

NEBRASKA

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Magazine

May 2024

DIGGING FOR DOLLARS

How to Save Money in the Garden

Inside:

- May is Electrical Safety Month • Backup Power
- Unearthing the Past • Why Solar is Not Free



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Gardeners use a variety of purchased products in their yard work, most of which have gone up in price sharply in the past two years. See related article on page 6. Photograph by George Weigel



Wayne Price

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Breaking Barriers: New Funding Opens Path to Renewable Energy Careers

The landscape of employment is evolving, and our approach to workforce training must as well. In February, the U.S. Department of Energy (DOE) announced a pivotal step in this evolution, as \$24 million in funding was allocated to support workforce training programs focusing on renewable energy jobs that do not necessitate a four-year degree.

Under the umbrella of the Biden Administration's Investing in America agenda, community colleges, trade unions, and labor management partnerships are empowered to apply for funding to establish Industrial Assessment Centers (IACs). The program was previously open to four-year educational institutions, which includes the University of Nebraska-Lincoln campus, which has operated an IAC since 2017. These centers serve a dual purpose: providing free energy assessments to small and medium-sized manufacturers while offering hands-on learning opportunities to students, apprentices, and workers.

The significance of this funding cannot be overstated. Secretary of Energy Jennifer Granholm emphasizes that over half of the jobs created by President Biden's agenda won't require a college degree, underlining the importance of accessible pathways to meaningful employment.

In November 2023, the DOE selected the inaugural recipients of funding to establish IACs, marking a significant step forward in workforce development. This expansion, made possible by the Bipartisan Infrastructure Law, builds on the DOE's longstanding efforts to bridge the gap between education and employment in the clean energy sector.

The impact of this initiative extends beyond job creation; it represents an investment in the future of our workforce. By providing opportunities for experiential learning and skill development, these programs equip individuals with the tools they need to thrive in the evolving job market.

This investment is particularly pertinent in the context of declining postsecondary enrollment rates in Nebraska. With only 66.6% of public high school graduates continuing their studies in postsecondary institutions, there is a pressing need to provide alternative pathways to career success. The establishment of IACs offers a viable solution, offering hands-on training opportunities that lead to meaningful careers in the renewable energy sector.

As we look to the future, it is imperative that we prioritize investments in workforce development programs that cater to the changing needs of our economy. The DOE's funding announcement represents a crucial step towards building a skilled workforce capable of driving innovation and sustainability in the renewable energy sector.



Jared Routh

Jared Routh is the General Manager of High West Energy, headquartered in Pine Bluffs, Wyoming

Stay Safe: May is Electrical Safety Month

May is more than a month marked by changing seasons; it's also Electrical Safety Month. During this month, High West Energy, along with other electric cooperatives and public power districts, is committed to raising awareness about the importance of electrical safety. While we prioritize safety year-round, Electrical Safety Month serves as a reminder to stay vigilant and prioritize safety. As your trusted partner in providing reliable electricity, we want to ensure that you and your loved ones stay safe while enjoying the benefits of electricity.

Electricity is an integral part of our daily lives, powering our homes, businesses, and communities. While it enhances our quality of life, it's crucial to recognize the potential risks associated with electricity and take proactive measures to prevent accidents from happening.

Begin by conducting regular inspections of electrical cords and outlets to identify signs of wear, fraying, or damage. Promptly replace any damaged cords to prevent overloading and overheating. Avoid overloading outlets by refraining from using extension cords for appliances and instead, utilize smart plugs to monitor power loads.

Secondly, ensure that electrical appliances and devices are kept away from sources of water. Never operate electrical equipment with wet hands and make sure outdoor outlets have weatherproof covers. Provide sufficient space around appliances to allow for proper air circulation and prevent overheating.

Investing in surge protectors is another crucial step to safeguard electronic devices and appliances from power surges, effectively preventing damage caused by sudden spikes in voltage. Additionally, prioritize the proper maintenance of electrical appliances by adhering to manufacturers' instructions for usage and maintenance. Regularly check for recalls and address any issues promptly.

Lastly, communicate essential lessons on electrical safety to children, educating them about the potential dangers associated with electricity and establishing guidelines for the proper use of electrical appliances. As an extra precaution, install safety caps and covers on all outlets to prevent children from inserting objects into them. Instill the importance of avoiding pulling cords, as this can lead to damage or fraying, compromising electrical safety. Additionally, keep hazardous appliances out of the reach of small children until they reach an age where they can safely operate them.

As we celebrate Electrical Safety Month this May, let's collectively prioritize safety in our homes and communities. By following these tips and staying informed, we can all contribute to a safer and more secure environment. We are dedicated to empowering you with the knowledge and resources needed to make electric safety a year-round commitment. Together, let's ensure a brighter, safer future for everyone.

By George Weigel

Digging for Dollars

How to Save Money in the Garden

Plant prices are up sharply the past two years. So are insecticides, fertilizers, deer repellents, mulch, tools, and other accessories gardeners use to keep their green investments alive. Even bagged dirt is no longer dirt-cheap. What's a gardener on a tight budget to do? Fortunately, this is one pastime that lends itself well to lots of belt-tightening strategies. Let's dig into specifics...

Ways to save on plant purchases

You could pay full price at prime planting time like the majority of gardening consumers, or you could pay half or less with some bargain-sniffing strategies. Start by looking for markdowns on overstocked, out-of-bloom, or past-prime plants. These are often perfectly healthy... just not attractive enough to fetch top dollar.

Four top savers: 1.) perennials relegated to a bargain rack after they've finish blooming for the season; 2.) annuals and vegetables that are still viable but unsold after the spring rush, 3.) trees and shrubs that are misshapen markdowns but fixable via pruning and patience, and 4.) tulips, daffodils, and other spring-blooming bulbs that are often 50 percent off when unsold but still plantable by the end of October.

If you shop local, get on your favorite garden center's loyalty program. These offer discounts, coupons, rewards, and special sales to regular customers. While you're at it, let local garden-center managers know you're interested in plants they want to clear out. You might



get a call before plants go on the clearance rack – and maybe even year-end freebies.

Bargains are sometimes possible through mail-order and online vendors, but expect the plants to be small and “bare root” – i.e. shipped with weight-saving packing material around the roots instead of soil. Coddle them in a pot for a year to maximize success.

Plant bargains also can be found from unconventional sources, including plant societies, Master Gardeners, libraries, public gardens, farmer's markets, schools, and garden clubs – all of which often hold plant-sale fundraisers using divisions from members' yards, locally started seedlings, and discounted greenhouse transplants.

You might also encounter plants at yard sales. These sometimes can be bargain-priced, dig-your-own gold mines. Just be careful you're not buying someone else's overly aggressive varieties.

Landscape companies are another overlooked plant resource. Landscapers routinely dig up healthy plants during renovations, simply because they've outgrown the



Buying plants when they're not in peak form and demand can yield significant discounts.

Even less expensive is planting seeds directly in the ground outside, bypassing the need for lights, pots, potting mix, and such.

A third plant budget-stretcher is mining your own plants for expansion. Most perennial flowers can be dug and divided into fist-sized pieces after several years of growth, giving you free plants to use elsewhere.

Clumps of spring bulbs also can be dug and divided after their foliage browns in spring, and some shrubs will yield newbies if their “suckers” (roots that send up shoots) are dug and transplanted. Virginia sweetspire, summersweet, hydrangea, diervilla, kerria, lilac, bayberry, sweetshrub, sweetbox, and forsythia are good sucker-transplant candidates.

Check with friends and neighbors to see if they'd like to trade divisions, which can yield free new varieties for your yard. New shrubs, trees, roses, and evergreens can be created by snipping four- to six-inch pieces off the tips of “mother plants” and sticking them into moist potting mix. That induces roots to grow from the buried cut ends, giving you a new “baby” copy of the plant.

This works for many annual flowers and tropicals, too.

If you're spending too much on annual flowers (the ones planted anew each spring), save money by converting space to perennials (plants that come back year after year). Limit those \$6 annuals to pots, hanging baskets, and window boxes. Perennials cost more up front and don't bloom as long as annuals, but the payback is usually three years or less. Some annuals, such as ageratum, celosia, and cosmos, are good at “self-seeding,” meaning they come up on their own each spring from seed dropped by last year's flowers.

This is a way to fill beds without any new expense and only limited work (i.e. removing seedlings you don't want or transplanting self-sprouted seedlings where you do want them).

Save on your potted-plant budget by starting with fewer plants each season. With patience, pots of fewer premium-priced potted annuals will fill in eventually

space or a new homeowner doesn't like them. They may let you salvage their dig-outs before they go to a dump.

Ways to trim the plant budget

Wherever you buy plants, opt for less-expensive smaller sizes. Given patience and good growing conditions, a quart-sized perennial will end up at the same mature size as a gallon-sized one but at a significantly lower starting price.

Leaning small especially saves on trees, which can double in price for just two or three feet of additional height. Research has found that smaller transplant sizes usually establish faster and catch up to their bigger brethren within a few years.

Starting new plants from seed yields way more plants to the dollar than transplants. Vegetables and annual flowers are fairly easy to start from seed inside in winter. Basic workshop lights with fluorescent tubes are sufficient for growing seedlings, which usually need only about six weeks of inside growth before being ready to plant outdoors.

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and cost less than tightly packed ones.

Another pot option is scavenging the yard for perennial flowers that you can dig and divide to use in pots. The best are ones with colorful foliage that add interest beyond the few weeks they're in flower, such as coralbells, hosta, golden sedge, variegated liriope, and ferns. Return the perennials to the ground in fall to overwinter and mine again next year.

A third pot money-saver is using "double-duty" plants. Most so-called "houseplants" (crotons, palms, snake plants, peace lilies, rubber plants, etc.) are tropical or sub-tropical species that do perfectly fine outside in northerly summers and inside over winter.

Consider using plants you've bought as houseplants in summer pots, dressed up with coordinated annuals. Conversely, instead of discarding tropicals bought for summer pots at the end of the season, convert them into houseplants over winter.

Ways to save on gardening products

The fastest way to save on gardening products is to cut out things that you – and your plants – really don't need.

Some possibilities: wound dressings for pruned trees (not necessary and sometimes counter-productive); leaf shine (a soft, damp cloth with dilute soap cleans dusty houseplant leaves); compost activator (a few shovelfuls of finished compost or soil adds decomposition microbes); anti-transpirant/anti-desiccant sprays (somewhat helpful in transplanting but research shows little to no cold-weather protection); moisture-holding gels for potted plants (research shows little to no water-saving benefit); landscape fabric (inhibits soil oxygen and traps moisture in poorly drained beds, plus weeds grow on top if you mulch over it), and tree fertilizer spikes (trees usually get the nutrients they need from soil, decomposing mulch, and/or fertilizer on the surrounding lawn).

Next is reducing the amounts you use, such as fertilizer in general.

Plants take up only the nutrients they need. Adding more doesn't make them grow bigger or better and is a waste of money, plus is potentially polluting.

If plants are growing well, there's usually no need to add anything. If they're not, a soil test will tell if lack of nutrition is a culprit – along with exactly what nutrients are needed and in what amounts.



Dividing clumps of expanded perennials is a way to add plants at no charge.

Extension offices and many garden centers offer inexpensive DIY soil-test kits to help you spend fertilizer dollars wisely.

Bug and disease sprays are another potential cost-saver. Some gardeners routinely use pesticides "just in case," both wasting money and potentially killing beneficial insects that would've controlled pest bugs naturally (and at no charge).

Most bugs and diseases target only specific plants, and much of the damage is temporary or cosmetic anyway. Consider products only when particular plants are under threat from intolerable or potentially fatal damage – and when there are no better alternatives.

Sometimes, free or less expensive alternatives are available for other garden products. For example, an index finger stuck a few inches into the soil can give an accurate read on soil moisture vs. investing in a soil-moisture meter.

Expensive potting mix can be stretched by mixing your own from bulk ingredients or by "refreshing" last year's saved mix with half new mix (assuming last year's mix wasn't bug- or disease-ridden).

Many municipalities now collect leaves in fall and offer the resulting free or low-cost compost to residents the following year, saving on bagged or bulk purchases. Ditto for tree companies, which often are willing to drop loads of chipped tree branches in home driveways, saving themselves hauling/dumping fees.

Even costly hardscaping materials such as bricks, stone, patio furniture, garden ornaments, and fencing are sometimes available free or heavily discounted from neighbors advertising them through local social-media channels.

Lots of household-waste items are fair game for repurposing in the garden, including storage tubs that morph into flower containers, cut-off soda bottles that serve as plant protectors, and butter tubs that become seedling pots.

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Larry's Safety Lesson

Safety Following the Storm

By **Larry Oetken**



Certain parts of Nebraska are prone to flooding, especially along the Platte and Missouri rivers. However, it seems like flooding has been taking place around the state more and more in recent years. Spring and early summer storms have been dropping a large amount of rain, causing streams and creeks to overflow their banks.

The top concern during this time is safety. It is especially important to be aware of downed power lines or electrical equipment in contact with wet ground.

If you see any sagging or downed power lines, stay back and report them to your local rural electric utility. Just because they are down doesn't mean they are de-energized. Until utility crews arrive to make sure the lines are not energized, the area can be very dangerous. Warn others to stay away as well.

If you are one of those people that likes to drive around and view the flood waters yourself, make sure you don't attempt to drive over a downed power line. Most people think that they are safe because the tires are made of rubber.

An energized power line that is down can cause things around it to become hazardous and potentially deadly. A metal fence or guardrail in contact with a downed line can be electrified for several thousand yards. Even puddles of water are a risk. Anyone who comes into contact with these is at serious risk. Touching one of these energized structures can be as dangerous as coming into contact with the power line itself.

The aftermath of a flood can be a dangerous time, especially during clean up efforts. Be aware of the potential hazards of flooding or standing water.

Make sure you and your family are aware of hazards that could be hidden by tree limbs and debris.

Larry Oetken is the Job Training & Safety Coordinator for the Nebraska Rural Electric Association.

By Scott Flood

BACKUP POWER

Is a Battery-Powered Option Right for My Home?

We depend on reliable electricity more than ever before, which is why even the briefest service interruption can be incredibly frustrating. It's no wonder many homeowners are taking a closer look at the latest battery-powered systems as backups during an outage.

Battery technology has advanced significantly in recent years, with batteries able to hold more electricity even as they shrink in size and cost. The same innovations that boosted the performance of electric vehicles (EVs) are being engineered into today's battery-powered backup systems.

As their name implies, battery backup systems like Tesla's Powerwall are essentially high-capacity batteries that store a set amount of electricity, which you can then use to power your home in the event of an outage. Some are constantly charged by the power grid, while others rely on solar panels for recharging.

Traditional standby generators use small internal combustion engines fueled by natural gas, propane or diesel. They can be connected to your home's electrical panel and kick on automatically whenever the flow of electricity stops. Assuming you keep them refueled,



most can operate for days at a time. However, some standby generators can be noisy, and nearly all produce smelly exhaust containing deadly carbon monoxide gas, so they can't be operated indoors. Large standby generators are typically installed outdoors on a concrete pad, which may detract from your home's curb appeal.

Most home battery backups are smaller than comparable generators. Because they don't use combustion to generate electricity, there's no danger of carbon monoxide exposure. That makes them safer and more environmentally-friendly than generators. Most can be installed in a small space indoors. Battery backups are also significantly quieter.

When a power outage occurs, battery backups start instantaneously, unlike generators that may take a few moments to spool up and reach operating speed. Battery backups also don't need regular maintenance like oil changes or spark plug replacement, and there's no need to store fuel.

Of course, battery-powered generators do present some disadvantages. The amount of power they deliver is limited by the capacity of their batteries. When they're



Left: As their name implies, battery backup systems like Tesla's Powerwall are essentially high-capacity batteries that store a set amount of electricity, which you can then use to power your home in the event of an outage. Photograph courtesy of Tesla, Inc.

Above: Portable, battery-powered backups can be used indoors to power smaller appliances, like your laptop, TV or microwave. Photograph courtesy of Goal Zero

out of electricity, they may need hours of recharging before being used again, so they're not as well-suited for lengthy outages. Energy-hungry appliances such as air conditioners and water heaters may drain the batteries' capacity more quickly, so you may have to disconnect them during an outage. Fortunately, some battery backups are modular, allowing you to add capacity as needed. If you only need a few devices powered during an outage, consider a portable battery-powered system. These small, quiet backups can be used indoors to power smaller appliances, like your laptop, TV or microwave.

Generally, batteries require long charging times, so if an initial outage is quickly followed by another, they may not be able to respond. There are fast-charging systems on the market, but they carry substantially higher price tags. In fact, the upfront cost of a battery backup is more than a standby generator—in some cases, twice as much for comparable performance.

Like the one in your mobile phone, batteries in these systems can degrade over time. In five or 10 years, they may need to be swapped out with new batteries, adding to the overall cost. Being able to recharge battery

backups with solar panels appeals to many homeowners, but the performance will depend upon the amount and angle of sunlight falling upon your roof.

So, is a battery-powered backup system right for your home? The answer is different for every homeowner, but whether you're considering a battery system or a traditional standby generator, start by calculating the amount of power you need to keep your home's systems and conveniences operating efficiently. Once you know that, you can determine which models are up to the task and calculate how long the device you're considering can power your home. (If you have a family member whose health depends upon devices such as a CPAP machine or supplemental oxygen, be sure to factor that into your decision.)

Finally, whether you choose a battery backup or a traditional standby generator, make sure it's designed to protect your home and all your electronics from power surges and other issues that may damage your TVs, computers and other sensitive electronics. That way, you won't have to worry about remaining without them long after an outage has ended.

Wrapping Up: Highlights from Nebraska's Fast-Paced 60-Day Legislative Session

by James Dukesherer, NREA Director of Government Relations

It is hard to believe that everything we have worked on in this year's legislative session has occurred in 60 legislative days. It feels like it has been years of work. The Legislature has now adjourned for the year, and this month we can take a look back at the results and accomplishments of this year's session. Here is a brief summary of some of the most pressing issues impacting the electric industry that were passed into law.

LB 61 (Brandt)—eases the restrictions on public power's ability to lease telecommunications fiber. The bill allows public power to lease fiber in areas that do not have broadband service of at least 100/20 megabits per second speeds.

LB 866 (Bostelman) was included in the Natural Resources Committee priority bill **LB 867**. The bill removes the accountant position from the board, updates the per diems, allows for an additional term of service, and eases the restrictions dealing with someone from within the electric industry who serves on the board.

LB 1370 was a Natural Resources Committee priority bill and contained a package of bills that significantly impacted public power. The bill included:

LB 1370 (Bostelman)—calls for a private meeting with the Power Review Board when a utility decides to retire a dispatchable generation plant that is greater than 100 megawatts. After the plant closing becomes public knowledge, the meeting records become publicly available.

LB 120 (Bostelman)—before electric suppliers can construct generation or transmission facilities within 10 miles of a military installation, they must first confirm that the facilities do not contain materials that were produced by our foreign enemies, or that the utility is in compliance with the critical infrastructure protection requirements issued by the North American Electric

Reliability Corporation.

LB 969 (DeKay)—deals with public power's requirements to submit sizable projects out for public bid. The bill increases the thresholds before a public bid process is required. As costs have significantly risen, this measure will help to ensure an efficient process as we procure the materials we need for reliable electric service.

LB 1260 (Jacobson)—will allow a director of a public power and irrigation district to have an interest in a residential lease agreement or a water service agreement with such district and still vote on board decisions impacting these agreements.

LB 399 (Brewer)—requires public and private companies to hold a public meeting with at least one board member physically present in the county in which an electric generation facility is to be built before they will be able to commence construction.

LB 1300 was a priority bill that contained a package of bills, including:

LB 1300 (Bostar, at the Request of the Governor) Deals with our state's preparedness in the event of a Pacific war. The bill authorizes the state to conduct a risk assessment and creates a committee that will assess the state's critical infrastructure and vulnerabilities. The committee is authorized to hold secure briefings and consult with infrastructure experts. The meetings are not open to the public and the reports produced are confidential. The Governor is authorized to produce a report which does not include any classified materials which can be shared with the public but will not contain any information that would help our enemies to plan an attack.

LB 1358 (McDonnell)—Would allow public power districts boards to increase board member salaries up to a cap set in statute that reflects a cost-of-living adjustment since the last time they were increased in 2001.

LB 1317 was a Revenue Committee priority which contained a package of bills.

LB 1218 (Bostar), within this package, dealt with the deployment of electric vehicle (EV) charging stations across Nebraska. The bill authorizes private companies to sell electricity at charging stations by the kilowatt hour, something that until now only public power was authorized to do. The bill also establishes limitations for public power ownership of EV charging stations, providing time for private companies to apply for federal grants and deploy charging stations before public power entities are able to do so.

The NREA wants to thank those of you that follow this column during the Legislative session. There is nothing more helpful to the electric industry than an educated



citizenry that can provide the grassroots support we need when our issues come to the forefront of the Legislature. Thank you again for all of your strong support this legislative session.

State Senator Robert Dover, District 19, meets with a group of NREA member-system general managers. The group discussed a number of electric industry issues with senators and staff members at the State Capitol.

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Alma and Melvin Meyer continue to utilize the cave on their farm near Pilger, Nebraska. Moisture from the cave's interior is vented through the pipe behind them. Photographs by LaRayne Topp

Unearthing the Past

The Hidden World of Nebraska's Farm Caves

Black and white images capture a still shot of life on the Nebraska plains in the 1880s. Custer County families tote out their prized possessions to be displayed forever on glass plate negatives—treadle sewing machines, songbirds in delicate cages, and even fancy pump organs—all for the purview of photographer Solomon Butcher.

In the background are prairie abodes: dugouts, sod shanties and even two-story frame houses. Beside the homes are necessary buildings. The outhouse, of course. A wash house where clothes are sorted, soaked and scrubbed. Various barns to house the chickens and milk cows, sheep and pigs

And then there's the storm shelter. The farm cave. The fruit cellar. As necessary to survival in pioneer days as a home itself, storing food grown in the summer and gathered in the fall. A place of refuge when tornadoes twisted round the farmstead and fierce windstorms blew. A refrigeration center for eggs, cream and milk.

Before the time of rural electrification and modern refrigerators, a trip to the root cellar before each meal was as necessary as sunshine is to morning. Kids were sent there to fetch jars of home-canned applesauce, pork steaks layered under rendered lard in giant crocks, potatoes and carrots awaiting retrieval, and onions, dangling from the ceiling.

These root cellars or caves, as they were often called, kept farm-fresh produce from spoiling. Their underground location kept produce cooler in the summer than above ground, plus kept it from freezing throughout bitter cold winter months.

Some farm caves remain on viable farms today, but on abandoned farmsteads they are merely reminders of the value of their existence. It's been so long since any have

been constructed it's difficult to find anyone who has actually built one.

Pilger, Nebraska, carpenter Leonard Raabe can only speculate how they may have been fashioned, but knows that Roman architecture, such as aqueducts and colosseums, often utilized arches. The curved design of these arches donated strength plus the ability to support a large weight placed at the top.

If he were to build a cave today, Raabe explained that he would dig out an area the size and depth he would want the finished cave to be. In the early days, horse-drawn slips or scrapers would have been used, with the operator walking behind while utilizing handles to steer. Raabe would then construct an arched wooden form on which to lay the brick or block. Once the bricks were set, he would remove the false works and shim, causing the arched bricks to settle down against each other, adding to their strength. Cement steps could then be added to an entrance down into the cave, with dirt shoveled over the top.

Some caves were actually dug into the hillside or tunneled into the ground as a gopher would in the compacted soil of clay farms. These caves, with wooden or cement steps and a bricked stairwell leading to the bottom, were used to store potatoes and other root crops.

Wesley Schutte of Beemer, Nebraska, especially remembers a cave built at the teacherage near his rural church. The cave was particularly deep, because as it was built and accessed from the home's basement. At one time potatoes came in on railroad cars, sold for a premium price and stuffed into gunny sacks. They were

Continued on Page 17

Employers usually offer orientation and training for new employees, but sometimes electrical safety is overlooked. Beyond burning popcorn in the microwave and annoying all your coworkers with the stench, we remind you of the following on-the-job electrical safety tips, which also apply at home:

IN GENERAL

Do not complete electrical work if you are not qualified. Employees asked to change light fixtures, repair wiring, install outlets or other types of electrical work have been injured and killed on the job. It is best to leave electrical work to a professional electrician.

INDOORS

Many offices have landlines. Do not talk on a landline phone during a thunderstorm. Many people think this is a myth but it is not — a bolt of lightning that strikes a telephone line can come through the wires and enter a headset. That jolt can burst your eardrum or even cause cardiac arrest.

Use high quality extension cords with appropriate gauge and length endorsed by a reputable laboratory.

Do not run extension cords under carpet. Out of sight, out of mind, and the cords could get damaged under the carpet or get overheated, causing a fire.

Another reason not to place extension cords under



carpet: they should be used as a temporary solution. If your workplace needs more outlets, your employer should have a professional electrician install them.

Electrical cords can be a tripping hazard; your employer should supply heavy duty cord covers.

Do not overload the electrical system at your work by plugging too many items in or plugging in items that draw too much power.

Speaking of drawing too much power, ask before using a space heater at work.

Do not use damaged cords, plugs, outlets or outdated electrical equipment.

Murphy



From Page 15

carted into the teacherage basement and deeper still into the basement for storage. As the church's trustee, Schutte was called when the basement water pipes burst and flooded the basement – and the water flowed on down into the cave.

“The potatoes got washed that day,” he said.

At the age of 97, Schutte never took advantage of a cave for shelter from an approaching storm.

“One time I looked out the window,” he said, but he never once went to the cave.

Melvin and Alma Meyer, of Pilger and in their early 90s, grew up with caves as youngsters and also utilize the cave at their current farm home. Just a few steps from their back door, the cave has provided refuge during windstorms and storage space for home-canned peaches, pickles and other produce.

The cave walls are fashioned from red brick, the interior is skim-coated with cement, and the steps to its cold depths are also of cement. A vent pipe out the top acts like a chimney, allowing the moisture from far below to escape into the atmosphere.

When Alma was a girl, her family's cave was dug into the hillside. Her dad made shelves for her mother's multitude of canning, and way in the back, her parents stored potatoes. Often, caves had a dirt floor space for those.

Because no home freezers were in use in homes when they were growing up, everything had to be canned: vegetables from the garden such as green beans, beets and cucumbers, fruit picked from farm orchards or purchased in town, and beef or pork butchered once or twice a year.

Each year, Alma's family made sulc, pronounced sults, which is a canned meat of Czechoslovakian heritage.

“The Czechs didn't butcher beef or pork for canning,” Alma said. “We'd sell it.” They raised chickens, ducks and geese and butchered them as needed before each meal, until they were able to rent lockers in town to store frozen meat and poultry.

Alma's mother often canned food in large, glass half-gallon jars, stored on the cave's ample shelving alongside pints of jelly.

“Mom bought fruit,” Alma said, but their strawberry bed was an acre in size.

“We'd stand on our head and pick strawberries all day, and then she'd give them away to the neighbors.”

Melvin remembers his mother standing over a hot stove, filling jars for her blue enamel, water bath canner. His family grew an orchard filled with fruit trees and grapevines which needed to be picked and preserved. They also canned beef.

“For five days of the week, from spring through fall, there was not a time she didn't do a canner full of something,” he said.

At mealtime, trips were made before and after every meal to get milk along with canned fruit, vegetables or beef. Melvin was delighted the time his sisters came up from the cave screaming; bull snakes enjoyed the cool dark nature of the caves.

Growing up near Clarkson and Dodge, neither Alma nor Melvin recall many tornadoes during their childhood, but when they married and moved to Pilger, all that changed. They didn't have a storm shelter or a basement as newlyweds, but their neighbors, George and Lena Chilcott, did, and invited the Meyers to retreat to their cave whenever they needed to, even if the Chilcotts weren't at home.

Now Alma keeps a “tornado bag” packed with a flashlight, special photographs and jewelry, important papers, jugs of water, and two forks, two spoons and a can opener—for all the jars of food waiting to be enjoyed.

And two or three of her cats,” Melvin said with a smile.

When the Meyers' grandkids were small, Melvin related how they'd peek into the dark recesses of the cave from the open door above. “I ain't scared,” they'd say, but then would take his hand. “Would you go down with me?” they'd ask.

It's a prized image of their farm cave they've captured, not on glass plate negatives, but in their hearts.



Alma shows one of the half-gallon jars her mother used to use for canning.

The ability to generate your own renewable energy at home is an amazing thing. It's pretty cool that the technology is accessible to home and property owners across the country. The concept of free energy from the sun is appealing, but solar power isn't actually free. There are costs associated with capturing that energy for use in your home.

Installing a residential solar system doesn't equate to \$0 energy bills. Prices for the solar system and installation vary, but adding solar typically comes with a five-figure price tag. Solar systems only provide power when the sun is shining. You still rely on your electric utility for power at night and when the skies are cloudy. Most electric utility rate structures include a set monthly service fee. Unless you plan to disconnect from local electric service completely, you will still have a monthly electric bill.

Solar might be a good investment for you, or it might not. Several factors impact how well the investment pencils out, including where you live, home orientation and shading, electric bill rate structure and cost, available incentives and tax credits, your budget and credit rating.

If you are considering solar on your home, I suggest taking these three steps:

First, make your home as energy efficient as possible. It wouldn't make sense to put a new motor on a boat with holes in it, so why would you put a solar system on an energy-wasting home? Invest in reducing wasted energy before investing in creating new energy. The efficiency updates I recommend before installing solar include insulating and air sealing your home and upgrading to efficient appliances—especially the heating, ventilation and air conditioning system.

If your HVAC system is older than 10 years or malfunctioning, make sure replacing it is in the budget. Remember, energy efficiency upgrades might have a better return on investment than installing solar.

A more efficient home means a smaller—and lower-

cost—solar energy system. Solar systems are typically designed to produce the amount of energy a home uses in a year, so if you complete energy efficiency improvements before installing a solar system, make sure the solar contractor accounts for those energy savings.

Second, check with your electric utility about the requirements to install solar and how it will impact your bill. If you decide to install solar panels, working with your utility will be essential, as you will need to take important steps, such as signing an interconnection agreement to ensure the system is properly connected to the electric grid.

Third, get at least three quotes to compare each contractor's recommended system design, equipment and cost. It's a significant investment, so you want to know your options.

There are several ways to pay for a solar system and installation. It can be bought outright with cash or financed by a loan. This allows you to own the system immediately or at the end of the loan term. State and federal tax incentives can help offset the costs.

There is also the option to install a solar system through a lease or power purchase agreement. In this structure, a third party—usually the solar installer—owns the system. They install the system on your property and then sell you the energy produced at a predetermined rate. They are responsible for maintaining the system and own it at the end of the agreement term.

Loans, leases and power purchase agreements can impact the sale of a home. Although a solar system may increase the value of your home, some buyers—or their lenders—are not interested in taking on leases or power purchase agreements.

Investing in solar is one way to support the transition to renewable energy. Before you make the leap, improve your home's energy efficiency and empower yourself by thoroughly weighing the costs and benefits.



Make your home as energy efficient as possible before purchasing a solar system. A more efficient home means a smaller—and lower-cost—solar system. Photograph by Carlson, Valley Electric Association

Stay Cool, Save Energy: Tips for Using Dehumidifiers Wisely

If you live in Nebraska, you know it can get hot in the summer. But if you live in the eastern half of the state, you probably know with heat usually comes humidity, which can make things sticky!

The amount of moisture or water vapor in the air is most often talked about in terms of Relative Humidity (RH). RH is the amount of water vapor actually present in the air compared to the greatest amount of water vapor the air can hold at that temperature. Depending who you talk to, recommended RH levels for a home are generally between 30 and 55 percent. Anything above this range may promote bacteria growth. During winter, humidity levels should be in the range of 30 to 40 percent RH to prevent window condensation. Summertime comfort is usually achieved between 45 and 55 percent RH.

To reduce indoor humidity levels in the summer, many people use a dehumidifier. These units work by drawing moist air over a refrigerated coil with a fan. The evaporator coil is kept cold by a compressor. As moist air passes through this coil, it cools and condenses water vapor. The air is then reheated by the condenser coil and blown into the room. A dehumidifier's operating capacity is usually measured in pints of water removed every 24 hours. Two main factors impact its operation: the size of the space that needs to be dehumidified and conditions that exist in the space before dehumidification. What



many people do not realize is running a dehumidifier can use the same amount of energy as a small air-conditioner. Unfortunately, when they receive their first summertime electric bill, the extra kilowatt-hours and dollars charged become a cold reality check!

What can you do to manage a dehumidifier's impact on your budget? If you choose to use a dehumidifier, do so in the most efficient way possible. Most dehumidifiers have top-mounted air discharge and can be placed against walls. If you do not have top-mounted air discharge, make sure the dehumidifier is located away from walls and furniture so air can circulate freely around the unit. Operate your unit away from sources of dust and dirt, which can clog coils and grills. Finally, be sure all exterior doors and windows to the space being dehumidified are closed while the unit is running so you are not continually bringing in outside air with a higher humidity level.

Note that dehumidifiers receiving

EnergyStar recognition have more efficient refrigeration coils, compressors and fans than conventional models. They remove the same amount of moisture, but use nearly 30 percent less energy compared to less efficient models.

There are other ways to control home humidity levels, too. If you're already cooling your home with a central air-conditioning system, your indoor unit is also dehumidifying while bringing the air temperature down. Consider having an additional air register installed in the humid space in your home, and take advantage of the air conditioner's dehumidifying capabilities. This will also help improve airflow between humid and drier parts of your home.

How about keeping moisture out of your home in the first place? Extend downspouts from your gutters, and direct them away from your home's foundation. Ensure soil slopes away from your foundation to avoid water pooling around your home. Avoid over-watering grass and other plants right next to your house. Repair leaking outdoor faucets attached to the side of your home. Ensure clothes dryers are properly vented to the outdoors and not dumping their moist air inside. Use vent fans in bathrooms and kitchens to remove humidity at the source. Do not forget to turn fans off when you are done creating additional humidity, or you will continue venting your nicely air-conditioned air!

Cinco de Mayo: Family, Food, Fun!

Whether Cinco de Mayo means an opportunity to celebrate your family's heritage or it's simply an excuse to gather with the ones you love, every holiday truly is about the same thing: special moments together. While those treasured times at the table revolve around camaraderie and conversation, it can start with a filling meal and end with a sweet treat.

Take this year's festivities the traditional route with recipes that combine familiar favorites with ingredients you normally may not use otherwise, such as cactus. This Mexican Cactus Pork Stew makes Cinco de Mayo a cinch with the use of a Dutch oven. Just brown fresh pork shoulder (or reheat leftover pork) in the Dutch oven and combine with onion and jalapeno for the right mixture of flavor and spice. Once pork is cooked or warmed through, add broth, beans, spices, seasonings and a cup of chopped cactus for a southwestern spin.

Call the kids to the kitchen to lend a hand with these Mexican Cinnamon Cookies – they'll love working with the dough and rolling warm cookies in the cinnamon-sugar mixture after baking. Remember, they don't have to be perfect; you can ensure a bit of fun and flavor by letting their creativity shine.

Visit Culinary.net to find more family-friendly recipes perfect for celebrating holidays throughout the year.



Mexican Cactus Pork Stew

- | | |
|---|--|
| <ul style="list-style-type: none"> 1 pound pork shoulder (leftover or fresh) 1 medium onion, chopped 1 jalapeno pepper, chopped 3 cups beef broth 1 can (28 ounces) diced tomatoes 2 cans (15 ounces each) mild chili beans 1 cup chopped cactus (nopales) 1 tablespoon garlic powder 2 tablespoons smoked paprika 1 teaspoon cayenne pepper salt, to taste pepper, to taste 4 green onions, chopped, for | <ul style="list-style-type: none"> garnish 1/4 cup chopped cilantro, for garnish |
|---|--|

If using fresh pork, in Dutch oven, cube and brown it with onion and jalapeno pepper. If using leftover pork, reheat in Dutch oven with onion and jalapeno pepper.

Add beef broth, diced tomatoes, chili beans, cactus, garlic powder, smoked paprika, cayenne pepper and salt and pepper, to taste.

Simmer 25 minutes then garnish with green onions and cilantro.



Mexican Cinnamon Cookies

- 4 sticks butter, at room temperature
- 4 cups self-rising flour, plus additional for coating workspace
- 2 teaspoons cinnamon
- 1 egg
- 3/4 cup sugar

Topping:

- 2/3 cup sugar
- 4 teaspoons cinnamon

Preheat oven to 375 F.

In bowl, combine butter, 4 cups flour and cinnamon. Add egg and sugar then knead into ball.

Spread additional flour on counter and cut ball into six sections. Roll each section into 24-inch ropes then cut into 1-inch pieces and place on cookie sheet.

Bake 10 minutes.

To make topping: In bowl, combine sugar and cinnamon.

Roll warm cookies in mixture and let cool on rack.

Nacho Casserole

- | | |
|--|--|
| <ul style="list-style-type: none"> 2 lbs. browned hamburger 1 16 oz. bag of frozen corn (thawed) 1 1/2 cups mayonnaise 1 pkg. taco seasoning 1 16 oz. jar of salsa 1 can Campbell's fiesta nacho cheese soup | <ul style="list-style-type: none"> 8 oz. cream cheese 1 bag of Doritos 2 cups cheddar cheese 2 cups mozzarella cheese Toppings: sliced black olives, shredded lettuce and sour cream |
|--|--|

Brown hamburger and drain excess grease. Mix hamburger and taco seasoning. Mix together mayonnaise, salsa, soup, sour cream, corn and then add hamburger. In 9" X 13" pan, layer 1/2 of hamburger mixture, 1 cup of shredded cheddar, 1 cup of mozzarella and 1 cup of crushed Doritos. Repeat layers. Bake at 350 degrees for 30 to 45 minutes. Top with shredded lettuce, sliced black olives and sour cream.

Bernadine Slusarski, Duncan, Nebraska

Feta Cheese Stuffed Peppers

- 10-15 mini sweet peppers
- 5 oz. feta cheese
- 8 oz. cream cheese, softened
- 1/4 teaspoon onion powder
- 1/4 teaspoon garlic powder
- 1 tablespoon olive oil
- 1/4 teaspoon pepper

Wash peppers and cut off top and split lengthwise in half. Remove seeds. Mix remaining ingredients in a medium bowl. Using a fork or a stick blender, mash feta cheese until smooth. Add remaining ingredients and mix well. Fill halves of peppers with the cheese mixture. Serve immediately or refrigerate until ready to serve.

Vicky Hammon, Spencer, Nebraska

Radish Dip

- 1 8 oz. package cream cheese, softened
- 1/2 stick margarine, softened
- 1/2 teaspoon celery seed
- Dash of paprika
- 1/2 teaspoon Worcestershire sauce
- 1 cup radishes, finely chopped
- 1/4 cup green onion, finely chopped

In a large bowl mix all ingredients together and form into a ball. Cover and refrigerate for at least 2 hours. Serve with Crackers or vegetables.

Janice Hitz, Norfolk, Nebraska

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