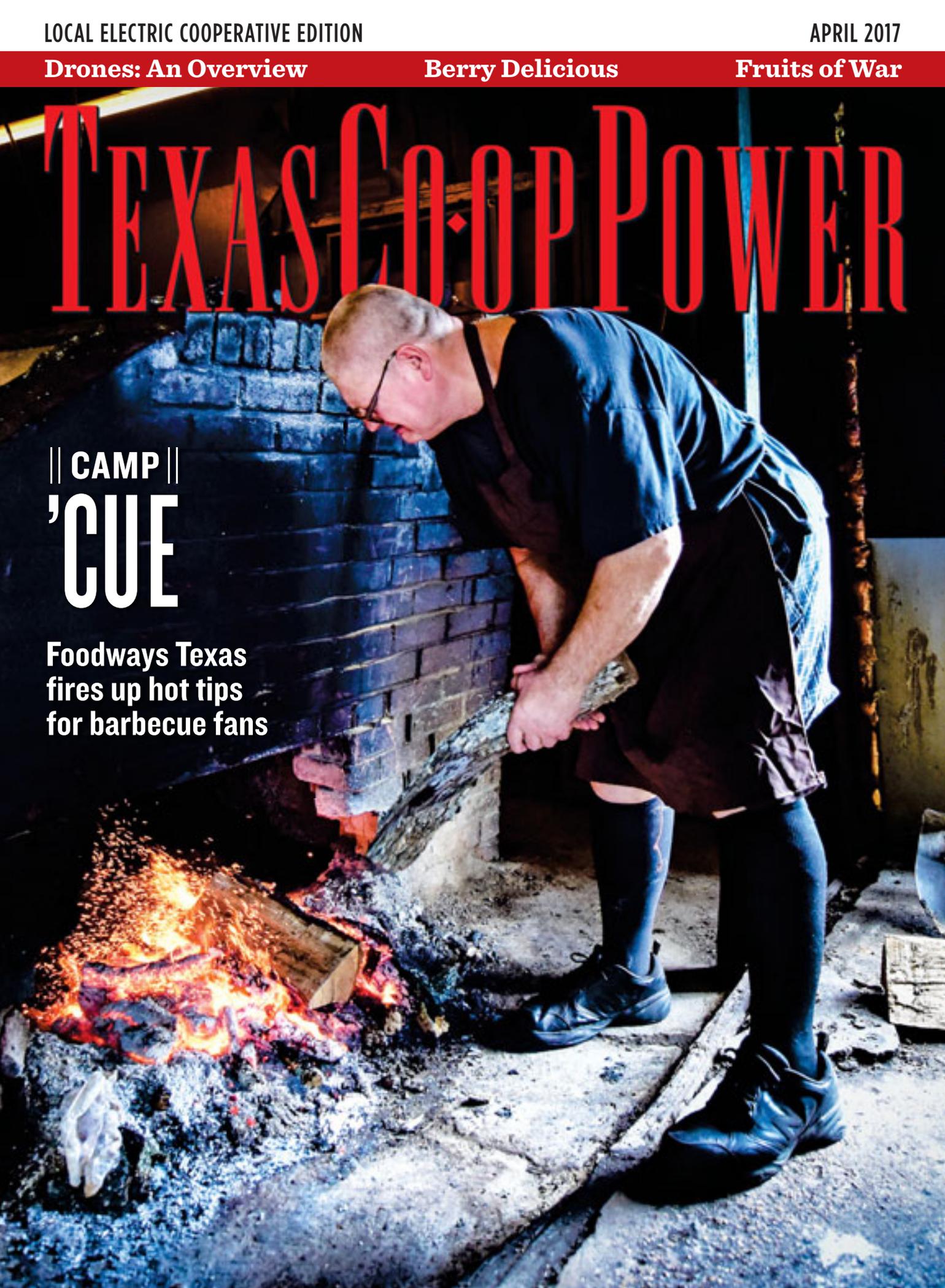


# TEXAS CO-OP POWER

## || CAMP || 'CUE

Foodways Texas  
fires up hot tips  
for barbecue fans

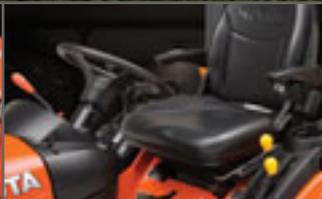




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Workers prep a \$200,000 power line inspection drone in the Hill Country.

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**ON THE COVER** Pitmaster Steven Kapchinskie adds wood to the open fire at Martin's Place in Bryan. Photo by Robert Jacob Lerma

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## Blessed To Be the Builder

What a beautiful surprise to see your page of photos [*Focus on Texas: Churches*, January 2017], especially the one submitted by George Littrell, a member of Grayson-Collin EC. My husband, Chris, built that church about 15 years ago. He took such great pride in building it.

TRACEY OSBORNE | ARGYLE COSERV

## Bonding Over 42

*The Top Spot* [January 2017] sure did bring back memories of when we moved to Old Glory in 1969. A cousin taught us how to play 42. We were hooked.

Not long after we moved here, we entered a 42 tournament. Surprisingly, we ended up winning the tourney and were afraid we had alienated ourselves with our new neighbors. They were avid 42 players.

But they were forgiving, and we enjoyed many nights of 42 and 84 with them.

MITTIE DUNHAM | OLD GLORY BIG COUNTRY EC

Nazareth also has 42 parties twice a year. I enjoy participating and visiting with old and new friends. I'm impressed that young people and even children play.

YVONNE WAKEFIELD | DIMMITT BAILEY COUNTY EC

I love to play 42. I grew up playing; now I'm 80. We played with our parents a lot on cool winter nights.

VLASTA BARTOS | EL CAMPO WHARTON COUNTY EC

What are the other three dominoes in the person's hand on the cover of the January 2017

## Broke My Heart

*Open Hearts* [February 2017] hit very close to home for me. I was diagnosed at age 26 with a massive atrial septal defect. The hole is the size of a tennis ball, but I never knew I had it.

I have had open-heart surgery, and the thing I remember the most about being in the cardiac intensive care unit were the babies crying—and feeling so bad for them. I knew why I was hurting, but they didn't, and as the mother of a 16-month-old at the time, it broke my heart to hear them cry.

I would love to knit some hats for the cause.

DONNA WRIGHT | BURLESON | UNITED

**Editor's note:** Find out how to help at [TexasCoopPower.com](http://TexasCoopPower.com).



edition [above]? Looks like a start of a good 42 low hand.

DENNIS A. MUECK | ROCKDALE BARTLETT EC

## Worse Than War

Growing up in the 1950s in Odessa, I remember watching my parents and their family and friends play 42 dominoes for hours at a time and really enjoying all the camaraderie they had.

I was also very interested in the history behind *The New London School Explosion* [January 2017]. I heard many stories from my father, uncle and grandfather, who were among the oil field workers called off their jobs to help search for

and recover the bodies of the children and adults who died that day.

It was very hard on my father, who knew so many of them because he had graduated the year before. I remember him saying it was much harder on him than what he underwent in World War II as a Marine sergeant.

JEAN RINEHART | KINGSLAND CENTRAL TEXAS EC

Before recently retiring as a law enforcement officer, I frequently taught classes on school safety. The tragedy at New London was always a part of the curriculum. Odorized gas was not the only requirement that came out of that tragedy. Mandated, monthly fire drills and classroom doors that open outward were also a result.

STEVE GARST | WILLIS SAM HOUSTON EC

## Longleaf Legacy

I have two giant longleaf pines that were planted over 40 years ago from a donor in East Texas [*Long Live the Longleaf*, January 2017].

JEAN LIVESAY | WILLS POINT

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Please include your town and electric co-op. Letters may be edited for clarity and length.

Texas Co-op Power

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## HAPPENINGS

# Tons of Love

**BOB BRISCHETTO** has tons of feelings for the Medina River, which meanders through Bandera County for about 50 miles, and he's not alone.

"This is probably one of the most beautiful rivers in the state of Texas," says Brischetto, a member of Bandera Electric Cooperative, who is enticed by giant cypress trees that shade the water. "Frankly, I'm in love with the river."

So for 16 years he has organized the **MEDINA RIVER CLEANUP**, an all-day venture by volunteers—sometimes more than 200—who cover the river by boat, truck or foot to pull out trash. And not just candy wrappers and drink lids but also big stuff that floods wash downstream. Brischetto says they fill dumpsters with metal roofing, sheds, trailers and decking pried away from homeowners.

"This is what amazes me," he says. "Each year, we still pull out several tons of debris."

The cleanup, which starts at Bandera City Park, is **MAY 6** this year. "We would love to attract people to the river cleanup from throughout the state," Brischetto says, "and we would like very much for them to be interested in starting their own cleanups."

**INFO** ▶ (210) 413-7264, [medinariver.net](http://medinariver.net)



NATIONAL LINEMAN APPRECIATION DAY

## MUCH APPRECIATED

**NATIONAL LINEMAN APPRECIATION DAY**, when electric cooperatives shine a spotlight on lineworkers' dedication and community service, is April 10 this year.

**But Greg Mays**, a lineman at Farmers Electric Cooperative, has been experiencing lineman appreciation of a different nature since October. That's when he appeared on the cover of *Texas Co-op Power*, which caught the attention of readers around Greenville and Sulphur Springs who realized they had something of a celebrity in their midst.

**Nearly a dozen** Farmers EC members dropped off magazines at co-op offices so Mays could autograph the covers. "It's cool, but it's a little embarrassing," Mays says. "We're just regular people."

**Emails to** the magazine suggest otherwise. "If our linemen looked like Greg ... all the women in Conroe would be cutting their lines down," wrote one reader. "The lineman is just totally gorgeous," another said. "Yowza!"

**Mays says** his wife playfully threatens to check his email, but the attention has given him a chance to talk about his passion.

"**I love my job,**" he says. "I truly love helping people. At 2 o'clock in the morning when the power is out, I love to help people."

Find more happenings all across the state at [TexasCoopPower.com](http://TexasCoopPower.com)



*Check it out!*



**WATCH TIME-LAPSED CONSTRUCTION** of Mid-South Synergy's solar project at [tinyurl.com/solartimelapse](http://tinyurl.com/solartimelapse).

ENERGY INFO

## Cooperative Solar

**KNOWING THAT ELECTRICITY USERS** in the area between Houston and College Station wanted solar power without the hassle of installing and maintaining their own panels, Mid-South Synergy built a community solar farm in Bedias.

Through Synergy Solar, the electric co-op offers its residential members the option to purchase solar power in 100-kilowatt blocks. More than 315 co-op members have signed up as of February.

"We are excited to be providing our members with an easy, affordable and cooperative-based approach to solar power," said Kerry Kelton, general manager of Mid-South.

WORTH REPEATING

*"Idea is nothing but an electricity through the wire of nerves."*

— **THOMAS HUXLEY**, 19th-century British biologist

ALMANAC

## THE DOOLITTLE RAID

**APRIL 18** marks the 75th anniversary of one of the most daring military missions in American history: the Doolittle Raid on Tokyo.

**Eighty men** in 16 B-25 bombers attacked Japan in retaliation for the bombing of Pearl Harbor, four months earlier. Lt. Col. Jimmy Doolittle led the raid April 18, 1942. His co-pilot was Lt. Col. R.E. Cole of Comfort, now the last living raider at 101 years old and a member of Bandera Electric Cooperative. [See *My Flight With a Doolittle Raider*; November 2016.]

**Seven of the raiders** died as a result of the attack. Three died making emergency exits from their planes; three were executed and one starved to death as Japanese prisoners of war.

MARK YOUR CALENDAR

## Have You Heard?

April Fool's Day is being moved from April 1 to April 8, starting next year, to give people more time in April to plan their pranks.

WEATHER WATCH

## April Showers Overrated?



**APRIL SHOWERS** bring May flowers. But a list of the 30 rainiest U.S. cities doesn't show April to be the month with the most rain.

**In Beaumont**, No. 28 with 60.47 inches per year, June gets the most rain. The list is based on average annual precipitation across cities with populations of 20,000 or more using climate data from 1981–2010. Beaumont is the only Texas town listed. Hilo, Hawaii, is No. 1 with 156.79 inches of rain annually.



POSTCARD FROM

# CAMP BARBECUE



## Weekend program at Texas A&M University shares meat-smoking skills and

**A** group of 60 brisket lovers gathers around a vintage horseshoe bar at Martin's Place in Bryan to kick off Barbecue Summer Camp, a weekend symposium created by Foodways Texas, an academic organization committed to preserving, promoting and celebrating the state's diverse food cultures.

The sold-out event, produced in conjunction with the Meat Science Section of the Department of Animal Science at Texas A&M University, has drawn "campers" from across the country. We're all here to learn and hone our skills, but the seductive aroma of smoked meat is distracting us. Soon, we're all interested primarily in lunch, and we're getting restless.

Robb Walsh, a James Beard-award winning food writer and author of *Legends of Texas Barbecue Cookbook* (Chronicle Books, 2002), welcomes us with a quick overview of what's to come. "The culture of barbecue is our focus," he explains. A barbecue camp veteran, Walsh updated the second edition of his book with information that he picked up through the event. The book's

"Tips and Techniques" section has been renamed "What I Learned at BBQ Summer Camp."

Walsh tells us the family-owned Martin's operation started in 1925 and that pitmaster Steven Kapchinskis is the third-generation proprietor. (The business takes its name from his grandfather, Martin Kapchinskis, who started it.) Because Martin's moved to its current location in 1939, its interior is like a barbecue museum. What began as a service station and meat market evolved into a full-service eatery. The space remains "frozen in amber," Walsh says, mostly because "they can't make changes without bringing the entire building up to code."

Before lunch, we tour the sweltering smoke room, where everything, including an old-fashioned pencil sharpener, has been blackened by decades of soot. Placing a hand above the hot grates, Steven Kapchinskis tells us there are varying temperatures within the same pit—something he knows by feel—so throughout the cooking process, he moves briskets and ribs according to his



## the storied culture of Texas barbecue

own sense. He adjusts the pit temperature by opening vents and doors (even the door to the room). “It’s different every day,” he says. Such hands-on knowledge and intuitive understanding of smoking meat to consistent perfection, day after day, is at the heart of Texas barbecue culture.

At last, it’s time to eat. The hearty spread of tender pork ribs, charred brisket, German potato salad and coleslaw is an appropriate start to our belt-busting weekend devoted to the techniques and history of Texas barbecue.

**M**uch of the learning unfolds in College Station at the A&M Meat Science Center, where we spend a lot of time in chilly meat lockers wearing lab coats and hairnets. Classroom sessions cover everything from pit design to food safety, with subjects such as how to avoid cross-contamination with marinades. We get up close to suspended animal carcasses during beef and pork anatomy overviews. We learn about the

**Opposite: Texas A&M meat science professor Davey Griffin shows off a finished brisket. Above: A concrete block pit contains a whole hog, which will smoke all day.**

importance of maintaining a steady flame during the barbecue wood and smoke panel discussion, featuring acclaimed Central Texas pitmasters such as Bryan Bracewell of Southside Market & Barbeque in Elgin, who prepares

that night’s dinner. All that technical info could be boring, but A&M meat science professors Jeff Savell and Davey Griffin, longtime friends and colleagues, keep the exchanges light and engaging with plenty of entertaining personal anecdotes.

There are also plenty of rubber-gloved, hands-on opportunities. We break into groups and blend our own rubs and marinades then massage the spices into pork shoulders and spareribs. We make jalapeño sausage and toss chicken wings in orange-marmalade-Sriracha sauce. We even take a field trip: On Saturday morning, the class travels to Savell’s backyard to prep a whole hog for an all-day roast in his concrete block pit. We return that evening to savor the delicious results, along with cold cans of Shiner.



**From top: Steven Kapchinskief of Martin's Place opens the pit door. A&M students demonstrate proper butchering. Campers in a classroom. A&M meat science professor Jeff Savell shows a properly smoked brisket.**

Part of the fun is getting to know the other attendees from a broad range of professions who come from across the United States and as far as Mexico City. I discuss the virtues of wood pellets and swap recipes and restaurant recommendations with a Navy deep-sea diver, an anesthesiologist, a chef from Houston and a restaurateur from Charlotte, North Carolina.

Between sessions, there are enthusiastic conversations about smoker styles, beef ribs, brining and how a cooker might hold its temperature during winter in the Northeast. Many campers added a tour of Texas barbecue shrines to their travel itinerary and shared opinions about whose brisket reigned supreme. "I agree with Robb. It's not about whose barbecue is best," said my new friend Dave Brown, the deep-sea diver. "It's about understanding the culture behind the food." Mission accomplished, Foodways Texas.

don't expect that hunks of raw meat and stacks of wood will inspire the same desire to get home and cook that emerges when I hit the farmers market, but it does. I drive away with plenty of inspiration and a renewed excitement to stoke my own fires at home.

Paula Disbrowe of Austin is *Texas Co-op Power's* food editor.

**WEB EXTRAS at [TexasCoopPower.com](http://TexasCoopPower.com)** For more information on Barbecue Summer Camp, see [foodwaystexas.com](http://foodwaystexas.com). Barbecue camps are open to Foodways Texas members only. Memberships are \$75 and can be purchased online.



## TOP TAKEAWAYS From Foodways Texas Barbecue Camp

Sausage from Southside Market in Elgin

### USE TOOLS THAT SET YOU UP FOR SUCCESS.

Texas A&M University meat science professors Jeff Savell and Davey Griffin encouraged us to buy tools that would help ensure the best results. Pros rely on their hard-won knowledge (as in, gauging doneness by touch), but most of us need a surface-mount probe for the most accurate measure of temperature inside the smoke, an injector needle for marinating chickens, and a thin, pliable boning knife for trimming fat from larger cuts like brisket.

### PICK THE PROPER MARINADE.

Marinades aren't just about flavor. They affect the cooking process by making meat more tender and juicy, and they can improve the final texture of the meat. Consider the specific cut that you're cooking. Your desired result will direct you to use either an acid-based marinade (with vinegar, citrus or tomato) or an enzyme-based marinade (using buttermilk, yogurt or papaya/papain). Both tenderize meat but differ in how they react during the cooking process.

Acid-based marinades work well for tender cuts such as bone-in pork chops and tenderloins because they don't require as much soaking time. Enzyme-based marinades are better suited for larger muscles with more connective tissue to break down, such as pork and lamb shoulders.

### DON'T JUDGE A CUT OF BEEF BY ITS LABEL ALONE.

Although "prime" is the industry standard for the best meat, a cut of "choice" can be just as well-marbled. Look past the grading and inspect the meat yourself. Chances are, if it has a rich color and plenty of marbling, it will be delicious.

### GRAZED AND CONFUSED.

Don't expect consistent results from grass-fed beef, Griffin says. It doesn't have the great equalizer of a finishing feed, so meat from different cattle can have varying tastes. Grass-fed beef lacks the traditional layer of white, creamy exterior fat that is the result of approximately 100 days on a high-nutrition corn diet.

### CHOOSE THE RIGHT WOOD.

Although different types of wood (mesquite, oak, pecan or fruit) offer various nuances, regional wood preferences historically reflect what's readily available. Franklin Barbecue in Austin uses post oak because it burns hot and clean, and because it is most available in Central Texas. What's more important is using wood that's properly aged—for at least 6–9 months. Green wood produces dirty smoke that can make meat bitter.

### BECOME A SMOKE CHARMER.

Charcoal produces heat, not smoke, so you've got to maintain a steady fire that produces clean smoke. You'll know you're on track when you see a flame and the logs are being slowly consumed. Your goal is to create a clean, white smoke and avoid black smoke.

Bryan Bracewell, owner of Southside Market & Barbecue in Elgin, says he knows how the smoked meat at his restaurant will turn out from the smoke billowing from the chimney. If it's black, there's a chance that his cooks have used green wood or dampened down the fire too much. He also notes that you can create bad smoke from dry wood if you don't ventilate properly.

### TIPS TO IMPROVE YOUR SMOKE.

Use smaller chunks of wood in smaller smokers. Don't go for quick results. The pros stress that impatience and adding too much firewood to the smoker will get you in trouble.

### THERE'S NO SHAME IN AN OVEN FINISH.

The "smoke ring" is the pink layer of meat just under the outside "bark," and the development of a smoke ring ends at 140 degrees. Once the meat reaches that temperature in the smoker, you're not losing anything by wrapping the meat in butcher paper and finishing it in the oven. —PD

# Drones

## AN OVERVIEW

TEXAS INNOVATORS,

INCLUDING ELECTRIC CO-OPS,

HONE DRONES AS TOOLS OF TODAY.

STORY BY CHRIS BURROWS | PHOTOS BY CHRISTOPHER SHERMAN

**E**ric Bitzko guessed it was a new truck or a gun that co-worker Jeff Horton had bought when he got the weekend phone call.

“He said, ‘Hey, I’m coming over. I got something to show you.’ I was like, ‘Here we go,’ Bitzko says before all the excitement leaves his voice. “But he comes over, and it’s this gray box.”

Inside the box was a toy of a very different sort: a remote control hobby quadcopter—a drone.

“We pretty much spent all afternoon flying it around my house, getting used to the controls and playing with it,” Bitzko says. Yet the Pedernales Electric Cooperative linemen couldn’t help but notice, between backyard aerobatics and near misses,

that this device could have work applications. “That’s just a lineman’s mentality,” he says.

Those thoughts became plans, and that toy became a tool some months later, in May 2015, when historic flooding forced the Blanco River beyond its banks near Blanco and Wimberley. People were missing, river crossings were destroyed and thousands of Pedernales EC members were without power. The linemen devised a way for the drone to carry string over the river. The string would be attached to ropes, which in turn would be affixed to downed power lines. Once across, the length could be used to restring the lines and restore power.

Not long after receiving the call to help with recovery efforts, Bitzko and Horton sent their idea of using a drone to help restore power up the chain of command. Within hours, they had approval from PEC management, as well as county officials and local Federal Aviation Administration contacts.

Instead of waiting for waters to recede to attempt risky small-boat crossings on the debris-filled, raging river to repair lines, the pair used Horton's drone, keeping lives out of harm's way and restoring power to some 2,000 members in hours instead of days. By the end of the afternoon, crowds had gathered to watch the drone work.

"The members were the ones that were the most excited about it," Bitzko says. "They were told all night long that it's going to be a few days. ... As soon as they caught wind that we were doing river crossings with drones: 'I've got to see this.'"

Drones are now working their way into many corners of Texas life. Agriculture, public health and utilities innovators are finding uses for these nimble eyes in the skies that were once the domain only of hobbyists.

## POWERING UP

More than a half-million drone pilots now call Texas home—second only to California—according to the latest figures from the FAA, which has been tracking drones since 2015.

Their aircraft come in many shapes: from more traditional-looking, fixed-wing craft to hover-capable quadcopters with prices that start in the hundreds but can reach thousands of dollars. Some drones are equipped with cameras or sensors, and others can transport payloads.

The FAA in August released its rules governing the use of commercial drone operations, opening the doors for drone-based businesses. The agency projected this new industry will include some 600,000 aircraft nationwide by August and become an \$82 billion industry employing 100,000 Americans by 2025.

Already, commercial drones are making their mark in Texas.

## TAKING FLIGHT

Sitting at his desk at the Texas A&M AgriLife Research and Extension Center in Corpus Christi, Juan Landivar, the director, is preparing a report for the Texas State Support Committee for cotton producers on a system that employs drones to analyze

which among 200–300 breeds of cotton cultivars grows best under given conditions. Drones can collect more thorough data from the air more efficiently than a researcher on the ground.

"This helps researchers and plant breeders do a better job selecting varieties and interpreting experimental results," Landivar says. The research his team is conducting already is affecting the small but growing community of farmers and ranchers that relies on data collected by drones to boost efficiency and improve profitability. "The same techniques, the same technologies that we're developing to analyze the small plants, will be used for precision crop management."

The market for agricultural drones is expected to grow to as much as \$3.7 billion by 2022, according to a study by Massachusetts-based WinterGreen Research, and the Association for Unmanned Vehicle Systems reports that agricultural drones eventually could account for 80 percent of all drones.

While Landivar says the technology he puts into service is not yet ready for widespread use, it is close. Drones help farmers be "not only more efficient, but use less chemicals and hopefully help protect the environment," Landivar says. "I think in the next five years, there are going to be a lot of advances."

## GETTING TO WORK

Agriculture might be the most promising use for drones, but the boom already has spread to many other sectors in Texas.

Police on South Padre Island last year purchased a pair of drones with the capability of streaming high-definition video to better keep tabs on the more than 25,000 spring break revelers who occupy the beaches every March.

A collaboration between Microsoft and Harris County health officials has brought smart mosquito traps to Houston. They are designed to catch, track and fight disease-carrying bloodsuckers using a plethora of data. The project is investigating ways to incorporate drones to seek out dense mosquito clusters that pose the greatest risk and remotely deploy traps.

The Texas A&M University System launched a national certification program for drone pilots in 2016, and Austin-based HUVData, which uses drones to inspect wind farms, was one of the first companies to take advantage. LeTourneau University in Longview created a similar degree program.

Scientists have begun using drones to monitor red tide algae blooms off the coast of South Texas. Previously, data was supplied by satellites at a premium price.

Drone racing clubs bring together "rotorcross" enthusiasts who race their high-dollar devices through



**Opposite page and at left: Pilots with Texas Drone Professionals prepare their aircraft and its LIDAR sensors for a flight along Pedernales EC power lines.**



**‘W** E CAN FLY IT DOWN A POWER LINE,  
AND BASICALLY IT CAPTURES ABOUT A 500-FOOT-WIDE SWATH,  
3-D SCANNING THE POWER LINE AND THE AREAS AROUND  
THE POWER LINES TO LOOK FOR ANY OBSTRUCTIONS.’

tight-turning obstacle courses in the air, either indoors or out, using cameras mounted onboard and streaming video to the pilots.

## HELPING BOTTOM LINES

As Bitzko and Horton discovered, drones and electric utilities are a natural combination when it comes to managing miles and miles of power lines.

McCord Engineering was first on the scene in Texas in 2014 when the company began to investigate ways to make engineering more efficient by using drones. Since then, the company has developed its own fleet of heavy-duty drones armed with an array of sensors and cameras that electric utilities, including co-ops such as Mid-South Synergy and Bluebonnet and Pedernales, call on to conduct engineering surveys, monitor power lines and plan for the future.

At the forefront are Light Detection and Ranging, or LiDAR, sensors that the company uses to collect a range of data from the air.

“We can fly it down a power line, and basically it captures about a 500-foot-wide swath, 3-D scanning the power line and the areas around the power lines to look for any obstructions,” says Cy Terral, McCord’s field services manager.

While the economic benefits seem clear, Landivar and Terral agree that operators must work to overcome drones’ public relations issues.

“We try to avoid the name ‘drones’ because that’s what the defense department uses,” Landivar says, a sentiment that Terral

echoes. He initially was worried by the reaction the buzzing behemoths might receive in the field. But after some 500 miles flown, Terral now feels reassured.

“I figured there’s going to be some people that just say, ‘I don’t want that thing out here on my property,’” he says. “Most of the members are ecstatic. In fact, a lot of them will say, ‘Do you know what time y’all will be out here? I’d like to bring the grandkids out.’”

## STAYING ALOFT

Bitzko left the 2015 floods invigorated by what he and Horton accomplished, since then pursuing a drones program at PEC. He compares this advance to the time, decades ago, when linemen first started working on hot power lines—a bold technique then that is commonplace now.

“Now, if we’re going to kill out a main feeder, people look at us like we’re crazy,” he says of the notion of cutting power to thousands of homes for linemen to work—uncommon nowadays.

Bitzko is hopeful that drones will help usher in a safer, more efficient era for co-ops as innovators across the state find new and unique uses for the devices. “It’s good to see that there are other like-minded individuals that see the possibilities as really endless.”

**Chris Burrows** is a communications specialist at Texas Electric Cooperatives.

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# FAQ for High-Wire Heroes

*Questions for—and answers from—your co-op’s linemen*

**HAVE YOU EVER SEEN A CREW** of your electric cooperative’s linemen working high on a pole or in a bucket truck and wished you could ask them questions about their work? Not many people hold this complicated and dangerous job, so not many know the ins and outs of it. Co-ops are proud of their linemen and want members to understand exactly why. To help explain, here are a few questions that are frequently asked of linemen:

**Q: It looks like a tough and scary job.**

**What is the hardest part of being a lineworker?**

**A:** There are lots of challenging aspects to working on electric lines, and every lineman is sure to have a different answer. Some say it was difficult initially to acquire the vast amount of knowledge it took to complete the training. Others acknowledge that it’s hard to leave their homes and families to work outside in rough weather—especially if the call comes on a weekend or holiday, as often seems to happen. The sometimes grueling hours and strenuous conditions are another difficulty of the job, as is the pressure of working around high-voltage lines.

**Q: How do line personnel work on energized lines and avoid being injured?**

**A:** Linemen receive years of extensive training before they can work on live lines. They are highly qualified to perform intricate tasks under high pressure—often at heights of 40 feet or more—that are typically required for line work. They also receive regular training throughout their careers to keep them mindful of safety requirements and apprised of updates in equipment and procedures.

Linemen also use personal protective equipment that shields them from the high voltage of electric lines. This includes insulated rubber gloves, sleeves and boots, as well as specially designed tools and insulated vehicles. Each piece of equipment is inspected regularly to ensure that it’s intact and able to protect the lineworker from harm.

**Q: Aren’t power lines along the road insulated?**

**A:** Many people think that overhead power lines along roadways have insulation material around them like the electric cords they see on appliances in their homes. Not exactly. Some



Linemen brave heights and tough weather conditions to keep the power flowing in your area.

low-voltage power lines are insulated; however, high-voltage distribution and transmission lines are not insulated. That’s part of the reason they are suspended so high in the air—and it’s the reason broken lines are so dangerous when they’re down on the ground. All power lines can be deadly and should be treated with caution.

**Q: Why do linemen choose such a hazardous line of work?**

**A:** Linemen understand that their career choice might seem strange to other people, especially when they’re outside working on lines in freezing conditions or driving rain. The reasons vary from one lineman to the next, but many say they enjoy the mastery of a complicated skill and the satisfaction of being challenged daily by work that is never repetitive. Some appreciate being part of a hardworking brotherhood. Others love the excitement and fulfillment of being called on to come through in an emergency. Nearly all linemen agree that the best aspect of their work is the opportunity to help their neighbors when things look darkest.

Every member of cooperatives in Texas benefits from the courage and dedication of linemen. Please honor these “high-wire heroes” April 10 by celebrating National Lineman Appreciation Day.

Spring cleaning ensures that your home's appliances and systems work the way they should.



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## Clean Your House To Lower Your Energy Bill

**THE CLEANER YOUR HOUSE IS, THE MORE YOU COULD SAVE** on your energy bill. While you're scrubbing your home from floor to ceiling this year, give these elements a good cleaning:

**Air-conditioning filters.** Keeping them clean—or changing them regularly if they're disposable—ensures that air easily can pass through them when you run your air conditioner. That helps your system run more efficiently, which means it uses less energy. Plus, a clean filter helps prevent irritants such as dust and pollen from blowing through your AC vents.

**Ceiling fans.** How often do you climb up high enough to dust the tops and bottoms of the blades—and, if they're attached to a light, to wipe down the bulb? While you're up there, flip the switch that controls the direction of the fan blades. In the summer, you want the blades to push air down into the room, not pull it up toward the ceiling.

**Lightbulbs.** The fan light is not the only bulb that has been collecting dust all year. After turning off fixtures, use a dry microfiber cloth to wipe down bulbs in ceiling fixtures, lamps and sconces. Remove decorative covers and carefully rinse them with warm, sudsy water. Dry thoroughly before replacing them.

**Vents.** They're something most people never clean. Remove wall and ceiling vent covers with a screwdriver and rinse them with water. Don't replace them until they're completely dry. Like filters, clean vents help your AC system with air circulation and cut down on any airborne particles that might get trapped in your house.

**Electronics and appliances.** At least once a year, crawl behind every TV set, computer, printer, refrigerator, washer and dryer in your home to dust off the cords, wipe down the back of the appliance and vacuum the floor. If your refrigerator has an ice maker, you might need to ask a plumber for assistance; you don't want to accidentally pull the plumbing connection out of the wall. While the fridge is away from the wall, vacuum any exposed coils.

**Dryer vent.** You know how full of fuzz and pet hair the lint tray in your dryer is after every load of clothes? The vent that spews the hot air from the dryer to the outdoors is even more full. Ask an electrician to clean your dryer vent at least once a year. If it's too clogged, your dryer won't operate efficiently. In extreme cases, the lint in that clogged vent can catch fire.

## Why Appliances Need Surge Protection

**YOU'VE INVESTED PLENTY** in the appliances in your home: computers, TVs, stereos, refrigerators and more. None of this equipment is cheap, and you take good care of it. Are you also protecting your equipment from power surges?

If your home does not have surge protection, consider getting it.

Today's electronic equipment and appliances are very sensitive. Anything you plug in can be damaged or even destroyed by a power surge. These anomalies are brief, unpredictable increases in voltage that can enter your home through the power, telephone or cable TV lines.

Several things can cause power surges. The most common cause is lightning, but other causes can include an object coming in contact with a power line, or electric-powered equipment suddenly starting up or drawing extra power.

Power surge protection puts up guards in two places: 1) where electricity enters your home, and 2) inside your home where equipment is connected to electricity through outlets. A meter-based surge protector protects your home at the power entry point, which is where your home and equipment are most vulnerable. Plug-in devices for surge protection inside the home protect your equipment at the outlet point.



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# LED Bulbs for the Birds

Increased egg production makes high-tech lighting worth the investment

BY GAYLEEN RABAKUKK

LIGHT-EMITTING DIODE BULBS COST LESS to operate and produce less heat than traditional incandescent bulbs, and a recent study suggests that LED lights could benefit the poultry business by enabling the production of more eggs with calmer, quieter chickens.

Jesse Huth holds a master's degree in poultry science and has years of experience raising chickens. He also provides poultry consulting and hosts *Squawk Talk*, a radio show about chickens and wild birds on radio station KVVH-FM (94.1) in Wimberley. He advocates using LED bulbs in chicken houses large and small.

Huth explained that in the fall, most hens stop laying eggs, an instinctive response to decreasing daylight. This natural impulse prevents chicks from hatching during cold weather, when they would be more vulnerable. However, illuminating the chicken coop can extend daylight hours and keep hens laying all year.

"About 17 hours of light each day is ideal," Huth said. The summer's longest day is 16½ hours. By putting the lights on timers programmed to come on before sunrise and turn off after sunset, the hens get used to the consistent lighting.

Several lighting options are available for poultry production, including traditional incandescent bulbs, fluorescent lights and LEDs, which cost significantly more. Huth said he believes the advantages of LEDs are well worth the initial cost.

"Incandescent lights are inefficient, and they also put out a lot of heat," he said. "When you're talking about meat chickens, their bodies generate a lot of heat, so any-

thing you can do to reduce that is good."

Fluorescent lights produce a different spectrum of light from what occurs naturally, and that spectrum is based on what is visible to the human eye. This means a spectrum that appeals to humans may not work well for chickens. "The vast majority of a chicken's brain is devoted to vision and based on the structure of their eyes," Huth said, "and they can see a wider spectrum and have a different visual sensitivity than humans."

Fluorescent lights also flicker rather than provide consistent illumination. This combination of flickering and the different spectrum has a negative effect on poultry that Huth has seen firsthand.

During his graduate school research, Huth visited a large poultry operation that managed approximately 50,000 chickens. Two barns were set up with fluorescent lights and two with LED lights.

"The chickens in the fluorescent-lit houses were very panicked. I opened the door, and they immediately started flapping around and trying to get away, kicking up dust. It was not a good situation," Huth said. "The LED house chickens were very calm and didn't care at all that I was there."

Blood tests and measurements confirmed Huth's observations: The chickens living in the LED-lit barn were less susceptible to stress than their fluorescent-lit counterparts. Chickens with lower stress levels are less fearful, don't panic and maintain healthier immune systems.

"Over the long term, chickens that are stressed don't eat as much, don't



focus on laying eggs and don't put on as much meat as those that aren't stressed," Huth said. He expected these results based on his university studies, but real-world confirmation came from seeing thousands of chickens either clearly stressed or perfectly calm, with the only environmental difference being the lighting. This convinced him of the benefits of LEDs.

"The only downside is that the birds don't molt, shedding off their old feathers," Archer said. "If they don't molt, then they don't get new plumage. The birds may not look as pretty, but they're still healthy."

Gregory Archer, assistant professor of poultry science at Texas A&M University, said lighting benefits aren't limited to commercial poultry producers. In the fall,

he frequently gets calls from individuals wondering why their hens have stopped laying. "Production drops off, or they may stop laying altogether in October or November," he said. "Then it starts coming back in the early spring."

"If you want to produce eggs year-round, you need lighting," Huth said. "If you're going to do that, LED lights are the best option."

Installing a light can mean up to four more months of daily egg production, even for a few chickens in the backyard chicken house.

**Gayleen Rabakukk** is a member of Pedernales EC who lives in north Austin.

#### **WEB EXTRAS at [TexasCoopPower.com](http://TexasCoopPower.com)**

The research study Huth took part in was published in the *Oxford Journal of Poultry Science*.

#### **TIPS FOR USING LED BULBS WITH CHICKENS**

- ▶ Hens need only the equivalent of a 40-watt bulb to lay eggs all winter. Don't use a floodlight. It's the lighting time that's important, not the light intensity.
- ▶ Choose bulbs and fixtures rated for outdoors. They will last longer.
- ▶ LED bulbs are worth the cost, even for small, backyard producers. The initial investment might seem high (outdoor poultry LEDs can be \$25 each), but the bulbs pay for themselves with longevity—and hens laying eggs through the winter months.

# Farm Bureau Radio

Broadcaster's familiar voice characterizes a life in radio

BY LADAWN FLETCHER

LISTENERS OF THE TEXAS FARM BUREAU Radio Network will soon miss Curt Lancaster's familiar drawl. Fifteen years ago, his voice was the first one over the airwaves of TFBR as he ushered in the new agriculture radio network. Lancaster has guided TFBR from only a handful of stations to more than 70 today.

Farmers and ranchers, along with a wide swath of those working in agriculture, listen to farm radio for weather and industry news. The National Association of Farm Broadcasting says more than 80 percent of farmers tune in to farm radio several times a week. For 35 of the 50 years he has been on the air, farmers and ranchers have listened to Lancaster deliver the news they need.

When Lancaster was a boy growing up on a cotton farm in Garza County (in the Lyntegar Electric Cooperative service area), he developed an obsession with radio. In his parents' barn, he fashioned a nonworking radio console, tinkering with dials and talking into a microphone he devised for his makeshift studio.

Lancaster pursued his interest by hanging around the local radio station. Staff members gave him The Associated Press scripts they read on the air. Lancaster took the scripts home and practiced delivering the news from his homemade studio using his best radio voice. Once he got older, they gave him a job.

"You know what they say, 'Hang around long enough, they'll give you a job,' and that is what happened to me," Lancaster says.

His first radio assignment was cover-

ing a local high school football game.

"I was just awful!" he recalls.

A few weeks after his sports debut, the station owner's wife, only hours from giving birth, was on the air because there was no one to fill in for her. Spotting the 16-year-old, the owner inquired about his ability to run the control board. Lancaster assured him he could, and the couple hurried to the hospital, leaving Lancaster on the air.

The owner had been unimpressed with Lancaster's sports coverage, but he was excited about how well the young man worked in the studio. He offered the teen a job.

"I loved being a disc jockey," Lancaster says. "I could be a disc jockey to this day."

He loved the music, and he has always been a weather nerd—something that has helped him throughout his career in farm radio. After graduating from high school, Lancaster continued to work in radio and eventually creative services and television, too.

In 1981, Roddy Peoples, a friend and the owner of Voice of Southwest Agriculture Radio Network, asked to meet with him. The two shared farm upbringings and an interest in airplanes and radio work. On occasion, Lancaster sat in for Peoples on his radio show.

Before long, Peoples wanted Lancaster to come work for VSA to deliver farm news. Lancaster accepted the job, and for the next 20 years, he was the voice of farm news for the network. Peoples eventually sold VSA to Clear Channel Communications (now iHeart



Media), and Lancaster stayed on for several years as general manager before striking out on his own.

Shortly after leaving VSA, Lancaster was approached about starting a radio network with the Texas Farm Bureau. At first he declined because he enjoyed working on other projects, but he reconsidered after talking to his wife. He knew and loved farm radio and had even served as president of the National Association of Farm Broadcasting. Once he changed his mind, the foundation for TFB Radio Network was laid.

“As we were building out the studio, I remember looking at this big Texas map on my wall. I usually put stickers on it for every radio station. At that time, there were zero stickers and I was having a sinking spell. I realized the enormity of the job.”

Texas Farm Bureau Radio went live in

December 2001. By January 2002, it had six stations. Today, there are 73 stations, and their programming is heard in more than 200 Texas counties. Shows are broadcast on AM and FM stations and in digital format for computers. The network’s broadcasts can be downloaded to smartphones for listening anytime.

“About 95 percent of our content is interviews,” Lancaster says. “It’s very little of what the industry calls ‘rip and read,’ and that sets us apart. I talk about agriculture and anything that impacts the rural parts of the state.”

As anchor of *Texas News and Views on TFB Radio*, Lancaster interviewed farmers and ranchers from across the state. He also had questions for President George H.W. Bush (who accepted Lancaster’s call to the White House), and governors Rick Perry and George W. Bush. One of his most

memorable interviews was with astronaut Charlie Duke, who was the lunar module pilot for Apollo 16.

Although many listeners catch the weather and agribusiness news they need in the same manner that Lancaster began delivering it a half century ago—through the radio—more are beginning to listen to his show and others on the web, or by downloading broadcasts to their smartphones.

How the listeners hear the TFB Radio broadcasts doesn’t really matter to Lancaster. For him, it was always about the conversations he had.

**LaDawn Fletcher** is a Houston-area writer who enjoys writing about Texas.

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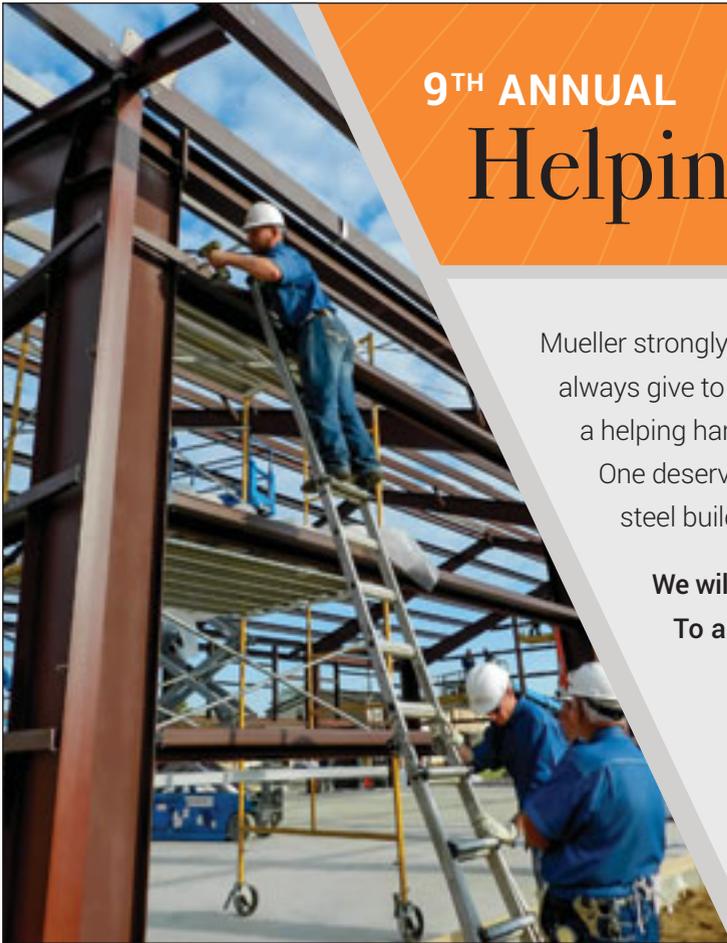
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Go to [TexasCoopPower.com](http://TexasCoopPower.com) for details and official rules.

## TEXAS CO-OP POWER

Enter online at [TexasCoopPower.com](http://TexasCoopPower.com). Each entry MUST include your name, address and phone number, plus the name of your Texas electric cooperative, or it will be disqualified. Specify which category you are entering, Sweet or Savory, on each recipe. Mail entries to: Texas Co-op Power/Holiday Recipe Contest, 1122 Colorado St., 24th Floor, Austin, TX 78701. You can also fax entries to (512) 763-3401. Up to three total entries are allowed per co-op membership. Each should be submitted on a separate piece of paper if mailed or faxed. Mailed entries all can be sent in one envelope. No email entries will be accepted. For official rules, visit [TexasCoopPower.com](http://TexasCoopPower.com). **Entry deadline: July 10, 2017.**

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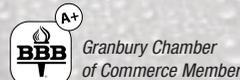


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Customer Rating  
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## SUPER COUPON

Customer Rating  
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## SUPER COUPON

Customer Rating  
 ★★★★★

**3 PIECE DECORATIVE SOLAR LED LIGHTS**  
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Customer Rating  
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# Patriotic Peach Pits

Charcoal from fruit seeds and nutshells improved gas masks during World War I

BY MARTHA DEERINGER

A FLOOD OF PATRIOTIC TEXANS DONNED uniforms and leaped into the fray nearly 100 years ago when the U.S. entered World War I. Those who didn't go overseas to fight joined the war effort at home, raising homing pigeons destined for the front lines, making bandages for the Red Cross and collecting peach pits. *Peach pits?*

Yes, these lowly fruit seeds, so plentiful in Texas, played a vital role in protecting Allied soldiers from poisonous gas.

World War I was the first conflict to employ the use of poisonous gases—initially chlorine, a yellow-green gas that drifted across the battlefield, causing death by asphyxiation. Later, phosgene and mustard gases were introduced.

Gas masks were issued to American soldiers at the front. These contraptions allowed the wearer to breathe through a fiber hose attached to a charcoal filter designed to capture gases. The masks were effective, even though the rubberized canvas faces were hot and restrictive and made the soldiers look like an army of mutant insects. Scientists continued to test new filtering processes, and gas mask manufacturers soon discovered a more effective replacement for the wood charcoal originally used.

“It has been found that the coal from the shells of certain seeds and nuts, among them cocoanuts [sic], chestnuts and horse chestnuts, as well as peach stones, has a much greater power of absorbing poisonous gases than ordinary charcoal from wood,” *Popular Science Monthly* reported in December 1918. “Cleaned, dried, and then subjected to a high temperature ... the stones become carbonized, and the coal, in granulated form, is used as an absorbent in the manufacture of gas masks.”

During the final year of the war, the Gas Defense Division of the Chemical Warfare Service of the U.S. Army issued a



call for Americans to save fruit pits. “Save Fruit Pits and Save Lives,” shouted a headline in the October 28, 1918, edition of the *Temple Daily Telegram*.

“Good charcoal will absorb as much as five hundred times its bulk of some gases,” according to *National School Services, Volume 1*. This newfound knowledge spurred Americans to set up local collection points to gather the peach pits. The government needed hundreds of millions of fruit pits (apricot, plum, cherry and olive pits also worked) to process into charcoal for packing gas mask filters. About 200 peach pits were needed to create enough charcoal for each filter canister.

Grocers and fruit stands in Temple, Belton, Bartlett, Killeen, Holland and Mofat displayed signs announcing collection points where folks could deposit peach pits for shipment to the government, according to a July 11, 2016, article in the *Daily Telegram*.

Schoolchildren gathered the pits from restaurants, hotels and bakeries as part of the reported 6,000 pounds shipped from Temple, where a local businessman donated a downtown warehouse for packing and processing the pits.

Nationally, the Girl Scouts and Boy

Scouts got involved, bringing nutshells and fruit pits to 160 Army collection points. In the Girl Scout campaign, this rhyme appeared:

*“Gather up the peach pits,  
Olive pits as well.  
Every prune and date seed,  
Every walnut shell.”*

The National Council of Boy Scouts in Temple offered a cash reward to the troop contributing the most pits, and Bell County set aside official Gas Mask Days to increase donations. “It is the duty of everyone,” reported the *Daily Telegram* in 1918, “that no fruits or nut shells lay unused.”

Despite the efforts during World War I, more than 90,000 soldiers died from toxic gases, and millions more suffered irreparable damage and debilitating health problems.

The Geneva Protocol in 1925 banned the use of chemical weapons in war. An international treaty banning the production, stockpiling and use of chemical weapons was ratified in 1997. It has been signed by 192 nations.

Today, Del Monte Foods sells peach pits as biomass to generate electricity.

**Martha Deeringer**, a member of Heart of Texas EC, lives near McGregor.

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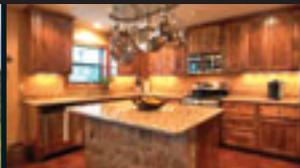


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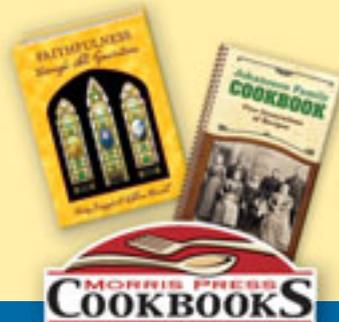
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## Berry Delicious

THESE DAYS, BERRIES ARE PRETTY much available year-round, but nothing beats the flavor of fresh, locally grown varieties. In Texas, that means early spring for strawberries, and a bit later for blackberries and blueberries. A great way to celebrate the bounty is by heading to the Poteet Strawberry Festival, April 7–9. Proceeds from the festival's Taste of Texas Food Show and Auction pay for scholarships for local students, and miles of strawberry-inspired fare make it a berry lover's nirvana. Visit [strawberryfestival.com](http://strawberryfestival.com) for more info.

PAULA DISBROWE, FOOD EDITOR

### Poteet Strawberry Pie

- 1/4 cups sugar
  - 2 tablespoons cornstarch
  - 1/4 cups water
  - 2 tablespoons fresh lemon juice
  - 1 package (3 ounces) strawberry gelatin
  - 1 quart fresh Poteet strawberries, cleaned, hulled and sliced
  - 1 prebaked 9-inch deep-dish or 10-inch regular pie shell
- Whipped cream for serving

1. In a medium saucepan, combine sugar and cornstarch. Add water and lemon juice. Over high heat, bring to a boil. Reduce heat, cook and stir until slightly thickened and clear, 4–5 minutes. Add gelatin and stir until dissolved. Cool to room temperature.
2. Stir strawberries into gelatin mixture. Pour into prebaked and cooled pie shell. Chill 4–6 hours or until set.
3. Serve topped with whipped cream, if desired. Serves 6–8.

**COOK'S TIP** Using sliced strawberries instead of whole strawberries makes the pie easier to cut.

MELISSA SKORPIL

## Berry Delicious



**THIS MONTH'S  
RECIPE CONTEST  
WINNER**

**NANCY FILER** | COSERV  
“Whenever the family got together, my grandmother would have

this torte waiting for us in the dining room,” Filer remembers. “It’s light and refreshing.” With a delicate, crackly crust (imagine an angel food cake-meringue hybrid), this torte is the perfect base for a pile of sweet, juicy berries and whipped cream.

### Grandma’s Schaum Torte

- 6 egg whites
- ½ teaspoon cream of tartar
- 1 tablespoon white or cider vinegar
- 2 cups sugar

Fresh strawberries, sliced and sweetened, to taste

Whipped cream for garnish

1. Preheat oven to 300 degrees.
2. Beat egg whites until frothy. Add cream of tartar and vinegar, and continue beating until mixture thickens. Add sugar 1 tablespoon at a time, continuing to beat until egg mixture is glossy and stiff.
3. Gently spread mixture into a 9-inch square baking dish and bake 1 hour. Transfer to a rack to cool at least 10 minutes.
4. When ready to serve, top with strawberries and whipped cream. Serve warm or at room temperature. Serves 6–8.

**COOK’S TIP** This dessert will have its best texture the day it’s made. If you want to prepare it in advance, leave it in the oven (with the heat off) to keep the meringue from weeping.

### \$100 Recipe Contest

September’s recipe contest topic is **Tailgating Favorites**. We’re recruiting blue-chip dishes to add to our roster before next season. The deadline is **April 10**.

**ENTER ONLINE** at [TexasCoopPower.com/contests](http://TexasCoopPower.com/contests);  
**MAIL** to 1122 Colorado St., 24th Floor, Austin, TX 78701;  
**FAX** to (512) 763-3401. Include your name, address and phone number, plus your co-op and the name of the contest you are entering.

## Strawberry Love Cake

VALERIE DOTY | COSERV

Decorated with heart-shaped strawberries, this swoon-worthy cake is true to its name. Doty likes it because the berries make a simple cake look spectacular. “For some, like me, decorating a fancy cake is just outside of our abilities,” she says. “This cake is beautiful in its own right.”

### CAKE

- 2 cups flour
- ½ teaspoon salt
- ½ cup butter-flavored vegetable shortening
- 1 teaspoon baking powder
- 1½ cups sugar
- ½ teaspoon almond extract
- 1¼ cups buttermilk
- 1 teaspoon vanilla extract
- 1 teaspoon baking soda
- 2 eggs

### FROSTING

- 8 ounces whipped topping, thawed
- 8 ounces cream cheese, softened
- 3 tablespoons powdered sugar
- 1 teaspoon almond extract
- 1 pound fresh strawberries, cleaned, hulled and sliced

1. Preheat oven to 350 degrees. Grease and flour a 13-by-9-by-2-inch baking dish or two 8-inch round baking dishes.
2. **CAKE:** In a large mixing bowl, combine all the cake ingredients except eggs and beat with a mixer on medium speed. Add the eggs, then beat at least another minute until combined.
3. Pour batter into the dish (or divide between two dishes) and bake 20–30 minutes, until a toothpick comes out clean.
4. **FROSTING:** In a separate mixing bowl, beat together the whipped topping, cream cheese and powdered sugar with a mixer on medium speed. Add almond extract and beat until well-blended.
5. Spread frosting over the single-layer cake and top with sliced strawberries. If making a double-layered cake, put one layer of the cake on a serving plate, rounded-side down. Top with half the frosting and half the strawberries. Press the second layer flat-side down on top of the first layer, so the strawberries squish

into the frosting. Top the second layer with remaining frosting. Do not frost the sides of the layers.

6. Cut the tops of the remaining strawberries with a gouge in the middle and then cut each berry in half lengthwise to form two hearts. Place the strawberry hearts all around the top edge of the cake and some in the center. Store the cake in the refrigerator until you’re ready to serve. Serves 8–10.

## Strawberry Yogurt Panna Cotta With Strawberry Mousse

ANITA PORTERFIELD | BANDERA EC

Traditional *panna cotta* (Italian for “cooked cream”) is made with heavy cream. In this recipe, Greek yogurt creates a similarly rich texture and adds an appealing tangy flavor. Fluffy strawberry mousse takes this panna cotta to the next level. Porterfield serves hers in wine glasses, but Mason jars or bowls also work well.

### PANNA COTTA

- 1 packet unflavored gelatin
- ¼ cup room-temperature water
- 1 cup heavy cream
- ½ cup sugar

Seeds of 1 vanilla bean

- 16 ounces plain Greek yogurt
- 4 ounces fresh or frozen strawberries, puréed
- 8 tablespoons strawberry whole-fruit preserves for topping

### STRAWBERRY MOUSSE

- 1 packet unflavored gelatin
- ¼ cup room-temperature water
- ¼ cup very hot water
- 1 cup of superfine or powdered sugar
- 4 ounces heavy cream, whipped
- 8 ounces fresh or frozen strawberries, puréed

Sliced strawberries, for garnish

1. **PANNA COTTA:** In a small bowl, bloom gelatin in water. In a small, heavy saucepan, bring cream, sugar and vanilla seeds to a simmer, stirring until the sugar dissolves. Do not boil. Remove from heat and stir bloomed gelatin into the cream mixture. Cool to room temperature.
2. Whisk the yogurt in a bowl until smooth, then add it to the cooled gelatin



mixture. Stir in puréed strawberries. Mix well.

**3.** Divide mixture evenly among eight wine glasses and chill until firm, about 2 hours. When set, spread 1 tablespoon of preserves on top of each, then return to refrigerator.

**4. STRAWBERRY MOUSSE:** In a medium bowl, bloom gelatin in room-temperature water. Add hot water and stir until gelatin is completely dissolved. Add sugar and mix thoroughly. Cool mixture until it begins to thicken.

**5.** Gently fold whipped cream and gelatin into the strawberry purée, then refrigerate until cool and thickened.

**6.** Spoon the mousse onto each panna cotta and garnish with fresh strawberries, as desired. Serves 8.

## Strawberry, Basil and Goat Cheese Grilled Chicken

CARLY TERRELL | UNITED

Charred quarters of romaine lettuce and grilled chicken give this striking main dish salad a

smoky nuance that complements tart-sweet balsamic-marinated berries and creamy crumbled goat cheese.

- 1/3 cup fresh basil, chopped
- 2 cups strawberries, quartered
- Extra-virgin olive oil, as needed
- Balsamic glaze, to taste
- 4 chicken breasts
- Salt and pepper to taste
- 2 cloves garlic, minced
- 1 bunch romaine lettuce, quartered
- 4 ounces crumbled goat cheese

**1.** Combine basil, strawberries, 1 tablespoon olive oil and balsamic glaze in a medium bowl. Gently toss, then cover and set aside.

**2.** Heat grill (or a grill pan greased with 2 tablespoons olive oil on the stovetop) to medium-high heat. Place the chicken in a large mixing bowl. Generously season with salt, pepper, garlic and 2 tablespoons olive oil, tossing to combine.

**3.** Grill chicken on each side until cooked through and golden-brown grill

marks appear. Set aside to rest.

**4.** Drizzle each quarter of romaine with olive oil, balsamic glaze, and generous sprinkles of salt and pepper. Place each quarter cut-side down on grill or pan until charred, about 2 minutes.

**5.** Arrange grilled romaine on a large platter (or individual plates, as desired) and top each with a chicken cutlet (whole or sliced). Top chicken with the strawberry-basil mixture, goat cheese crumbles, another drizzle of balsamic glaze and a final pinch of salt and pepper. Serves 4.

**COOK'S TIP** Don't confuse balsamic glaze with balsamic vinegar! The glaze is a reduction of the vinegar—and it's thick and syrupy. You can find it in the vinegar section at the grocery store. For more flavorful chicken, marinate meat with seasonings and olive oil in the refrigerator 1-2 hours before grilling.

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# Birds

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▼ **GREG KRENEK**, Mid-South Synergy: "Male wood duck taking flight from our pond at our home in Montgomery"



▲ **CHARLES ASCHENBECK**, Jackson EC: "Pine siskins come down to winter in Texas every year."



▲ **PAT DUNNUCK**, Sam Houston EC: "Found this osprey on the east end of Galveston"



▲ **KAREN RICE**, Sam Houston EC: "[Great blue] heron at sunrise at Holiday Shores Marina on Lake Livingston"

◀ **ANTHONY LOUVIERE**, Pedernales EC: "Northern cardinal cools off in a water hole on a South Texas ranch."

## UPCOMING CONTESTS

AUGUST SURF'S UP	DUE APRIL 10
SEPTEMBER AT THE RODEO	DUE MAY 10
OCTOBER COSTUME PARTY	DUE JUNE 10

All entries must include name, address, daytime phone and co-op affiliation, plus the contest topic and a brief description of your photo.

**ONLINE:** Submit highest-resolution digital images at [TexasCoopPower.com/contests](http://TexasCoopPower.com/contests). **MAIL:** Focus on Texas, 1122 Colorado St., 24th Floor, Austin, TX 78701. A stamped, self-addressed envelope must be included if you want your entry returned (approximately six weeks). Please do not submit irreplaceable photographs—send a copy or duplicate. We do not accept entries via email. We regret that *Texas Co-op Power* cannot be responsible for photos that are lost in the mail or not received by the deadline.



## Pick of the Month Wildflower Trails

**Hughes Springs** April 27-29

(903) 639-7519, hughesspringstxusa.com

Catch the blooming season amid the stately pines and oaks of East Texas along the highways connecting Avinger, Linden and Hughes Springs. Then enjoy crafts, food and a carnival.

## April 7

**Bastrop** [7-9] **Mostly Clay**, (512) 988-0034, facebook.com/bastropclayarts

**San Marcos** [7-9] **Swing on the Square**, (512) 393-8430, smtxswingfest.com

## 8

**Bryan Downtown Street & Art Fair**, (979) 822-4920, downtownbryan.com

**Decatur Glitzy Girls Trailer Park**, (940) 210-9169, glitzygirlstrailerpark.com

**Gruene Spring Walk**, (830) 625-6330

**Sealy Bluebonnet Master Gardeners Plant Sale**, (979) 865-2072, bluebonnetmastergardener.org

## 15

**Denison Easter Egg Roll**, (903) 465-8908, visiteisenhowerbirthplace.com

**Jefferson Women of Jefferson Organization 5K Scholarship Rabbit Run**, (903) 665-7954, wojo5k.com

## 19

**Smithville** [19-23] **Jamboree**, (512) 461-9216, jamboreesmithville.com

## 21

**Johnson City** [21-22] **FarmHaus Market**, (830) 330-4209, facebook.com/farmhausmarket

**Seguin** [21-22] **Yellow Rose Fiber Producers Fiesta**, (830) 433-5078, yellowrosefiberproducers.com

**Marble Falls** [21-23] **Balcones Songbird Festival**, (512) 965-2473, balconesongbirdfestival.org



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Johnson City  
FarmHaus Market

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**Bonham** Red River Art, Wine & Music  
Festival, (903) 640-2196,  
creativeartscenterbonham.com

**Canyon Lake** Earth Day, (830) 964-3744,  
tpml.org

**Hico** Flacas Clean H2O Run, (707) 695-7805,  
runsignup.com/flacascleanrun

**La Porte** San Jacinto Day Festival and  
Re-enactment, (281) 479-2421,  
sanjacinto-museum.org

**Santa Anna** Spring Craft Fair,  
(325) 348-3535, santaannatex.org

**Mooreville** [22-23] Mooreville United  
Methodist Church 150th Anniversary,  
(254) 859-9030

**Wimberley** [22-23] Arts Fest,  
(512) 826-4286, wimberleyartsfest.com

25

**Jacksonville** Tasting Jacksonville,  
(903) 586-2217, jacksonvilletexas.com

28

**Granbury** [28-29] Wine Walk,  
(682) 498-3089, granburywinewalk.com



April 29-30  
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**Buda** [29-30] Country Fair and Wiener Dog  
Races, (512) 914-2858, budalions.com

May

5

**Austin** Diamond Chefs Gala: *Starry  
Starry Night*, (512) 462-5328,  
tsdfoundation.org/diamond

**Brenham** [5-6] Maifest, (979) 836-3696,  
maifest.org

**Plainview** [5-6] Mark Marley's Go Big or Go  
Home Barbecue Bash, (806) 296-1119

**Seguin** [5-6] South Texas Cowboy Gathering  
& Western Music Festival, (830) 491-8888,  
southtexascowboygathering.com

6

**Rio Medina** South Texas Cattlewomen  
Annual Fundraiser, (210) 416-2286,  
southtxcattlewomen.com

**Gun Barrel City** [28-29] Annual Quilt Show,  
(903) 340-6547, gunbarrelquiltersguild.org

**Lamesa** [28-30] Chicken-Fried Steak  
Festival & Balloon Rally, (806) 777-1171,  
ci.lamesa.tx.us

29

**Grapeland** Folk Festival at Mission Tejas  
State Park, (936) 687-2394

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# Aisles of Blue

Visitors get to pick their own at Moorhead's Blueberry Farm near Conroe

BY RUTH FIELDS

IT'S 7 O'CLOCK ON A MAY MORNING, BUT already dozens of cars are parked at Moorhead's Blueberry Farm. It's the peak of blueberry season, and the most eager pickers arrived at 5:30, says Sid Moorhead, whose father, Albert Moorhead, founded the pick-your-own farm. One mother says of her 3-year-old, "He was still in his pajamas because we came so early."

Blueberry-hungry people drive to the farm between Conroe and Porter, and some will pick from daylight until dark. The fields are open to pickers Friday through Sunday from late May through July. Moorhead advises pickers to come in the evening to take advantage of smaller crowds and cooling temperatures.

"Large bucket or small?" Moorhead family members ask before directing us to the ripe blueberries. The farm has 20 acres and varieties of blueberries. Some ripen by Memorial Day; others wait until Father's Day or as late as the Fourth of July.

"Regulars ask for certain varieties," Moorhead says. About half of the berries are early-ripening varieties, and many pickers like them because they are large and plump. "They're fun to pick," he says. Among the later-ripening berries are Tifblue. "It's our workhorse," he says. "It makes it through the heat."

It's warm in the blueberry field, and the atmosphere is festive. The dense bushes hide people, but their voices carry. "It's the biggest blueberry in history!" a child says. A few rows over, someone begins singing.

On one row, I meet Karen Seay, a retired seventh-grade science teacher who drives about 30 minutes from Kingwood every blueberry season. "I have been coming for over 25 years," she says. "It was a family outing every year." Seay is lugging a large bucket. She'll eat the berries fresh for a couple of weeks then freeze the remaining ones for baking during winter.



Picking season runs from late May through July.

"Don't wash before freezing because then they stick together," Seay advises.

"I try to get the biggest berries," says Lilly Moore, 9, who has been coming from Kingwood to the farm with her mother, Chrissy Moore, for six years.

"We wait all year for this," Chrissy Moore says. She has discovered that the best picking is at the often-neglected top and middle of each bush.

"There's tons of blueberries!" says Brynn Johnson, 11, a first-timer. The bushes are heavy with berries, and I'm reminded of the classic children's book *Blueberries for Sal* by Robert McCloskey that describes what I hear as the berries land in my bucket: "*Kuplink, kuplank, kuplunk!*"

Blueberries are known as a northern fruit, and people often are surprised that they grow in Texas, Moorhead says. Research and experimentation, however, led to the development of heat-tolerant varieties in the 1940s. In the mid-1970s, Albert Moorhead, a descendant of farmers, Texas A&M University graduate and retired elementary school principal, attended a field trip to A&M's experimental blueberry station in Over-

ton. He bought blueberry plants from North Carolina to create the humble beginning for one of the first blueberry farms in Texas.

"My dad got four rows going, and he invited his friends to come pick blueberries. He didn't charge anybody," Moorhead says. The friends, however, felt guilty about picking free fruit and were reluctant to return. "He started charging them a dollar a pound, and they came back."

More plants were added, and the farm opened to the public. Today, the bushes — all 9,000 of them — are harvested by visitors. Blueberries are \$2.50 per pound. Honey, collected from the beehives kept nearby to pollinate the plants, costs \$5 per 12-ounce bottle.

The Moorhead family regularly updates its website, [moorheadsblueberryfarm.com](http://moorheadsblueberryfarm.com), with picking reports.

Writer Ruth Fields lives in Montgomery and is a member of Mid-South Synergy and Hamilton County EC.

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