

# COOPERATIVE CONNECTIONS



Katie Grott, field station manager at SDSU's Cottonwood research facility near Philip, stays busy overseeing several ongoing projects designed to deliver practical and profitable solutions for producers.

## Blazing new trails

**Ag research abounds at Cottonwood**  
Pages 8-9

**Line work courses through their veins**  
Pages 12-13

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**COOPERATIVE  
CONNECTIONS**

**SOUTH DAKOTA  
ELECTRIC**

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**#THANKALINEWORKER**

**THE POWER BEHIND YOUR POWER**

You've likely noticed electric cooperative crews out and about, working on power lines and other electrical equipment in the community. It's no secret that a lineworker's job is tough - but it's a job that's essential and must be done, often in challenging conditions. This month, as we celebrate Lineworker Appreciation Day on April 11, I thought I'd share some interesting facts about electric lineworkers with you.



**Trevor Jones**  
General Manager

The work can be heavy, in more ways than one. Did you know the equipment and tools that a lineworker carries while climbing a utility pole can weigh up to 50 pounds? That's the same as carrying six gallons of water. Speaking of utility poles, lineworkers are required to climb poles ranging anywhere from 30 to 120 feet tall. Needless to say, if you have a fear of heights, this likely isn't the career path for you.

Lineworkers must be committed to their career - because it's not just a job, it's a lifestyle. The long hours and ever-present danger can truly take a toll. In fact, being a lineworker is listed in the top 10 most dangerous jobs in the U.S.

Lineworkers often work non-traditional hours, outdoors in difficult conditions. While the job does not require a college degree, it does require technical skills, years of training and hands-on learning. Did you know that to become a journeyman lineworker can take more than 7,000 hours of training (or about four years)? That's because working with high-voltage equipment requires specialized skills, experience and mental toughness. Shortcuts are not an option, and there is no room for error in this line of work.

Despite the many challenges, our co-op lineworkers are committed to powering our local communities. During severe weather events that bring major power outages, lineworkers are among the first ones called. They must be ready to leave the comfort of their home and families unexpectedly, and they don't return until the job is done, often days later. That's why the lineworker's family is also dedicated to service and supportive. They understand the importance of the job to the community.

Nationwide, there are approximately 120,000 electric lineworkers who are responsible for keeping the power flowing 24/7, 365 days a year. More than 300 of them are located right here in South Dakota. To do their job, they maintain roughly 65,000 miles of power lines across all across the state. In addition to the highly visible tasks lineworkers perform, their job today goes far beyond climbing utility poles to repair a wire. Today's lineworkers are information experts who can pinpoint power outages from miles away. Line crews now use laptops, tablets, drones and other technologies to map outages, survey damage and troubleshoot problems.

Being a lineworker may not seem like a glamorous job, but it is absolutely essential to the life of our community. Without the exceptional dedication and commitment of these hardworking men and women, we simply would not have the reliable electricity that we need for everyday life.

So, the next time you see a lineworker, please thank them for the work they do to keep power flowing, regardless of the time of day or weather conditions. After all, lineworkers are the power behind your power. Please join us as we recognize them on April 11, and follow "#ThankALineworker" on social media to see how others are recognizing lineworkers.

# 10 helpful tips for spring energy savings

Every season of the year provides many unique energy-saving opportunities for you and your family.

Here are some ideas particularly well suited for you to apply this spring.

- 1. Clear the air:** Open windows to allow fresh air to circulate throughout your home.
- 2. Cook outside:** Enjoy the sunshine by using your grill or smoker to add festive flavors to meals.
- 3. Search and seal:** Cracks and spaces let conditioned air slip outdoors. Caulk and weatherstrip to seal leaks.
- 4. Natural light:** Open blinds and curtains and turn off the lights to save energy and money.
- 5. Be fan friendly:** Use ceiling fans to circulate air and keep cool.
- 6. Atmospheric adjustment:** Remember to adjust your thermostat settings for the warmer months ahead.
- 7. Tune up:** Schedule an appointment with a qualified heating, ventilating and air conditioning technician to identify any potential problems with your system.
- 8. Peak savings:** Plan household chores that require electricity during off-peak hours (when energy demand is low).
- 9. Take charge:** Consider disconnecting electrical devices you don't use regularly until you need them. Plugged-in devices use energy even when not in use.
- 10. Move outdoors:** Time spent outdoors offers opportunities to turn off lights, TVs, computers and appliances. You'll be more active, have more fun and save more money.



## DON'T TOY WITH PERSONAL SAFETY



When playing outdoors, keep a safe distance from power lines, substations and other equipment your electric co-op uses to send electricity to your home.

Flying remote-controlled toys and drones is a great way to have fun, but accidentally making contact with a power line or other electrical equipment can be dangerous and, in some cases, even deadly.

- Never fly kites or drones near power lines.
- Stay away from power lines, meters, transformers and electrical boxes.
- Never climb trees near power lines.
- If you get something stuck in a power line, call your electric co-op.



## Fire Prevention

### Jonie Smith

Jonie Smith sends out an important safety message for campers to extinguish fires before leaving the area. Jonie is the daughter of Myles and Amber Smith of Castlewood. They are members of H-D Electric Cooperative.

Kids, send your drawing with an electrical safety tip to your local electric cooperative (address found on Page 3). If your poster is published, you'll receive a prize. All entries must include your name, age, mailing address and the names of your parents. Colored drawings are encouraged.

# LIP-SMACKING BEVERAGES

## BLUEBERRY BANANA SMOOTHIE

**Ingredients:**  
 1 cup spinach  
 1/2 cup water  
 2 tbsp. apple cider vinegar  
 1 tbsp. almond butter  
 1/2 cup bananas, frozen  
 1/2 cup blueberries, frozen  
 1 tbsp. chia seeds  
 1/4 tsp. ground cinnamon  
 1/4 tsp. minced ginger  
 1/2 cup berry yogurt  
 fresh blueberries, for garnish (optional)  
 Ground black pepper to taste

### METHOD

In blender, blend spinach, water, apple cider vinegar, almond butter, frozen bananas, frozen blueberries, chia seeds, cinnamon, ginger and yogurt until smooth. Pour into two glasses and garnish with fresh blueberries, if desired.  
**culinary.net**

## FRENCH ICED COFFEE

**Ingredients:**  
 3 cups strong coffee  
 2 cups sugar  
 1 pint cream or half & half  
 1 qt. milk or almond milk  
 2 tsp. (vanilla) flavoring (other flavorings also work)

### METHOD

Dissolve sugar in hot coffee. Cool. Add other ingredients. Pour into containers (I use the tall 2 c. Tupperware for individual drinks, but also use quarts.) Freeze. Take out and let thaw.

**Ruth Schilberg, Viborg**

## SWAMP WATER

**Ingredients:**  
 1 small package lime gelatin  
 1 cup hot water  
 1 (12-oz.) can frozen unsweetened pineapple juice concentrate  
 2 liters carbonated water

### METHOD

Mix lime gelatin with hot water to dissolve. Add frozen concentrate and carbonated water. Chill. Makes 10 servings.  
**Lily Gums, Clear Lake**

## FRUIT SLUSH

**Ingredients:**  
 4 cups sugar (granulated)  
 6 cups water  
 1 46 oz. can pineapple juice  
 2 12 oz. cans frozen orange juice  
 1 12 oz. can frozen lemonade (pink or yellow)  
 2 small bananas, mashed very fine (or other fruit)

### METHOD

Mix and bring to a boil the sugar and water. When mixture is cool, add juices and fruit. Put in 5-quart pail and freeze. When frozen, use 2-3 scoops in a glass with 7-Up or ginger ale. Great drink for spring or summer.

**Alana Neville, Milesville**

## STRAWBERRY SMOOTHIE

**Ingredients:**  
 2 cup fresh strawberries, stemmed & halved  
 1 cup plain yogurt  
 1/2 cup ice cubes or chips  
 1/2 tsp. ground cardamom  
 1/4 tsp. ginger

### METHOD

In a blender, combine all ingredients. Blend on high speed until smoothie texture. Makes 2-12 oz. glasses.

**Jane Ham, Rapid City**

**Please send your favorite casserole recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2022. All entries must include your name, mailing address, phone number and cooperative name.**

### Q: I'm planning to buy a new home this year, and I want to know how efficient it is. What questions should I ask my home inspector?

A: Many factors go into buying a home. For most people, energy efficiency does not top the list, and unfortunately, houses don't typically come with energy efficiency ratings.

It can be difficult for a buyer to know how efficient a home is when viewing the listing online or taking a tour. But your home inspector can help you identify potential energy costs and energy-efficiency upgrades.

Some homes may already be efficient, while other homes may need improvements. There's nothing wrong with buying an inefficient home, but you will want to know what you're getting into and that you can afford the energy costs once you get the keys.

Here are five questions to ask your home inspector:

#### 1. What is the condition of the electrical panel and wiring throughout the home?

A panel upgrade or rewiring can be a costly endeavor. An older panel and wiring aren't inefficient, but it can delay or make some energy-efficiency projects more expensive. In several homes I have worked on, older wiring had to be replaced before insulation could be added.

Make sure the panel can accommodate any new appliances you might want to add, such as air conditioning or an electric vehicle charger.

#### 2. How old is the HVAC system, and how efficient is it? Has it been maintained?

The typical lifespan of an HVAC system is 15-25 years. As the largest energy user and often the most expensive equipment in the home, you will want to know the energy, maintenance and replacement costs. If the HVAC system is old, consider the cost for a replacement.

#### 3. How old is the water heater?

The lifespan of a storage water heater is about 10 years. The cost to replace a water heater ranges from \$400 to \$3,600, depending on the unit type and installation costs. If an older water heater is in a finished space or on a second floor, replace it before it fails and potentially causes water damage.

#### 4. What are the levels and conditions of insulation in the attic, walls and floor?

Insulation is one of the easiest and most beneficial energy-efficiency upgrades you can make. It isn't as pretty as new countertops, but it can make a home more comfortable, waste less energy and reduce outdoor noise.

To cut down on drafts and make insulation more effective, air seal before insulating. Seal cracks, gaps or holes in the walls, floors, ceiling and framing between heated and unheated spaces.

If your new home needs insulation and air sealing, make this your efficiency priority. The sooner you do it, the more energy you will save over time. Recommended insulation levels vary by location. You can find information about insulation and air sealing at [www.energy.gov](http://www.energy.gov).

#### 5. Are there any extras in this home that will increase my utility bills?

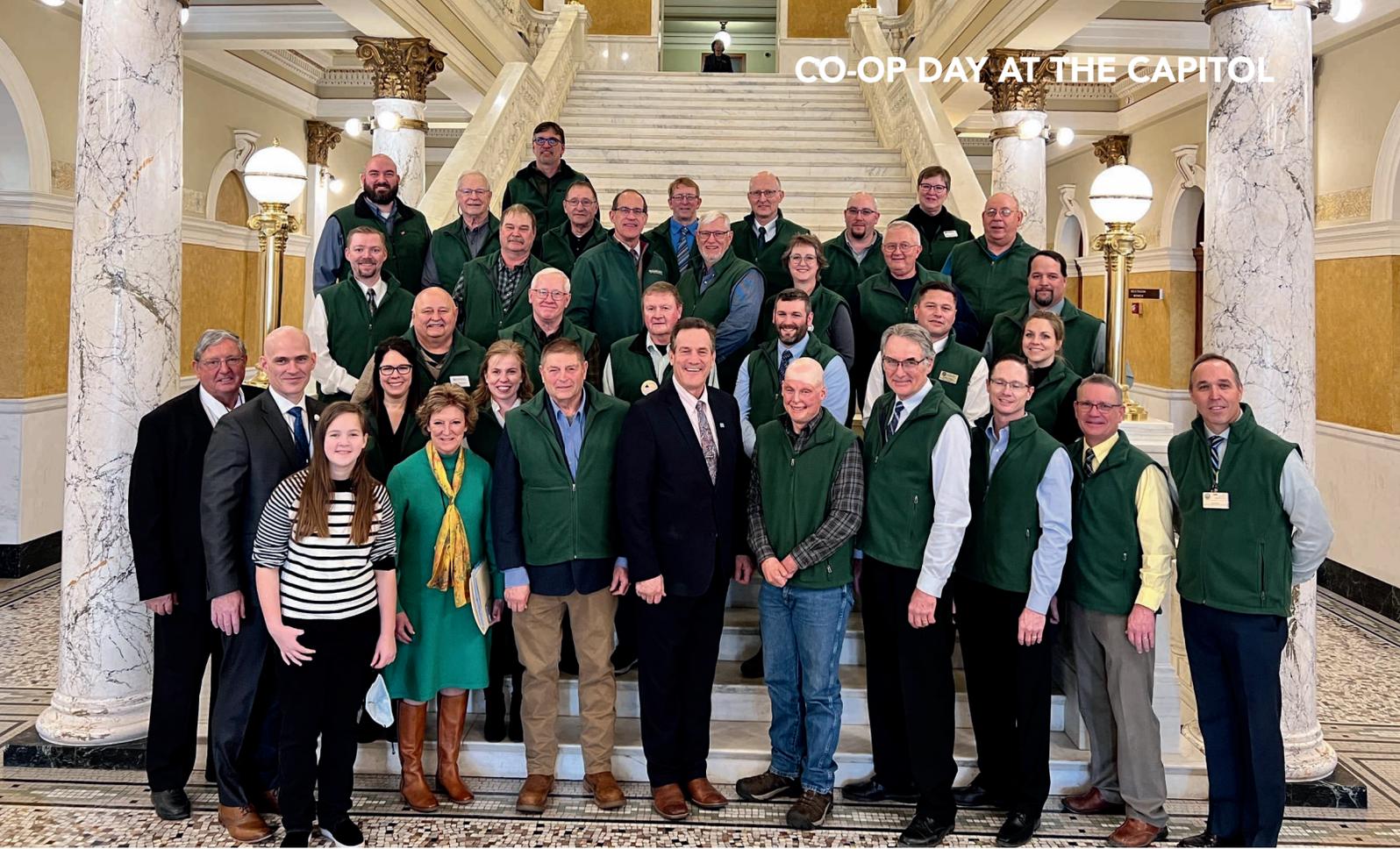
Any motors in the home or on the property should be assessed, including pumps for wells and septic systems. When it comes to extras, remember life's luxuries aren't free. You will want to be able to afford the cost of operating amenities, such as pools, hot tubs and saunas.

**Additional considerations** - You can request the home's utility bills for the previous two years from the seller or realtor. Your bill will not be the same due to your personal energy habits, but this information will give you an estimate of the home's energy costs.

When buying a home that checks all your boxes, ask your home inspector the right efficiency questions. Understanding the condition of appliances, features and building materials can save you from hidden surprises in your home and on your first utility bills.



**Miranda Boutelle**  
Efficiency Services  
Group



Electric cooperative leaders and employees from across the state traveled to the Capitol in Pierre to discuss industry-related issues with lawmakers. The group is shown above with Lt. Gov. Larry Rhoden (front/center). *Photo by Billy Gibson*

## Electric Cooperative Day at the Capitol

**Billy Gibson**

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In-depth discussions about electric vehicles, vaccinations, taxation and other hot topics were in abundance during the 2022 Electric Cooperative Day at the Capitol. Held in February just before the legislative session's "crossover day," more than 30 electric cooperative leaders traveled to Pierre in wintry weather to engage in face-to-face conversations with elected officials.

The co-op representatives also served a hot meal to more than 300 individuals including legislators, government employees, lobbyists, senior government officials and others as the centerpiece of the day's activities.

The meal, prepared by former co-op employee Roger Crom and former co-op board member Ken Gillaspie, stood as a gesture of appreciation to lawmakers and their staffs for their often arduous work

going through the process of crafting legislation.

The cooperative directors, managers and employees from organizations around the state represented the collective interests of more than 300,000 cooperative member-owners.

Topics of interest included renewable power and electric vehicles (EVs) as lawmakers considered rules pertaining to EVs such as creating a network of charging stations in the state, licensing rules and fees for public road use.

The cooperative visitors observed conversations and deliberations among lawmakers taking place during committee meetings and hearings including appropriations, education, transportation, energy and others. Afterwards, they took the opportunity to meet with their representatives, ask questions and dig deeper into the issues that could have a direct impact on electric cooperative consumers.

After the meal was served, co-op leaders gathered for an update from lobbyists representing electric cooperatives and their members.

Don Heeren, president of the board at the South Dakota Rural Electric Association in Pierre, said he looks forward to the annual Electric Cooperative Day at the Capitol because it allows him and other co-op leaders to engage in close, productive conversations with lawmakers.

"Over the past couple of years we've been forced to conduct our legislative business largely over the internet, and that's been very restrictive," Heeren said. "There's just no substitute for having personal conversations when you're charged with the responsibility of making sure the collective voice of the members you represent is heard."

Heeren added: "To be able to sit down together and have our discussions over a hot meal makes it even better."



# ROBO RANCHING

Cottonwood Field Station Manager Katie Grott and student Lily McFadden take a break from their work. *Photos by Billy Gibson*

## Cottonwood Field Research Station is abuzz with studies designed to increase producer profitability

**Billy Gibson**

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There are robo-cops, robo-codes and robo-calls. But robo-cattle ranching?

That futuristic phrase is part of the nomenclature surrounding a beef production movement called “precision ranching,” an offshoot of the “precision agriculture” approach that promotes the use of advanced technology to improve yields and profitability.

This new wave of ag research evokes postmodern images of bovines grazing through the fields wearing high tech gadgets. Turns out, it’s a description not too far off the mark, according to Dr. Jamie Brennan, an assistant professor of research and extension specialist at South Dakota State University.

Based out of the West River Research and Extension Center in Rapid City, Brennan is using SDSU’s Cottonwood Field Station near Philip to study the viability of using high-tech GPS tracking collars to deliver real-time information on steer activity and behavior.

“By monitoring animal movement we can identify changes in behavior that might indicate sickness, for example, which can be sent as an alert to producers,” Brennan said.

He’s deploying the type of advanced accelerator technology commonly associated with Fitbit watches, vehicle trackers, smartphone map apps and other monitoring devices.

“We’re working to develop the capability for producers to easily identify not only where animals are on the landscape but also where they are selecting for grazing and resting locations,” Brennan said. “The work we are doing at the station is designed to determine the potential benefits - and possible shortcomings - of precision ranching technology and to predict the return on investment for the producer.”

Brennan’s project is just one of several intriguing studies currently in play at the Cottonwood Field Station. One of six field research centers in the SDSU Agriculture Experiment Station network, Cottonwood is among the

oldest facilities of its kind in the country. Covering more than 2,600 acres, Cottonwood was established in 1907 and has received regional and national acclaim with impactful results such as developing a new method of determining stocking rates for western regions and devising the Universal Soil Loss Equation now known as RUSLE2.

These scientific forays into precision ranching include virtual fencing (Vence™), Smart Feeder™ systems, mobile app-based mineral consumption monitors, methane emissions measuring devices and soil moisture monitoring.

The exploration into virtual fencing holds plenty of promise in helping producers manage their livestock and landscape more efficiently and effectively, according to Cottonwood Field Station manager Katie Grott.

While it may be hard for an old-school rancher to envision a world without barbed wire, fence posts and cattle guards, moving this technology to market could result in substantial savings for farm families.

Grott explained the technology is a much more sophisticated version of the kind of residential-grade invisible fence



A cow at the Cottonwood Field Research Station waits patiently for a Smart Feeder to be loaded with hay.

designed to keep pets from wandering around the neighborhood streets. Virtual fencing is already being used to contain goat herds and other smaller animals with measurable success.

The latest research testing involves combining an electrical pulse administered through a GPS-enabled collar, combined with an auditory stimulus to keep cattle confined within certain boundaries. A software program allows the rancher to define those boundaries as needed for successful grazing rotation and land management.

“We’re looking at how virtual fencing affects animal behavior, performance and natural resources,” Grott said.

Dr. Krista Ehlert, assistant professor and extension specialist, is also involved in the project and adds, “Virtual fencing turns physical labor into cognitive labor for producers, helping to reduce labor and potentially improve work-life balance for producers.”

Other projects at Cottonwood include work being led by assistant professor Dr. Hector Menendez. The research uses technology developed by the Rapid City firm, C-Lock. C-Lock has a scale that collects daily weight records on animals every time they drink. The data provide

valuable information on stocking rates, forage quality and weather conditions on individual animal performance.

“It’s an exciting time in the area of agricultural research,” Menendez said. “We have secured funds to proceed with a project on interdisciplinary engagement in animal systems and precision livestock water monitoring. And we’re excited about holding producer-oriented workshops, training classes and field days to educate producers on how these advancements can improve their profitability.”

One rancher who keeps a close eye on the latest research results is Eric Jennings, president of the South Dakota Cattleman’s Association.

“There are some interesting new concepts being explored through this facility and others,” Jennings said. “We’re watching to see which of these systems prove to become both practical and affordable for producers to implement in their daily operations. For instance, the idea of virtual fencing has been around for a while, but the research and application of new technology has emerged as a viable option.”

Brennan, Ehlert, Menendez and others who work daily to blaze new pathways

Amount of acres  
researchers have

**2,640**

at their disposal at the  
Cottonwood  
Field Station

for cattle producers take gratification from knowing their labor and application of scientific methods could result in a farm family turning the corner toward profitability and sustaining a generational way of life. Plus, they enjoy drawing students into the process and inspiring the next generation of farmers.

“They receive training in animal science, rangeland ecology, precision technology, modeling, computer programming and boots-on-the-ground ranching,” Menendez said. “One of our aims is to encourage the next generation of professionals that can merge precision technology to maximize rangeland livestock production while maintaining ranching culture.”

## DON'T FEAR THE METER

### How Smart Meters Benefit Consumers

Ever wondered why electric utilities are replacing analog meters with smart meters? Despite a wealth of misinformation, smart meters provide many benefits to consumers.



Smart meters are extremely accurate and provide real-time energy use data, eliminating the need to estimate billing.



Smart meters allow two-way communication from the meter to the utility. They pinpoint power outages and other disruptions in real time and limit the need to physically access the meter on your property.



As more smart meters are installed, utilities are better able to forecast energy demand, which will help improve our nation's grid.



## Smart electric meters help members by delivering accurate, real-time information

Paul Wesslund

A gizmo that's probably hiding in plain sight just outside your home is innovating your electric service with quicker responses to outages and more effective use of renewable energy.

It's your electric meter. And if it hasn't been switched from an analog model with a small metal wheel spinning behind its glass case to one with a digital readout, it likely soon will be.

Digital smart meters make up more than half the electric meters in the country, and electric cooperatives are leading the way. Fifty-eight percent of all U.S. utility customers use smart meters. For electric co-op members, that figure is 73 percent and climbing.

Two features make smart meters different. One is the ability to monitor energy use with the kind of detail that can give both the co-op and its members information to make more efficient use of electricity. The other is the ability to

instantly send information back to the co-op either through low-power radio signals, or through power lines. Those two capabilities create entirely new ways to improve your electric service:

- Outages can be detected and repaired faster. Smart meters can let the co-op know of an interruption, pinpointing the location, without waiting for someone to report it;
- Electricity can be used more efficiently. Smart meters can report unusual energy use, showing appliances that might be faulty or could be replaced with a more efficient version;
- Alternative energy can be better integrated into the grid. Smart meters can help cure one of the headaches of renewable energy - solar energy disappears at night and wind power stops in calm weather. Data from smart meters can be analyzed by computers and coordinated with power plants, rooftop solar panels and wind turbines;
- Co-op members can be involved in a more decentralized electricity system.

Solar panels and electric vehicles make complicated additions to a utility network. But those can be turned into benefits by analyzing the data provided by smart meters. For example, as electric vehicles gain popularity, co-ops are exploring special rates to encourage charging when energy use is low;

- Co-op operations can be streamlined. Faulty equipment can be detected before it fails.

Concerns about smart meters, including health effects of their radio signals, have been addressed by the American Cancer Society as studies show the strength of smart meter transmissions is far below those from a cell phone or your TV's remote.

Other concerns include privacy. However, electric co-ops have a long tradition of protecting the data of their members.

Co-ops adopted digital meters to save money by avoiding traveling long distances through rural areas just to read a meter. They've kept up that progress, adding other devices to create a new concept of the electric utility grid.



Basin Electric Cooperative's Dry Fork Station in Wyoming is located near a site being developed for a large-scale carbon storage project.

### Katherine Loving

Providing reliable, affordable electricity is the top priority for electric cooperatives. Co-ops and other electric utilities continue to incorporate additional energy generated from renewable sources, but until these technologies fully mature, fossil fuels remain a part of our overall generation mix to ensure reliability.

As the U.S. moves forward with carbon reduction goals, co-ops are also looking for ways to provide clean energy and offset the carbon that's generated during power production. Capturing carbon emissions at their creation source is one of those approaches.

Carbon capture involves a series of steps that removes carbon dioxide (CO<sub>2</sub>) from its original source to prevent it from reaching the Earth's atmosphere. During the capture step, CO<sub>2</sub> is removed either before or after combustion.

Post-combustion capture is the most common method used at existing power plants. After electricity is generated, the CO<sub>2</sub> is removed from the gas mixture found in a plant's flue.

In pre-combustion capture, the fuel

sources are heated with pure oxygen (or steam and oxygen) to release CO<sub>2</sub>.

Once captured, the CO<sub>2</sub> is transported to its next destination. Typically, CO<sub>2</sub> moves as compressed gas in pipelines but can also be transported by tanker trucks or ships. Captured CO<sub>2</sub> can be injected into geological formations or recycled for other uses.

One appeal of carbon capture is the abundance of underground natural storage locations, such as deep aquifers, porous rock and unproductive mines. The U.S. Geological Service estimates the U.S. has the potential to store 3,000 metric gigatons of CO<sub>2</sub>, the equivalent of centuries worth of emissions.

Research on how to recycle CO<sub>2</sub> is ongoing, but established uses include using the gas in enhanced oil recovery, growing fish food from lab-grown bacteria that feed on CO<sub>2</sub> and creating carbon-negative concrete or other carbon-based materials.

As promising as carbon capture sounds, the costs and risks limit the technology's ability to be implemented on a larger scale. Post-combustion capture often requires expensive retrofitting of power plants.

Pre-combustion capture, while more effective, has been limited due to high costs of equipment and pure oxygen.

In addition to these costs, the processes require a large amount of energy. Transportation of the gas increases in cost for longer distances between the source and destination, making plants located far away from sequestration locations less feasible. Sequestration also carries the concern of CO<sub>2</sub> leaks, which would negate the effort to remove it from the atmosphere.

Despite these hurdles, carbon capture is seen as an important technology in reducing emissions.

In 2015, XPRIZE, a technological development competition, aimed to award \$20 million to develop new and emerging technologies that utilize CO<sub>2</sub>. The winning project was a carbon-negative concrete created by a team of UCLA researchers called CarbonBuilt. The research team conducted tests at Basin Electric's Integrated Test Center to turn flue gases and fly ash into carbon-negative concrete. The process reduces the carbon emissions of concrete production and traps additional carbon long-term within the final product.

# VOLTAGE IN THEIR VEINS

The Miller and Wingen men share a total of 177 years of experience in the electric utility industry. Pictured above are Joel Miller, Rollie Miller, Travis Miller, Corey Miller, Wes Wingen and Dustin Wingen.

## Miller, Wingen utility workers represent a combined 177 years of faithful service

### Tara Miller

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Take a moment to imagine life without electricity. No household appliances, no electric heat, no air conditioning, no internet and no phone. In 1925, only half of homes in the U.S. had electricity. Fast forward to 2022, and electricity is a basic necessity.

April is Lineworker Appreciation Month – a time to celebrate and honor the brave men and women who often work in hazardous conditions to power our world.

The Miller family, originally from Canova, has 177 years of electric industry experience, and most of them started their careers as lineworkers.

### WHERE IT ALL STARTED

Before attending school to become a lineworker, Joel Miller, better known as “Joe” or “Smokey” to some, graduated from Canova High School and began working at Overhead Door Company

in Sioux Falls. While he didn’t mind the work, he knew it wasn’t what he wanted to do for the rest of his life. Joe then heard about an opportunity to attend school and become a lineworker.

“I knew Ron Callies. He was an instructor,” Joe said. “He told us to look at the program, so Robert Zens and I checked it out and thought we would give it a try.”

Joe graduated from what is now known as Mitchell Technical College (MTC) in 1978 and began the family’s legacy of life on the line when he joined East River Electric in Madison. He started on the construction crew and later worked in maintenance. His friend Robert Zens also worked at East River Electric, but passed away in a motorcycle accident in 1980.

Joe worked at East River Electric for nearly 20 years before he moved to Western Area Power Administration (WAPA) in Pierre. WAPA is a federal organization that markets and delivers hydroelectric power and related services

across the 15-state region. Joe retired from his position of line foreman at WAPA in 2020 after 43 years.

### FOLLOWING THE LEADER

Rollie was next in the Miller family line-up, a year younger than Joe. His mom talked him into going to Pipestone, MN, to work at Bayliner Boats with his older brother Ed. Rollie then worked at Feterl’s Manufacturing in Salem where he welded augers until he decided to enroll in line school at MTC at the age of 20.

“The biggest reason I went to line school was because Joe had just done it, and I was friends with Robert Zens. I saw how they just did it, and I thought I could do it, too,” Rollie explained.

Rollie now manages Vigilante Electric Cooperative in Dillon, MT. Before running the show, he worked for an electrical contractor and for West River Electric.

He then attended SDSU and worked for Bob’s Electric in Flandreau with Reggie Gassman, who is manager of customer electrical services at Sioux

Valley Energy. They both grew up in the Canova area.

Rollie earned a bachelor's degree in electrical engineering, allowing him to become a licensed professional engineer.

"My education has greatly benefited me throughout my career," Rollie said.

Rollie's boys are also following the family tradition. Cody Miller attended SDSU to become an electrical engineer and consults for electric utilities, and Logan "L.J." Miller is enrolled in the power line construction and maintenance program at MTC.



Cody Miller



L.J. Miller

"It's not a cake walk. I told them you really have to study and work hard," he said.

After Rollie, Corey was the next Miller brother to attend MTC.

"The reason I went into it is because I had two older brothers who were

linemen. I knew when I was a freshman in high school that I was going to be a lineman," Corey said.

After graduating from MTC in 1987, Corey became an apprentice lineworker at Public Service of New Hampshire. He worked there for three years, then took a position at Missouri Public Service.

Like his brothers, Corey worked his way up the ranks. He was hired as a lineworker and promoted to foreman, then supervisor, and now works in management. He is also on the board of directors for the International Lineman Rodeo Association, helping host the annual lineman rodeo event which promotes lineworker safety.

Corey's 15-year-old son Zach plans to become a lineworker after high school. Corey shares this advice for anybody

- **Joel Miller**, Retired Line Foreman at Western Area Power Administration (Pierre, SD)  
43 Years, 6 months of industry experience
- **Rollie Miller**, General Manager at Vigilante Electric Cooperative (Dillon, MT)  
42 years, 6 months of industry experience
- **Corey Miller**, Director of Regional Operations at Evergy (Lexington, MO)  
35 years, 6 months of industry experience
- **Travis Miller**, Foreman at Southeastern Electric (Salem, SD)  
30 years of industry experience
- **Wes Wingen**, Manager of Meter Services at Black Hills Power (Rapid City, SD)  
15 years, 10 months of industry experience
- **Cody Miller**, Electrical Engineer (Dillon, MT)  
8 years, 6 months of industry experience
- **Dustin Wingen**, Former Lineworker at Alaska Village Electric Co-op (Anchorage, AK)  
2 years of industry experience
- **Logan (L.J.) Miller**, Student in the power line program at Mitchell Technical College

considering a career in the field:

"We need linemen. It is an awesome profession to get into. Linemen live to restore power – that's their lifeblood. And, quite honestly, you will make a very good wage while doing that."

Travis was the last of the Miller brothers to attend line school. He decided milking cows wasn't his calling, so in 1991 at age 26, Travis followed the path started by his big brother Joe.

"I figured they all did it, so I could probably do it better," Travis joked. He is now the foreman at Southeastern Electric in Salem.

Wes and Dustin Wingen are the sons of Stacy (Miller) and Bob Wingen. They are nephews to the Miller brothers and have also been involved in the electric utility industry. Dustin was a lineworker in Anchorage, AK, before coming back home to farm. Wes is an engineer and manager of meter services at Black Hills Power in Rapid City.

### IT'S A MILLER THING

The Miller family had nine children: Sandy, Duane, Ed, Joe, Rollie, Stacy, Derrin, Travis and Corey. Marcella, mother of the youngest eight children,

passed away in 2011, and Duane "Stub" Miller, the family patriarch, currently resides in Howard. Stub shared, "People don't know it today, but having electricity is something we shouldn't take for granted."

The four Miller brothers share a combined 151 years of electric industry experience. When you add it all up, the Miller and Wingen men boast an impressive 177 years of electric industry experience.

They couldn't have worked in this profession without the support of their families, which are too large to list. All the storm jobs, dangerous assignments and family moves were worth it when they think about the people they serve. They all agree, "It's a Miller thing" and working with voltage is in their veins.

### THANK A LINEMAN

Please take time to thank lineworkers for all they do to brighten our lives. We thank the Miller family for their many years of service in the industry.

*Editor's note: Writer Tara Miller is Travis Miller's wife and works for Central Electric Cooperative near Mitchell.*



# FORAGING FOR FUN

Jayne Pfeifle of Timber Lake is fond of foraging for fruit, which she turns into delicious jellies and jams. *Photo by Roger Lawien*

## Foraging for 'found food' can be fun and also good for your diet plan

**Billy Gibson**

[billy.gibson@sdrea.coop](mailto:billy.gibson@sdrea.coop)

Back when Jayne Pfeifle was a little girl and ventured outdoors to gather chokeberries with her mother, her thoughts were fixed on the delicious jellies and jams she'd soon enjoy.

She wasn't aware she was engaging in an activity that would come to be known decades later as "foraging." For all she knew, foraging for food was something wild animals did when they got hungry.

With the steady lifting of pandemic restrictions, many people across the country are taking to the outdoors to avail themselves of what's called "found

food" or "nature's free grocery store."

As an indication of the rising popularity of foraging, one social media star from Ohio has amassed nearly 3.5 million TikTok followers, in addition to nearly a million more fans on Instagram. Alexis Nikole Nelson, 29, has been featured on National Public Radio, Fortune magazine, The New York Times and other news and entertainment outlets.

During the pandemic, Nelson started posting videos from her forays into the forests to gather edible mushrooms, berries, weeds and other plants. She was floored by the response she received.

Some subjects included "Where to find mushrooms that taste like shrimp,"

"How to make 'bacon' out of acorns," and "How to make 'danger bread' using cow parsnip." But Nelson struck social media gold when she posted a video that got the attention of people left financially strapped by the pandemic: "How to 'stretch' groceries by foraging."

Before long, a wider audience of outdoors enthusiasts were gravitating toward the notion that foraging can not only be enjoyed either solo or with others, but it can also be adventurous while saving money and promoting a more nutritious diet.

For Pfeifle, much of the satisfaction she derives from foraging for chokeberries, plums, elderberries and other wild edibles is making sure her husband of 39 years has a tangy treat to spread on his breakfast toast.

"Clyde likes his jelly and toast every

## What to take

- Bug spray
- Sunscreen
- Long pants (for prickly and/or poisonous plants)
- Gardening gloves
- A basket or bag for storage
- A GPS or phone for maps
- Scissors or a hunting knife



Morel mushrooms are a favorite target for many foragers in search of free food and fun.

morning,” she said of her husband, her frequent foraging field companion. “I enjoy getting out and gathering the berries and he enjoys the jelly, so it makes everybody happy.”

Just don’t ask her to deal with buffaloberries. That’s where Pfeifle draws the line.

“It’s a tiny berry. They’re hard to pick, hard to clean and hard to process. The jelly is good, but it’s too much hard work and not worth the trouble,” said Pfeifle, who has served as an educator at Timber Lake Elementary for the past 48 years.

Little Moreau Recreation Area is a prime public picking place for Pfeifle and other people in the Timber Lake area, but she stays close to the vest when asked to disclose some of her other favorite foraging sites. It so happens that holding secrets is a quality found in many foragers, akin to a fisherman’s reluctance to announce to the world where the fish are biting.

Jaclyn Arens, communications and marketing coordinator at Bon Homme Yankton Electric Cooperative, looks forward to foraging for morel mushrooms when the weather warms up in the spring. She’s learned over the past

few years since she began the hobby that there’s a limited window of time for the best hunting.

“We start scouting at the end of March, but we don’t usually find anything until April and May,” she said. “The soil temperature is important, and the morels don’t pop up until it’s warm enough, about 50 degrees. They burn up or disappear when it gets too warm.”

In keeping with the forager’s unspoken code of silence, she’ll say when and how, but she won’t say where.

“I will say we look for places that have moist soil and deciduous trees like oak, elm, ash and cottonwood. Forests with big, old, decaying trees are best because morels grow from the root systems of dying trees. People have had luck in places where trees have been cut down or burned. There is plenty of public land in South Dakota to explore,” Arens said.

One pro tip Arens offers is to bring along a mesh bag to store your morels. The mesh material allows the spores to spread while hunting for more mushrooms. Another pro tip: if you do find an elusive morel, freeze in your tracks...there are likely more close by, so it’s wise to stop before accidentally trampling over a perfectly fine ’shroom.

In addition to the lure of the hunt, the taste of morels and the quality time spent with her boyfriend, Arens really



Jaclyn Arens

enjoys the annual ritual of getting out into the wild after a long winter.

“My favorite thing is getting outside in the spring after being cooped up in

the winter,” she said. “Plus, morels are delicious, and they taste even better after a long day of mushroom hunting. My favorite way to cook morels is to lightly batter them in flour and fry them in a hot pan with butter. Yummy!”

She encourages beginners to follow a few basic rules:

- Avoid areas beneath or around electric power lines.
- Avoid trespassing on private property.
- Never eat anything unless you can identify it with 100 percent accuracy.
- Take a companion along for fun and safety.
- Try to avoid areas where chemicals or insecticides may have been applied.

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**APRIL 16**  
Easter Egg Hunt at  
Reclamation Ranch, Mitchell, SD

To have your event listed on this page, send complete information, including date, event, place and contact to your local electric cooperative. Include your name, address and daytime telephone number. Information must be submitted at least eight weeks prior to your event. Please call ahead to confirm date, time and location of event.

To view the publication's master event calendar, scan the QR code below:



Or visit <https://sdrea.coop/cooperative-connections-event-calendar> to view more upcoming events.

**MARCH 25-26**

**Schmeckfest**  
748 S Main Street, Freeman, SD, 605-925-4237

**MARCH 26**

**Annual Ag Day**  
Washington Pavilion, Sioux Falls, SD, 605-367-6000

**MARCH 30**

**Elton John Tribute Concert**  
Performing Arts Center, Mitchell, SD, 605-770-7813

**APRIL 2**

**Watertown Coin and Currency Show**  
Elks Lodge, Watertown, SD, 605-882-4663

**APRIL 2-3**

**Youth & Family Services' 25th Annual Kids Fair**  
The Monument, Rapid City, SD, [youthandfamilyservices.org/kids-fair/](http://youthandfamilyservices.org/kids-fair/)

**APRIL 8-9**

**Forks, Corks & Kegs Festival**  
Various Locations, Deadwood, SD, [deadwood.com/event/forks-corks-kegs](http://deadwood.com/event/forks-corks-kegs)

**APRIL 8-9**

**Jackrabbit Stampede Rodeo**  
Swiftel Center, Brookings, SD, [swiftelcenter.com](http://swiftelcenter.com)

**APRIL 8-10**

**CAHF Spring Fling Eggstravaganza Series**  
Carroll Acres Hobby Farm, Rapid City, SD, [carrollacreshobbyfarm.com](http://carrollacreshobbyfarm.com)

**APRIL 8-16**

**The Passion and the Cross**  
Orpheum Theater Center, Sioux Falls, SD, [siouxfallsorpheum.com](http://siouxfallsorpheum.com)

**APRIL 9**

**Keystone Spring Fling Vendor Fair**  
1101 Madill Street, Keystone, SD, 605-786-3035

**APRIL 9-10**

**DGTCA Gun Show**  
Rushmore Civic Center, Rapid City, SD, 605-270-0764

**APRIL 16**

**Easter Egg Hunt**  
Reclamation Ranch, Mitchell, SD, 605-770-2867

**APRIL 22**

**River Rat ½ Marathon, 10K, and 5K**  
Gavins Point Area, Yankton, SD, [allsportscentral.com](http://allsportscentral.com)

**APRIL 22-23**

**Junkin' Market Days**  
W. H. Lyon Fairgrounds, Sioux Falls, SD, 605-941-4958

**APRIL 23**

**Lakota All Star Basketball Games**  
The Monument Summit Arena, Rapid City, SD, 605-342-41985

**APRIL 23**

**Martina McBride**  
Swiftel Center, Brookings, SD, [swiftelcenter.com](http://swiftelcenter.com)

**APRIL 23**

**Winefest Renaissance**  
1121 1st Avenue SE, Aberdeen, SD, 605-225-8714

**APRIL 23-24**

**46th Mobridge Area Art Show**  
Scherr-Howe Arena, Mobridge, SD, 605-845-2060

**APRIL 23-24**

**Brookings Quilt Guild Show**  
Swiftel Center, Brookings, SD, 605-690-3246

**APRIL 27-30**

**45th Annual Kingswood Rummage Sales**  
Southwest Sioux Falls, SD, [kingswoodrummage.com](http://kingswoodrummage.com)

**APRIL 28-30**

**26th Annual Black Hills Dance Festival**  
The Monument, Rapid City, SD, [blackhillsdancefestival.com](http://blackhillsdancefestival.com)

**APRIL 29-MAY 1, 5-7**

**Ordinary Days**  
Grand Opera House, Pierre, SD, [pierreplayers.com](http://pierreplayers.com)

**APRIL 30**

**SDSO Centennial Finale**  
Washington Pavilion, Sioux Falls, SD, [sdsymphony.org](http://sdsymphony.org)

**MAY 7**

**Cinco de Mayo Fiesta**  
131 E Falls Park Drive, Sioux Falls, SD, 605-274-3735

**MAY 14-15**

**Ellsworth Air and Space Show**  
1940 EP Howe Drive, Ellsworth AFB, SD, [ellsworthairshow.com](http://ellsworthairshow.com)

**Note: Please make sure to call ahead to verify the event is still being held.**