



SFA Gardens NEWS

Notes from the Director

By Dr. David Creech

With every International Plant Propagation Society-Southern Region annual conference, I learn something. IPPS-SR is a unique blend of like-minded academicians, nurserymen, landscapers and plantsmen. We gather once a year in locations across the South for a busy mix of lectures, bus tours to local nurseries and gardens, banquets, live and silent plant auctions, and the Question Box, a freewheeling exchange between those who have both questions and answers.

This year's conference was held Oct. 28 to Nov. 1 in Dallas. Since we are at the western edge of the Southern region, the general thinking was attendance might be low. It wasn't. When the dust settled, we brought in more than 200 registrants.

Laura Miller of Texas A&M University at Dallas, Jonathan Berry of JBerry Nursery, and I managed the local site committee work, which included the speakers, audio and visual, tours and hotel arrangements. If you like dealing with an ocean of details, this job's for you. The result was great lectures, lots of socializing and plenty of learning. Everyone left inspired. The only glitch was a tour bus stuck miserably in the Athens Tree Farm

sand, but we overcame that challenge in fine fashion.

One question this year and in years past is "Where are the students?" Most Texas nurserymen and landscapers report business is booming, inventories are short and it's hard to fill open positions. Students graduating now are in the driver's seat. It's no secret horticulture enrollments have never returned to the peak experienced in the late 1970s. For instance, enrollment at TAMU was more than 600 in the late 1970s; it's a fourth of that now. At SFA, we've gone from 99 majors in 1977 to about 30 today. Low enrollments mean loss of classes.

Perhaps the drop in enrollment is a generational change. As we transition from the baby boomers and Generation X to millennials, Generation Z and Generation Alphas, there are bound to be changes in everything. From the workaholic, goal-centric, competitive baby-boom generation to the tech-savvy, civic conscious life/work balance tone of recent graduates,

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During a tour of SFA Gardens, participants in the International Plant Propagation Society-Southern Region annual conference viewed the labyrinth at the Gayla Mize Garden. Bottom right: Charlie Parkerson of Lancaster Farms, Virginia, takes a break during the IPPS-SR tour.



times are changing. To attract millennials, academic institutions are adding specializations in the area of foodscapes, entrepreneurship, business, sustainable productions, environment and natural resources, and in some states, cannabis approved for medicinal use.

The generation coming into the workforce has higher expectations than years past. A few years ago, a student looking at several job opportunities visited my office. His résumé had the usual biographical, academic and extracurricular history we all expect, but at the very top, he listed his career objective as “upper-level management.” I said, “Gee, the fellow interviewing you is upper-level management. You just got here and now you want his job?” I nudged him to rethink this a bit. Perhaps he really wanted “an entry-level position, the opportunity to work hard and had the determination to make a contribution to the company’s bottom line.” He got the job.

TAMU’s David Reed, Mike Arnold,

Dan Lineberger and Tim Davis looked at horticulture enrollment in depth with a 2016 article on the “Challenges of higher education in the U.S. – what will horticulture of the future look like?” (Acta Hort. 1126, 205-218). Gathering data from across the nation, they reported horticulture enrollments have been trending downward. They listed possible reasons for this as “ineffective or no recruiting, not attracting as many female majors, increasing admission standards, bad publicity primarily based on jobs and low starting salary, and not appealing to the new millennial student.”

Further aggravating the trend is the dissolution of horticulture into plant, soil and/or environment departments. For instance, they found in 2014 only 31 percent of universities offering horticulture degrees had departments with horticulture in the department name. They noted increasing enrollment couldn’t be achieved by academe alone. What may be needed is partnering with public horticultural

institutions, horticultural societies, and leading horticultural and allied industries.

Total faculty member numbers are decreasing slightly, and there’s a trend to hiring more adjunct faculty members, lecturers, instructors or part-time faculty members. With declining enrollment and few new faculty hires, the result is an aging faculty, perhaps less in tune to what students want, need or expect. Then there’s the research and project-funding problem. Faculty members find themselves without state appropriated funding and must generate their own operating funds via submitted proposals to cover research, graduate students, technical support staff members, travel, operating expenses and often a portion of their own salary to maintain 12-month appointments. It’s a changing world.

Let’s keep planting.



Left: In November, the City of Nacogdoches dedicated a park in honor of the late Dr. Francis “Ab” Abernethy. During the dedication of “Ab’s Park,” Jeff Abt, waxing philosophic, delivered a speech. Right: Dawn Stover, SFA Gardens research associate, helps at the live plant auction during the IPPS-SR conference.

Got Seeds?

By Jocelyn Moore

SFA Gardens welcomes fellow gardeners to join us for the third annual Nacogdoches Seed Swap. All viable flower, herb, vegetable and tree seeds are welcome, whether purchased at a nursery or saved from your own garden. Start sorting now, and mark your calendars for 1 p.m. Saturday, Jan. 20, at the Pineywoods Native Plant Center's Brundrett Conservation Education Building.

"Seed swaps are the perfect place to build community relationships by connecting around growing food and sharing our abundant resources," said Kerry Lemon, head of the Thomas J. Rusk School Garden and former assistant education coordinator at SFA Gardens.

Previous seed swaps drew many gardeners eager to share their saved seeds, best tips and garden tales. Some seeds from past swaps were saved during many years, including the Longhorn Okra saved for more than 15 years by a late gardener and delivered by his son.

For this year's swap, we hope to arrange at least one expert per section (flower, herb, vegetable and tree) to help answer questions seed savers and swappers may have. If you are interested in signing up as a seed expert for the event, email Jocelyn Moore, SFA Gardens assistant education program coordinator, at moorejv@sfasu.edu.

The concept of saving and sharing seeds is nothing new; in fact, sharing seeds is a long-held agricultural tradition. SFA Gardens is honored to help restore this cherished practice lost to recent generations.

This event is free and open to the public. Donations are gladly accepted and support Nacogdoches Naturally, SFA Gardens' afterschool gardening club.



Seed savers exchange seeds as they prepare for the season during the inaugural Nacogdoches Seed Swap at Austin Heights Baptist Church.

FAQs

1. How does a seed swap work?

If this is your first swap, you are in for a treat! Bring your well-labeled seeds and a volunteer can help set out your seeds on their corresponding table (i.e. vegetable, herb, flower, tree, mystery or miscellaneous). Once all gardeners' seeds are out, official swapping can begin, and you are free to take home new varieties.

2. How should I bring my seeds?

Label your seed variety and date the year the seeds were collected or bought. There's no need to individually package your seeds to give away; instead, you can bring them in their existing packet or container, and gardeners will then take a small amount home in provided envelopes.

3. How many seeds can I take home?

Seed swaps generally work on an honor system, so feel free to take about as much as you brought. When taking seeds from a package, think about how many seeds you realistically need. A pinch is usually plenty.

4. I am new to gardening and don't have seeds. Can I still come?

Yes! We welcome new gardeners and encourage you to take home a sampling of easy-to-start seeds, along with new tips, resources and friends!

5. What happens to leftover seeds?

Some seeds will go to local school gardening clubs and community gardens. Others will be donated to the Nacogdoches Seed Library at the Nacogdoches Public Library.

Adopt A Tree

By Elyce Rodewald

Nacogdoches Naturally afterschool program brings members from the Boys and Girls Club of Nacogdoches to the SFA Pineywoods Native Plant Center each week to explore, investigate and experience the natural world. Nacogdoches Naturally is about respecting oneself, others and wildlife; teamwork and making new friends; discovering the complexity and beauty of nature; and outdoor adventures, challenges and growth. And surely, it is about fun and enjoying the outdoors.

One of our most popular and meaningful activities is “Adopt a Tree,” where each child chooses a tree at the PNPC to watch throughout the year. They identify the tree, measure and photograph it, create leaf and bark rubbings, and then visit it often to observe changes.



Students tour the PNPC for a field trip. One of the students, Joel, was a past Nacogdoches Naturally participant and adopted the photographed tree.

I underestimated the importance of the connection between the child and the tree until a drought killed a small, adopted magnolia. When the child returned to Nacogdoches Naturally in September, she burst into tears at the loss of her beloved tree. Conversations

about the cycle of life and the importance of dead trees had little effect on her. She was inconsolable until some green shoots emerged from the base of the tree. Life was good again.

Most of the children choose a tree quickly, often looking for the biggest circumference or tallest tree. They bond and give interesting nicknames to their tree like Bob or Piney. One child, Joel, was different. He searched and investigated many trees before finding the tree that needed him most. He decided a small dogwood near the road was his tree. Every week, on the way to our meeting at the stump circle, he

would say hello to his tree and give it a hug.

Joel did not return to Nacogdoches Naturally the next fall, but three years later, I recognized him as he enthusiastically exited a school bus with classmates attending a field trip at the PNPC. He was animated and explained to his teacher that he knew where he was and that he had a tree here.

The teacher gave Joel a cursory nod. He was insistent, “I have a tree

here — I can show it to you!” I stepped in and suggested we visit his tree right away and introduce it to the rest of the class. Joel led the way to the little dogwood by sprinting across the Tucker House’s backyard to give his long-lost friend a giant hug. His classmates joined



him and were soon asking how they could adopt a tree.

This year, adopting a tree is as important as ever to Nacogdoches Naturally participants. Dulce the sweet gum, Phoebe the flowering dogwood and Beauty the bald cypress are making a difference in the children’s lives. You may notice small signs through the PNPC such as Carmen’s Tree, Ja’Kyrie’s Tree or Weston’s Tree. These signs designate the lucky trees carefully chosen and loved by a Nacogdoches Naturally participant. Through repeated observation and exploration, the children are connecting to nature and developing a sense of place. One child noted her tree had heart-shaped leaves, and she felt happy and joyful when she was with her tree. As you stroll through the gardens this season, we hope you also find peace and joy among the beauty of the pineywoods!

Help us protect our trees at the PNPC by parking only on asphalt in designated parking areas. Parking under trees compacts soil and damages roots, eventually killing the trees.

Nutrition Student Interns with SFA Gardens, Works with Community Children

By Nathan Slinkard

I don't always have the opportunity to work outside in gardens, focus on real food or teach nutrition to children; however, I was able to do all of this and more through programs and activities with SFA Gardens for my dietetic internship.

The first big event I helped with was the Harvest Feast for Nacogdoches Naturally, a weekly afterschool program for children. My first responsibility was to shop for the ingredients we needed that day, which included a trip to Appleby Community Farm to select fresh, organic, locally grown produce. We taught the children how to make several healthy dishes to be served during the Harvest Feast, which included a veggie salad, a fruit salad, Dutch oven apple crisp, cornbread, non-GMO, gluten-free hot dogs and more. For my station, I helped a participant make a batch of gluten-free, dairy-free cornbread as well as an apple crisp (both of these we baked in Dutch ovens). The kids' families were invited to the Harvest Feast where they were able to see and eat the delicious foods their children created. It was a great evening, and I most enjoyed talking with the participants about why healthy eating is important and why different people eat gluten-free or dairy-free diets.

My next opportunity came when I led an informational booth at the SFA Wellness Fair. I was able to talk to college students and faculty and community members about SFA Gardens' beautiful trails. One of the hottest topics at our booth was geocaching and munzee — two games combining technology and outdoor adventure.

Geocaching is a “high-tech scavenger hunt” that starts with downloading the free app and traveling outside to find the hidden caches. The app will show you the location of the caches, but you also can find the coordinates online and use a handheld GPS. Inside a geocache is a small paper log that you sign and often a treasure you can swap for one you bring. Geocaches are abundant around the SFA campus and SFA Gardens trails, and so are munzees!

Similar to geocaching, the free munzee app shows you their locations. Munzees are small, QR code stickers that are placed outside on light poles, benches, parking signs, etc. You would never notice they were there unless you looked closely! To capture a munzee, you either scan it with your phone or just walk within range if it is a virtual munzee.

I also visited the Thomas J. Rusk

Elementary School Garden to help the TJR Garden Buds. The children were so proud of their garden and were willing to try a variety of vegetables since they had grown the produce themselves. To start things off, I talked a bit about corn (its importance to Native Americans and the pilgrims, and its use in other food products and animal feed, etc.) and led a discussion about how eating healthy foods supports their physical and mental growth. Next, the children rotated between stations that included harvesting vegetables, prepping or cooking food, and writing one thing they were thankful for this year.

Additionally, I helped at Carpenter Elementary School and its Garden Club. The children rotated between one station that involved harvesting and trying vegetables, and the game station, which I led. The game we played was inspired by the Learn, Grow, Eat & Go curriculum by the Texas A&M AgriLife Extension Service and their “go,” “slow” and “whoa” foods, which teaches children what foods should be eaten the most, less often and as special treats. The children raced over and picked from a variety of paper food cutouts and brought back the healthiest ones they could find. At the end, the children



SFA student Nathan Slinkard worked with SFA Gardens for his dietetic internship. Slinkard helped host Nacogdoches Naturally events and worked with children from Thomas J. Rusk Elementary School Garden and Carpenter Elementary School.

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considered the foods they grabbed, and we discussed why each food was either a “go,” “slow” or “whoa” food.

I researched healthy, seasonal recipes for their Kids Cook Curriculum and developed additional games for the Garden Clubs. I thoroughly enjoyed working with SFA Gardens faculty members and was impressed with what they are doing for the community. As a dietetic intern, I

understand how important eating a nutritious diet is for physical growth, mental health, and reducing the risk of developing chronic illnesses, and learning how to do this should start in childhood. SFA Gardens works tirelessly to provide children with the chance to see where food comes from, how to grow it, which foods are healthy and how to prepare these foods.

Ilex X ‘Cherry Bomb’ – The Holly That Almost Got Away

 By Dr. David Creech

Ilex X ‘Cherry Bomb’ was a gift from JC Raulston a long time ago. This holly was part of a box of about 50 tiny plants and had a label reading NA 28255. It was 1986, and we had a small garden on the south side of the Agriculture Building. It was a simpler time.

Plants were precious, and when we received a gift box, it was an event of epic proportions. I would gather students around for the unpacking, go to repotting and labeling, and it was Christmas in the garden. I called them bits of gold. We would grow and plant them here and there in the garden. Well, this particular *Ilex* was part of a collection of hollies that JC Raulston was trialing for the U.S. National Arboretum. He had propagated and scattered them far and wide as he was prone to do, and we were one of the lucky recipients.

Actually in 1987, we had four NA numbered selections that ended up in what we called “Holly Row” of Asian Valley (NA 28338, 28221, 28269, 28297 and 28255). Most are still there. NA 28255 was a particularly interesting clone because it was spineless, soft to the touch and wasn’t a fast grower. In a decade, it was a mounding 4-by-4 shrub.

After graduation, Scott Reeves found himself at Tresearch Farms in Houston, and he noticed NA 28255 performed well there. It wasn’t long before numbers were built, and he asked if I thought the name ‘Cherry Bomb’ was pretty good. I thought it was a great name.

The plant entered commerce. It received favorable reviews in the landscape trade and became a good holly to plant in the alkalinity-challenged landscapes of the region where many hollies fail. It had good form, clean foliage and nice big red berries that persisted well on the



plant. Scott moved on to Creekside Nursery near Hempstead, Texas, and ‘Cherry Bomb’ is still a plant he continues to sell.

More than a decade passed and the USNA decided to check with evaluators and decided none of the *Ilex* NA selections distributed in that batch stood out. There were no introductions planned, and the selections should all be destroyed. John Ruter of the University of Georgia noted there was a “Texas garden” that had distributed the plant, and he thought it might actually be in commerce. John let me know of the situation, and I called Margaret Pooler at the USNA and related my history with the plant. No, we weren’t part of the original distribution. No, we don’t have a agreement. JC Raulston had given us the plant. That was all the explanation she needed. Margaret knew JC and his penchant to give it all away and let the world sort it all out. I provided additional information, and the plant



‘Cherry Bomb’ flourishes at Peckerwood Gardens in Hempstead.



Dr. Jim Owens, research scientist at Virginia Tech University, standing beside 'Cherry Bomb' at Hampton Roads Agricultural Research and Extension Center.

was soon introduced formally as 'Cherry Bomb.'

According to the USNA's introduction, "'Cherry Bomb' originated from the breeding program of William F. Kosar at the U.S. National Arboretum as open pollinated seed collected from *Ilex* 'Nellie R. Stevens' during winter 1959-60." The male parent is believed to be *Ilex integra*. There are some fine older plants in gardens. The plant at Peckerwood Gardens in Hempstead is a beauty. I was recently in Virginia visiting Dr. Jim Owens, research scientist at Virginia Tech University, and admired what I think is the largest 'Cherry Bomb' in the world

at the university's Hampton Roads Agricultural Research and Extension Center. Evidently, the station was a recipient of the JCR distributed plant, and 'Cherry Bomb' obviously found a home to its liking. So much for the idea of it ending up as 4-by-4 dwarf!

We must confess that 'Cherry Bomb' has been absent at SFA Gardens for two years. The original plant was destroyed in a flood and another had been removed for a project. We were "cherry-bombless;" however, there's now good cheer in the land. Scott Reeves of Creekside Nursery in Hempstead donated 10 plants in 2017 and admonished us not to lose it again. We won't.

How Deep is Too Deep? Good Planting Techniques

By Jordan Cunningham

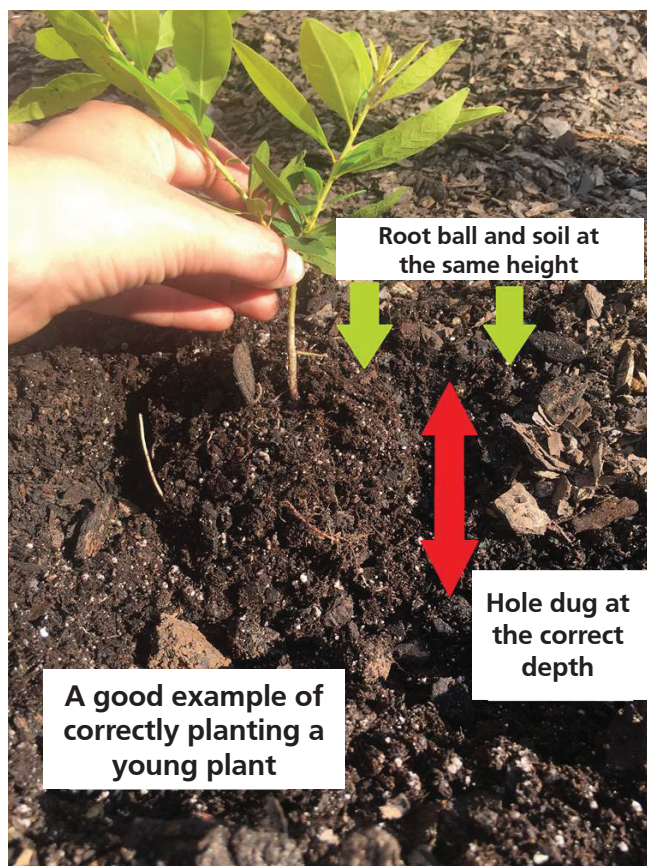
If plants could speak, what would they say? Would they ask for more water or request a sunnier spot to call home? Maybe they would tell us which bug is eating them or when it's time to be moved inside for the winter. When it's time to plant them, I believe the first thing our green friends want to tell us is how deep they should be planted. Whether it's a young tree or a flowering salvia, a plant is not given the best chance of survival when they are planted too deep or not deep enough. We can all be guilty of improper planting if we don't take the time to realize what a particular plant needs.

What are the results of improper planting?

When a plant is planted too deep, a part of the stem or trunk that is ordinarily in contact with the air is forced into the soil's dark, wet conditions. That part of the plant was not made to handle the constant moisture and lack of airflow. It could rot and hinder a plant's ability to carry nutrients from the roots up to the leaves. The weakened stem is more likely to be affected by diseases and pests. The health of the plant declines and possibly leads to death.

When we plant at too shallow a depth, we leave the roots at the mercy of our ever-changing East Texas weather. Dry, hot days can dry out roots and render them useless while cold snaps can freeze roots and give the same result. Plant roots are most comfortable in the soil where the

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When a plant is planted too deep, a part of the stem or trunk that is ordinarily in contact with the air is forced into the soil's dark, wet conditions. The photo above illustrates the correct way of planting a young plant.

moisture levels are more constant and temperatures never reach the extremes we experience above ground. Healthy and happy roots are vital to a plant. Dry, dead roots cannot collect the nutrients or water a plant needs for survival. They don't provide the structural anchor plants need to stay upright.

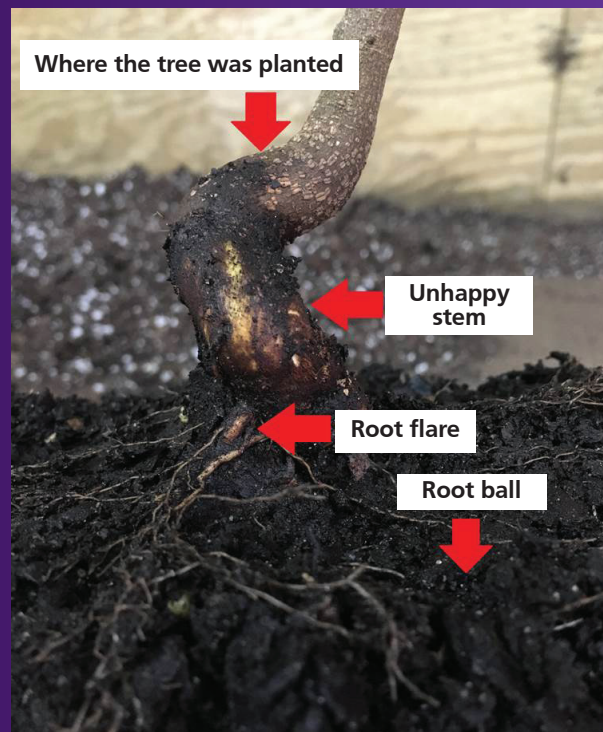
How deep should a plant be planted?

Most annuals and perennials we buy from a nursery or the SFA Gardens Plant Sales like to be planted at the depth they are already at in their current pot. The crown of the plant — the part of the stem just above the soil — needs to remain above the soil after it is planted. This means when we dig a hole for this plant, it needs to be just as deep as the root ball is tall. The root ball is the nice clump of dirt and roots that is exposed when the plant is removed from its pot.

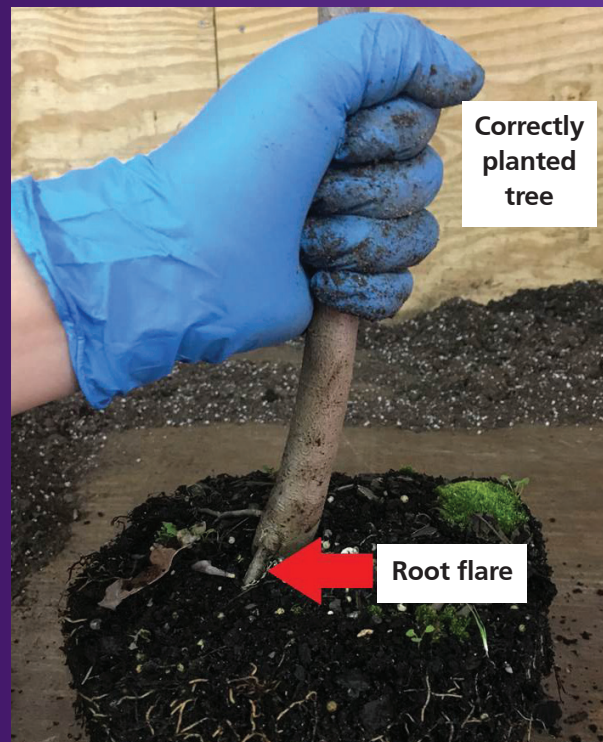
Planting trees is similar to planting smaller plants with one big difference: the first step to planting trees is to find the root flare. The root flare of a tree is where the first root branches off from the original stem. The place where the roots flare off from the stem is the original crown of the tree. Unfortunately, it is very common for young trees to be planted too deep. Then, when we buy the tree and take it home to plant, we end up planting even deeper. To avoid putting all this stress on the plant, when we remove the tree from its pot, we should dig into the root ball near the trunk to find the first root. Remove the soil around the place where the first root branches off so we can see the root flare clearly. Remove all the soil above the root flare keeping in mind that this could (and most likely will) make the root ball shorter. This new height of the root ball is our new planting depth. When we plant the tree in the ground, we should still be able to see the root flare. As the tree grows, the roots will flare out more and provide better structure for the tree.

What are correct planting techniques?

First, dig a hole about the size of the root ball. Check the size of the hole before you actually plant your plant. If the root ball of the plant sticks above the ground, dig the hole deeper. Your plant will thank you later. If the plant's root ball and crown fall below the ground, take the plant out and push some of the



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soil you removed back into the hole then check the depth with your plant again. Repeat these two steps until the hole is the right size for the plant.

When you've reached that point, rub your hand around the sides of the root ball to encourage the roots to grow in a different direction (not in the shape of the pot anymore) then put your plant in the hole. Use the soil you removed to fill in the spaces around your plant. Tuck in the soil gently but firmly. Packing in the soil too hard can compact it and make it difficult for the roots to grow out. Keep in mind that leaving large air pockets will cause the soil to "sink" later. It's a delicate balance. You can put some soil on top of the root ball, but remember not to cover more of the stem

than what was originally buried. Be careful not to bury the plant's crown. If it is a tree, make sure you can still see the root flare.

Finally, water. A plant is never truly planted until it is watered. Water where you know the root ball is underground and around the existing soil, completely saturating the areas where the roots can reach and grow to. This is your plant's first drink of water in its new home, so make it a good one.

Plants don't actually speak like we do, but they have ways of telling us when they are happy and healthy. Help your green friends speak positively by planting them at the correct depth. They will thank you their whole lives.

Plant Propagation

By Dawn Stover

I've long heard Dr. Creech say, "A sign of a good propagator is their shadow over the mist bed." And while this is certainly true, there are many other important attributes, as well. Plant propagation is a lovely mix of science and art, and I'd like to share a few tips with you.

I've been propagating plants professionally for more than 20 years, starting at Treeseach Farms in Houston during summers and Christmas breaks as an undergraduate. My propagation mentor there, Scott Reeves, looked at me and said, "You know, you ought to go study horticulture with Dr. Creech at SFA," and I have been propagating plants here ever since.

There are several types of plant propagation, including clonal propagation (cuttings), sowing seeds, grafting, tissue culture and simple layering. I have the most experience with cuttings and seeds, given that I have little patience and grace, which are both required for grafting. While we have optimal propagation facilities at SFA Gardens, with intermittent mist and subsurface heating, anyone can be a propagator with little equipment involved.

The most important advice I can offer is to keep good records. It's just as critical to know what didn't work as it is to know what did work. For cuttings, we keep records in a database and keep track of the plant name, date propagated and hormone used, and assign each plant its own number so we can keep track of each particular crop. After plants are rooted, we record how many are potted and can easily reference the propagation database using the assigned number to keep track of rooting percentages. We use an online database so Jordan Cunningham and I can update the records in real time and don't have to keep up with different drafts of a saved file. Record keeping helps you know the variables to change if you were unsuccessful as well as what to repeat if you were successful.

Clonal propagation, or taking cuttings, is a quick way to get exact clones of a particular plant. We take cuttings because it's an efficient way to produce many propagules that keep the desirable traits of the parent plant and creates a more uniform crop. Additionally, many perennials and flowering shrubs take several years to flower when grown from seed, and this step eliminates the wait for maturity,

allowing plants to flower in the first or second year.

Timing is probably the most important factor in rooting cuttings as certain plants tend to root better at different times of the year. Shrubs are more particular to timing than are annuals and perennials, and there are a host of books available to help point you in the right direction. We use Dr. Michael A. Dirr's "The Reference Manual of Woody Plant Propagation: From Seed to Tissue Culture" as a general reference, understanding that he is writing from a slightly colder climate than ours and adjusting our timing accordingly. Part of it also is having the intuition of when a plant is ready to root, and of course, we're keeping track of everything and can prove intuition from years' past right or wrong.

When taking cuttings, we take a 3-to-4-inch portion of a stem, cutting it off just below a node. A node is the point where the leaf attaches to the stem. You'll need at least two nodes to your cutting as the buds at the nodes are where new stems will emerge when the plant is rooted. While we dip our

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Stems are cut below a node with at least two nodes per cutting. Pull the leaves off of the bottom node before placing in soil.

cuttings in a commercially available rooting hormone, there are hormones available for home gardeners that can often be found at local independent garden centers or online.

After treating with rooting hormones, cuttings are nestled firmly into well-drained planting media amended with perlite to further assist in drainage. We have the benefit of an extensive mist system, but there are ways to create your own smaller versions at home, including everything from complete kits to plastic soda bottles, to something you dream up. I'll leave the methods and mechanics to you and Google. Cuttings will often push new growth when roots begin to form, but feeling resistance when given a gentle tug is a better indicator.

Germinating seeds is particularly rewarding, watching life unfurl as tiny cotyledons push through the soil. More often than not, the flower and vegetable seeds we buy from the garden center are easily germinated. It can be a bit trickier when trying to germinate seeds collected from the garden or property, but I think it's really fun figuring out how to germinate these treasures, especially with native plants.

We often have to take into account how to clean seeds – whether they are wet or dry, how to store them and if they have any underlying dormancy requirements that need to be met. It sounds complicated, but that's part of the fun. If you're collecting zinnias from the cutting garden, they can simply be stored dry until it's warm enough the next year to sow them in the garden. When it comes to native plants, they might need stratification, scarification or can

be sown directly.

Stratification involves replicating conditions that occur in nature. Seeds that ripen in the fall will overwinter in moist leaf litter on the ground before they germinate in the spring. We can mimic this process by placing seeds in lightly moistened sand and refrigerating for one to three months. Again, record keeping is critical. We learned that a two-month stratification of Winkler's firewheel was insufficient to break dormancy. We have much better success with a three-month stratification. It's also a good idea to mark your calendar on the date seeds should come out of refrigeration.

Scarification acts to break down hard seed coats that are impervious to water and gases needed in the germination process. Think of bluebonnets, coral bean and Texas mountain laurel. In nature, ripened seeds fall in sandy soil, and over time, seed coats are worn down as the sand rubs against them. We can scarify seeds several ways. Mechanical scarification involves rubbing with sand paper or a file, or tumbled with sand. Thermal scarification involves bringing a volume of water to a boil and dropping in seeds immediately after the water is removed from the heat source and then soaking for 12 to 24 hours in the cooling water. Acid scarification involves placing seeds in sulfuric acid for a certain amount of time. Let's leave acid treatment to the professional nursery folks. And yes, record keeping is extremely important here!

Learning how to propagate will help you fill your garden with your favorite plants. I hope you feel inspired to try it on your own!

Upcoming Events



JAN. 11: THERESA AND LES REEVES LECTURE SERIES

Hear Danny Carson of Moody Gardens present "Behind the scenes at Moody Gardens: Why 1,100 employees is never enough!"



JAN. 20: THIRD ANNUAL NACOGDOCHES SEED SWAP

Join us and bring viable flower, herb, vegetable and tree seeds, whether your own or purchased at a nursery, from 1 to 4 p.m. at the Brundrett Conservation Education Building, located at 2900 Raguet St. The cost is free, but donations to Nacogdoches Naturally, SFA Gardens' afterschool gardening program, are appreciated.



JAN. 27: GRAFTING WORKSHOP: SCIONS OF THE TIMES

Learn the plant propagation techniques of budding and grafting with SFA professor emeritus Dr. David Creech from 9 to 11 a.m. at the Brundrett Conservation Education Building. Participants will practice on a variety of plants and should bring a small, sharp pocketknife. All other materials will be provided. The cost is \$25 for SFA Gardens members and \$30 for non-members. Participants will be able to take their grafted Japanese maple home.



FEB. 3: FERMENTING FOODS WORKSHOP

Discover the benefits of fermented food and how to create them with Dr. Darla O'Dwyer, associate professor, dietetic internship director and coordinator for the food, nutrition and dietetics program at SFA, from 9 a.m. to noon at the Brundrett Conservation Education Building. Participants will sample some of O'Dwyer's favorite fermented foods and will receive a Pickl-It® jar to start the fermentation process for sauerkraut. The seminar costs \$40 for SFA Gardens members and \$45 for non-members.



FEB. 8: THERESA AND LES REEVES LECTURE SERIES

Enjoy listening to Cindy McClimans, Houston landscaper, give ideas on "Creating Unique Landscapes."



FEB. 17: GREAT BACKYARD BIRD COUNT AND BIRD DAY

Join members of the Pineywoods Audubon Society, Texas Parks and Wildlife Department, and National Association of Interpretation for a day meeting the birds of East Texas from 9 a.m. to noon at the PNPC. Attendees can participate in bird olympics, birdwatching, counting and more.



MARCH 8: THERESA AND LES REEVES LECTURE SERIES

Learn proven techniques on soil improvement as Dr. Franta Majs, director of SFA's Soil, Plant and Water Analysis Laboratory, gives tips on "For Better Fruits, Vegetables and Landscapes, Test Your Soil: Taking Care of Soils for the Ages."



MARCH 15 TO APRIL 15: AZALEA TRAIL

Follow the Nacogdoches Azalea Trail through the Ruby M. Mize Azalea Garden, Gayla Mize Garden, Arboretum, PNPC and throughout Nacogdoches. For more information about activities scheduled during this time, contact the Nacogdoches Convention and Visitors Bureau at visitnacogdoches.org.



MARCH 24: LITTLE PRINCESS TEA PARTY

Magic, music and merriment abound at this delightful tea party with seatings at 10 a.m. and 12:30 p.m. in the Ruby M. Mize Azalea Garden. This is an enchanting gathering for mothers, grandmothers and others to share with their princesses, ages 3 to 10. The event costs \$30 per person, and reservations can be made online beginning Feb. 1 at sfagardens.sfasu.edu.

Lecture series events listed above will begin at 7 p.m. in the Brundrett Conservation Education Building. Lectures are free. A drawing for plants from SFA Gardens will follow.

For more information, call (936) 468-4129, or email sfagardens@sfasu.edu.



COME GROW
WITH US.

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“To have ‘green fingers’ or a ‘green thumb’ is an old expression, which describes the art of communicating the subtle energies of love to prosper a living plant.”

– “The Education of a Gardener” by Russell Page

