

CONNECTIONS

Mammoth Discovery

Coal Miner Finds Mammoth Tusk Pages 8-9

A Golden Harvest Pages 12-13 **CEO COLUMN**

Have a Safe August

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Matt Sleep CEO

August is a good time to start talking about safety. Not only is safety important when school starts, but it is also very important when dealing with electricity. Earlier this summer we had a couple of "near misses" with our electrical system. Both were accidents. Neither involved any Co-op personnel. However, both are good examples of what can happen when electrical lines are exposed.

The first occurred west of Spearfish. There must have been a burst of wind, on what seemed like a calm evening, that blew over a billboard. The posts were rotten and when the structure blew over it took down part of our system that served the billboard causing sparks which in turn caused a small grass fire. The area was a little marshy so there wasn't much of a fire. The Spearfish fire department did a great job putting the fire out. Our crews responded and restored the electricity to the area.

The second occurred east of Belle Fourche on Highway 34. An out of state driver had some health issues while driving. The driver lost control of the vehicle, went off the highway up, over an approach, across the ditch onto one of our electrical pedestals, and then continued off into an irrigation canal. The cables in our pedestal sparked and caused a small grass fire. The Belle Fourche fire department came out and put the fire out and first responders dealt with the accident. Our crews responded and restored the electricity to the area.

In both instances we experienced power outages in the affected areas. This means that there were a few of you without power. Whenever there is a power outage we start getting phone calls. Note: we use an automated system that will send out texts when we have an outage to the areas impacted. The texts have estimated time that the power will be restored, please understand that these are just estimates NOT guarantees when the power will be back on. It is important for everyone to understand that when there is an outage, we have crews that are scrambling to get out and fix them as fast and as safely as possible. They are often out when conditions are not ideal working on getting the power back on. In the two instances above the weather was decent and they were during daylight hours. There are a lot of times when the conditions and timing are not so good, and we have no control over the circumstances.

We have two types of outages. The first is a planned outage. A planned outage occurs when our crews need to complete some work on the powerline. Depending on the circumstances of the planned outage, we try our best to give advanced notice so that those affected by the planned outage know about it and can plan for it.

The second type of outage is an unplanned outage. The two instances above are examples of unplanned outages. Unplanned outages are completely out of our control. Unplanned outages can be caused by anything from mechanical failure to a tornado.

Whether planned or unplanned our crews are out trying to get the power back on for you. Their safety is ours, and should be everyone else's, number one priority and getting the power back on to you, the members, is our second priority. Please keep in mind that Electricity is extremely dangerous to deal with. Our crews are often out working with it in the most extreme conditions. So, the next time the power goes out, please keep those crews in your thoughts as they work on getting your power back on. We strive to keep the lights on and be safe doing it!

It's good practice to always watch out for and stay clear of power lines. If you see a power line on the ground or very low or has a tree on it, please call us. Our number is 605-456-2494.

Have a Happy and Safe August!

COOPERATIVE

CONNECTIONS

BUTTE ELECTRIC

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Harvest workers urged to take time to reap safe harvest

It can be an exciting and exhausting time, the culmination of a season of hard work. However, the rush to harvest can also yield tragic outcomes. Each year, dozens of farm workers are killed and hundreds are injured in accidents involving power lines and electrical equipment.

"Things people see every day can fade from view and in the busy-ness of harvest time, it's easy for farm workers to forget about the power lines overhead," says Richard McCracken of the Safe Electricity Advisory Board. "But failure to notice them can be a deadly oversight."

Review with all workers the farm activities that take place around power lines. Inspect the height of farm equipment to determine clearance. Keep equipment at least 10 feet away from power lines – above, below and to the side – a 360-degree rule.

"Always lower grain augers before moving them, even if it's only a few feet," says Bob Aherin, PhD, CSP & University of Illinois Professor and Agricultural Safety & Health Program Leader. "Variables like wind, uneven ground, shifting weight or other conditions can combine to create an unexpected result Also use extreme caution when raising the bed of a grain truck."

Farm workers should take these steps to ensure a safer harvest season:

- Use care when raising augers or the bed of grain trucks around power lines.
- Use a spotter when operating large machinery near power lines. Do not let the spotter touch the machinery while it is being moved anywhere near power lines.
- As with any outdoor work, be careful not to raise any equipment such as ladders, poles or rods into power lines. Remember, non-metallic materials such as lumber, tree limbs, ropes and hay

will conduct electricity depending on dampness, dust and dirt contamination.

- Never attempt to raise or move a power line to clear a path!
- Don't use metal poles to break up bridged grain inside bins. Know where and how to shut off the power in an emergency.
- Use qualified electricians for work on drying equipment and other farm electrical systems.

Operators of farm equipment or vehicles must also know what to do if the vehicle comes in contact with a power line: Stay on the equipment, warn others to stay away and call 911. Do not get off the equipment until the utility crew says it is safe to do so.

"If the power line is energized and you step outside, touching the vehicle and ground, your body becomes the path and electrocution is the result," Aherin said. "Even if a power line has landed on the ground, the potential for the area nearby to be energized still exists. Stay inside the vehicle unless there's fire or imminent risk of fire."

If this is the case, jump off the equipment with your feet together, without touching the ground and vehicle at the same time. Then, still keeping your feet together, hop to safety as you leave the area.

Once you get away from the equipment, never attempt to get back on or even touch the equipment. Some electrocutions have occurred after the operator dismounts and, realizing nothing has happened, tries to get back on the equipment.

It is very important that all farm workers and seasonal employees are informed of electrical hazards and trained in proper procedures to avoid injury.

For more information on farm electrical safety, visit www.SafeElectricity.org

Extreme Heat Preparation

Learn How to Stay Hydrated

You need to drink enough water to prevent heat illness. An average person needs to drink about 3/4 of a gallon of water daily. Everyone's needs may vary.

- You can check that you are getting enough water by noting your urine color. Dark yellow may indicate you are not drinking enough.
- Avoid sugary, caffeinated and alcoholic drinks.
- If you are sweating a lot, combine water with snacks or a sports drink to replace the salt and minerals you lose in sweat.
- Talk to your doctor about how to prepare if you have a medical condition or are taking medicines.

Make a Plan to Stay Cool

Do not rely only on electric fans during extreme heat. When temperatures are in the high 90s, fans may not prevent heat-related illness. Taking a cool shower or bath or moving to an air-conditioned place is a much better way to cool off.

- Spending a few hours each day in air conditioning can help prevent heat illness.
 - If you have air conditioning, be sure that it is in working order.

- If you do not have air conditioning or if there is a power outage, find locations where you can stay cool. For example, a public library, shopping mall or a public cooling center. Plan how you will get there.

- Additional resources may be available from local government or community groups.

- Make sure you have plenty of lightweight, loose clothing to wear.
- Create a support team of people you may assist and who can assist you. Check in with them often to make sure that everyone is safe.

Learn Emergency Skills

- Learn how to recognize and respond to heat illness.
- Learn First Aid and CPR.
- Be ready to live without power. Utilities may be offline. Be ready to live without power, gas and water. Plan for your electrical needs, including cell phones and medical equipment. Talk to your doctor. Plan for backup power

Gather Emergency Supplies

• Gather food, water and medicine. Stores might be closed. Organize supplies into a Go-Kit and a Stay-at-Home Kit. In the event of a power outage, you may lose access to clean drinking water. Set aside at least one gallon of drinking water per person per day. Consider adding drinks with electrolytes. Include sunscreen and widebrimmed hats.

- Go-Kit: at least three days of supplies that you can carry with you. Include backup batteries and chargers for your devices (cell phone, CPAP, wheelchair, etc.)
- Stay-at-Home Kit: at least two weeks of supplies.
- Have a one-month supply of medication in a child-proof container and medical supplies or equipment.
- Keep personal, financial and medical records safe and easy to access (hard copies or securely backed up)
- Consider keeping a list of your medications and dosages on a small card to carry with you.

Source: American Red Cross



Power Line Safety "Call 911 and Don't Get Out"

Hobie Klein, Age 12

Hobie Klein warns farmers to call 911 and don't get out of the tractor if contact is made with a power line. Hobie's parents are Dean and Karey Klein, members of Sioux Valley Energy.

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.

Summe

MOM'S VEGETABLE SALAD

Ingredients:

Salad 2 cans diced carrots 1 can green beans 1 can yellow beans 1 small can peas 1 can cut baby corn Drain all the vegetables

Add 1/2 cup diced green pepper 1 cup diced celery 1 diced medium onion

Dressing

Combine in a saucepan 1/2 cup oil 1 1/3 cup sugar 1/3 cup white vinegar 1/3 cup cider vinegar 2 Tbsp water Combine in a saucepan and boil until clear

Method

Pour dressing over vegetables and refrigerate for several hours before serving. Keeps for a week.

Debra Clow Harrisburg, S.D.

FRESH SUMMER SALAD

Ingredients:

- 3 tbsps. olive oil, divided
- 1 tbsp. lime juice
- 1/4 tsp. salt
- 1 1/5 cups fresh corn or thawed frozen corn
- 1 1/2 cups cherry tomatoes, halved
- 1/2 cup cucumber, finely chopped
- 2 tbsp. fresh basil, minced
- 1/3 cup crumbled Feta cheese or Parmesan cheese
- 1 tbsp. balsamic vinegar or Italian salad dressing

Method

Mix 2 tablespoons of oil, lime juice and salt in a small bowl. Cook corn in a skillet with remaining 1 tbsp. oil. Pour corn into bowl, cool slightly. Add tomatoes, cucumber and basil. Refrigerate. Before serving, drizzle with dressing, cheese and balsamic vinegar or Italian dressing.

Barb Selland Mitchell, S.D.

CHICKEN SALAD

Ingredients:

- 1/2 cup plain lowfat yogurt
- 2 tbsps. mayonnaise
- 1 tsp. parsley flakes
- 1/2 tsp. seasoned salt 1/4 tsp. ground black pepper
- 1/2 rotisserie chicken, cut into bite-size chunks (about 2 cups)
- 1/2 cup thinly sliced celery
- 1/4 cup chopped red onion

Method

Mix yogurt, mayonnaise, parsley, seasoned salt and pepper in large bowl. Add chicken, celery and onion; toss to coat well. Cover. Refrigerate at least 30 minutes or until ready to serve. Serve in sandwiches or on salad greens.

McCormick.com

Please send your favorite 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 2024. All entries must include your name, mailing address, phone number and cooperative name.

Types of Heat Pumps



Miranda Boutelle Efficiency Services Group

Q: My heating system is 10-plus years old, and I want to switch to a heat pump. Can you help me choose the best option for my home?

A: Heat pumps have been around for decades, and in that time, the technology has come a long way. In my opinion, they could use a rebrand.

The name heat pump does not highlight the benefit of air conditioning that comes with the technology. Heat pumps are highly efficient because they don't use energy to create heat. Instead, they use energy to move heat – into the home in the winter and out of it in the summer. They typically produce about three times more energy than they use.

The most common types of heat pumps are air source and ground source. Air source heat pumps transfer heat from the outside air, even if it isn't particularly warm outside. Ground source, or geothermal heat pumps, transfer heat between your home and the ground. With a lower upfront price tag, air source heat pumps are more common.

According to the U.S. Department of Energy, air source heat pumps can reduce heating use by about 65% compared to an electric furnace. They come in a variety of styles and configurations to fit different homes. Air source heat pump technology has been popular in warmer climates for decades. There are now cold climate versions available, too.

Here's an explanation of how each type operates:

Ducted air source heat pumps are ideal for homes with existing ductwork or homes where ductwork can be feasibly added. Replacing an aging central air conditioning system with a heat pump can significantly reduce heating costs.

Ductless heat pumps, or mini-split heat pumps, also draw heat from the outside air. They are a great solution for homes that do not have existing ductwork.

There are many configurations to suit

different home layouts. New options on the market allow for coupling with gas or propane backup heat, which might be a good fit for your home. Ductless heat pumps can be a great option for homes with wood stoves. This can help home air quality, heat the home without gathering wood and provide air conditioning in warmer months.

Geothermal heat pumps transfer heat from the ground to your home. They are even more efficient than air source heat pumps, reducing energy use by 70% to 80%, according to the U.S. Department of Energy. They can also heat water for use in the home, which saves on water heating costs.

From a user experience perspective, heat pumps are a little different because the heat from the register doesn't feel quite as warm as oil, electric, natural gas or propane heat. That can take a little getting used to, but the efficiency gains and energy savings make the investment worthwhile.

Before buying a heat pump, compare equipment ratings. The higher the rating, the more efficient the equipment. If it is time to replace your heating system, I recommend making the switch to a heat pump to conserve energy and potentially save on your electric bills.

Understanding the Backup Heat Feature

Most heat pump systems are installed with a backup or auxiliary heat for cold weather. This auxiliary heat can be electric coils, gas, propane or oil, which is usually more expensive to operate. This helps keep your home warm on cold days, but you don't want to use it if you don't need it.

For some heat pumps, turning up the thermostat too quickly or too high can trigger the backup heat. Typically, your thermostat will display emergency or auxiliary heat when using this feature. Speak to your HVAC technician to ensure your thermostat is set to maximize efficiency.

Sparking Innovation On The Farm

Tara Miller

Central Electric Cooperative, Manager of Communications

The year was 1950, and a teenager named Robert Moe was living on a farm in northern Hanson County when Intercounty Electric brought power to the prairie. His parents, Chester and Myrl, had three boys and three girls. Robert was the second youngest of the Moe children.

When farms started receiving power, welding manufacturers held demonstrations to sell their products to area farmers. So, Robert's dad and his brother, Roy, purchased a 220-volt Forney brand welder.

"Intercounty Electric started small group welding classes in each county. Hanson County's classes were held at an implement dealer in Alexandria," Robert said.

After several weeks of classes, Intercounty Electric organized a contest in each county to pick the best welder, and Robert emerged as the winner in Hanson County. His skills were further recognized in a four-county contest held at the Intercounty Electric office building, where he was again named the winner.

Robert presented the first-ever 4-H welding demonstration at the South Dakota State Fair.

"Because my welding demonstration required a special electrical connection, Intercounty Electric installed an electric plug on a pole in the middle of an empty lot on the state fairgrounds."

Robert fabricated livestock gates and other farm necessities. In 1953, he also made a metal grille guard for the family's 1952 International pickup. His welding demonstrations would earn him a trip to Chicago to attend the 4-H Club Congress in the electrical division.

At age 21, Robert joined the United States Army and served for two years before returning home to farm. He eventually met his future wife, Norma Northrup, who grew up on a farm served by Intercounty Electric east of Letcher on Highway 37.

Robert and Norma grew crops and raised cattle on the Moe homestead for more than 25 years. They spent 32 winter seasons in south Texas and traveled around in an RV in the summer for 18 years before eventually moving to Mitchell. Robert remembers, "Having a yard light was a handy new luxury when we first got electricity, but it got even better later when Intercounty offered a free all-night light if wired through the meter."

Norma said, "It's amazing to look at all that's changed with electric appliances. Refrigerators, deep freezers, water heaters, and washing machines."

However, Norma explained, one of the more profound impacts of electricity was how it would shape their children's lives. Their two sons, Kevin and Keith, both have successful careers related to computer technology, a field that would not exist without electricity.

Intercounty Electric merged with Tri-County Electric in 2000 to form Central Electric Cooperative, which today serves mostly rural portions of Aurora, Brule, Buffalo, Davison, Hanson, Jerauld, Miner and Sanborn Counties.





Mammoth Discovery

Shannon Marvel

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Over Memorial Day of 2023, a coal miner made a historic discovery at the Freedom Mine in North Dakota.

"The shovel operator just happened to take a scoop that had a complete mammoth tusk," said Jeff Person, a paleontologist with the North Dakota Geological Survey.

"The tusk was about seven-foot-long. That shovel must've picked it up just perfectly to not damage or break it. The driver reported the find to his superiors at the Freedom Mine, who then contacted us," Person said.

The tusk was found in an old streambed. Other fossils



were found in the streambed, including "more than twenty bones from the skeleton, including ribs, a shoulder blade a tooth and parts of the hips," according to a news release.

"Most of the mammoth fossils known from North Dakota are isolated bones and teeth," stated Clint Boyd, Senior Paleontologist for the North Dakota Geological Survey, in the news release. "This specimen is one of the most complete mammoth skeletons discovered in North Dakota, making it an exciting and scientifically important discovery."

The bones were sent off to the Paleontology Lab at the North Dakota Heritage Center and State Museum in Bismarck to undergo extensive cleaning before being prepped to be dried out, which requires that the bones be wrapped in plastic.

It could take up to another year for the bones to be dried out enough to be taken out of the plastic wrap, Person said.

At that point, the bones will be the focus of scientific research, he said.

According to the news release, "mammoths lived in North Dakota during the Pleistocene Epoch, commonly called the Ice Age, and went extinct in this area around 10,000 years ago. Several species of mammoth lived in North America, including the Woolly Mammoth and the Columbian Mammoth. They lived alongside other iconic animals like saber-toothed tigers and giant sloths. Once the bones are fully cleaned, paleontologists will be able to identify which species was collected from the mine."



A Guide to Electric Vehicle Ownership

The automotive industry is undergoing a transformative shift as many consumers are making the switch to electric vehicles. Electric vehicles, or EVs, offer numerous benefits, from environmental sustainability to cost savings.

Transitioning to an EV requires careful consideration of multiple factors. The following list overviews key aspects of EV ownership and can help you make an informed decision based on your specific needs.

EV Knowledge: Familiarize yourself with EV basics. Understand the differences between Battery Electric Vehicles (BEV), Plug-in Hybrid Electric Vehicles (PHEV) and Fuel Cell Electric Vehicles (FCEV). Consider your daily, monthly and annual driving needs and evaluate each option.

Driving Range: Evaluate the EV's driving range when fully charged to ensure it aligns with your daily commute. We often think about a summer road trip for our driving needs, but it's important to remember there are other options for infrequent, long-distance travel.

Home Charging: Determine if you will need to install a Level 2 charger and if your home's electrical system is compatible. By evaluating your whole home energy use, you can determine if electrical panel upgrades are necessary for a Level 2 system. Level 1 chargers typically do not require upgrades.

Public Charging Options: Research the availability of public charging stations along your typical routes.

Cost Comparisons: Compare EV prices from multiple dealerships. Sticker prices are higher upfront, but EVs have proven to be cost effective due to reduced maintenance and fuel costs

Financial Incentives: Explore federal, state and local incentives available for EV purchases. Check with your electric co-op to see if they offer incentives or special rates for EVs.

Maintenance: EVs typically require less maintenance than conventional vehicles, which can lead to long-term savings. EVs have far fewer moving parts than combustion-engine vehicles, resulting in a streamlined maintenance experience.

Battery Warranty: Ensure the EV battery

includes a substantial warranty. Most manufacturers offer eightyear warranties (or up to 100,000 miles). If you're considering managed charging or bi-direction power flow (V2X) programs, take these warranties into account. V2X programs facilitate a bi-directional power flow between EVs and the power grid, which is highly beneficial for co-op members who own an EV. These programs allow EV owners to sell power back to the grid during periods of high electricity demand. Participation in these programs may impact your vehicle's warranty, so it's recommended to consult the warranty documentation before participating in a V2X program.

Insurance Implications: Consult with your insurance provider to review potential changes to your policy when owning an EV.

Fees: Some plug-in electric vehicles are subject to additional fees to compensate for road tax revenue that is typically collected from gasoline taxes. Additionally, you may have to pay a higher vehicle registration fee for EVs and hybrid vehicles. It's important to be aware of these potential fees when considering the total cost of ownership for an EV.

EV ownership offers many benefits. EVs often have fewer restrictions in High Occupancy Vehicle (HOV) lanes, allowing for quicker commutes. EVs are exempt from certain inspections due to their lack of an internal combustion engine, and they require no oil changes, leading to lower maintenance costs. And owning an EV is a fun experience – drivers can enjoy a fastaccelerating, quieter ride.

If you're interested in an EV, reach out to your electric co-op. Many co-ops offer "ride and drive" events, home charging programs and more, allowing members to gain firsthand experience and determine if an EV is right for them.



The Difference Between Baseload and Intermittent Power And Why it Matters

Scott Flood

It's one of those excruciating days when the warm air becomes unbearable. You crank up the air conditioner on the way home from work, and the first thing you do when you get home is turn the thermostat down a couple degrees.

Throughout your area and the entire region, thousands of other people are responding the same way. Every air conditioner and fan start working at full speed to keep everyone cool and comfortable. The end of the workday creates a massive surge in the amount of electricity needed to meet the demand, and it's up to the people who oversee the operation of North America's power grid to make sure there's an adequate amount to keep you comfortable.

It's a challenging task because the amount of electricity that's needed varies throughout each day. While you and your neighbors are asleep, the demand is lower, but as everyone wakes up, turns on the shower, and starts the coffeemaker, the demand for power climbs quickly.

Our electric grid gathers and distributes power from many sources, including power plants that convert fossil fuels like coal, natural gas and oil into electricity; nuclear power plants; and renewable energy sources, such as wind turbines, solar farms, hydroelectric dams and even landfills. The electricity supplied from all of these sources is categorized as baseload, peaking or intermediate power.

Baseload power accounts for most of the electricity we use. Always-available power sources are designed to constantly generate large amounts of power, so you and everyone else is assured of a reliable supply of electricity whenever you need it. The most familiar examples of baseload sources are nuclear and fossil-fuel power plants, along with some hydroelectric and geothermal facilities. While baseload plants provide an affordable and dependable source of power, they're not engineered to keep up with sudden changes in electricity demand. The companies operating them are unable to turn them on or off quickly. When the demand for electricity shifts – either gradually or suddenly—grid operators turn to either intermediate or peaking power plants. These plants are designed to startup quickly and adapt their power output to meet the varying demand. In most cases, peaking plants supply more frequent and sudden changes, whereas intermediate plants supply more gradual or slower changes.

Renewable power sources such as solar and wind farms are increasingly used to supply electricity. Both sources provide intermittent power since the amount of electricity generated and the time at which electricity is generated depend upon cooperation from nature. Solar panels can't generate electricity when there's not enough sunlight, and large wind turbines generally don't produce power until the wind speed reaches at least 13 miles per hour. Because intermittent power sources like wind and solar depend on unpredictable weather conditions, they can't be relied upon to deliver predictable and constant baseload power. This is why changes in electricity demand are usually met with intermediate or peaking generation powered by more traditional sources like natural gas.

Electric co-op members who are concerned about climate change may wonder why power suppliers aren't rushing to replace fuels such as coal and natural gas with environmentally-friendlier alternatives like wind and solar. If co-ops and other electric utilities switched completely to intermittent sources, they wouldn't be able to meet consumers' needs for reliable power.

One promising technology involves the development of energy storage devices such as batteries that can be used to store excess power generated by wind and solar so it's available even when the weather isn't cooperating. While that technology is advancing, it's still evolving, and largescale use of such batteries is many years away. Batteries also require large amounts of elements such as lithium that must be mined, creating additional environmental concerns.

While electric co-ops are working hard to shift to environmentally-friendlier sources, the realities of differing power needs are why most maintain a diverse mix of energy sources and fuels. Co-op members can help by taking steps to reduce their own energy use. For example, switching to more-efficient lighting and appliances will not only reduce your monthly electric bill, but it can reduce the amount of electricity that's needed.

Contact your local electric co-op to learn more about practical ways you can use less electricity without sacrificing comfort and convenience. The less power we all use, the less the power producers will have to generate.

HONEY FARMS

A GOLDEN HARVEST

The Buzz Behind Adee Honey Farms

Frank Turner

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Three generations ago, the Adee family learned that a tumultuous time can lead to significant opportunity. During the 1930s, the Great Depression wreaked havoc on small rural communities and the agricultural industry. The value of crops and livestock plummeted, and the land became arid.

These hard times impacted many in the Midwest, including Vernon Adee, a rural teacher and rancher in Nebraska. Vernon needed a new way to provide for his family, and a letter from his brother held the answer: "I can't sell chickens or hogs, but I'm doing well with honey. Be advised: Get a beehive."

Following his brother's advice, Vernon attended a foreclosure auction and purchased his first beehive. The decision to begin beekeeping would inspire several more generations of the Adee family to continue in the trade.

Wanting to start their own operation, Vernon's sons, Richard and Stanley, purchased a retiring beekeeper's business through a trade magazine advertisement in 1957. Located in Bruce, South Dakota, the business included 1,500 hives and a breeding yard in Woodville, Mississippi. The acquisition marked the beginning of Adee Honey Farms, and what began as a small family farm quickly grew into the largest beekeeping operation in the country. Today, Adee Honey Farms supports more than 80,000 colonies and nearly 70 full-time employees.

"It started with survival and eventually became a family business," said Bret Adee, Vernon's grandson and the owneroperator of Adee Honey Farms. "I can remember being four or five years old and being in the field with my dad, holding the smoker and helping where I could. By the time I was in elementary school, I was loading trucks and moving boxes in the warehouse. Like anyone who grew up on a farm, I was involved in the family business by the time I could walk."

From a young age, Bret has held a deep love and appreciation for the honey bee. The insect's ability to cooperate and produce golden treasure while benefiting plants, crops, and the ecosystem at large makes them a unique livestock, unlike any other.

"To watch a hive grow and forage, and by the end of the summer make up to 150 pounds of honey – it's just so exciting," said Bret. "It's the dynamics of the biology that keeps it interesting."

Right now, Adee Honey Farms is engaged in honey production in the Midwest, with their bees spread across South Dakota and the west edge of Minnesota and the south edge of North Dakota. Around the first week of August, Bret's business will start the honey harvest, an event that can last until the first frost or even longer. For now, Bret said this year is shaping up to be a good season for honey production.

"It's early, but I'm optimistic. The years when there is a lot of clover are the years that beekeepers do well," said Bret. "We had a wet enough fall that enough clover germinated. We can always lose that to a hot dry wind... but we are optimistic right now."

But bees aren't just used to make honey; they also have hand in pollinating crops across the country. More than a neat fact, it's also the second half of the beekeeping industry. The mere presence of honey bees can increase yields for crops such as alfalfa and sunflowers by up to 20 to 30 percent, depending on the variety of crop. According to the U.S. Department of Agriculture, pollination is responsible for more than \$18 billion in added revenue to crop production in the country.

Once the honey harvest is over, the bees will be loaded onto a truck to tour the country, traveling from the Dakotas to California and later to Texas in search of favorable weather and crops to pollinate. In fact, crop yields from California almond trees and apple trees are almost totally dependent on pollination from bees, enticing farmers from across the country to welcome bees onto their land. Everyone benefits - even bees.

"It's a win for the consumer who gets to eat the honey. It's a win for the landowner who has the bees on his land, and if everything goes right, it's good for the beekeeper's family too," said Bret.



Bret Adee, owner-operator of Adee Honey Farms, is a third-generation beekeeper in the Adee family. Photos courtesy of Adee Honey Farms.





Photos Courtesy of Karli Hinds

Food Trucks

How Karli Hinds Jumped Into the Business

Shannon Marvel

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Karli Hinds was working a typical corporate 8 a.m. to 5 p.m. job when she realized she wanted a life where she had the flexibility to travel with her husband.

"So I had actually quit my job and stayed home for six months or so," Hinds said. "Then I wanted something I could do but still have the flexibility to travel."

Hinds had a couple ideas, one that had to do with the fact that she's a "foodie."

"I started cooking really young. I would say I was making meals by myself when I was in middle school," she said.

The idea for opening a food truck was at the forefront of her mind, given that she was not interested in having a storefront.

"I didn't want the hassle and responsibility of it. I wanted a business I could rely on myself and not have to rely on several employees," Hinds said.



"On my second day in the food truck, I was serving Tex Mex, and I had a crazy line. It was just insane. I wanted to quit right then, but I also was thinking, 'this is going to work.' It was a good turnout, and it was only my second day."

- Karli Hinds

Financially, there are pros and cons to starting up a food truck business.

Hinds said there's limited finance options for food trucks while at the same time, there's more cash that you must have on hand to get started.

Finding a food truck or trailer was the next challenge and proved to be fairly difficult for Hinds at first.

"We wanted one that was brand new," Hinds said. "Most of the manufacturers are out of Mexico, and they don't always have the best reputations. We really struggled

with finding a reputable company to build a trailer with me. Somehow, we found a random post on Facebook from a guy that was selling brand new food trailers somewhere in the middle of nowhere in Iowa."

Hinds and her husband walked through the trailers and picked out what they liked and didn't like before finally deciding on the one to get.

Hinds uses the food truck to cook up an array of menu items every week.

"I'm actually a really picky eater, believe it or not," Hinds said. "I didn't want to specialize in one thing. People in small towns know we get kind of burnt out from eating the same thing over and over."

Hinds rotates between eight or so different food themes.

"Once in a while I come

up with something new to add within that theme," Hinds said. "My best seller is always my smash burgers."

She'll find her recipes on the popular social media app, Tik Toc.

On her second day of business, Hinds knew her food truck business would be sustainable.

"On my second day in the food truck, I was serving Tex Mex, and I had a crazy line," Hinds said. It was just insane. I wanted to quit right then, but I also was thinking, 'this is going to work.' It was a good turnout, and it was only my second day."

Hinds said the job isn't always fun and is physically demanding.

"The hours are a lot more chaotic," she said. "The problem-solving aspect is better as I don't have a chain of command that I need to go through to make things right with the customer."

During the winter months, Hinds delivers lunches a couple days out of the week.

"It's just one item and I deliver them in town within Vermillion," Hinds said. "That's just something that I do that's a little bit different than other food trucks."



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