VOLUME 14, ISSUE 4 WINTER 2019

SFA Gardens NEWS

Notes from the Director

By Dr. David Creech

First, let's start with some good news. I'm pleased to announce there's a gardener in our village who's stepped forward to make a huge difference in the future of SFA Gardens. It's no secret in Nacogdoches that Bill Elliott has quietly scattered support across a wide swath of good things happening in Texas Forest Country. I've known Bill since the early days of the arboretum, all the way back to the mid-1980s. I call that era the "pre-staff" days, back when the garden was eight acres, a small horticulture facility, had no staff or trucks and an easy-to-understand budget because it was so darn close to zero; pre-Ruby M. Mize, Gayla Mize or Pineywoods Native Plant Center. Those were the under-the-radar years. Our two arboretum plant sales were held in the Agriculture Greenhouse on Wilson Drive, just south of the Agriculture Building, before moving to the intramural fields. Bill was part of that cheerful crowd racing to grab cool plants worthy of a home. He's seen the place evolve. Evident to anyone, Bill has a natural appreciation of plants and curiosity about how to grow them. He's a gardener.

As for SFA Gardens, Bill gets all the credit for making the Lanana Creek bridge happen, which is a critical connection between the Mast Arboretum and Ruby M. Mize Azalea Garden. On Dec. 14, 2004, in front of a crowd over 100 people, the bridge was quietly dedicated in memory of Micky Elliott. The details of how that happened are locked in my memoirs, which can't be published until 25 years after my death.

Bill's support also was a big part of a decade-long campaign to build the Brundrett Conservation Education Building, which was dedicated in 2014. That effort made building a bridge seem like a stroll in the park. Never underestimate the power of university rules, regulations, policies, procedures and guidelines. No, big projects don't just pop up. They're usually cooked in a pot on the stove with a lot of folks stirring the soup. Still, when the dust settled, the gardens had an absolutely wonderful facility in which so many good things have happened.

Fast forward to 2019, and we can now celebrate that the Micky Elliott Family Foundation has provided support to take the SFA Gardens up a notch. We're going to get some much needed help on the ground. It's no secret that, at times, landscape

Continued on Page 2 »

In This Issue:

Left: Bill Elliott and Wyndell Westmoreland discussing plants with Barbara Stump at an early SFA Gardens plant sale.

Below: The late LaVerne Creech at her 100th birthday celebration in 2017.

maintenance has not always been our strongest feature. With 128 acres total, 60 acres under cultivation, over seven miles of trails and four major theme gardens, keeping up with landscape maintenance has been a migraine. For too many years, the burden has fallen primarily on the shoulders of Duke Pittman, who is currently the sole landscape manager for the gardens. Duke gets an A on having to juggle too many balls in the air. This gift will put more hands on and in the ground. Weed control, planting, mulching, pruning, training and fertilizing can be handled on time. This wonderful step forward proves this garden has been and continues to be all about plants, plans and people. In fact, what I said in 2004 at the dedication of the new bridge over Lanana Creek remains the same today: "Bill knows how to build bridges that connect plants and people. He's done that at SFA and in our community."

There's other good garden news, of course. The fall plant sale was a success. Perfect weather, a festive crowd and some great plants ruled the day. We squired the fourth crop of kiwifruit to completion and think this may actually make a mark in Texas commercially. All we need to do is put all the pieces together. Malcolm Turner had a great adventure in New Zealand, described later in this newsletter. If he's not careful, he'll end up being the second most knowledgeable kiwifruit expert in Texas. The Moody Gardens project continues with some interesting research results and new plants that deserve testing across more of Galveston Island. Dawn Stover and Jordan Cunningham are busy breaking in the new greenhouse, and new plants are everywhere. The environmental education program, with Elyce Rodewald and Jocelyn Moore leading the way, has the gardens filled with kids learning about the outdoors. Anne Sullivan has embraced our project-driven, budget-constrained work world with the grace and humor it requires. I keep telling her no one knows more about the budget than she does.

For full disclosure purposes, I have to note that the last six weeks have been a bit of a torture test. My mom, LaVerne, passed away Oct. 2 at her home in Nacogdoches. She was 102, totally lucid, played a mean hand of bridge, read constantly and was a role model for so many of us. Let me say thank you to all who offered your thoughts, prayers and condolences on her passing, and I'd like to thank the staff (Dawn, Duke, Jordan, Malcolm, Elyce, Jocelyn and Anne) for being so thoughtful, kind and on top of things for the last six weeks. Janet has been an absolute sweetheart. Only a few minutes from the garden, Mom was a daily part of my life for over two decades after my father passed away in 2004. She was blessed with a fascinating, exciting life. She was a volunteer at our plant sale for so many years (guaranteeing no hanky panky with the money). She was almost always in the audience at the Theresa and Les Reeves Lecture Series, where she won more than her fair share of plants at the raffle, simply because it was kind of rigged. We will all miss her, and I guarantee she would demand we get back to work and keep on planting for a better Nacogdoches.

SFA Gardens is Wild About Science

By Elyce Rodewald

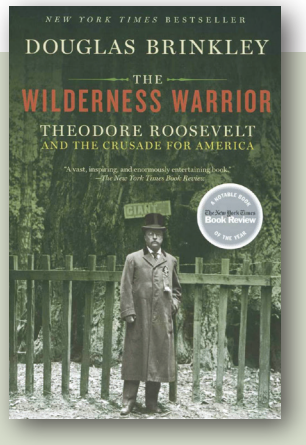
Students create a food web to better understand the flow of energy through an ecosystem.

For most people, cooler temperatures and fall colors bring thoughts of Halloween and Thanksgiving. In SFA Gardens' education arena, when the weather turns cool our thoughts turn to getting Wild About Science. Through this program, SFA Gardens and the Department of Elementary Education partner to bring hands-on science lessons, taught by SFA education majors, to area fourth graders. In its second year, Wild About Science allows SFA students to develop teaching skills in an outdoor setting and to witness the benefits of experiential education.

Students of Dr. Leah Kahn and Dr. Paula Griffin reflected on their experience:

- "I think it is extremely important for teachers to experience the outdoors with students. This experience showed me that outdoor education is not only possible, but also is great for keeping students engaged."
- "[Wild About Science] gave me a new experience, and I was able to learn what a teacher can do outside of the walls of the classroom. I learned I can easily take the lead when I need to."
- "I most definitely believe SFA should continue these types of field experiences. It shows different ways to involve science within your classroom that are active and fun. It makes us think about other topics or content areas so that multiple contents are covered in one activity. Also, it is nice to get other schools involved in the community."
- "Thanks for giving us this Wild About Science opportunity! It has made me more confident about teaching science and inspired me to consider ways to work in nature when planning my lessons. I am sure it is a lot of work organizing the event with so many schools, students and field experience teachers, but I felt like it gave me lots of new tools for my future classroom."

Lessons this year included a soil investigation, a demonstration of an East Texas food web and a simulation of how trees function. The activities are fun, engaging and promote concepts found in the science curriculum required by the state.



Teddy Roosevelt: Bully for Outdoor Education

Book review by Anne Sullivan

Theodore Roosevelt Jr. was an outdoor education advocate extraordinaire. Roosevelt would often include children on his long hiking/discussion outings with Leonard Wood, Roosevelt's close personal friend and commanding officer during the Spanish-American War. Historian Douglas Brinkley wrote in his book "The Wilderness Warrior: Theodore Roosevelt and the Crusade for America" how Wood recalled Roosevelt's knack for making these walks of great interest to the children. "He transmitted to them something of his own keen interest in nature, his love of birds, his interest in woodcraft, and in a thousand ways attempted to instill in them an interest in and understanding of God's world as he saw it," Wood said, "to implement heathy tastes, and to build up a love for a wholesome outdoor life ... at a time when it was easy to lay the right foundation and to plant seed, which would bear good fruit. He had a wonderful fund of information about birds and animals which he was continually passing on to the youngsters in a way they could understand." Roosevelt was a true "bully" for outdoor education.

Sticky secretions on sundew leaves

The Hills are Alive!

By Dawn Stover

Twenty plus years ago, as I began my path in horticulture, you would have been hard-pressed to find me wandering willingly through the woods. I felt perfectly at home in the orderliness and consistency of the greenhouse and nursery, and equally comfortable in the confines of the formal garden, with its defined edges and paths. Something remarkable has changed for me in the last two decades. Perhaps living in Texas Forest Country has slowly seeped into my constitution, and now I'd rather be in the forest than not.

I have been fortunate in the last few years to have been led to exceptional places behind our pine curtain, some of which have led to that "The Hills are Alive" song-and-twirl moment Julie Andrews expresses in "The Sound of Music." For certain, pitcher plant bogs nestled in longleaf pine forests capture that jubilant feeling. I've seen pitcher plants before — in nurseries and botanical gardens, in catalogs and on the internet — but the moment I first encountered them in their real-life habitat, I wanted to twirl and sing, too.

Pitcher plants and the other interesting members of their plant community are restricted to specialized habitats. In East Texas, these plant communities occur in sandy uplands, often in longleaf pine forests, that have an impermeable clay layer near the surface that runs laterally along lower sections of the slopes. This allows for near continuous, slow, sideways movement of water throughout the area, regardless of the amount of rainfall in a given season. Exploring areas like this really reinforces the need to invest in proper, waterproof footwear!

Dawn and Jordan in a hillside seep pitcher plant bog

Only one species of pitcher plant occurs west of the Mississippi and into East Texas: *Sarracenia alata*, commonly called the yellow trumpets or pale pitcher plant. They are one of four types of carnivorous plants found in Texas and are certainly the most eye-catching of the bunch. Their most prevalent and persistent feature is their large leaves, which emerge singly from the base of the plant. The leaves are hollow and form a hood at the top called an operculum, which serves to shed rainwater away from the interior of the leaf.

Pale pitcher plant in flower

The glorious visual guide provided by the operculum is the first thing to lure an insect. This unsuspecting meal is then enticed by the scent and nectar produced on the rolled-lip edge of the tube (called the peristome) where a waxy deposit will coat its feet upon landing. Waxy feet are heavy and slippery, and thus begins the descent into darkness for our six-legged friend. If you thought for an instant there might still be hope for this poor creature, downward-pointing hairs serve as the next obstacle to freedom. Finally, death is inevitable as the insect lands in a pool of fluid that contains wetting agents and digestive enzymes, where it drowns and is slowly digested by the plant.

Many carnivorous plants occur in poor soils and rely on digestion of insects to supply nutritional needs. This is the case for the pitcher plant as well as the tiny little sundew. I have generally found sundew where I've found pitcher plants occurring: in those nutrient poor, constantly wet, sandy soils. There are several species of sundew, *Drosera spp.*, in East Texas, and to be perfectly honest, my eye isn't yet trained to tell them apart. They form tiny little prostrate rosettes of foliage and occur prolifically in spots throughout this specialized habitat. It's easy to step on one (or three) whether you're looking or not. Upon close inspection, the leaves look as if they are covered in dew. This is actually different secretions produced on the ends of tiny stalked glands that resemble miniature tentacles. Some glands produce a sticky and sweet substance, called mucilage, which attracts and then "glues" the insect to the plant, and others produce digestive enzymes and acids to, you guessed it, digest the insect.

Not all plants in the pitcher plant community are so gruesome and murderous. Some are just plain interesting. There are several terrestrial orchids found here, like the rose pogonia, tuberous grass pink and orange fringed bog orchid. I wrote a bit about those in our fall 2019 newsletter, or you can read about them on my blog thesoutherngardengirl.blogspot.com.

One plant in particular is more interesting than showy, but I think it is pretty charming nonetheless. Pipeworts, *Eriocaulon spp.*, have small white flowers that form a sort of ball at the end of long, bare stalks. There are no "showy" petals, but they brilliantly glow from a distance. Another common name is hatpin, which is quite actually what they look like. I don't know how these would do in a landscape, but I think they have some potential as a cut flower. I haven't collected any seed yet, but I look forward to working with pipewort in the future. You also can find the pinewoods rose gentian in this community. It's an annual that produces a bright pink flower with eight distinct petals surrounding small yellow centers. If you could bring children's drawings to life, this is the flower I always drew and colored as a kid. I'm not sure this plant would translate in the landscape since it's an annual growing in a very specific situation, but it's a lovely treasure to encounter in nature.

Most plants here are uncommon, but some are truly rare. I've seen the bog coneflower, *Rudbeckia scabrifolia*, in two pitcher plant bogs. This plant is listed as imperiled on both the state and global levels, largely due to loss of habitat. If you look on range maps, it occurs very rarely in some East Texas and Western Louisiana counties. Like its more common cousins, the bog coneflower produces cheerful yellow flowers with strongly reflexed petals in the summer months. This particular plant will definitely have a place in our Elizabeth Montgomery Rare and Endangered Plants Collection at the SFA Pineywoods Native Plant Center. This summer, several of our botanist friends made a really interesting discovery in deep East Texas. They found a population of Stokes aster, *Stokesia laevis*, which does not occur in Texas. This particular population was so far removed from anything, the chances of it being introduced by man are nearly nil. Stokes aster has long been available in the horticultural trade, and there are many wonderful cultivars in existence, so it's good to know we can count it as one of our own. I love using this plant as a groundcover. They are clump-forming, so you have to plant them closely, but the foliage is evergreen, and they have beautiful, large, aster-like flowers in early summer.

So many treasures await discovery if only we take the time to look for them. Most of the places I visit are national forests, which are open to the public. Two other pitcher plant bogs exist with considerably easy access. The Watson Rare Native Plant Reserve is tucked into the forests south of Warren, Texas, on the shore of Lake Hyatt. Now run by a charitable corporation, this special place is the result of a lifetime of work by naturalist and artist Geraldine Watson, who also was instrumental in the establishment of the Big Thicket National Preserve. While the Big Thicket encompasses a large area, the Pitcher Plant Trail is within easy driving distance of the Watson Preserve. Let's take a trip sometime!

The "triples," flower buds with two smaller side buds, are thinned by hand to remove the smaller side flower buds so the larger king flower bud may flourish.

A new girdle can be seen beneath a previous incision that has healed over.

Gil Singh, right, explaining bud thinning to William Stevenson and his father, Ross Stevenson. Ross is a partner in the Mohaka Orchard.

New Zealand Revisited

By Malcolm Turner

I've just returned from my second trip to New Zealand this year. The first was in late April to see the harvesting of golden kiwifruit on several orchards, but due to rain, I never saw a single fruit picked. On this trip, the weather was clear every day, and I was able to work on an orchard owned by Ross Stevenson in the Mohaka area, about an hour inland from the coastal city of Napier. We rented an Airbnb house in Napier and commuted each morning with his wife, Jaris, and son, William. Napier is on the east coast of the northern island and was destroyed by an earthquake in 1931. It was rebuilt mostly in an art deco style. Several gardens there are filled with beautiful ornamentals, trees, fountains and sculptures between the Pacific Ocean and the downtown business district.

We spent our first day at Mohaka with Gill Singh, the orchard vines manager. It's early spring in New Zealand now. The flowers were beginning to bloom, and it was quite cool each morning, with temperatures in the upper 40s. Gill wanted us to walk the rows and do some bud thinning. In a commercial kiwifruit orchard, the ideal number of flower buds is about six per square foot, or 50 to 55 per square yard. To achieve this, workers walk the rows and remove unopened flower buds that are too close together, misshapen buds that are oblong rather than round, or side flower buds on a stem with a king flower bud. Bud thinning allows the fruit to grow to the size the distribution company desires for market.

During our time on the orchard, we also did some girdling on the green kiwifruit variety, Hayward, which is the typical green kiwi found in our local grocery stores. We worked with Sam Evans, the orchard structure manager, on proper girdling technique. The main idea is to carve a notch around the trunk with a special girdling knife without being either too shallow or cutting too deeply into the vine. Girdling occurs four times per year on the gold kiwifruit and five per year on the green. About a month after the girdle is made, it will be girdled again in the same wound. Girdling promotes a larger fruit size.

Part of the work going into summer is pruning back new growth. The kiwifruit grows on last year's vines, and vines that will produce next year's fruit will start to grow. However, some of the new vines will not be fruit producing, will be in the wrong area or will extend the vine out beyond its area. Last year's vines lying across the rows usually have new vines sprouting from their ends. These new vines were zero-leaf pruned to stop their growth permanently, or tip-crushed to reduce their growth to two or three feet — just enough to cover a bare area. In zero-leaf pruning, the new vine is cut back about half an inch above where the last flower bud is located. If there is an unopened bud at a petiole on the opposite side of the stem, it also must be removed or the vine will come back from that point.

Tip-crushing is more like tip-pinching. You have to squeeze the tip of the vine between the thumb and forefinger to mash it. This holds the growth back to two or three feet which allows the vine to fill in an open area on the top of the trellis. If left unchecked, the vine might grow to 20 feet and interfere with other vines.

Lastly, we spent time imitating bee pollination. While I was there, flowers were opening, and local bees were starting to show up. The orchard brought in 150 hives over a couple of nights. Once the temperature was high enough and the sun came out, the orchard was very busy with bee activity. We each were given a handheld pollen blower with a jar containing about 10 grams of kiwifruit pollen purchased from another grower. Kiwi pollen sells for $5,000 per 1,000 grams, so we were very careful with it. I thought we were trying to pollinate the female plants (kiwis are dioecious, meaning there are separate male and female plants). However, the pollen we were blowing into the female flowers was intended to get on the bees so they would take it to the flowers.

The flight to New Zealand is long. I left Houston about 9 p.m. Monday, Oct. 28, and arrived in Auckland Wednesday, Oct. 30, about 14 ½ hours later. A day is lost crossing the international date line, but it is made up on the return flight. I then took a one-hour flight to Napier, which saved seven hours of car travel. It was completely worth it. New Zealand is a beautiful country, and although I find the people a little reserved, they have always been very friendly once they got to know me. Every morning, I ran on a sidewalk built for biking, walking and running along the ocean in Napier. The first couple of days, I ran with a woman from Christchurch who is brand manager for a company that manufactures sunflower and rapeseed (grapeseed in the U.S.) cooking oils.

When I finished my runs, I would walk for a mile or two and pet every dog along the way. I said good morning to an older man and asked if I could pet his dog, and he replied "Winnie would love a scratch." The man then asked where I was from, and I told him I was visiting from the U.S. and my home is in Texas. He smiled as wide as he could and quickly hugged me, although he seemed a little unsure what my reaction might be. "I love America," he shouted. "The Marines saved my life!" He told me when he was younger, during World War II, he was broke and unemployed when the Japanese Navy threatened to invade. The U.S. Marines came in and saved New Zealand and his life, allowing him to return to work and eventually move to the U.S. to live and work for a time. That day, he was expecting friends from Colorado to visit.

We left Napier Friday, Nov. 8, so I could spend a day in Auckland. I really needed a week or more. This has nothing to do with kiwifruit, but there are beautiful gardens and buildings to see there, and I only scratched the surface. I went to the Auckland War Memorial Museum to see a Maori cultural presentation and learn a bit of New Zealand history. Just below the museum, the Domain Wintergartens consists of two Victorian-era, arched greenhouses, one cool and one hot, with a central courtyard and fountain between them. On one side is an amazing fernery (I didn't even know there was such a thing!).

Unfortunately, my time there had to end, but I did get in one last stop at the Pah Homestead, which houses the Wallace Trust Arts Center, to enjoy tea and scones with Ross Stevenson and view some New Zealand art before returning home.

Adventures in Dormancy

By Jordan Cunningham

Plants can sense when the days are getting shorter and colder. This puts them into panic mode. Plants know freezing temperatures can freeze the water inside of their stems and leaves, which leads to death. However, plants have a plan for survival: dormancy. Trees, shrubs and perennials all experience dormancy.

Continued on Page 8 »

Beautiful Japanese maple preparing to shed its leaves

The most visible sign of dormancy is when a plant loses its leaves. Deciduous trees, shrubs and many perennials shed their leaves when they sense unfavorable conditions. Deciduous leaves don't have a protective coat, so plants ditch their leaves to help retain warmth and energy. Plants lose their leaves at different rates and times. Some drop all leaves at once very early in the fall, while others lose their leaves slowly throughout the fall and into the winter.

When a plant prepares to shed its leaves, it will cut off the flow of nutrients to the leaves, effectively stopping photosynthesis, the process by which plants convert sunlight into sugars for energy. When photosynthesis stops, plants begin to lose their green color, giving way to the beautiful fall colors we look forward to, and leaves fall to the ground.

The most important part of the dormancy process is when the plant slows down its metabolism. Just like when animals hibernate during the winter, plants also store up sugars and rest during the cold seasons. Both deciduous and evergreen plants reduce their internal processes and growth to protect themselves from unfavorable conditions. Evergreen plants do not produce new tender shoots. In deciduous plants, sugars are no longer produced by photosynthesis, so they reserve their energy by storing sugar, water and other nutrients. The stored sugar acts almost like an antifreeze to keep the interior of the stems from freezing and causing death. Thick outer layers of branches, like bark for example, provide another layer of protection against the cold. Many common perennials die back to the ground when it gets very cold, but the plants themselves are not dead. Sugars are stored underground in the root systems.

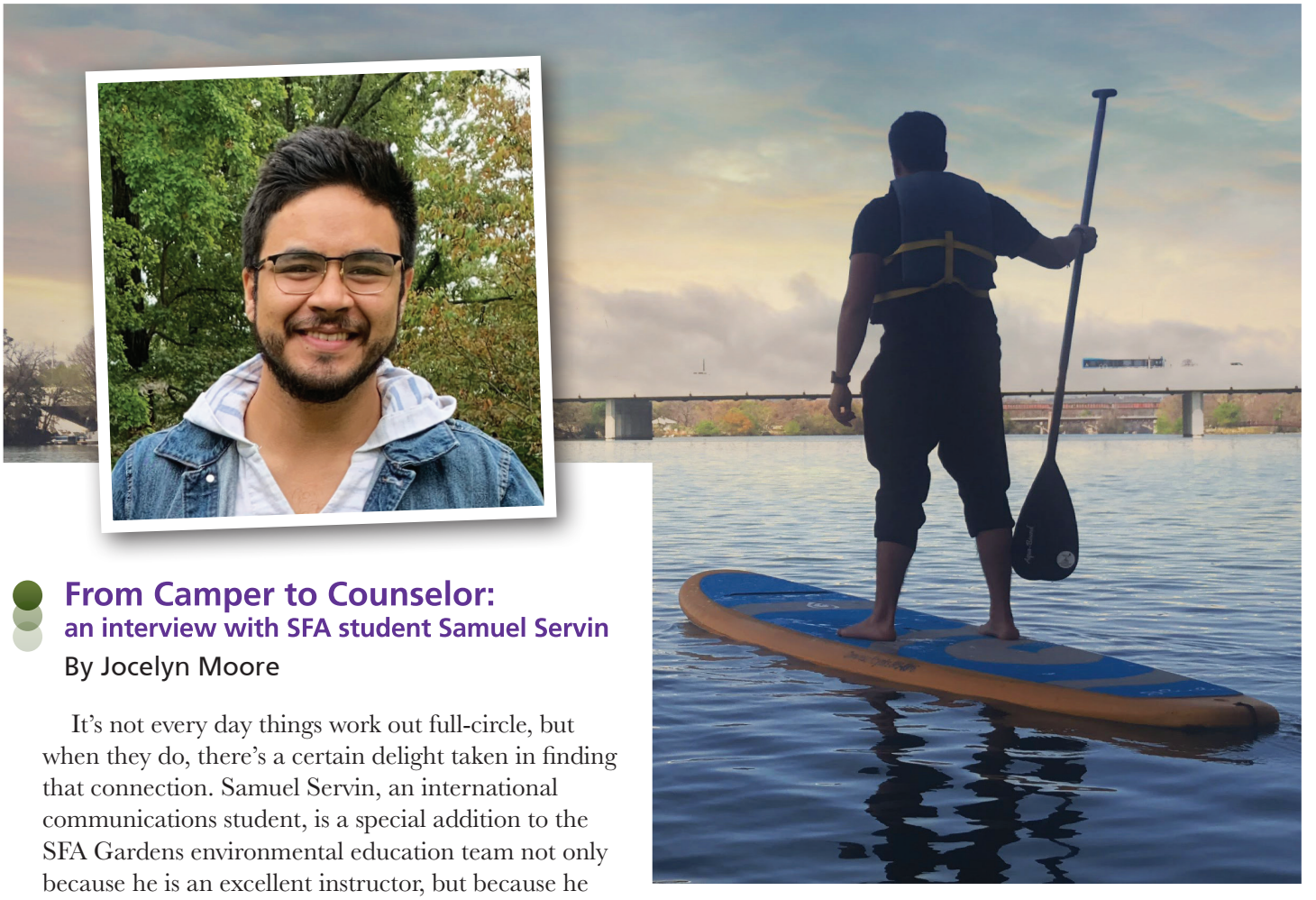
The root systems of both woody and herbaceous plants are very important during dormancy. Roots store water, sugar and nutrients needed to survive the winter and break out of dormancy when the weather becomes more favorable. Keeping the roots happy and healthy during the cold season is very important to the plant. As long as the root system is strong, the plant can continue to live year after year. If the ground freezes, the root system also will freeze and the plant will die. Luckily, in East Texas, our winters do not get cold enough to freeze the ground, but you can help protect the roots of your plant by putting down a layer of mulch to insulate the ground, especially for plants with shallow root systems. Potted plant root systems also should be protected. Bring the pots inside your house, garage or another indoor area away from the cold. Place hardier potted plants close to buildings to protect them from wind and reduce heat loss.

Annual and tropical plants don't go through dormancy in the winter for several reasons. Some don't have the energy to last more than one year. Other plants are simply not "built" to survive periods of cold or freezing and will drop seed in preparation for a new year. The plant also could be from an area that doesn't experience cold temperatures, and the ability to go into dormancy was never in the plant's DNA. Plants are programed to handle only a certain amount of stress or cold. Even with our common faithful perennials, a particularly cold winter can ensure some plants will not return.

***Echinacea* mix:** Coneflowers are great examples of perennials that die back to the ground and stay dormant until spring.

***Cornus flordia* leaf:** This dogwood tree is just beginning to slow the photosynthesis process, and other colors are showing through the green.

Dormancy is a natural process for most plants as a result of cooler temperatures or other unfavorable conditions like drought. Understanding dormancy can help us better protect our plants and preserve them year after year. As plants grow and change through the seasons, we can enjoy each new adventure.



From Camper to Counselor:
an interview with SFA student Samuel Servin

By Jocelyn Moore

It's not every day things work out full-circle, but when they do, there's a certain delight taken in finding that connection. Samuel Servin, an international communications student, is a special addition to the SFA Gardens environmental education team not only because he is an excellent instructor, but because he was one of the first campers to attend our Pineywoods Camps when they began in the early 2000s. He realized he had been part of the very camps he was volunteering for when he met his former counselor, Kerry Lemon, last summer. Since volunteering, he was recruited as a student worker to lead field trips and help with afterschool programs, summer camps and the behind-the-scenes magic that makes our programs possible. Here is an interview with Sam about how SFA Gardens' outdoor programming helped shape who he is today.

How has an early exposure to environmental education helped shape who you are today?

It has definitely given me an early appreciation for the outdoors and nature in general. Through that appreciation, it planted the seed that would later sprout into a passion for spending time outdoors climbing trees, swimming in natural springs and lakes, exploring nature trails, hiking, and similar activities. The outdoors brings a special joy and fulfillment to my life that I could not imagine myself living without, and an early exposure to environmental education helped shape that joy and fulfillment in me.

What are you learning in your current job?

I am learning a bit of everything, from tree identification to knot tying to how to differentiate silt from clay. Since I started working here, I have gained a more conscious awareness of my immediate impact on the flora and fauna that surround me.

What do you hope to share with today's youth?

More than anything, I hope to share my perspective in terms of the importance and benefits of spending time in nature. Today's younger generation is incorporating technology into more areas of their lives than in generations past. While I do believe technology is a blessing in its own respect, I also strongly believe nature has a "supernatural power," for lack of a better term, to ground us in reality, to relieve stress, to alleviate and benefit mental health, to provide an organic escape that will ultimately edify us as organic beings, to inspire and astonish with its grand magnificence and, for those of us who share faith, connect us to our creator. I hope to share the passion I have found of being in nature and the subsequent awareness of the responsibility we have to take care of the ecosystems that surround us.

Missions, Miracles and the Margil Vine

By Anne Sullivan

Once again, Christmas is here, and once again, I was compelled to open up my wonderful "Christmas in Texas" book by Elizabeth Silverthorne to learn more about the history of Christmas traditions in the great state of Texas. This year, I discovered an inspiring tale with an interesting tie-in to horticulture, local history and a Christmas miracle. The story takes place in old San Antonio way back in 1719 at what was then the Mission San Antonio de Valero — now known, of course, as the Alamo. I was surprised to learn that none other than Nacogdoches' own Father Margil of Lanana Creek fame founded the Alamo.

Born in Valencia, Spain, in 1657, Father Antonio Margil de Jesus spent almost 50 years with the Native Americans of Central and North America. He was the first "padre president" of the Texas mission system established by the Roman Catholic Church to convert Native Americans to Christianity in the early 1700s. In 1716, he made his way to Nacogdoches and established the Mission Nuestra Senora de Guadalupe. It was here, during a terrible drought in 1717-18, both the Lanana and Banita creeks slowed to a trickle and eventually dried up.

Legend has it that Margil — known for walking barefoot, fasting daily, sleeping rarely and rejecting all meat from his diet — spent an intense night in prayer for his people, who were desperate for relief from lack of water. The next day, after having a vision during his night of prayer, Margil proceeded to a high spot on a bend in Lanana Creek to continue his vigil. Following divine guidance, he struck his staff against the rock creek bank, and two springs sprung forth. The Native Americans, soldiers, priests and animals were saved. The location on the creek is known today as the Eyes of Father Margil and is marked on the Lanana Creek hiking and biking trail, not far from the Main Street trailhead by Liberty Hall and just east of Oak Grove Cemetery.

But there's more to the story. After the French threatened the missions in East Texas, Margil returned to the mission in San Antonio. During that year's Christmas season, missionaries prepared for the holiday with a realistic nativity scene, decorated with native mosses and foliage. The Native American children were invited to participate and bring gifts to the Christ child in the manger. Delighted, the children brought gifts of strung beads, animal claws and painted buffalo horns.

One small Native American boy came to Father Margil's attention. The child was from a very poor family and had no gift to bring to the celebration. In an attempt to comfort him, Margil went with him to find a gift when they stumbled upon a vine with green berries and leaves. They dug up the vine and planted it in a clay pot. Shavano, the little boy, was disappointed with his meager gift but gave it anyway, asking the Christ child to accept it and make it beautiful.

Legend has it the next morning, cries of "Milagro! Milagro!" (Spanish for miracle) were heard coming from the nativity scene. Shavano, rushing to the site, saw that the little vine had grown and twined itself around the manger. The leaves had turned to a dark green, and the green berries had turned a bright red. It had become the most beautiful of gifts! To this day, the vine, *Cocculus carolinus*, commonly called the Carolina snailseed, grows wild around San Antonio. The natives call it the Margil vine for Father Margil and his role in the miracle of that early Christmas at the Alamo. During the Christmas season, its leaves turn a bright green and the berries a scarlet red.

Merry Christmas to everyone, and have a wonderful new year!

Upcoming Events

JAN. 9: THERESA AND LES REEVES LECTURE SERIES

Hear Tim Hartmann, Texas A&M AgriLife Extension program specialist from College Station, explain, "Everything You Wanted to Know about Fruit Growing but Were Too Timid to Ask."

JAN. 25: KID FISH

The City of Nacogdoches is hosting Kid Fish from 9 a.m. to 2 p.m. at Lakeside Park, where children can fish for trout and earn their Texas Parks and Wildlife Department Junior Angler Certificate. This free event offers food and fun for the entire family.

JAN. 26: SEED SWAP

Bring viable seeds to trade from 1 to 4 p.m. at the Brundrett Conservation Education Building, located at 2900 Raguet St. This event is free, but donations to Nacogdoches Naturally, SFA Gardens' afterschool program, are always appreciated.

FEB. 13: THERESA AND LES REEVES LECTURE SERIES

Listen to Dr. George McEachern, Texas A&M University professor of horticulture, discuss, "Pecans: Past, Present and Future."

FEB. 15: BACKYARD BIRD BONANZA

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. Participate in bird Olympics, birdwatching counting and more fun activities centered around our feathered friends.

FEB. 29: BUDDING AND GRAFTING SEMINAR

Learn about budding and grafting with Dr. David Creech, SFA professor emeritus and SFA Gardens director, from 9 a.m. to noon at the Brundrett Conservation Education Building, located at 2900 Raguet St. Participants will practice on a variety of plants and will take home their own grafted Japanese maple tree. Bring a small, sharp pocket knife. All other materials will be provided. Cost is $30 for SFA Gardens members and $40 for nonmembers. Space is limited. To pre-register, call (936) 468-1832, or email sfagardens.sfasu.edu.

MARCH 15 TO APRIL 15: AZALEA TRAIL

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

MARCH 19: THERESA AND LES REEVES LECTURE SERIES

Learn from Rick Lewandowski, director of the Shangri La Botanical Gardens and Nature Center in Orange, Texas, all about, "Plant Treasures in the Piney Woods of the Gulf South."

MARCH 21: VEGGIE GARDENING

Ground yourself in basic veggie gardening techniques with Duke and Dr. Jodi Pittman of Pittman Farms in Garrison from 9 a.m. to noon in the Brundrett Conservation Education Building. Cost is $30 for SFA Gardens members and $40 for nonmembers.

Lecture series events listed above will begin at 7 p.m. in the Brundrett Conservation Education Building, located at 2900 Raguet St. in the Pineywoods Native Plant Center. Lectures are free, and a drawing for plants from SFA Gardens will follow.

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

SFA GARDENS

COME GROW
WITH US.

Stephen F. Austin State University
Arthur Temple College of
Forestry and Agriculture
P.O. Box 13000
Nacogdoches, TX 75962
(936) 468-4404
sfagardens@sfasu.edu
sfagardens.sfasu.edu
Facebook: SFA Gardens

Arthur Temple College of Forestry and Agriculture
STEPHEN F. AUSTIN STATE UNIVERSITY

Dr. David Creech receives award

The Native Plant Society of Texas recently awarded Dr. David Creech the Charles Leonard Weddle Memorial Award for lifetime achievement in the field of Texas native plants.

Creech has spent the better part of the last 30 years including native plants in his classroom material at SFA, encouraging nursery professionals to include native plants and counseling landscape professionals to do the same. His work with bald cypress is recognized across the South, and SFA Gardens is home to perhaps the finest collection of Taxodium germplasm in the country.

In 1992, Creech served as president of the Native Plant Society of Texas. Though he has retired from classroom teaching, he remains at the university as SFA Gardens director, which includes the Pineywoods Native Plant Center. The center not only is a fine place to see native flora on display, but also has been a platform for research focusing on endangered plants, introducing new plants to the trade and promoting native plant conservation in Texas.