

WHETSTONE VALLEY ELECTRIC

JANUARY 2024 VOL. 28 NO. 9

COOPERATIVE CONNECTIONS

Beneath the Black Hills

Charting Untrodden Miles in Jewel Cave Pages 8-9

Striking Gold in Science Pages 12-13

New Rates in 2024



Dave Page General Manager

For the first time since January 2017, Whetstone Valley Electric Cooperative will increase electric rates in 2024.

For several years, Whetstone Valley Electric and our power suppliers have been able to manage and mitigate rising costs to hold off a rate increase to our members. However, due to pressures from inflation and the impact of supply and demand of both electricity and equipment, an adjustment is now required.

In November and December, the board of directors met to review and consider the capital and operating budget for the coming year. After careful consideration and close adherence to our mission "to provide the highest level of service, quality, and value to our members and patrons in everything we do" – the board approved the capital budget which encompasses capital expenditures including electric infrastructure additions and replacements of just under \$2.5 million in 2024.

The construction work plan calls for continued line replacement each year, which is necessary to ensure reliable service for our members. Supply chain issues and inflation have had a significant impact on construction costs. Since 2020, the cost of transformers, enclosures and poles has more than doubled. In addition, it can take one or two years to receive many of the needed equipment items.

Wholesale power supply costs are more than half of our total operating cost and by far, the single largest operating expense. Wholesale Power costs are increasing in 2024 and more increases are expected in the coming years. The operating budget includes the purchase of 100,595 MWH at a cost of over \$6 million.

For every dollar you pay to Whetstone Valley Electric Cooperative, \$0.525 goes towards power supply costs; \$0.187 goes towards indirect expenses (interest, depreciation, and taxes); \$0.054 of that dollar is direct expenses (cable locating, right of way clearing, billing and postage, member meetings and incentive programs); \$0.11 goes toward general administration; \$0.10 is used for operations and maintenance; and \$0.024 goes towards operating margins.

As part of our mission, "to provide the highest level of service, quality, and value to our members...," we strive to be a light in our communities, assist in economic development and provide valuable training, education, member engagement and safety awareness for our members. As part of this commitment, our members have access to a variety of rebates and incentives for the beneficial use of electricity for lighting, heating, and water heaters.

Safety is always a priority for this organization and as such we plan to continue our public safety education campaigns throughout the year.

The increased capital budget along with an increase in power supply costs due to capital improvements and other additional expenses will mean that existing rate levels are not enough to meet financial requirements and budgeted expense levels. While we do plan to utilize deferred revenue, it will not be enough to put off the rate increase.

As a not-for-profit cooperative, Whetstone Valley Electric Cooperative's rates are designed to cover the cost of providing electric service. Rates are approved by the board of directors. We will keep you informed of the coming changes and let you know how those changes will affect your electric bill.

Our 2024 Work Plan and Budget initiatives have been designed to meet Whetstone Valley Electric's system replacement plans, growth, member initiatives and challenges facing the electric cooperative industry. Through it all, we strive to provide you – the member – with system reliability, affordable rates and programs and services that will continue to meet your needs and expectations. Stay safe this winter! We look forward to a great year.

COOPERATIVE CONNECTIONS

WHETSTONE VALLEY ELECTRIC

USPS 018-979

Managing Editor: Emily Jonason

BOARD OF DIRECTORS President: Bill Tostenson – 432-7876 Vice President: Joel Adler – 467-1002 Secretary: Darren Strasser – 938-4601 Treasurer: Krista Atyeo-Gortmaker – 676-2323

David Behrns - 932-3722 Tom Berens - 432-5034 Matt Cameron - 612-964-8909 Paul Nelson - 949-1818 Scott Niedert - 432-9397

General Manager:

Dave Page – davep@whetstone.coop

This institution is an equal opportunity provider and employer.

WHETSTONE VALLEY COOPERATIVE CONNECTIONS is published monthly by Whetstone Valley Electric Cooperative, Inc., PO Box 512, Milbank, SD 57252, for its members. Families subscribe to Whetstone Valley Cooperative Connections as part of their electric cooperative membership. Whetstone Valley Cooperative Connections' purpose is to provide reliable, helpful information to electric cooperative members on matters pertaining to rural electrification and better rural living.

Subscription information: Electric cooperative members devote 50 cents from their monthly electric payments for a subscription. Nonmember subscriptions are available for \$12 annually. Periodicals Postage Paid at Milbank Post Office, Milbank, S.D. 57252, and at additional mailing offices.

POSTMASTER: Send address changes to: Whetstone Valley Cooperative Connections, PO Box 512, Milbank, SD 57252; telephone (605) 432-5331; toll-free 1-800-568-6631; fax (605) 432-5951; e-mail energyexperts@whetstone. coop

Office hours: Monday-Friday 8 a.m.-4:30 p.m. Visit us at

www.whetstone.coop

Design assistance by SDREA.



Whetstone Valley Electric Sponsors \$1,000 Scholarship

Whetstone Valley Electric Cooperative and Basin Electric will be offering a \$1,000 scholarship to the dependent of a Whetstone Valley Electric Cooperative member. The scholarship is for the 2024-2025 school year.

Applicants for the scholarship must be a U.S. citizen and a dependent of a current member-system consumer of Whetstone Valley Electric Cooperative. They must be a student enrolled or planning to enroll in a full-time undergraduate or graduate course of study at an accredited, two-year or four-year college, university, or vocational/technical school. Individuals who have applied in previous years but did not receive the scholarship are eligible to apply again.

The scholarship recipient chosen will be based on SAT/ACT scores, overall grade-point average, work experience, participation in school and community activities, a personal statement of career goals and a written recommendation by a third party.

Applications for the 2024 scholarship award are due in the Whetstone Valley Electric office on or before Feb. 20, 2023. All applications will be forwarded to Basin Electric to be judged. The winner will be announced at the 2024 annual meeting.

Whetstone Valley Electric is a member of Basin Electric, which is a consumerowned and controlled regional cooperative responsible for supplying wholesale power to nine Midwestern states.

For more information and a scholarship application form, contact Whetstone Valley Electric or your local high school guidance counselor.

Co-op Food Drive

Whetstone Valley Electric Cooperative members contributed non-perishable food to the company's 16th annual food drive. All members who donated food were submitted into a drawing for a \$50 bill credit. The winner of that drawing was Dean Hanson.

We would like to express our gratitude and thank all that donated.



Left to right: Ryan Dunnihoo, Brian Davis, Mark Haaven, Tristan Hall

January is National Radon Action Month

Radon is a Natural Danger

About one in 15 homes in the U.S. has radon levels at or above the the EPA action level, according to the National Cancer Institute. You can't see or smell radon, and scientists estimate 20,000 lung cancer deaths in the U.S. each year are attributed to it.

Radon is produced from a natural breakdown of uranium in soil, rock and water. It enters homes, offices, schools and other buildings through cracks in floors and walls, construction joints or gaps around service pipes, electrical wires and sump pits. The Environmental Protection Agency reports elevated levels of radon gas have been measured in every state and estimates nearly one out of every 15 homes in America has elevated radon levels.

People who breathe in these radioactive particles, swallow water with high radon levels or are exposed to radon for a long period of time are susceptible to lung damage and lung cancer. Smokers who are exposed to elevated levels of radon gas have a 10 times higher risk of developing lung cancer, according to the Centers for Disease Prevention and Control.

It may take years before health problems appear. Your chances of getting lung cancer from radon depend mostly on:

- How much radon is in your home
- Where you spend most of your time (the main living and sleeping areas)
- The amount of time you spend in your home
- Whether you are a smoker or have ever smoked

Test Your Home

Old homes, new homes, homes with basements and homes without basements can have radon problems. Testing is the only way to determine how much radon is present.

Consider hiring a professional tester. Short-term (2-90 day) and long-term (more than 90-day) test kits are available, with the long-term kit producing more accurate results. The EPA website can help you find a radon test kit or measurement and mitigation professional near you. Do-it-yourself test kits also are available at many local hardware stores.

No level of radon exposure is considered completely safe, however the EPA only recommends reducing radon levels in your home if your long-term exposure averages four picocuries per liter (pCI/L) or higher. A pCI is a measure of the rate of radioactive decay of radon gas. This decay causes radioactive particles that can get trapped in your lungs when you breathe.

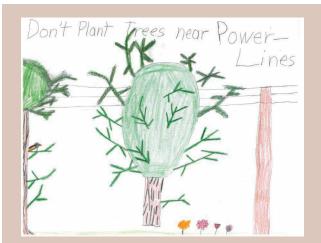
Reduce Radon Gas in Your Home

The American Cancer Society says a variety of methods can be used to reduce radon gas levels in your home, including sealing cracks in floors and walls and increasing ventilation though sub-slab depressurization using pipes and fans.

The EPA recommends using a state or nationally certified contractor, because lowering high radon levels often requires technical expertise and special skills. Two agencies have set the standard for participants seeking certification:

- The American Association of Radon Scientists and Technologists
- National Radon Safety Board

Always test again after the work is finished and then every two years. The U.S. Environmental Protection Agency has designated January as National Radon Action Month, a time when health agencies across the country urge all Americans to have their homes tested for radon.



Don't Plant Trees Near Power Lines Annette Tschetter, Age 9

Annette Tschetter instructs readers to not plant trees near power lines. Annette is the daughter of Ryan and Elaine Tschetter from Revillo, S.D., members of Whetstone Valley Electric.

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.

PUMPKIN APPLE SOUP

Ingredients:

3 tbsps. butter 1 cup finely chopped onion 2 tsps. pumpkin pie spice 1 tsp. ground ginger 1 can (15 ounces) pumpkin 1 cup chunky applesauce 3 1/2 cups chicken broth 3/4 cup heavy cream

Method

Melt butter in large saucepan on medium heat. Add onion; cook and stir 5 minutes or until softened. Stir in pumpkin pie spice and ginger.

Stir in pumpkin, applesauce and broth until well blended and smooth. Bring to boil, stirring occasionally. Reduce heat to low; simmer 5 minutes. Remove from heat. (If a smoother soup is desired, place mixture in batches in blender container; cover and blend until smooth.) Stir in cream. Heat gently before serving, if necessary.

McCormick.com

CREAMY CHICKEN NOODLE STEW

Ingredients:

- 1/3 cup butter, cubed 1 med. carrot, shredded 1 celery rib, finely chopped
- 1/3 cup all-purpose flour 1 carton (32 oz) chicken broth
- 1 cup whole milk
- 1 cup uncooked kluski noodles or other egg noodles
- 2 cups cubed cooked chicken
- 1 1/2 cups shredded cheddar cheese
- 1/4 tsp. salt
- 1/4 tsp. pepper

Method

In a large saucepan, heat butter over medium high heat; saute carrot and celery until tender, 3 to 5 minutes. Stir in flour until blended; gradually add the broth and milk. Bring to a boil, stirring constantly. Cook and stir until thickened, 1-2 minutes. Stir in the noodles. Reduce heat: simmer uncovered, until noodles are al dente, 8-10 minutes, stirring occasionally. Add the chicken, salt and pepper. Cook and stir until the chicken is heated through. Stir in the cheese until melted. Serve.

Susan Mitzner Balaton, Minn.

CHICKEN NOODLE SOUP WITH ROTISSERIE CHICKEN

Ingredients:

- 1 tbsp. vegetable oil
- 1 1/2 cups chopped carrots, (about 1/2-inch)
- 1 1/2 cups chopped celery, (about 1/2-inch)
- 1 cup chopped white onion, (about 1/2-inch)
- 1 tbsp. rotisserie chicken seasoning
- 4 cups chicken stock
- 4 cups medium egg noodles 2 cups chopped rotisserie
- chicken 1 tbsp. parsley flakes

Method

Heat vegetable oil in large saucepan on medium-high heat. Add carrots, celery and onion; cook and stir 8 to 10 minutes until softened and lightly browned. Stir in Seasoning. Cook 1 minute.

Add stock and egg noodles. Bring to boil. Reduce heat; simmer 8 to 10 minutes until noodles are just tender.

Gently stir in chicken and salt. Simmer 2 minutes longer. Remove from heat. Stir in parsley to serve.

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 2023. All entries must include your name, mailing address, phone number and cooperative name.

Tips to Stay Warm and Save Energy This Winter

Q: My winter energy bills are typically higher. Can you offer advice on how to lower bills during colder months?

A: Colder weather can increase energy use and bills since heating accounts for the highest wintertime energy consumption in most homes. The amount of energy used to heat your home depends on your equipment, how you use it and the efficiency of your home's shell – the building components that separate the indoors from the outdoors.

It's important to know how your home is heated so you can make informed decisions on your energy use. It also helps you prepare for upcoming bills and avoid surprises that impact your budget. A forced-air furnace is the most common type of heating system and is fueled by natural gas, propane, oil or electricity. Heat pumps are growing in popularity and available for forced-air systems. If you have a forced-air system, check the filter regularly and replace when it's dirty. Ductless heat pumps, or minisplits, boilers, radiant heat, baseboard heaters and electric resistance heaters are other common heating system types.

If you don't know what type of system you have, find the model number of your equipment and look it up online. You'll find information about the kind of system, how efficiently it operates and recommendations for servicing it, which can improve system efficiency.

We use energy to make our homes comfortable. The easiest and lowest-cost way to save money on heating is to keep your thermostat as low as your comfort will allow. The closer your home's temperature is to the outdoor temperature, the less energy is used.

The U.S. Department of Energy recommends a thermostat setting of 68 degrees in the winter while you are awake and lower when you are asleep or away from home. Keep in mind that setting the temperature too low can cause pipes to freeze or moisture issues in some geographic locations.

Adding an additional layer of clothing, slippers or a hat can keep you comfortable in a cooler home.

Do you use electric resistance space heaters to heat a room or small section of your home? If so, you may see an increase on your electric bill. For example, let's say you use a 1,500-watt electric space heater to warm your living room while you watch TV or read a book. Operating that space heater for two hours a day at the U.S. average electricity rate of about 16 cents per kilowatt-hour will cost you about \$15 a month. Operating that same space heater for 12 hours a day will cost you about \$90 a month.

If you choose to use space heaters, use them safely. Keep them three feet away from anything flammable, do not leave them unattended and plug them directly into the outlet, not an extension cord or power strip.

Just as we put on a windbreaker to keep cold winds from blowing through a sweater, your home also benefits from blocking air movement. Air sealing can make a big improvement in the comfort of your home as well as provide energy savings. A common air sealing practice is applying weatherstripping to exterior doors and windows. You can also seal around plumbing penetrations to help eliminate drafts. A gap often exists between the drywall or wood and the plumbing pipes and drains. Filling these gaps with expanding foam can reduce drafts in bathrooms and kitchens.

Cold, windy winter days are the perfect time to find opportunities for air sealing. Rattling doors or moving curtains can indicate air leakage. Air leakage can occur where two different materials come together, like drywall and trim work. Cracked plaster and gaps in drywall can also cause drafts. Sealing the gaps saves energy and improves comfort.

As outdoor temperatures dip this winter, take a few proactive steps to maintain comfort in your home and keep your energy bill in check.



Miranda Boutelle Efficiency Services Group



Jerry Hammerquist, middle, receives the Rural Neighbor Award.

Jerry Hammerquist Honoring a Cooperative Leader

Shannon Marvel

shannon.marvel@sdrea.coop

It's a small wonder why someone like Jerry Hammerquist would win the 2023 Rural Neighbor Award, sponsored by Touchstone Energy Cooperatives. He's a community rancher who values his neighbors.

"Well it's pretty easy in our neighborhood to be a good neighbor because we've got good neighbors. We help them, they help me," Hammerquist said.

"There's nothing like having good neighbors, I'll grant you. We have the best neighborhood in South Dakota."

Hammerquist lives and ranches on the farm his grandfather first homesteaded in Caputa about 140 years ago.

When his father passed away in 1960, Hammerquist was a senior in high school.

"I got my classes changed so I could work on the ranch, then I started working for neighbors and sale barns. My wife got to working for the attorneys. And we got on with the federal U.S. Attorney. Without her, I wouldn't have made it. We ended up having two kids, seven grandkids, and one great grand kid. Caputa is where I grew up. I'm still here," Hammerquist said.

Hammerquist got his start in the cooperative world when he was asked to be on a committee to find a candidate for the election in his area.

"I could not find any, so I was told to put my own name in – not thinking a thing about it," Hammerquist recalled.

He won the 1984 election. Back then, Hammerquist said things were simpler.

"We didn't have any complaints, it was very easy to start out with. Then I got to be an officer, and we grew like crazy," he said.

For almost four decades, Jerry has faithfully served as a board director for West River Electric Association for an impressive 39 years, 20 of those years as board chairman.

Hammerquist said it was an interesting time when he was the chairman of the Action Committee for Rural Electrification fundraiser. During that time, Hammerquist was able to get many people to donate to the fundraiser. "I had a little trouble cooking the egg sometimes. It was a very good experience for me," he said.

Hammerquist not only manages a thriving ranch but has been a valued member of the Elks Club, Central States Fair, Western Junior Livestock Show, and the Western South Dakota Buckaroos.

He's served as a past president and director of the Pennington County Agricultural Stabilization and Conservation Service Farmers Home Administration.

Currently, he holds the position of president on the Rapid Valley Water Conservation District Board and has previously led Rushmore Electric and chaired Action Committee for Rural Electrification (ACRE) on behalf of the South Dakota Rural Electric Association.

He's also been recognized with significant community agricultural awards, including the Catalyst Club Good Neighbor award in 2010 and Ag Producer of the Year in 2018.

He's a recipient of the Black Hill Stock Show Hall of Fame/Silver Spur Award.

His advice to those who follow in his path is to remember that you're member owned.

"The customers do come first. And the employees," Hammerquist said. "It was all a real learning experience."



Jewel Cave's walls glisten with a coating of calcite crystals coating that give this cave its unique name. Image credit: NPS

BENEATH THE BLACK HILLS

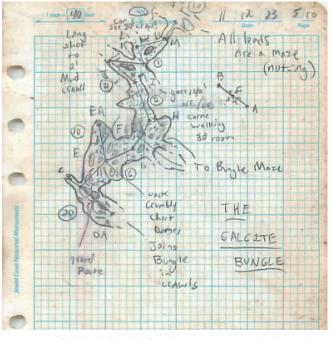
Charting Untrodden Miles in Jewel Cave

Frank Turner

frank.turner@sdrea.coop

In the depths of the Black Hills lies an immense domain of underground caves renowned for their untouched beauty, enticing tourists with the opportunity for stunning photography and expert-led tours. Digging a little deeper, however, reveals that many of these unsuspecting attractions are actually home to a vast network of rooms and passages where no human has ever set foot before. Jewel Cave National Monument, located west of Custer and celebrated for its unique, crystal calcite coating, is one such subterranean cavern that continues to be a frontier of exploration.

Jewel Cave has thousands of miles of unexplored passages, crawlways and chasms that await discovery, making it one of the largest cave systems in the world. The immensity of Jewel Cave and others like it in the Black Hills has inspired multiple



A field sketch from the four-day Veterans Day weekend expedition. Image credit: NPS

generations of ambitious cave explorers who have devoted years of their lives to mapping out new areas of these underground expanses.

Despite their efforts, only a small fraction of Jewel Cave has

been navigated and mapped, leading to new cave discoveries being recorded even now.

Recently, a group of National Park Service volunteer cave explorers, led by volunteer Chris Pelczarski, expanded the known limits of Jewel Cave in an expedition over Veterans Day weekend of this year.

In total, their journey lasted four days. Bringing only what they could carry, the small group of cavers wriggled through miles of passages without natural sunlight or ready supplies to ultimately be the first to step into what was previously untrodden terrain.

To achieve their goal, the volunteers tackled the 3-D maze that defines the Jewel Cave network, hiking and climbing steep underground terrain. Despite the challenge, Pelczarski said the ending discovery made the whole journey worthwhile. When discovering something new, the challenge pales in comparison.

"The experience of pushing the edge of something is very unique," said Pelczarski. "When entering a new space, it weighs on you that it's the first time that a human has ever interacted with that space. As explorers, we have an incredible amount of responsibility because we are the ones who share that story with others and set the tone of that space."

In total, the explorers discovered and charted just over one mile of new passages during their Veterans Day expedition, uncovering new passages and even a distinctive split in the rock their group named 'Fruit by the Foot,' due to the volunteer group garnering a "fruitful yield" of discovery from the rock formation.

The broader work of these cavers has led to several breakthroughs over the years, including the discovery of Jewel Cave's first cave lake, Hourglass Lake.

"In 2015, our explorers got to a point where the lowest part of the cave dipped into the Madison Aquifer. It was Jewel Cave's first cave lake," said Michael Wiles, Chief of Resource Management at Jewel Cave National Monument. "Since that initial discovery, 12 more lakes have been found within Jewel Cave."

With the possibility of discovery around every corner, Wiles regards volunteer explorers like Pelczarski as torchbearers in a continuing legacy created by the many cave explorers that came before them, including South Dakota caving legends Herb and Jan Conn and Wiles himself.

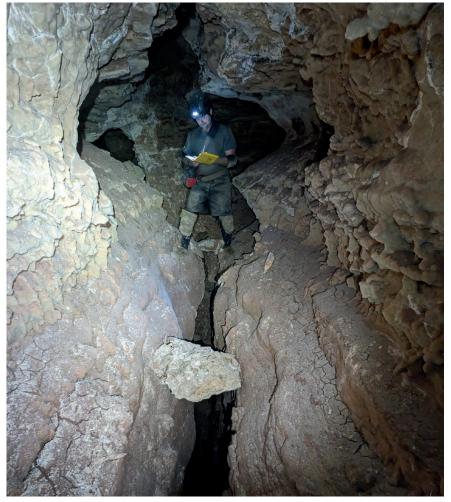
"Herb and Jan are icons in the Black Hills area and throughout the world because they were the first to document and map the cave back in 1959," said Wiles. "They fell in love with the cave and it really captured their imagination."

Together, Herb and Jan discovered the first 70 miles of Jewel Cave. Building from Herb and Jan's initial discoveries, Wiles, with the help of volunteers like Pelczarski, has been involved in the mapping of an additional 150 miles of cave since the Conns retired.

To date, 218.8 miles of Jewel Cave have been discovered. However, Wiles explained that barometric airflow studies indicate that the cave could be up to 14,000 miles long, and only 3% of the cave's estimated total length has been mapped and discovered.

"Jewel Cave, for practical purposes, isn't going to end," said Wiles. "We know that the cave is hundreds if not thousands of miles long and that, alone, is exciting."

With only a fraction of the total cave discovered, it's evident that several years of cave discoveries lie ahead.



Volunteer cave explorer Dan Austin sketching a passage of Jewel Cave. Using coordinates to draw a survey line in the book, Austin draws the cave walls around the line to represent the cave walls around him, adding additional notes as needed. *Image credit: NPS*

2024 WVEC Upcoming Director Elections

Whetstone Valley Electric Cooperative is making plans for its 82nd annual membership meeting. The 2024 annual meeting will be held on March 21, 2024, at the Wilmot High School.

This year, three members must be selected to serve on the board of directors, all for three-year terms. The districts with open seats are as follows:

District 3: Alto, Spring Grove, Ortley, Summit, Springdale, Garfield Townships **District 4:** Geneseo, Lockwood Townships **District 6:** Melrose, Big Stone Townships

Without a candidate for District 3, it will become vacant as of the date of the next annual meeting due to term limitations of no more than five consecutive terms or a total of fifteen consecutive years set forth in Article IV, Section 2 of the cooperative bylaws.

Director nominations are by petition only. Petition forms are available at our headquarters at 1101 East Fourth Avenue in Milbank. A candidate must be a bona fide resident of the district and return a petition with at least six (6) signatures from current members of the same district to the Whetstone office not less than 40 days prior to the annual meeting.

Because of publication deadlines, to have a candidate profile published in the March issue of *Cooperative Connections*, petitions should be submitted at or prior to Feb. 1, 2024.

The process for becoming a Director for Whetstone Valley Electric Cooperative, Inc. (WVEC) is contained in the Cooperative bylaws Article IV. Each candidate for a director position should carefully read the bylaws and understand the procedures. The bylaws can be found on our website, whetstone.coop or by contacting our office.

The Whetstone Valley Electric Cooperative board serves on behalf of the membership to provide oversight and strategic governance, while day-to-day operations are led by the cooperative general manager. The board is responsible for sending representatives to the associations of which the cooperative is a member. Directors are expected to attend education seminars and may be asked to serve on other associated cooperative boards. Directors may be asked to lobby and remain informed on pertinent legislative issues. Reading and studying is necessary to keep informed of current issues and how they may affect the co-op. It is the responsibility of the board to evaluate and develop long-term strategic plans to assure the financial and operational stability of the cooperative. Directors should expect to commit about 30 days per year for cooperative related activities.

In addition to the rewards of being a director, there are some important responsibilities. A director must:

- Be prepared to abide by and uphold the bylaws of the cooperative
- Be open to new ideas and have a desire to learn
- Be able to understand and engage members as their expectations change
- Be adept at analyzing complex options to make sound decisions

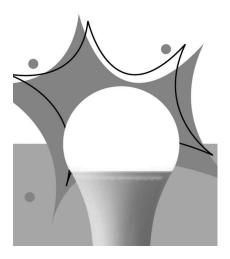
If you are interested in learning more about what it means to be director, please feel free to contact a board member or our General Manager.

ENERGY EFFICIENCY TIP OF THE MONTH

During winter months, ensure your home is well sealed to reduce the need for excessive heating. Seal air leaks around your home and add insulation where needed to save up to 10% on annual energy bills.

Install weather stripping on exterior doors and apply caulk around windows. Check attic insulation levels and hire a qualified contractor if additional insulation is required.

Source: energystar.gov



Estate Planning is for Everyone

Allison Goldberg

You have an estate. Most people do. It comprises all your possessions, bank accounts, investments, life insurance and even your pet. No matter your wealth, you should have a plan for what happens to those assets at the time of your death. And you should also plan for contingencies in case you become mentally or physically incapacitated. Creating a plan for the estate you have is a gift of guidance and peace of mind for both you and your loved ones. Without an estate plan, the state dictates the transfer of any assets that do not pass by joint ownership or beneficiary designation.

When death or tragedy occurs, you'll want control of how your money, medical care, funeral arrangements and possessions are handled – and to whom money and possessions are distributed to and when. An estate plan provides these instructions and can ensure your wishes are executed while minimizing costs and potential hassles for your heirs. Here are a few tips for getting started.

Involve family and friends who may be affected or included in your discussions.

Transitions and financial transfers will likely go more smoothly if heirs are informed of your estate decisions while you are available to explain your thought process. Additionally, caregivers for minor or disabled dependents, caregivers for pets and financial trustees should be consulted before you include them in your plan. Caregiving is especially important if any of your dependents have special needs. If you have a business, you also need to provide for its transfer upon your death or disability.

Use estate planning as an opportunity to organize and correct financial documents.

Before getting into the details of your estate plan with an estate planning professional, review and catalog all of your financial assets. As you do this, check the beneficiary information, and make sure the contact information and allocations are still correct; if information and allocations are incorrect, gather the correct information, and make time to correct the errors. If you haven't already, file these documents in a fireproof box or safe. Life insurance, retirement accounts (workplace accounts and IRAs) and annuities all transfer upon your death via beneficiary designation rather than through your will. Since these can represent a major share of your estate, it is important that such designations are kept up-to-date.

Start with the basics.

Most experts recommend beginning your estate plan with life insurance, a will, a durable power of attorney, a health care power of attorney and a living will. The life insurance should cover burial expenses and replace lost earnings, which is particularly important for young families. The will should specify how you would or would not like your assets divided and transferred following your death, as well as detailed arrangements for the financial and legal guardianship of minor children or dependent adults; you can also appoint a trustee to manage the distributions, sell assets and perform other fiduciary tasks. A durable power of attorney appoints someone to make medical and other decisions on your behalf should you become incapacitated or disabled, and your living will should include detailed health directives.

Hire an estate planning professional.

If you already have a Certified Financial Planner[™] (CFP[®]), they can guide you from the beginning of this process and refer you to an appropriate lawyer. Beginning with a CFP and allowing them to help guide and educate you can save you money on attorney's fees. Low-income individuals and families can contact their state's legal aid society and Bar Associations to find low- or no-cost consultations.

Periodically review your plan.

Your estate plan should continue to evolve as your life does. Review your plan at least every 10 years and more frequently if you experience major life events, such as births, deaths, marriages, divorces or retirements that could change your wishes. Using these milestones as reminders to review and update beneficiaries, allotments and health directives will guarantee your estate plan reflects your most recent wishes. Planning ahead ensures your loved ones will have guidance and reassurance.



The Sanford Underground Research Facility partners with more than 2,000 scientists from more than 200 global institutions and universities, enabling groundbreaking research across multiple disciplines.

STRIKING GOLD IN SCIENCE

Unearthing Research at the Sanford Underground Research Facility

Frank Turner

frank.turner@sdrea.coop

Years ago, the Homestake Mine in Lead, South Dakota, lured prospectors with the promise of riches during the gold rush era. Yet today, the site where miners once delved for gold now hosts scientists pursuing their own discoveries, not for gold, but for discoveries in particle physics and dark matter at the Sanford Underground Research Facility.

The mine's transformation into a

state-of-the-art research facility really began in 1970 when Raymond Davis Jr. began what is now know today as the Homestake experiment, a research project that would forever change the entire landscape of western South Dakota. Seeing beyond the precious metal, Davis envisioning the Homestake Mine as the perfect location to conduct research on the illusive neutrino particle. Conducting neutrino research underground was a crucial component of the project because the deep environment of the mine shielded his experiments from cosmic rays, allowing for more accurate detection of neutrinos. While the Homestake Mine was still in operation, Davis worked among the bustle of mining activities to conduct research, which led to groundbreaking discovery in neutrino research and ultimately to a Nobel Prize in 2002.

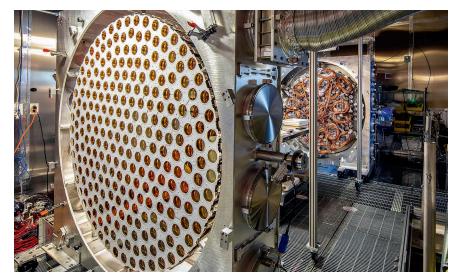
As Davis concluded his ground breaking neutrino research, a chapter was closing for the Homestake Mine. According to the facility's website, Homestake was North America's largest and deepest gold mine at the time of its closing, producing approximately 41 million ounces of gold in its 126-year lifetime. When the mine was decommissioned in 2002, it threatened to not only leave a vast cavern in the earth but also a significant void in the local economy. Davis's success, however, prompted South Dakota's leadership to step in at a critical moment and repurpose the mine into a bastion of scientific research.

Mike Ray, Media Relations Manager at Sanford Underground Research Facility, reflected on the state's response to the mine's closure. "Those in leadership at the time saw that this mine was closing and the terrible economic impact that the closure was going to have on the northern hills and this community, but they saw a light at the end of the tunnel," he said.

The light at the end of the tunnel became the Sanford Underground Research Facility. To advance one of South Dakota's most ambitious projects, the state secured a \$70 million donation from philanthropist T. Denny Sanford and a land donation from Barrick Gold Corporation, the mine's owner. The state then established the South Dakota Science and Technology Authority, which contributed an additional \$40 million to realize the project. These donations paved the way forward to begin construction on a space for some of the most advanced science projects ever made.

The herculean effort, Ray explained, was not only to mitigate the negative economic impact of the mine's closure but to create something even more impactful for South Dakota and its residents. Today, the Sanford Underground Research Facility collaborators include over 2,000 scientists from over 200 institutions and universities worldwide. It is expected to garner an estimated \$2 billion net economic impact in South Dakota by 2029.

Beyond its economic contributions, the lab holds potential for groundbreaking discoveries across various disciplines, including projects researching biology, geology, engineering or particle physics. Notably, the lab is currently home to LUX-ZEPLIN, the world's most sensitive dark matter detector and DUNE, the Deep

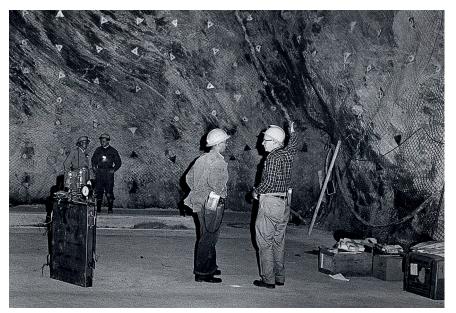


An array of the LUX-ZEPLIN, the world's most sensitive dark matter detector. Photo Credit: Matthew Kapust, Sanford Underground Research Facility.

Underground Neutrino Experiment, among several other significant projects. While LUX-ZEPLIN and DUNE are distinct projects, both seek to provide fundamental insights into our current understanding of the laws of physics.

"There are so many examples of how fundamental research can take decades to lead to innovation," Ray said. "The beauty of this is that we don't always know where this research will take us, but if we don't do this kind of exploration, we will never know the applications of these far-reaching projects."

Regardless of the outcome, the Sanford Underground Research Facility will continue to not only preserve the historic legacy of South Dakota's Homestake Mine, but also place South Dakota at the forefront of discovery and innovation for years to come.



A historic view of the Davis Cavern that hosted Ray Davis's Nobel Prize-winning solar neutrino experiment. The cavern has since been expanded and its walls have been coated with shotcrete, a type of spray-on concrete, to accommodate research on dark matter. *Photo Credit: Anna Davis, Sanford Underground Research Facility.*



Shown in front of the True Dakotan building on Main Street in Wessington Springs are newspaper/print shop staff (left to right) Delia Atkinson, Office Manger; Kristi Hine, Editor/Publisher; Cathy Perry, Proofreader; shop dog Lincoln. Among the oldest buildings in Jerauld County, the building has always been a newspaper and/or print shop. Constructed in 1915, the True Dakotan recently underwent a complete renovation after a fire in June 2020.

SMALL TOWN NEWSPAPERS Connecting Communities

Shannon Marvel

shannon.marvel@sdrea.coop

Rural, small-town newspapers are an important cohesive element that keep communities together.

Many of South Dakota's community newspapers have faced economic difficulties, yet their dedication to their mission is what drives them to find innovative ways to persist.

According to South Dakota NewsMedia Association's Executive Director David Bordewyk, a combination of factors have made it difficult for small, community newspapers to thrive as they once did in decades past.

"There's a lot of advertising that used to be in traditional media that has moved into a digital realm such as Google, Facebook and other platforms. That's been a huge disruption. Then there's the whole thing about the internet and how people consume information," Bordewyk said.

The pandemic had a major impact on the newspaper business and accelerated online advertising.

Inflation has also increased production and postal service costs considerably, which has made it tough for small, rural newspapers to balance their books and maintain profits.

"Almost all of our community newspapers rely on a postal service to deliver the newspaper to subscribers. And we've seen a 40 percent rise in postal rates over the last three years," Bordewyk said.

How do newspapers deal with that?

Some newspapers have done a good job of capturing that digital market, Bordewyk said. Others have really gotten aggressive at increasing their prices, with some having to increase subscription rates from \$40 to \$80 per year.

Regardless, there's value in a community newspaper.

Who else is going to consistently cover city council and county commission meetings, or local school activities and sports? Kristi Hine knows that value well.

Hine is the publisher and editor of the True Dakotan, a weekly newspaper that covers local happenings in Jerauld County, based in Wessington Springs.

"Newspapers play such an important role to keep communities together," Hine said.

"We cover everything from local government to high school sports to features. I just did a feature about these women who did a Christmas village exhibit at the county courthouse. It's peeling back the layers and truly telling the community's story. Without the local newspaper, there's no one to tell that story. Larger outlets may come cover a story if you have a tornado or your sports team is doing really well, but it's the community newspaper that'll be listening in on what the city council is going to say at their meeting," Hine said.

Community newspapers, in that sense, really are the eyes and ears for the community. The important goal of the community newspaper is to connect the community, Hine said. "Especially in this world when it's so easy to be on different sides of the spectrum. Community newspapers are the fabric that holds communities together, no matter what side of the aisle their readers land on," she said"Especially in this world when it's so easy to be on different sides of the spectrum. Community newspapers are the fabric that keeps communities together, no matter what aisle their readers land on," she said.

Hine bought the True Dakotan eight years ago in March of 2015. Originally from Phoenix, Arizona, the newspaperwoman

has found herself enthralled with the small Jerauld County community.

Over the last eight years, Hine said she's seen more changes in the newspaper industry than her predecessor saw in the last 40 years.

"There's been a great deal of change," Hine said.

She's gotten more creative with advertising, using social media as a tool to promote local businesses. If a business is hosting an event or wants to promote a special sale, the business will do a Facebook live with Hine.

The True Dakotan also offers an online E-Edition and weekly newsletter, though the original print product is still the largest circulation.

Advertising and marketing aside, it all comes down to local news content.

"That's the driving force as we enter this evolution of newspapers. We're at the crux," Hine said.

To the northeast in Day County, the Reporter and Farmer newspaper is being led by Amanda (Fanger) Dulitz, a young reporter-turned-publisher, who recently purchased operation last year.

"Community newspapers are the lifeblood of a community. The strength of a community is reflected in the strength of their community newspaper. We're the bulletin board of the community. We're the cheerleaders of the community. We keep people connected," Dulitz said.

Dulitz found her passion for rural newspapers in South Dakota as soon as she picked up the reporter pad in 2007 after graduating from high school.

She worked at the Onida Watchman for a short time before heading east to Webster, where she took on the role as a news reporter for the Reporter and Farmer. Fast forward a couple decades and now Dulitz is the owner of the Reporter and Farmer.

She noted that costs were pretty stable at the newspaper for awhile, but seemed to sharply increase as soon as she signed the dotted line giving her ownership of the operation.

"I'll probably have to take a look at my rates and lock in my rates for the next year. Everything is just going up, and it impacts the bottom line overall and you've got to do what you've got to do," she lamented.

But without the support of subscribers and advertisers, and really the entire community as a whole, the newspaper couldn't fulfill its purpose of keeping everyone on the same page and in the know.

The relationship between a community newspaper and the community itself is something Dulitz compares to a team of horses.

"The newspaper keeps everybody in an area knowing what's going on and pulling in the same direction. One horse can only pull so much, but if you put them together they can pull double. That community unity – the newspaper – is what yokes people together and gets people pulling together," Dulitz said.

She understands that without the community support, there'd be no newspaper.

"We've got some of those readers when the paper gets back from the press on



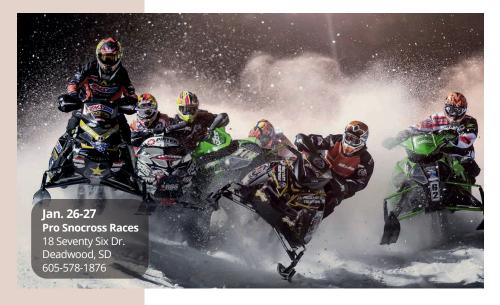
Kristi Hine, editor/publisher, True Dakotan and Delia Atkinson, office manager

Friday – they're standing there waiting for the paper to be dropped off. They're the first ones in the door letting us know about some breaking news event that we haven't heard about yet," she said.

"Constantly, readers and advertisers let us know what we're doing right and what we're doing wrong. We need that. We need that mutual push and pull. We recognize that our readers and advertisers are key to our business and we appreciate it."



From left is Publisher Amanda (Fanger) Dulitz, circulation manager Pat Sass, graphic designer Megan Garry, writer Kevin Winter, sales representative Kirstin Ure (front), print tech Jessica Washenberger and proofreader Linda Holberg.



JAN. 5 Granite Sports Fantastic Friday 3 p.m. Hill City, SD

JAN. 6 Live on Stage High Country Guest Ranch Hill City, SD

JAN. 10 45th Annual Ranchers Workshop 9 a.m. Sinte Gleska University Multi-Purpose Center Mission, SD

To have your event

listed on this page, send

complete information,

including date, event,

Include your name,

address and daytime

telephone number.

Information must be

weeks prior to your

location of event.

submitted at least eight

event. Please call ahead

to confirm date, time and

place and contact to your

local electric cooperative.

JAN. 12 Granite Sports Fantastic Friday 3 p.m. Hill City, SD

JAN. 13 Knights of Columbus Bowling Tournament 1 p.m. Meadowood Lanes

Rapid City, SD

JAN. 20 Live on Stage High Country Guest Ranch Hill City, SD

JAN. 23 A Trip to Chile (Reservations Required) 6:30 p.m. Mangiamo Hill City, SD

JAN. 25 A Trip to Chile (Reservations Required) 5:30 p.m. Mangiamo Hill City, SD

JAN. 26 Granite Sports Fantastic Friday 3 p.m. Hill City, SD

JAN. 26-27 Reliance Area Community Development 29th Annual Dinner Theater 6 p.m. Reliance Legion Hall Reliance, SD FEB. 3 Live On Stage High Country Guest Ranch Hill City, SD

FEB. 3 Lake Hendricks Fishing Derby 11a.m. City Boat Landing Hendricks, MN

FEB. 10 Polar Bear Chili Cook-Off 11a.m. Main Street Hill City, SD

FEB. 10 Tour de Chocolate Main Street Hill City, SD

FEB. 17 Live On Stage High Country Guest Ranch Hill City, SD

FEB. 18-20 MASC presents Disaster! the Musical Vesta Community Center Vesta, MN

FEB. 20 A Trip to Portugal 6:30 p.m. Mangiamo Hill City, SD

FEB. 22 A Trip to Portugal 6:30 p.m. Mangiamo Hill City, SD

FEB. 23-24 Women in Blue Jeans Conference Highland Conference Center Mitchell, SD

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