

FEBRUARY 2022

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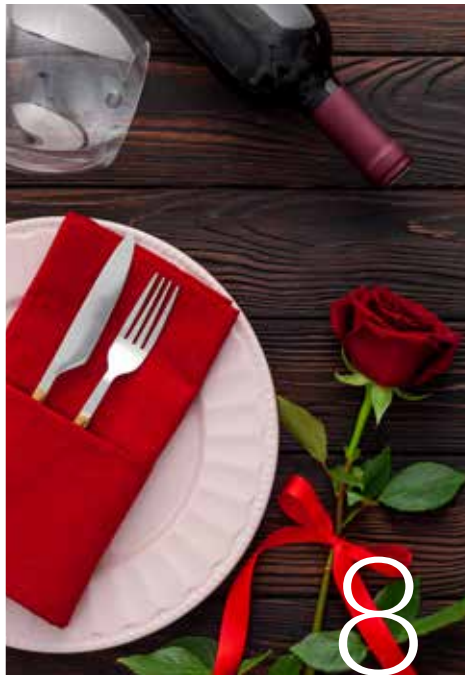
ELECTRIC COOPERATIVE LIVING

**Seniors: Apply for
2022 scholarships**

**Historic storm
impacts Guthrie
County REC**

Date night recipes

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EDITOR
Ann Thelen

ART DIRECTOR
Joel Clifton

IAEC EXECUTIVE VICE PRESIDENT
Chuck Soderberg

IAEC DIRECTOR OF COMMUNICATIONS
Erin Campbell

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ON THE COVER

Special thanks to Bruce A. Morrison, a North West REC member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could win \$100!

INTRODUCING IAEC'S NEW BOARD PRESIDENT: ROGER SOLOMONSON

BY ERIN CAMPBELL



Roger Solomonson is no stranger to serving on cooperative boards. His family jokes that they will one day inscribe his tombstone with the phrase, "He's at a meeting." He began

his cooperative board service long ago at the age of 21 when he served as a director for a local grain elevator and hasn't slowed down since.

History of advocating for cooperatives

As a retired grain and livestock farmer near Lake Mills in Winnebago County, Solomonson is a longtime advocate of the cooperative business model. He has served as a director for Heartland Power Cooperative for 27 years and is serving his fifth year as a director for the Iowa Association of Electric Cooperatives (IAEC), most recently serving as the board secretary and treasurer before becoming president in December.

Solomonson previously served as vice president and treasurer of the board for Dairyland Power Cooperative, which supplies electricity to Heartland Power Cooperative. As a big believer in education and training, he has earned his Credentialed Cooperative Director designation, the Board Leadership Certificate and the Director Gold designation.

Heart for community service

Many in north-central Iowa know Solomonson from his extensive community service work. Over the years, he has served in leadership roles at the local bank, grain elevator, church boards, township council, extension council, Winnebago Farm Bureau and pork, corn and soybean commodity organizations. Solomonson has also committed his time as Iowa State Membership Coordinator and North

Iowa Regional Director for Gideons International.

"I've lived in this community my whole life, and I'm passionate about giving back," he humbly shares.

Vision for board leadership in 2022

As the incoming board president for IAEC, Solomonson hopes to connect with all directors at Iowa's local electric cooperatives so he can best represent their needs. "My goal this first year is to attend one board meeting at each electric cooperative so I can get to know my fellow co-op directors on their own turf," he shares.

Solomonson's priorities as a leader include open communication. "With three new directors on the statewide board, the dynamics have changed a bit," he shares. "We're bringing a new perspective as we look at issues like cybersecurity and political engagement."

When reflecting on challenges facing

the electric industry, Solomonson says, "I think there are two issues that will challenge Iowa's electric cooperatives in the years ahead. How are we going to maintain reliable electricity as we rely more on intermittent energy sources like solar and wind? And also, how will we deal with increased regulations that are changing the way we supply energy? The goal is to safely supply reliable, affordable energy every time our consumers flip the switch."

Solomonson looks forward to serving Iowa's electric cooperatives in this new leadership role. His industry knowledge, leadership track record and passion to serve will be valuable assets. And if you're trying to track him down, he's probably at a meeting.

Erin Campbell is the director of communications for the Iowa Association of Electric Cooperatives.

Editor's Note: An introduction to the three new statewide directors will appear in the March issue of this magazine.

EDITOR'S CHOICE CONTEST

Win a CTECHi Portable Power Station!

The specs of this CTECHi Portable Power Station include 200W, 320Wh LiFePO4 battery backup power supply, fully charged within 3.5 hours, PD 60W quick charge, solar generator for outdoor travel and camping, plus emergency charging of devices at home.

Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later than Feb. 28. You must be a member of one of Iowa's electric cooperatives to win. There's no obligation associated with entering, we don't share entrant information with anyone and multiple entries from the same account will be disqualified. The winner of the Philips Soup Maker from the December issue was Arlene Mueggenberg, Raccoon Valley Electric Cooperative.



SENIORS: APPLY NOW FOR 2022 SCHOLARSHIPS

Guthrie County REC is proud to support our high school seniors as they plan their future educational goals. If you know a student who could use some extra money for college, please encourage them to apply for the cooperative's 2022 scholarship.

High school seniors in the Guthrie County REC service territory who are interested in continuing their education in any field of study or power line programs are invited to apply for the 2022 scholarship.

Guthrie County REC will award three \$1,000 scholarships for the 2022-2023 school year to individuals enrolled full-time at an accredited college, university or vocational/technical school, or attending power lineman school. Applicants must have a guardian or parent who is a member of Guthrie County REC.

How to apply

Applications must be postmarked on or before Friday, April 1. It must include the application form; a personal letter stating your educational goals, financial need and work experience; a statement on why you think rural electric cooperatives are important; a wallet-sized photo of the applicant; and your most recent academic transcript. Due to the volume of applications, only students awarded a scholarship will be notified.

Visit www.guthrie-rec.coop for more information and to download the application.



Guthrie County REC

A Touchstone Energy® Cooperative



Office

1406 State Street • P.O. Box 7
Guthrie Center, IA 50115-0007

Office Hours

Monday through Friday, 8 a.m. - 4:30 p.m.

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Calls answered 24 hours a day, 7 days a week

Website

www.guthrie-rec.coop

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COMMITMENT TO OUR MEMBERS HOLDS STRONG DURING WINDSTORM

BY CURT KNAPP



In the few days leading up to the Dec. 15 windstorm, we knew that we were in for another unprecedented event. Like all utilities, the people who count on us

most are often the ones who can least afford to lose power. But as the winds increased as the day went on, we knew there was going to be damage to our distribution system with outages affecting our members, so our crew was on high alert when the reports started coming in.

Preparing ahead

Guthrie County REC is committed to upgrading our lines and poles to help increase reliability and reduce the outages that come with severe weather events. This is something that keeps us busy as we conduct line inspections, vegetation management, and pole and line replacements throughout the year.

We know our members count on us, and that's why our linemen are dedicated to restoring power as quickly and as safely as possible. We were out the night of the storm, even though the winds hadn't yet died down, assessing areas where repairs were needed and pinpointing outages. I'm thankful for the co-op staff who stayed with us late into the night to assist with these efforts.

Recovery from the storm meant replacing 12 poles and six transformers, as well as rebuilding and replacing our three-phase line that was attached to our power supplier's high voltage transmission line. We had 443 outages caused by the broken or downed poles and lines belonging

to our co-op, and another 2,940 member-consumers without power due to damage to our power supplier's transmission lines that was beyond our control.

Outage updates and reporting

If you haven't already, I'd encourage you to check out our Facebook page where we post updates to keep you informed as power is restored during events like these. Be mindful, however, that the best way to report an outage, downed lines or broken poles is by calling 888-747-2206 with information, including your name, address, account number and location of the problem.

As we continue through the winter months, we will be ready for any further weather events. As always, the team at Guthrie County REC promises to do our best to keep your power flowing.

Curt Knapp is the line superintendent for Guthrie County REC.



Journeyman Lineman Larry Newbrough, Line Superintendent Curt Knapp and Member Service Clerk Marlene Chalfant work into the evening during the Dec. 15 windstorm to track outages and dispatch line crews.

LOCAL FFA CHAPTER ACTIVITIES HIGHLIGHT NATIONAL FFA WEEK



As a rural electric cooperative invested in supporting the rural economy and the future of Iowa farming, Guthrie County REC celebrates all National FFA Organization students in our service territory during National FFA Week Feb. 19-26.

The Coon Rapids-Bayard FFA Chapter has 60 members who range from seventh through 12th grades. Advisor Courtney Schroeder says both chapter members and non-member students plan and participate in FFA Week activities.

“National FFA Week is a particularly popular week in our school for both FFA and non-FFA members,” Schroeder says. “We host dress up, a dodgeball tournament, and a truck and car show. It’s definitely a memorable week for our school!”

As a service organization, FFA emphasizes fundraisers that are

both meaningful to the community and raise enough money to support chapter activities. A fundraiser selling pumpkins and gourds in the fall, and a popular annual fruit sale also help the chapter reach its goals.

“One of the events we are most proud to host is our annual Veterans Day breakfast,” Schroeder says. “Chapter members spend a morning cooking and serving food to our local veterans.

During the event, we get to show our appreciation for their service and listen to stories of war. Our fruit sales fundraiser is one of the biggest our chapter does.”

As the top school-based youth leadership development organization in the nation, FFA helps young people meet new agricultural challenges by developing their unique talents and exploring their interests in a broad range of career pathways. FFA members are our future leaders,

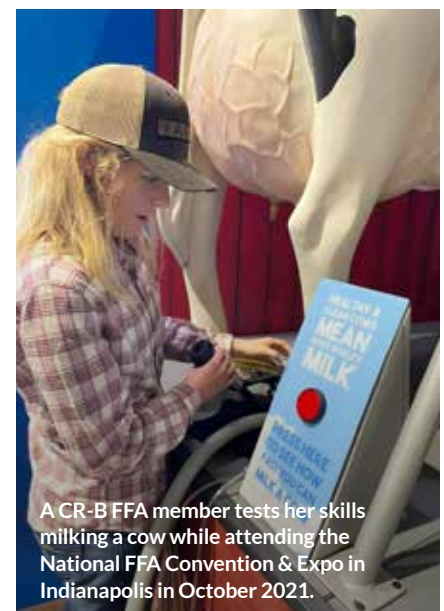
our future food suppliers, our future innovators and more.

“FFA has shaped me into the person I am today,” says Laura Anthofer, CR-B FFA vice president. “I have gained so many leadership skills through FFA and those skills will take me far in my future career and in life. There are many benefits to being an FFA member, including the opportunity to travel, advocate for agriculture, serve our community and create lifelong friendships with other FFA members from across the country.”

According to the Iowa FFA Association, there are 17,130 current FFA members from 285 schools and 252 chapters across Iowa. This dynamic youth organization is part of ag education programs at middle and high schools, where student members are engaged in a wide range of curriculum and FFA activities that develop or enhance their ag career opportunities. FFA stands for “Future Farmers of America,” however in 1988, the official name of the organization was changed from FFA to The National FFA Organization to better reflect the growing diversity of agriculture.

NATIONAL FFA WEEK

FFA

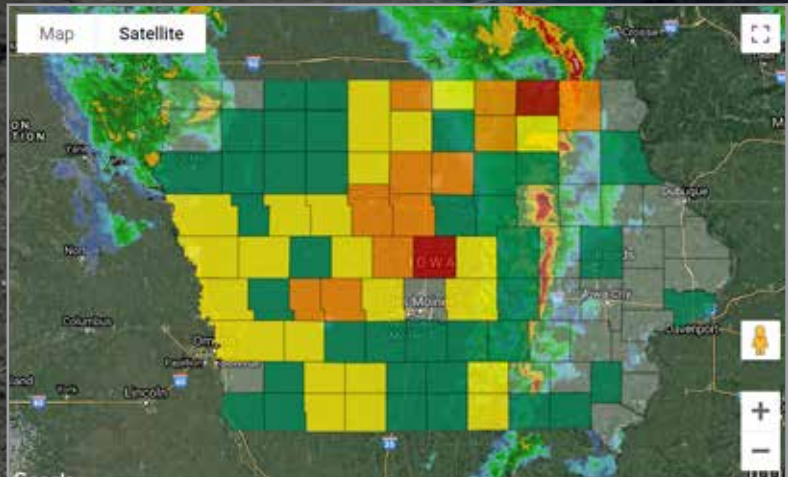
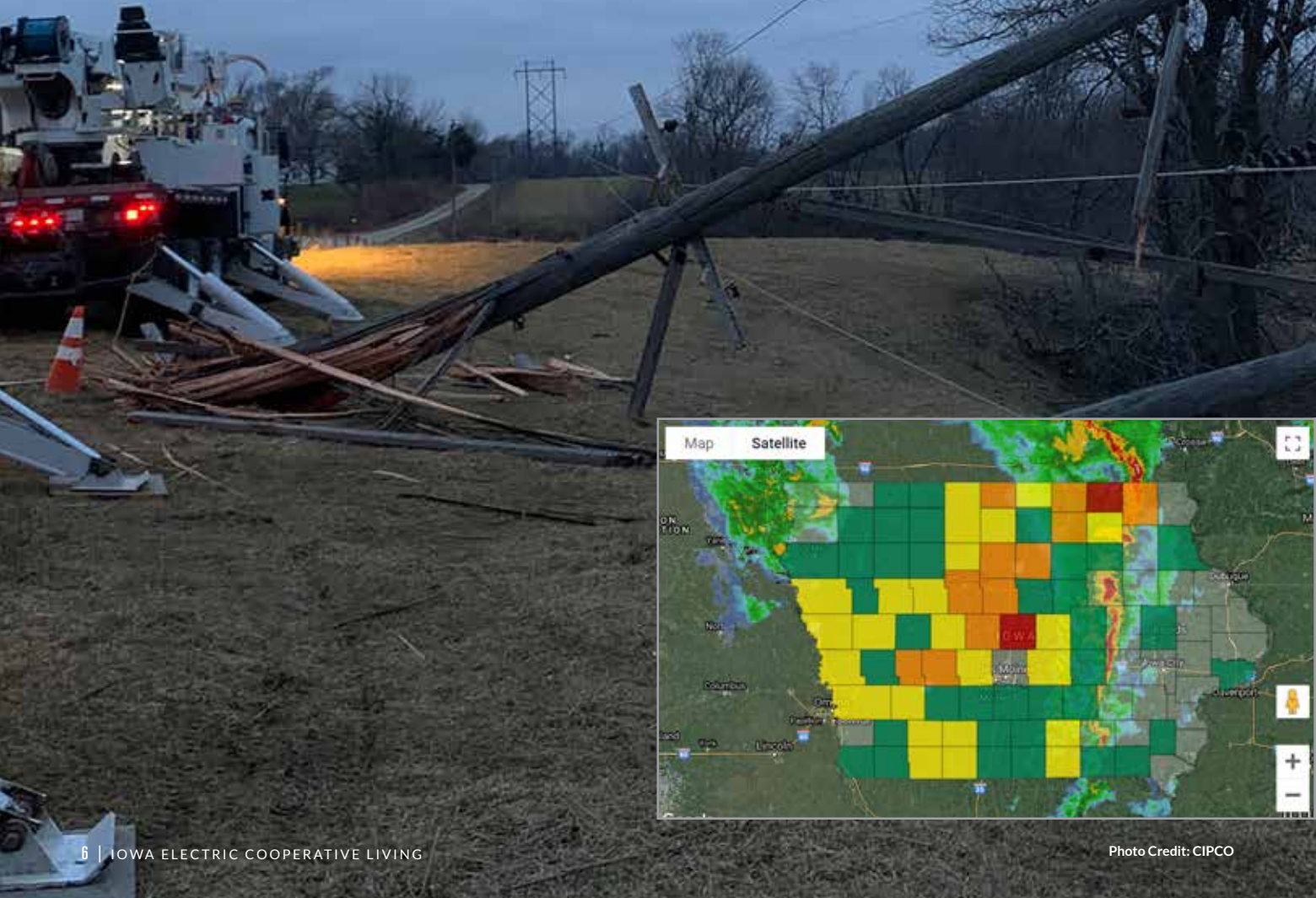


A CR-B FFA member tests her skills milking a cow while attending the National FFA Convention & Expo in Indianapolis in October 2021.

HISTORIC DECEMBER DERECHO

CAUSED DAMAGE AND OUTAGES THROUGHOUT IOWA

BY ERIN CAMPBELL



Iowa was in the path of a record-breaking thunderstorm on Dec. 15, which was later classified as the first December derecho in U.S. history. The state was experiencing unusually warm weather for that time of year, with record-setting highs in the 70s coupled with strong winds. Iowa's electric cooperatives cautiously monitored the storm system as it moved into southwestern Iowa around 4 p.m. and quickly ripped across the state, leaving northeastern Iowa around 9 p.m.

Record-setting storm

The National Weather Service (NWS) reported the storm spawned 43 tornadoes in Iowa, setting a new record for the most tornadoes in any single day in the state's history. Wind gusts topped speeds of 85 mph in some locations. After the storm passed, several strong wind gusts prevailed throughout the night.

A derecho is often described as an inland hurricane, but with no eye and winds coming across in a line. Derechos are more similar to hurricanes than tornadoes in the damage, which is likely to spread over a wide area. According to NWS, a wind damage swath extending more than 240 miles with wind gusts of at least 58 mph along most of its length can be classified as a derecho.

Service outages and interruptions

For Iowa's electric cooperatives, which serve primarily rural areas, there were 22,500 outages at the peak on Dec. 15. This accounts for approximately 10%

of all electric cooperative meters in the state. After the storm, line crews set out to assess the damage and make repairs as best they could in the prevailing wind gusts following the storm.

As the sun rose the next morning, it provided the necessary illumination for crews to better assess the storm's complete damage. Straight-line winds, tornadic activity, flying debris, and trees, limbs and branches contacting power lines caused broken poles, downed conductors and extensive damage to electrical equipment throughout the state.

"With severe storms like this one, we experienced damage to both the electric transmission system and the local electric distribution systems, which can create extended outage situations," says Scott Meinecke, director of safety for the Iowa Association of Electric Cooperatives (IAEC).

Mutual aid efforts help restore service

The safety team at IAEC coordinated crews and equipment from unaffected electric cooperatives to impacted co-ops to assist in the power restoration effort.

"We call it mutual aid when cooperatives help other cooperatives in times of need," explains Meinecke.

Within the first 24 hours of the storm hitting Iowa, power was restored to 18,500 electric cooperative meters. The remaining 4,000 outages were fully restored within the next couple of days.



Photo Credit: Corn Belt Power Cooperative

"We're always thankful for members' grace and patience as crews work long shifts to restore power," says Meinecke. "The damage from this December storm was particularly heavy in some areas and it can be frustrating when we're not able to provide much detail on when power will be restored. In some cases, crews couldn't safely head out immediately after the storm because the wind gusts made it too dangerous to be out in the buckets or on the poles."

A statewide outage map is available at www.iowarec.org to give a snapshot of current outages for Iowa's electric cooperatives. The outage map is automatically updated every 15 minutes and users can view by county or electric cooperative boundary with a weather overlay layer.

While this storm was one for the record books, Iowa's electric cooperatives were prepared for the worst and acted quickly to restore power as safely and quickly as possible.

Erin Campbell is the director of communications for the Iowa Association of Electric Cooperatives.



Photo Credit: Midland Power Cooperative

STORM SAFETY REMINDERS

- » Never go near or attempt to drive over downed power lines. Assume they are energized and dangerous and notify the electric utility or authorities.
- » Obey Iowa law and move over or slow down if you come upon utility crews working on the side of the road. Give them room to work safely.
- » Don't use portable generators in partially covered areas like garages or porches. Only use them in ventilated spaces outdoors to avoid carbon monoxide poisoning.

Date Night

RECIPES

AT HOME

CHICKEN PARMESAN FOR TWO

- 2** skinless, boneless chicken breast halves
salt and pepper, to taste
- 1** egg
- $\frac{2}{3}$** cup panko bread crumbs
- $\frac{1}{2}$** cup grated Parmesan cheese, divided
- 1** tablespoon flour
- $\frac{3}{4}$** cup plus **$\frac{1}{2}$** tablespoon olive oil, divided
- $\frac{1}{2}$** cup tomato sauce
- $\frac{1}{4}$** cup fresh mozzarella, cubed
- $\frac{1}{4}$** cup provolone cheese
- $\frac{1}{4}$** cup fresh basil

Place chicken breasts in freezer bag on a solid, level surface. Firmly pound chicken with smooth side of meat mallet until $\frac{1}{2}$ -inch thickness. Season chicken with salt and pepper. Beat egg in a shallow bowl, set aside. Mix bread crumbs and $\frac{1}{4}$ cup of Parmesan cheese, set aside. Sprinkle flour over chicken on both sides. Dip chicken in egg, then place chicken in bread crumb mixture and coat both sides. Heat $\frac{3}{4}$ cup olive oil in large skillet on medium-high heat until oil begins to shimmer. Fry chicken until golden brown, approximately 3 minutes each side. The chicken will finish cooking in the oven. Place chicken in baking dish. Top each chicken breast with tomato sauce, mozzarella, provolone and fresh basil. Sprinkle $\frac{1}{4}$ cup Parmesan cheese and $\frac{1}{2}$ tablespoon olive oil on top. Bake at 450 degrees F for 15-20 minutes until cheese is brown and bubbly. Chicken is cooked through when registering an internal temperature of at least 165 degrees F. Enjoy with mixed greens and crusty bread. *Serves 2*

Sue Nagel • Panora • Guthrie County Rural Electric
Cooperative Association

CHOCOLATE ANGEL FOOD CAKE

- $1\frac{1}{2}$** cups egg whites (12 eggs)
- $1\frac{1}{2}$** teaspoons cream of tartar
- 1** cup granulated sugar
- $1\frac{1}{2}$** teaspoons vanilla
- $\frac{3}{4}$** cup cake flour
- $1\frac{1}{2}$** cups powdered sugar
- $\frac{1}{4}$** cup Hershey's cocoa
strawberries

Beat egg whites and cream of tartar until foamy. Gradually add granulated sugar 2 tablespoons at a time. Add vanilla and continue beating until meringue holds stiff peaks. In a large bowl, blend flour, powdered sugar and cocoa. This must be Hershey's cocoa so there is no fat in it; otherwise, the cake will fall out of the pan. Fold the flour mixture into the egg white mixture. Put batter in an ungreased 10x4-inch tube pan. Gently cut through the batter. Bake at 375 degrees F for 20-35 minutes. Invert on a funnel, hang until cold. Serve with fresh strawberries.

Sonya Colvin • Ames • Consumers Energy

WILD RICE QUICHE

- 3** eggs, beaten
- $1\frac{1}{2}$** cups half and half
- $\frac{3}{4}$** cup Swiss cheese, grated
- $\frac{3}{4}$** cup Monterey Jack cheese, grated
onion, to taste
parsley, to taste
- 5** slices bacon, fried and crumbled
- 2** cups wild rice, cooked
unbaked pie shell
paprika, optional
parsley, optional

Combine ingredients, pour into unbaked pie shell. Bake at 450 degrees F for 10 minutes, lower heat to 350 degrees F for 30 minutes more. Remove from oven and let set up for 10 minutes before cutting and serving. Sprinkle quiche with paprika and parsley for garnish if desired. *Serves 6*

Penny Sue Haley • Keswick
T.I.P. Rural Electric Cooperative

SWEET & SOUR MEATLOAF

- 1 8-ounce can tomato sauce
- ¼ cup brown sugar
- ¼ cup vinegar
- 1 teaspoon yellow mustard
- 1½ - 2 pounds ground beef
- ¼ sleeve saltine crackers, crushed finely
- 1 medium onion, minced
- 3 cloves garlic, finely minced
- 1½ teaspoons salt
- 1 teaspoon pepper
- 1 green pepper, chopped
- 1 egg

Mix tomato sauce, brown sugar, vinegar and mustard until sugar is dissolved, set aside. In separate bowl, mix ground beef, crackers, onion, garlic, salt, pepper, green pepper and egg. Add 1 cup of tomato sauce mixture to meat mixture. Mix well and form into a greased, shallow baking pan. Pour remaining tomato sauce mixture over meatloaf. Bake uncovered at 400 degrees F for 45 minutes to 1 hour.

Danice Zern • Conrad
Grundy County Rural Electric Cooperative

SLOW COOKER PEPPER STEAK

- 2 pounds beef sirloin, cut into 2-inch strips
- garlic powder, to taste
- 3 tablespoons vegetable oil
- 1 cube beef bouillon
- ¼ cup hot water
- 1 tablespoon cornstarch
- ½ cup onion, chopped
- 2 large green peppers, chopped
- 1 14.5-ounce can stewed tomatoes, not drained
- 3 tablespoons soy sauce
- 1 teaspoon white sugar
- 1 teaspoon salt

Sprinkle steak with garlic powder. Heat oil in large skillet and brown beef strips. Transfer to slow cooker. Mix bouillon cube with hot water until dissolved, then mix in cornstarch until dissolved. Pour into slow cooker with meat. Stir in remaining ingredients. Cover and cook on low for 6-8 hours. *Serves 6*

Camilla Williamson • Albia
Chariton Valley Electric Cooperative, Inc.

PINK SQUIRREL DESSERT DRINK

- 1 gallon vanilla ice cream
- 1½ cups cream de cacao liqueur
- 1½ cups cream de almond liqueur
- whipped cream
- chocolate covered cherries

Set ice cream out to soften. Blend softened ice cream with both liqueurs, adding less or more to taste. Pour blended ice cream back into bucket or a freezer-safe bowl. Return to freezer until set (will not freeze hard). When ready to serve, dip desired amount into glass. Top with whipped cream and a cherry. This keeps well in freezer for quick and easy entertaining.

Joni Rus • Rock Valley
North West Rural Electric Cooperative

COCONUT CREAM PIE

- 2 cups milk
- ⅓ cup flour
- ¾ cup sugar
- 1 egg, beaten
- 1 teaspoon vanilla
- ½ cup coconut, shredded
- 1 9-inch pie crust, baked

Heat milk in a saucepan. Mix flour and sugar, add some of the heated milk and stir until smooth. Add flour mixture to saucepan and cook until the mixture has started to thicken. Temper beaten egg with stove mixture and add to pan. Once cooked, add vanilla and coconut. Pour into pie crust and refrigerated until set. Enjoy! *Serves 8*

Laura DeSmet • Larchwood
Lyon Rural Electric Cooperative

WANTED:

ICE CREAM RECIPES

THE REWARD:

\$25 FOR EVERY ONE WE PUBLISH!

Deadline is Feb. 28

Please include your name, address, telephone number, co-op name and the recipe category on all submissions. **Also provide the number of servings per recipe.**

EMAIL: recipes@ieclmagazine.com

(Attach your recipe as a Word document or PDF to your email message.)

MAIL: Recipes

Iowa Electric Cooperative Living • 8525 Douglas Ave.,
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OPPORTUNITY OF A LIFETIME: WIN A TRIP TO WASHINGTON, D.C.!



Enter our Essay Contest by March 25



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SOME OF THE THINGS STUDENTS WILL DO AND SEE ON YOUTH TOUR:

- Washington Monument
- World War II Memorial
- World War I Memorial
- Albert Einstein Memorial
- Franklin Delano Roosevelt Memorial
- Vietnam Veterans Memorial
- The National Mall
- Boat cruise on the Potomac River
- Holocaust Memorial
- Ford's Theater
- Korean War Veterans Memorial
- Lincoln Memorial
- Washington National Cathedral
- Mount Vernon
- Iwo Jima Sunset Parade
- White House
- U.S. Capitol

THESE ELECTRIC COOPERATIVES ARE SPONSORING THE 2022 YOUTH TOUR

All of the electric co-ops on this list are offering one or more all-expenses-paid Youth Tour trips this year, so check your co-op's website or call the office for more details.

Access Energy Cooperative
 Allamakee-Clayton Electric Cooperative
 Butler County REC
 Calhoun County Electric
 Cooperative Association

Chariton Valley Electric Cooperative, Inc.
 Clarke Electric Cooperative, Inc.
 Consumers Energy
 East-Central Iowa REC
 Eastern Iowa Light and Power Cooperative



AN IOWA STUDENT WILL EARN A \$1,000 COLLEGE SCHOLARSHIP TOO!

During the 2022 Youth Tour this June, a student from each participating state will be chosen to serve on the national Youth Leadership Council (YLC).

These young leaders will meet virtually throughout 2022 and participate in leadership training, practice their public speaking skills, attend co-op forums and engage in community activities like voter registration drives.

The Youth Leadership Council experience will officially commence at the 2023 National Rural Electric Cooperative Association (NRECA) Annual Meeting, held in Nashville, Tennessee. Here, the group will spend a few days reflecting on the experiences they've had throughout the year, attend informational and entertaining conference sessions alongside electric cooperative leaders from throughout the country, and solidify lifelong friendships and connections!

Iowa's local electric cooperatives are just getting started on their selection process for high school sophomores, juniors and seniors from their areas to earn an all-expenses-paid trip for the June 18-24 Youth Tour to Washington, D.C. Unfortunately, there always are more qualified student candidates from these co-ops (as well as deserving students from co-ops that aren't participating in the Youth Tour program) than there are openings on the trip. However, one of those students will have the opportunity to win a trip through the *Iowa Electric Cooperative Living* 2022 Youth Tour Contest!

Students who are eligible to apply for the Youth Tour trip at participating Iowa electric co-ops should apply locally first. However, students can

double their chances of winning a trip by entering the magazine's contest right after they enter the one for their electric co-op.

Students from across America take part in this weeklong education trip to the nation's capital each year. Participants will travel to Washington, D.C., meet their U.S. representatives and senators, and watch history come alive as they explore museums, memorials and monuments. They'll also meet student leaders from nearly every state and hear dynamic speakers during Youth Day. Best of all, students will make friendships that last a lifetime and become part of a group that has more than 50,000 alumni in every walk of life, including U.S. senators and CEOs.

OFFICIAL CONTEST RULES

The 2022 Youth Tour Contest is open to any high school sophomore, junior or senior who's part of a member family of an Iowa electric co-op. **One all-expenses-paid trip will be awarded by *Iowa Electric Cooperative Living* magazine**, in addition to the trips sponsored by local electric cooperatives.

Of course, students at supporting co-ops first should apply for the Youth Tour through their electric co-ops. Then, to enhance your chances of earning a trip, we encourage you to enter this contest too. If you're chosen as the winner of a trip sponsored by your local electric cooperative, you'll become ineligible to win the trip sponsored by *Iowa Electric Cooperative Living* magazine.

To enter, you will be required to submit an official entry form plus a short (250-word maximum) essay in response to this statement: **Pick one of the seven cooperative principles and share how your local electric cooperative embodies it.** Entry forms are available at www.IowaYouthTour.com. You can submit your essay online at this address or email it to youthtour@iowarec.org. Entries must be received by March 25.

Iowa Electric Cooperative Living magazine and IAEC staff will judge all essays anonymously. The decision of the judges will be final. The winner of the *Iowa Electric Cooperative Living* Youth Tour Contest will not be announced until April 15, which is after all sponsoring local electric cooperatives will have chosen their 2022 Youth Tour participants.

Farmers Electric Cooperative, Inc.
(Greenfield)
Franklin REC
Grundy County REC
Harrison County REC

Heartland Power Cooperative
Iowa Lakes Electric Cooperative
Lyon REC
Midland Power Cooperative
MiEnergy Cooperative

Nishnabotna Valley REC
North West REC
Pella Cooperative Electric Association
Prairie Energy Cooperative

Raccoon Valley Electric Cooperative
Southern Iowa Electric Cooperative
Southwest Iowa REC
United Electric Cooperative

THANK YOU FOR ATTENDING THE ANNUAL MEETING



A last-minute change to the format of the annual meeting didn't deter many of our member-consumers from coming on Jan. 8 to participate in the democratic process of their electric cooperative.

Due to the repercussions of COVID-19, Guthrie County REC could not hold its annual meeting in person at the planned venue. Instead, member-consumers were invited to a drive-through format meeting where they could drop off their election ballot, pick up an annual meeting gift and a boxed lunch, and receive written reports.

Election results

Ballots were accepted until 1 p.m. on Jan. 8 and counted by the cooperative attorney, CEO Cozy Nelsen and Board President Steve Bireline. The results are:

- **District 1: Julie Kiley, incumbent**
- **District 2: Jim Mazour, incumbent**
- **District 3: Ronny Bristle, incumbent**

A board reorganization meeting was held following the drive-through annual meeting with the following results:

- **President: Steve Bireline**
- **Vice President: Joni Rees**
- **Secretary/Treasurer: Julie Kiley**
- **Asst. Secretary/Treasurer: Bob Batschelet**
- **Representative on the Central Iowa Power Cooperative (CIPCO) Board of Directors: Steve Bireline**

PRIZE WINNERS

- **50-inch Vizio Smart TV (Grand Prize): Doug Harris**
- **Electric grill: Michael Schwabe**

The following are the winners of additional prizes selected through a random drawing of those who returned an election ballot. Prizes included a toaster, space heater, waffle maker, 7-quart Crock-Pot, ice maker, Google Nest thermostat, 6-quart Instant Pot pressure cooker, Ninja air fryer, wireless weather station, Presto Pizzazz pizza oven, DEWALT drill kit, Stanley jump starter, Shark robot vacuum, ice cream/yogurt maker, Bissell steamer, Ninja Foodi, electric pressure washer, \$25 gift cards (5) and \$50 gift cards (2).



Bill Wright

John McDermott

Charles Bilbrey, Panora
Lila Bilbrey, Panora
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THREE INTERESTING FACTS ABOUT ELECTRICITY

BY PAUL WESSLUND

Electricity turns dark into light, makes hot foods cold and cold foods hot, washes the dishes and searches the internet. It is essential to our everyday lives, yet we rarely think about it. But behind the scenes, interesting things are happening with electricity.

1 Electricity must be used or stored after it's generated

A rechargeable battery stores electricity, but the kind of electricity you use in your home needs to be used after it's generated. Electricity produced from power plants, solar panels, wind turbines and hydro dams needs to be perfectly timed for when you decide to use it.

A vast and intricate system of devices control power flow in a precisely balanced way. It's one reason utility operators must be strategic when adding renewable energy to the nation's fuel mix. Solar energy and wind power depend more on the whims of Mother Nature, which adds an extra degree of difficulty to power management.

Large-scale battery storage technology is rapidly improving, creating another way for electric utilities to better balance the flow and timing of electricity. Battery technology could also make it easier to add solar and wind energy to our grid because it can store energy when it's breezy and sunny, then use it at night and during calm weather.

2 Blame a squirrel for power outages

While severe weather causes most outages, if it's nice out and your electricity goes off, it could be caused by a squirrel. We all know to play it safe around electricity, but squirrels don't. They scamper and chew around transformers, substations and utility poles where they can disrupt high-voltage equipment.

But it's not just squirrels. Snakes, birds and other critters can find their way



into dangerous places. There's no official recordkeeping of wildlife-caused power outages, but estimates run as high as 20%.

3 Highways could charge electric vehicles (EVs) in the future

If researchers have their way, EVs wouldn't need to plug in – they could charge while being driven! “Wireless dynamic charging” projects are underway around the world. The idea is like wireless chargers you can buy for your home electronics, the kind you can set near a charger rather than actually plugging in the smart phone or other device.

Charging cars while they're driving along the freeway is of course a lot

more ambitious. But some developers predict that within five years, there could be stretches of vehicle-charging lanes.

Futurists expect electric trucks would be the most likely users of wireless charging lanes. Wireless dynamic truck charging could keep deliveries rolling rather than stopping for several hours to plug-in and recharge.

Electricity is such a basic part of our everyday life, so it's easy to forget about it. But every now and then it's good to think about all its benefits and mysteries.

Paul Wesslund writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives.

NEW TECH ALERT: IRON-AIR BATTERIES

BY MARIA KANEVSKY

As the electric grid continues to evolve, new technologies are being developed to help advance the grid of the future. One of these technologies is a new form of battery storage technology called the iron-air battery, which could potentially provide long-duration energy storage for *hundreds* of hours.

Long-duration storage adds reliability

Current battery technologies can only offer storage for tens of hours, meaning the innovative iron-air battery could provide energy for roughly 10 times longer than existing grid-scale batteries. This new technology could help ensure grid reliability even with extreme weather, such as hurricanes or powerful thunderstorms.

Long-duration energy storage will also be crucial for adding more solar and wind energy to the grid. This is because renewable energy is dependent on the weather and may not always be available when we need it. New iron-air batteries could provide the missing link by storing excess energy for when the sun isn't shining or the wind isn't blowing.

Low-cost “reversible rusting” technology

The battery technology itself is made up of thousands of small iron pellets that develop rust when exposed to oxygen. This process discharges the battery. When the oxygen is removed, the pellets revert back to iron, which then charges the battery. According to Form Energy, the startup company developing this new technology, this process is known as the principle of “reversible rusting.”

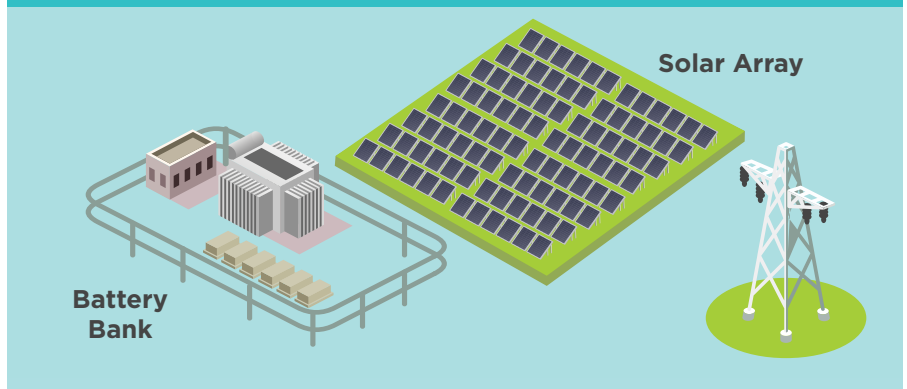
Since the battery technology mainly uses water, air and iron – all abundant and cheap resources – the technology is relatively low cost. These resources also make the technology relatively safe and simpler to recycle since there are no heavy metals.

A key feature of these batteries is their

THE FUTURE OF ENERGY STORAGE

A new form of battery storage technology, known as the iron-air battery, could potentially provide long-duration energy storage for hundreds of hours.

Long-duration energy storage will be crucial for adding more solar and wind energy to the electric grid since renewable energy is dependent on the weather and may not always be available when needed.



low cost, with Form Energy promising a price of less than \$20 per kWh. That price is about one-tenth the cost of lithium-ion battery technology, which is currently the cheapest battery technology on the market.

Individual iron-air batteries are about the size of a washing machine, making it easy to group many batteries together in a larger, scalable system. The size of the battery module group can vary depending on the storage needed at a specific site. This means the batteries can be placed in a variety of areas, from rural to urban, to meet energy needs.

Continued research and development

While this technology may be a solution for long-duration energy storage, the battery is not yet ready at the commercial level – although it is close. Form Energy estimates the battery should be ready for mass production by 2025. As a pilot project to test this groundbreaking technology, Form Energy is working with Great River Energy, a generation and transmission cooperative located in Minnesota. The 1 MW/150MWh project is anticipated to go live in 2023.

Given the importance of long-duration energy storage for the future of the grid, other startups are also looking to develop long-duration battery storage technology.

Time will tell if the iron-air battery, or any other long-duration battery, becomes successful as a new emerging technology. In the meantime, electric utilities can start to understand where this technology may potentially fit within their own systems to make the grid more resilient and reliable. Whether this technology becomes mainstream or not, utilities will continue finding ways to provide affordable, long-duration storage as the electric grid continues to change.

Editor's Note: In the March issue, we'll spotlight how several electric cooperatives in Iowa are harnessing battery storage technology.

Maria Kanevsky writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives.

FOOD AS A LANGUAGE

BY VALERIE VAN KOOTEN

On top of my microwave sits an oblong wooden box. The top features a decoupage rose, with the glue covering the petals a dingy yellow. The entire box is battered and nicked, but it contains a huge part of my history, culinary and otherwise.

Treasured mementos

Inside are recipes and other memorabilia – small index cards and scraps of paper featuring handwriting that can make me catch my breath. The box holds my Grandma Terpstra’s letter to me while I was a student at Iowa State University, telling me how she helped my uncle at the local farmers market and that the green beans are about past prime – not a recipe, but a note I treasure and store in the back of the box; my mom’s homemade ice cream directions, written in her angular script on a card that’s gone waxy with age; and my own childish fourth-grade penmanship, loopy and large, outlining my neighbor’s hot milk cake recipe, with a notation beside the “1 cup margarine” that says in parentheses, “2 sticks.”

I can trace my skill and advancing knowledge in the kitchen by these cards. Hot milk cake to deviled eggs to layered desserts to a cheese soufflé I am pretty sure I never attempted but am loath to throw away, just in case inspiration strikes.

My pile of cookbooks shows the same wear; they fall open to old favorites, pages splattered with cake batter and cookie dough. Their spiral bindings are coming apart, and disembodied pages are stuffed in like afterthoughts. These books come from churches and schools, high school home economics classes and local nonprofits. The names accompanying each recipe recall yet more memories, as I remember an older woman in my childhood church, or a family who has since moved away.

Family food memories

As human beings, we tend to relate family and get-togethers and



celebrations and deaths to food. It’s always been that way, I suppose.

Mention any holiday and aside from the religious overtones associated with that day, my guess is that your next thought will be the food – the scrumptious taco salad your sister-in-law makes, or the corn casserole everyone requests from your cousin, or the college kid who gets away with bringing potato chips, or the oyster stuffing that only your dad will touch (a dish that is sequestered at the end of the counter as much for those of us who don’t want it on our plates as it is for my dad, who doesn’t want to share with anyone).

Kent’s dad passed away at Thanksgiving. On the evening of the funeral, 30 of us gathered and shared the food that had descended on each of us – meat and cheese trays and ham buns, brownies and bars, gelatin salads and hamburger casseroles. When one doesn’t know what to say, food becomes the language of compassion.

And I’m good with that. Unless it’s oyster stuffing. Sorry, Dad – I don’t know what language that is.

Valerie Van Kooten is a writer from Pella who loves living in the country and telling its stories. She and her husband Kent have three married sons, two incredibly adorable grandsons and a lovely granddaughter.



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