. I've had a number of great inspirations during my career. Luther Burbank, Bill Welch, and Jerry Parsons all come to mind. But no person, living or dead, has had a more significant impact on my life and career than George Washington Carver. After reading my little paperback in fourth grade, I decided to become a horticulturist. I began collecting amaryllis because he grew them and started a life-long affair with bulbs. I learned how to cook and paint so I could be like George. And most importantly, I learned to share my knowledge with others. George Washington Carver did many great things. But what was most important was not what he did, but how it did it and who he did it for. Maybe he didn't change the world, but he certainly changed my life.

Spiderwort

By Trey Anderson

Spiderworts are plants that are familiar to most gardeners, but are often overlooked as great landscape fillers in winter. There are several species native to east Texas. Most are very hardy and drought-tolerant, and we all know how important that is these days. I most appreciate the evergreen, fleshy foliage that persists throughout winter. The leaves are typically a bluish green throughout the warmer months, but in the winter develop an eye-catching red hue. This time of year, plants begin to develop evergreen winter rosettes. Just in time too, since most other herbaceous plants are entering into dormancy. Spiderworts, *Tradescantia* spp., are in the Commelinaceae or Spiderwort family. There are nearly two dozen species native to Texas; about half of those are native in East Texas. The name spiderwort is de-



rived from the many spidery hairs found on the stems, leaves, and sepals. Wort is an old English word meaning plant. Flowers are attractive, but short-lived, appearing in morning and fading by afternoon. Once the peak bloom is over, do not be surprised to see a few blooms here and there appear throughout the summer and

early fall to put a little cheer in your day. *Tradescantia virginiana* is the most common spiderwort in the nursery trade, but is not native to Texas and is less vigorous than our native species. I am partial to three natives: *Tradescantia ohiensis* - Ohio spiderwort, *Tradescantia hirsutiflora* - hairy flower spiderwort, and *Tradescantia occidentalis* - prairie spiderwort. The Ohio spiderwort is the tallest, reaching 2 to 3 feet with clusters of blue flowers from May to July. The hairy flower spiderwort hugs the ground, staying under a foot tall with vibrant blue flowers. The prairie spiderwort fills in the middle ground growing to about 2 feet and boasting periwinkle blue flowers. All in all I think the spiderwort is a must have for any gardener and we guarantee to have them available at our spring and fall sales every year.

Biophilia is not a Band

By David Creech

I always say it's easy to be a gardener but it's really hard to be a great gardener. I say the same thing about teaching. Some folks think you're born that way - that you either have it or you don't. You either have a green thumb or you don't. Passion may not be enough. Here at SFA, we think it's all about empathy. Over the years, hundreds of students have trekked through our program. They're exposed to as much science and art as we can put in front of them . . . and we try to show them the way to as much as they're willing to explore and get excited about. While we teach content as good as anyone, I've never figured out how to teach empathy. I've scratched my head over this countless times. How do you teach empathy? Why is it that what seems obvious to some goes unnoticed by others?

Here's a faucet. Over here is a rare plant dying of thirst. Water it. Here's a grafted tree. These big suckers taking over are from below the graft. Cut them off. These plants are yellow. They need fertilizer. Feed them.

Part of any plant propagation class is dealing with cuttings – herbaceous, softwood, semi-hardwood, and hardwoods. There are books, trade magazine and journal articles, and web pages to study. There are substrate issues, bottom heat (root zone warming), automatic misting, time clocks, and hormones to manipulate and adjust. At the end of any cutting propagation session, I always ask students, "So, we've studied everything we can about rooting, now, what do you think is the most important factor for successful rooting?" Most students say automatic mist, or turgor of the stock plants, or hormones. Nope, it's something else. It's the shadow of the propagator over the propagation bench. The best propagators are constantly checking on their children.

Are they too wet or too dry? If it's a sunny day, they may tweak the mist up a notch while on a cloudy day they may space the mist intervals out. A good propagator looks for foliage going south or fungal gnats saying hello. When I show visitors our propagation compartment, I show off our automatic mist system but I tell everyone the real truth is Dawn is Auto and I am Matic. It's not a joke.

One of the neatest propagation facilities I've ever seen is a nursery near Jinjiang in Jiangsu Province in China. With over a



football field of two million Taxodium cuttings to keep wet for eight to ten weeks, the manager Mr. Zho was using a half-dozen ladies with high pressure hoses to hand mist the cuttings. All day long, every day for eight to 12 weeks, each worker worked their own long run of propagation beds, dragging their hose and wand and waving a stream of high pressure mist over the crop. After each run,

the ladies would sit in the shade and wait until the beads of water on the cuttings had evaporated, the signal that it was time to go again. I asked Mr. Zho why he didn't choose a boom mister or some other conventional system and he told me they had done that - but he had concluded the ladies knew exactly when the cuttings needed water, and rooting percentages were now very high. Empathy is part of it.

Greg Grant recently sent me an email from his home in Arcadia that sings this same song and I share it here: "I just killed myself shoveling out silt from the bottom of a dried pond that I tilled. That's where all the good stuff ends up of course. Long before organic gardening and recycling became the rage, George Washington Carver and his students would muck out local ponds for organic material and fertilizer. The group yesterday, as with my master gardener home tours this summer, wanted to know what kind of irrigation system I had and what kind of fertilizer I used. When I told them home grown chicken litter and a water hose, they acted like they didn't believe me. Students of horticulture need to know that there are no magic tools that can be purchased to ensure producing fruits, veggies, and flowers. Growing plants (like landscape design) is all about constant (often minute by minute) attention to fine, critical details. What was the word Dawn used for "plant empathy?"

Well, Greg, it's biophilia. Now when you look up biophilia on the internet, up pops a list of references on the crystalline music by Icelandic singer Björk. That's not it. No, the term "biophilia" literally means "love of life or living systems", the "the connections that human beings subconsciously seek with the rest of life." Good gardeners have empathy. They are afflicted with biophilia

Deck the Halls

Mark your calendars for December 3, 2011. Arboretum Research Associate, Dawn Stover, will be teaching the Gardens' annual wreath making class. Many more decorating ideas for fall and Christmas will be introduced this year in addition to the standard evergreen wreaths and swags!

What is Environmental Education By Elyce Rodewald

“When we try to pick out anything by itself, we find it hitched to everything else in the universe.”

-John Muir

For environmental educators, helping people understand this wonderful quote from John Muir is a big part of what we do every day. Our programs encourage participants to become aware that people are a part of the natural world and our actions impact other systems in nature. Our students learn about the parts of those systems and gain skills in identifying, measuring, and analyzing them. We hope our participants develop an understanding that human health is related to environmental health and that teamwork, coupled with critical thinking and decision-making, can lead to effective problem-solving skills.

We feel our most effective programs are those that are rooted in real-world issues and involve direct experiences with the environment. Hands-on investigations and critical-thinking activities help our students understand the importance of local ecosystems and the interdependence of humans and the rest of the natural world. We encourage life-long learning by offering a wide range of programs for all ages.

Please join us for an environmental education program offered through SFA Gardens. We hope it will be relevant, educational and, most of all, fun for you!

Visit sfagardens.sfasu.edu for information
about our educational programming

Environmental education is a process of gaining awareness and knowledge, and developing attitudes and skills in order to participate in the resolution of environmental issues.



Drought Survival: 101 By Dawn Stover

There's no denying that this past summer was brutal. Every time I talk to a fellow gardener, they are quick to mention the things they lost in the heat, and are even quicker to tell me the things they will NEVER plant again. Natives like loblolly pines, magnolias, and most especially, water oaks really struggled. And I don't have enough fingers to count the times someone told me they lost their well-established azaleas. Nacogdoches has been under voluntary water rationing for several months now, but there was a 6 million gallon increase in water usage for the month of September. Is it possible to garden in these dire conditions and still use water conservatively? Well the answer is most definitely yes, and I believe we can be much more frugal with our water when times aren't so lean.

First let's start with our soil. A healthy soil built with plenty of organic matter enables water to be adsorbed more readily and also allows plants to develop a deeper root system. Plants are able to utilize available water more efficiently. A friend once told me that for every landscape dollar you spend, 90 cents of that should go towards your soil. I couldn't agree more - except I make my own compost and get that part for free!

Next, let's work on plant selection. Sometimes it takes a bit of research on the part of a gardener to pick the right plant. Just because something is native doesn't automatically qualify it as drought tolerant. What if that native species grows in a flood plain, or in a watershed, or is only found near natural seeps? On the other hand, what if a certain native plant is found in

sunny locations in sandy soils? We have a little cabin in deep east Texas that we visit about once a month. The soil is nothing more than pure sand. We're trying to establish a few trees, but those of you that know me know that I have to have at least one flower bed too. My husband is in charge of watering (i.e. monopolizes the water hose), and my sandy little flower bed is often left without a drink during our visit. I can definitely testify to drought tolerant perennials just by looking at my survivors. The biggest pleasure has been watching my 'Grape Sensation' selection of *Gaillardia aestivalis* var. *winkleri* absolutely thrive in that sandy soil with little irrigation - about an inch per MONTH! In nature, this plant is found in similar situations although supplemental irrigation is contingent upon rain

See *Survival*, p. 7

Georgia or Bust!

By Dr. David Creech

I've just returned, with four students in tow, from the Southern Region International Plant Propagators Society (IPPS) conference held this year in Valdosta, Georgia. It's been a while since Janet and I made a road trip east with our truck and camper brimming over with rare, unusual, never-before-seen-on-the-east-coast plants, all going to the plant auction and side exchanges with friends and colleagues. And the best part, returning home laden down with plant treasures we pick up along the way. Just like the old days.

The weather was great! The crowd of 200 was enthusiastic. It was a joy to have four excited and well behaved students arrive safely at the conference after a 13 hour road trip. And it was even better to watch them endure a marathon of two days of bus tours and a full day of lectures. Add to that a fine banquet followed by a program and lively plant auction. Felicia English, Casey Thomas, Eric Golestan, and Kyle Giannette had never rubbed shoulders with so many nursery personalities in the South. Their conclusion: nurserymen are real people.

So who is the IPPS? The IPPS is a unique blend of ornamental plant enthusiasts, nurserymen big and small, and a varied group of academics working in the exciting arena of plant propagation, plant production, breeding, nursery management strategies, plant nutrition, pathology, pest management and so on. The IPPS mission is to seek and to share. It's a fun event with a good swath of the movers and shakers in the nursery industry. There's a lot of plant talk.

Unfortunately, the reality of this society, and other horticultural societies, is that the number of students at these events is getting less and less. Enrollments are down, and that may be part of it. Cost is another, but there are ways to get around that. I've come to know that connecting students to what is happening in their chosen field can only be partially accomplished in the classroom. Getting in front of the nurseries and



Dr. Creech, and SFA horticulture students Eric Golestan, Casey Thomas, Kyle Giannette, and Felicia English attend a field trip at the recent IPPS conference in Valdosta, Georgia.

gardens of the South, and the folks that work there is part of our educational responsibility. SFA students have and continue to make a mark in these gatherings.

What our four students learned is that ornamental horticulture is complex and exciting. Right now, this dynamic industry is struggling with a new set of economics. Things are tight. No one is really sure if that light at the end of the tunnel is the way out, or if another train is barreling this way. It's all about housing starts; they're just not there like they were back in 2007 and 2008. Since then, many of the big nurseries in the USA have downsized, gone bankrupt, or simply shut the gates. Too many nurseries find themselves moving 50 to 80 percent of the plant numbers achieved during the boom years. To be honest, most feel it'll never come back to where it was. There's simply just too much product for too little demand, and a housing boom is years off in the future. That's the thinking. Heavy discounting of production by some nurseries hasn't helped the price picture. So it's sort out time for the nursery industry.

However, there's a bright light in the picture. The entire market isn't sour. In fact, fruit trees, berry plants, vegetable transplants and seed are way up. Color still sells. "New" plants are still moving, although more so with branded products

that have name recognition and good marketing behind them.

A big highlight included the visit to Dr. John Ruter's seven-acre woody plant evaluation site at the University of Georgia's Tifton campus. I have visited the place two or three times in the past decade and can only say it gets better every time. Over the last twenty years, John has built a rather incredible and surprising woody plant collection in this coastal plain location. For me, a smooth barked Mexican pine, *Pinus pseudostrobus*, was one of the standouts; a real surprise. The Italian stone pine, *Pinus pinea*, looked strong and cheerful. That's reassuring because it's done well for us for so many years. A *Cunninghamia konishi* was in fine

form. In addition to plant evaluation, John has several nursery management projects on the ground, mostly dealing with the goal of finding strategies to minimize plant water use. Finally, another project is evaluating *Camellia oleifera*, the origin of tea oil, as a new oil crop for the southeast. Tea oil competes with olive oil in nutrition, but doesn't burn and smoke until above 400°F. John has released eight new plants from the program, including the popular 'Princess' and 'Prince' – varieties of *Pennisetum purpureum* featuring purple foliage.

Nurseries visited in that southern Georgia and northern Florida region included Monrovia Nursery, one of the big corporate nurseries with a national profile. Also toured were Hackney Nursery, May Nursery, and Clinton Nursery, all family owned business that have downsized, but to my eye, they all seemed to have plenty of energy and enthusiasm going for them. Dealing with market changes has meant less capital investment, less labor, and a struggle with pricing.

It's a unique time in Horticulture. There are bright spots and there are clouds. Finding students who like to wake up in the morning and get to work is a worthwhile goal. Reminds me of an old Chinese saying, "Teachers open the door; you enter by yourself." Let's keep planting.

Our Trees are Terrific, Too

By Barb Stump

We are finally getting a cool front after our dreadful summer. Our thoughts now turn to fall color, especially in the Ruby M. Mize Azalea Garden. In a month or so our southern sugar maples (*Acer barbatum*) and Japanese maples (*Acer palmatum* and *Acer japonicum*) will be fabulously yellow, red, and orange. Our first camellias are beginning to bloom. We have white Camellia sasanqua 'Setsugekka' and a rosy pink C. 'Autumn Rouge' now. The whole crowd of 23 sasanqua varieties will follow in the next two months, culminating with deep red, single C. 'Yuletide.' This is also the season for Encore™ azaleas. Color is already dotting the garden thanks to these wonderful multi-seasonal blooming azaleas. Particularly nice are the mature specimens of bright purple 'Autumn Royalty', bright red 'Autumn Embers', and 'Autumn Coral' in Bed 13. Our newest plantings of 'Autumn Sunset', 'Autumn Belle', and 'Autumn Moonlight' in Beds 28 and 45 are in bloom, lighting up the shady garden with double flowers in bright coral red, white and pink with a splash of red, and white with random streaks of bright pink.

I look forward to all of these seasonal thrills and enjoy sharing them with whoever will walk the garden with me. But it occurred to me that I might talk about something different for a change. As I walked the garden yesterday I looked up to see how

many of the "other ornamental trees" in the garden were truly garden-worthy and should be called to your attention. After all, there are at least 57 different genera that we've successfully introduced to the site. Many were among the first plantings in the fall of 1997, often representing very rare trees that Dr. Creech and Dawn had been holding in the shade houses. From *Acer* to *Zelkova* we have 189 different species that now make a real statement as fast-growing mid-story trees. This is a visible landscape lesson, because as Greg Grant said when we were first planning the garden, "You'll need some mid-story trees to fill in the vertical space between the azaleas and the loblolly pines." How right he was. Much as I love my azaleas, none of them fills a space like a Chinese *Schima*—now 25 feet tall, or one of Dr. Creech's many deciduous magnolias and *Mangletia* that are at least the same height. As you walk the garden this winter you'll notice that a great many of these trees are evergreen. Why? Because we wanted to maintain that vertical presence year-round, and yes, because the nursery industry has been looking for "new" broad-leafed evergreen trees for years. The ultimate find would be a broad-leafed evergreen that had red new growth but was reliably healthy to replace red-tipped photinias. We're close with some of the *Daphniphyllum*, but as with our red Japanese

maples, red leaf color is hard to maintain in our high summer temps and strong sun. I'm also happy about how the line of magnolias along the southern edge of the garden has turned out. While we didn't pleach them into a hedge as we did by the handicapped parking area, they are now about 35 feet tall, reaching out to the sides to close the 12-foot space between them, effectively screening the equipment shed to our south. Another example is *Chionanthus retusus*, the Chinese fringe tree, which we have planted throughout the garden and around the Council Ring. This fits the home landscape because they are "small ornamental trees," but as you can see, given good care, they can reach 15 feet tall by 15-20 feet wide, with lovely white flower clusters in the spring. If you don't have room for this width, then look for the cultivar called 'Tokyo Towers' that gets 25 feet tall by only 6 feet wide. You'll be able to see how these look at ultimate size as they mature in the new Gayla Mize Garden..

So, please walk the gardens this fall, and enjoy our "living laboratory" that we mention in our mission. You can see exactly how big—width as well as height—of a particular type of tree. Greg and I are nearing completion of creating all the signs for these trees, so it will be easier for you to know what interests you most.

Survival, con't

rather than a turn with the water hose. And it proves that xeriscaping is prettier than prickly old cactus and cow skulls.

Dr. Creech always says "mulch covers a multitude of sins." Mulch also helps soil retain moisture and helps cool plant roots. Apply a four to six inch deep layer before the summer sets in. We use finely ground pine bark, but pine straw and leaves work just as well, and are free if you're willing to drive around your neighborhood to pick them up. If you happen to have weedy spots, through down a layer of cardboard or thick sections of newspaper before applying mulch.

Finally, let's consider good irrigation practices. Watering deeply and infrequently encourages roots to grow deeper

into the soil where they are more likely to find moisture during a drought. I drive by a business on my way to work that runs their sprinklers every morning. The roots



Drought tolerant perennial: *Gaillardia aestivalis* var. *winkleri* 'Grape Sensation'

of their san Augustine grass are probably right at the surface of the soil and probably didn't take kindly to voluntary water restrictions (provided they were followed) when their daily addiction to irrigation was not supplied. We encourage folks to water about an inch per week, and water very early in the morning to help prevent evaporation. Drip irrigation is the more water efficient than overhead irrigation, but the situation and size of the area play a decision in the type of irrigation needed.

I know that I'm preaching to the choir here, but I can't help but wonder if the message needs repeating when I get that phone call from someone losing their azaleas in the drought despite their watering everyday. We can be wise with our water and have beautiful gardens too!



Gayla Mize Garden Heads into the First Winter By Dr. David Creech

The Gayla Mize Garden has survived its first year. A year of stifling heat and record drought. With survival of 95% of the plantings in the first year, there's plenty of reason to be cheerful. The drip irrigation system worked, the clocks worked, and the plants are settling in for the winter in fine shape. We did survive one problem: thirsty critters. During the worst of the drought, our small forest animals - (squirrels, racoons, rabbits, bobcats, coyotes, or perhaps a grizzly bear, we're not sure) - began gnawing the drip lines nightly. After a hasty meeting or two, we decided to provide a water source for these poor creatures. We strategically placed shallow plastic containers along the drip line to keep a source of fresh water available. A kind of in-the-shade watering hole for our enemies. While we still had an occasional "geyser," it seems to have worked. As you read this, the Gayla Mize Garden is getting two boardwalks and two bridges to tie the half mile trail network together. The 'Slender Silhouette' sweetgum treehenge is in good shape and our line of 'Cascade Falls' baldcypress is as well. Last but not least, we are pleased to announce an emergency call box system in place for the SFA Recreational Trails and Gardens.

Of course, a gardener's work is never done. This winter the five acres of unplanted territory of the 8-acre Gayla Mize Garden will get a transfusion of several thousand rare, unusual, and exciting plants that are currently brimming over in our nursery. They're as eager to get into the ground as we are to plant them!

