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October 2009



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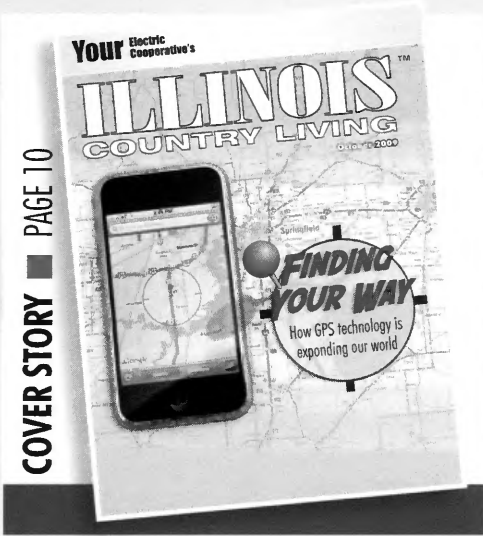
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FINDING YOUR WAY

Men don't like to ask for directions. Now they don't have to. GPS technology is revolutionizing the way farmers and linemen work, and it's even used for fun.

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ILLINOISTM COUNTRY LIVING

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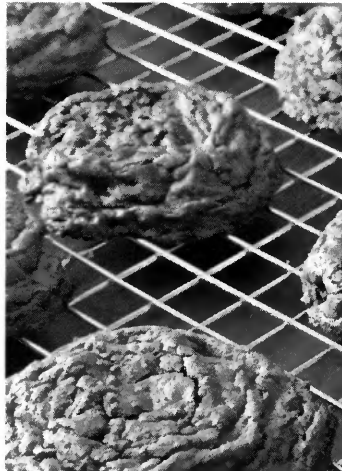
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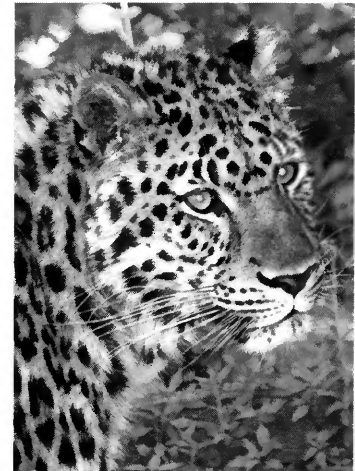
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The Association of Illinois Electric Cooperatives and 25 Illinois electric cooperatives are members of Touchstone Energy, a national alliance of 660 electric cooperatives. Touchstone Energy cooperative employees adhere to four core values — integrity, accountability, innovation and commitment to community.

Cooperative Health Care

The co-op business model can help address health care issues

The health care proposal released in August by the Senate Finance Committee includes an option to offer health insurance through cooperatives but leaves many questions about their structure and scope undefined. The National Cooperative Business Association (NCBA), the only national membership association for co-ops across all industries, supports the use of co-ops to address the U.S.'s health care needs. But NCBA seeks to ensure that any proposal strongly complies with long-established cooperative principles and protects consumers.

Paramount to the definition of a cooperative is membership control. A co-op is owned and governed by its members. Its primary mission is to provide quality goods and services rather than to maximize profits for shareholders. Savings at co-ops are generally returned to members.

Cooperative members democratically elect board members and participate in a transparent exchange of information with the board.

Although cooperatives are traditionally funded by member equity, any national health insurance cooperative will need a strong government investment. Inadequate funds for a health care co-op's development will leave it financially vulnerable. As history has shown, government-assisted co-ops have been able to fully pay back the government.

The cooperative business model has entered

the health care debates because co-ops can save money for members by aggregating demand for specific services, whether it's health insurance, pharmaceuticals or hospital supplies. For example, in a health insurance purchasing cooperative, consumers or

businesses can band together to purchase private health insurance policies in bulk, passing savings along to members. Cooperative health care providers also save money for members because, in addition to buying in bulk, the not-for-profit cooperative does not answer to outside investors.

October is Co-op Month

Each October we celebrate Co-op Month. Cooperatives are already involved in health care and

so much more. A recent study by the University of Wisconsin found that cooperative businesses account for more than \$650 billion in revenue and 2 million American jobs.

Approved and distributed by USDA, the Research on the Economic Impact of Cooperatives, conducted by the University of Wisconsin's Center for Cooperatives, is the result of several years worth of studies and surveys.

The results confirm what cooperative leaders and members have known all along — their businesses are part of a greater national movement that drives the American economy. There are 29,000 cooperatives in the U.S., in virtually every industry. The data shows their wide-ranging impact, from the new sector of biofuels cooperative, to mammoth sectors like farmer supply, credit unions and marketing cooperatives.

But co-ops have another advantage, often not reflected in revenue or jobs created. Cooperatives share a set of values that drive their operations and how they operate within their communities. Honesty, openness, caring for others and social responsibility are values all cooperatives demonstrate through their practices and procedures.

As member-controlled enterprises, co-ops are run largely by the people who live and work in the communities they serve. That gives them a different perspective from businesses owned by distant investors.

At a time when our economy is struggling, it's important to remember that tens of thousands of cooperatively owned businesses are focused on their members, not just profit. Sure, investor-owned businesses have a set of values too. But for co-ops it's more personal. It's a critical part of what drives our actions, making us a more integral part of our communities than most other businesses.

For more information about health care cooperatives, visit NCBA's Web site, www.ncba.coop. There's a link to the Wisconsin study on the front page, and the "about cooperatives" page has detailed information about health care co-ops. ■

Paul Hazen is President & CEO of the National Cooperative Business Association, the leading cooperative membership association in the United States — www.ncba.coop, phazen@ncba.coop



"The cooperative business model has entered the health care debates because co-ops can save money for members..."

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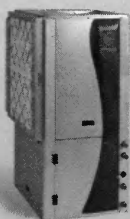
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"Together We Save" Empowers Co-op Members To Reduce Energy Bills



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TOGETHER WE SAVE

There's a lot of uncertainty regarding the direction Congress will take in climate change legislation. One thing is certain, though, electric bills are going up.

Being diligent about helping members reduce their energy use has never been just lip service to Touchstone Energy electric cooperatives across the country. And now they have even more tools at their fingertips with the "Together We Save" program that was unveiled on August 27.

The core of the campaign is the Together We Save Web site that demonstrates how taking simple energy-saving steps can lead to real dollar savings. Among other tools, a virtual home tour takes visitors through each room of a home and shows how their actions can save money. The site's TV Web portal provides short videos on energy efficiency-themed topics. In addition, site visitors will find nine animated, interactive applications. Each one focuses on a different energy, and money-saving, action that, once completed, outputs an actual savings calculation.

Illinois cooperative staff members are very pleased with the program. "What I like best about this program is that it's so easy for our members. It doesn't cost them anything to log on to togetherwesave.com and find out how they can start saving money immediately. I think they may be surprised to learn that they can achieve big savings with some small changes," says Brenda Rothert, director of communications and member services at Spoon River Electric Cooperative in Canton.

Kevin Bernson, VP of media and public relations at Shelby Electric Cooperative in Shelbyville, says, "We often get questions from members who need help with reducing their energy usage. These Web resources help our members better understand how they're using energy and give them more control in managing their energy costs."

For more information about the new program, visit www.TogetherWeSave.com or contact your local Touchstone Energy cooperative. ■

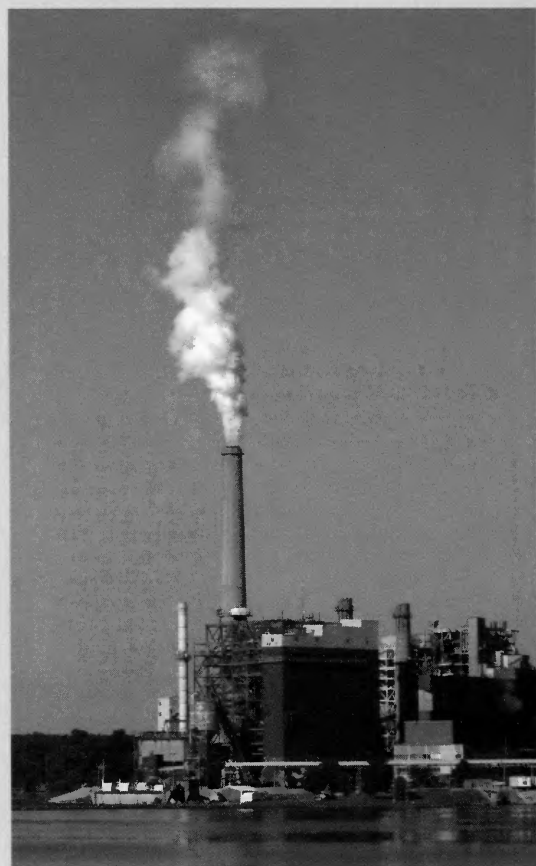
Carbon Dioxide Emissions Decline in 2008

Despite a 1.1 percent increase in the U.S. Gross Domestic Product, the nation's carbon dioxide emissions from fossil fuels declined by 2.8 percent in 2008, according to preliminary estimates by DOE's Energy Information Administration (EIA).

The record decline was caused in part by a 5.2 percent decrease in emissions from transportation. Sky-high fuel prices in the first part of the year, followed by economic woes in the fourth quarter, contributed to a record-breaking decline in vehicle miles traveled in 2008.

Carbon dioxide emissions from industries also fell by 3.2 percent, following a five-year trend of falling industrial emissions.

While lower energy use in the transportation and industrial sectors partly contributed to the drop in carbon dioxide emissions, that's not the full story. The EIA notes that U.S. energy demand fell by 2.2 percent in 2008, which is less than the drop in carbon dioxide emissions. That means that some of the energy shifted to a source that produces lower carbon dioxide emissions. In fact, the electric power sector, which generates 41 percent of the carbon dioxide emissions in the United States, decreased its power generation by 1 percent in 2008, but decreased its carbon dioxide emissions by 2.1 percent. In other words, the power sector decreased its emissions intensity by 1.1 percent in 2008. ■



DOE Awards \$8 Billion for Advanced Vehicle Technologies

DOE announced \$8 billion in conditional loan agreements in June for Ford Motor Company; Nissan North America, Inc. and Tesla Motors, Inc. to fund the development of advanced vehicle technologies. The loan commitments include a \$5.9 billion loan to Ford for



upgrading factories in five states to produce 13 more fuel-efficient models, a \$1.6 billion loan to Nissan to build advanced electric vehicles and advanced batteries, and a \$465 million loan to Tesla Motors to manufacture its new electric sedan.

These are the first conditional

loans released under DOE's Advanced Technology Vehicles Manufacturing (ATVM) Loan Program, which is using an open, competitive process to provide about \$25 billion in loans to companies that produce cars or vehicle components in the United States. To qualify, companies must propose projects that increase fuel economy to at least 25 percent above 2005 fuel economy levels. ■

Co-op Members Send Thousands of Postcards to Senators

In early September, Illinois electric co-ops asked their members to get involved in the political process and ask Senators Burris and Durbin to fight for climate change legislation that is fair, affordable and achievable. The postcard campaign was part of a national effort asking electric co-op members from across the country to contact their senators.

The signed postcards were hand delivered by a small delegation of Illinois co-op leaders to each Senator's office later in the month. Illinois co-op members responded in overwhelming numbers.

Steve Uram, Legislative Affairs Advisor for the National Association of Electric Cooperatives, said, "So far, the

Illinoisan members account for 48,218 of the 66,762 postcards we have received. Your members are amazing!"



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Duane Noland, President/CEO for the Association of Illinois Electric Cooperatives helped hand deliver the postcards. He said, "As a former state senator I know that our leaders pay attention to the folks back home. You can make a difference,

but only if you participate in the debate. It is easy to become disenchanted with the political process, but when Congress is debating issues like health care or energy it is critical that we get off the sidelines and let them know what we think. I'm proud of our members for answering the call to action." ■

A Wall of Energy Savings Unveiled at Farm Progress Show

Tens of thousands of attendees visited the Touchstone Energy booth at the Farm Progress Show, which ran September 1-3 in Decatur. A new energy efficiency wall display developed by Prairie Power, Inc., was unveiled at the booth. Bob Dickey, Manager of Marketing and Economic Development for Eastern Illini Electric Cooperative (center) and Dennis Ray, Marketing Services Specialist for Coles-Moultrie Electric Cooperative, were two of the co-op energy advisors on hand to provide energy efficiency construction tips. The display is a complete wall system that shows all the areas where you need to seal out energy leaks, says Dickey. The display will be used at other events across the state to help co-op members learn how to tighten up their home and save. ■



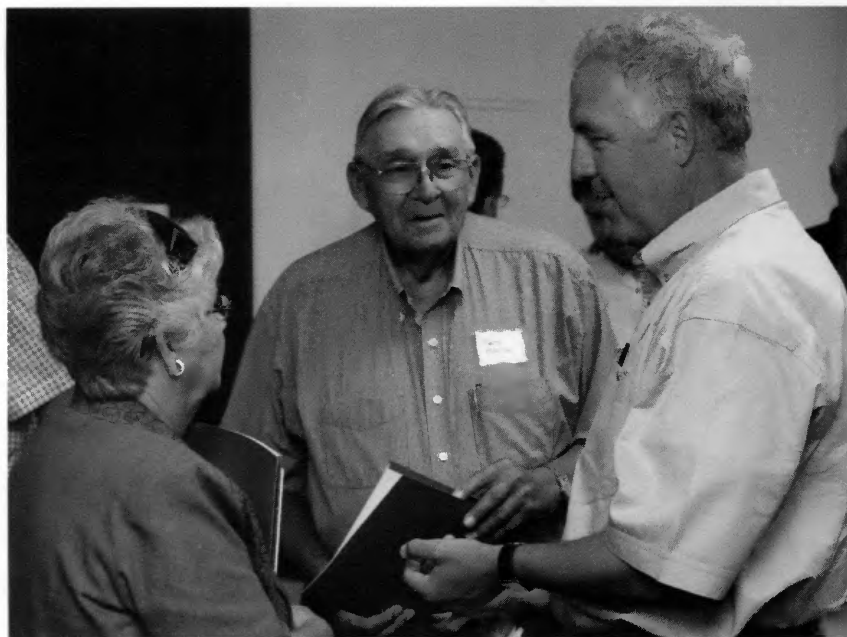
Warning – Don't Fall for Companies Calling Themselves a Co-op

Cooperatives are not-for-profit businesses that are owned by the member/consumers who use their services and products. Occasionally, a for-profit business will misrepresent their business as a cooperative, taking advantage of the good name and reputation of cooperative businesses.

We received a complaint from a member of Illinois Rural Electric Cooperative in Winchester who had been harassed by an insurance company called Reserve National Insurance. The high-pressure sales person never said Reserve National Insurance; he simply told the member that he had five questions from the rural electric cooperative.

This insurance company occasionally also sends out mailings to co-op members. The return address says "A National Association of Rural Co-operative Members." A survey and return envelope are included. The survey says "Rural Co-operative Members Questionnaire." We would recommend that you not respond to this survey. If you do you are almost guaranteed to get a high-pressure sales call.

Again, your local electric cooperative, the Association of Illinois Electric Cooperatives, and this magazine are not affiliated in any way with this insurance company. We also do not appreciate the misrepresentations they make that damage our reputation and relationship with our members. If you receive a call from this company or are being harassed by other phone solicitors we suggest you register your phone number on the National Do Not Call Registry. For more information go to www.donotcall.gov. If a phone solicitor still calls, there are severe penalties that can be enforced. ■



Congressman Shimkus Calls for an All-of-the-Above Approach to Energy

During his Ag Advisory Council meeting on August 18, Congressman John Shimkus (R, Illinois-19) talked about energy issues with Joyce and Gary Morrison of Fieldon. They are members of MJM Electric Cooperative where Gary serves as a director. Shimkus said, "Some of my friends in Congress want to add to the cost of energy with an energy tax disguised as cap-and-trade. Instead of adding to your heating, cooling, and gasoline bills, I want our nation to increase production of American energy, such as clean coal, nuclear, wind, solar, renewables, and offshore oil and gas. This is an all-of-the-above energy approach instead of an energy tax." ■

Funding Increased for Innovative Rural Energy Program

In the detailed budget proposal released in May, the Obama Administration more than doubled funding for the Rural Energy for America Program (REAP), which provides grants and loan guarantees for farmers and rural small businesses to develop renewable energy and invest in energy efficiency.

"To help our economy recover, we need to create new jobs and income in rural America. To safeguard our energy independence and our children's future, we need to create homegrown, clean energy," said Andy Olsen, Senior Policy Advocate at the Environmental Law and Policy Center. "The REAP program does both. This commitment to doubling REAP's funding shows that rural America has a key role to play in this administration's plans for economic recovery."

By providing grants that cover up to 25 percent of the cost of clean energy projects as well as loan guarantees and technical assistance, REAP spurs new investment in rural America, creates jobs, and fuels a cleaner, more secure energy future for our nation.

For more information, visit www.farmenergy.org ■

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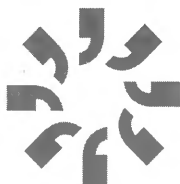
Climate Change legislation is now moving through Congress. Urge your elected officials to work with electric cooperatives to find a fair, workable solution.

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FINDING YOUR WAY

How GPS technology is expanding our world

By Catrina McCulley Wagner

We all have a basic need to know where we are and how to get from point A to point B. Early man guided himself by the stars. Next he invented the compass, map and sextant. Today the cool gadget for finding your way is a GPS (global positioning system). You may have one in your car, maybe even on your cell phone. If you are a guy, you'll never have to stop and ask someone for directions if you have a GPS. How cool is that?

GPS was originally developed by the Department of Defense in 1973 to assist soldiers and military vehicles in accurately determining their locations worldwide. In a sense, satellites orbiting the earth have replaced early man's use of the stars. At least 24 satellites circle the earth. GPS units use these satellites as reference points. By employing a little trigonometry, the distance the signal travels between the GPS unit and the satellites can be determined by estimating the amount of time it takes to reach the receiver. Using this technology, you can pinpoint where you are on Earth within inches.

Today, just about everyone has a GPS of some kind. They are usable everywhere except where the GPS can't receive a signal from the satellites, such as inside most buildings, subterranean locations and under wa-

ter. Pilots use GPS units to plot their courses, balloon pilots use them to help guide them safely around power lines and to help them find a safe place to land. Recreational boaters, commercial fishermen and professional mariners use GPS devices for navigation on the water. Other uses include outage tracking and mapping for electric cooperatives, farm field mapping, finding lost pets, 911 support, roadside assistance, hiking, hunting, camping and a new hide and seek outdoor activity called geocaching.

How Co-ops Are Using GPS Units

Electric cooperatives own millions of dollars in assets, poles and wires, stretching for thousands of miles across open country and along country roads. Illinois co-ops, for example, maintain 55,592 miles of line with poles, transformers, switches and substations throughout 90 of the state's 102 counties.

Unfortunately the paper maps used to locate co-op utility infrastructures are often inaccurate, incomplete and outdated.

But thanks to GPS and geographic information systems (GIS), electric co-ops are able to quickly overhaul and computerize outdated paper maps.

A GIS is basically a computer system capable of assembling, storing, manipulating and displaying geographically referenced information. In other words, it's a map with brains. And you don't have to figure out how to refold it.

Eighty percent of the information managed by an electric co-op is connected to a specific place on earth - a street address, a highway intersection or a simple x-y coordinate. That's why a GIS database is a revolutionary technology that cuts across every industry.

Spoon River Electric Cooperative in Canton is one of nine Illinois cooperatives using this technology to streamline operations, create greater accountability and improve safety.

"I'm very pleased with the program," says Spoon River Electric President and CEO Bill Dodds.

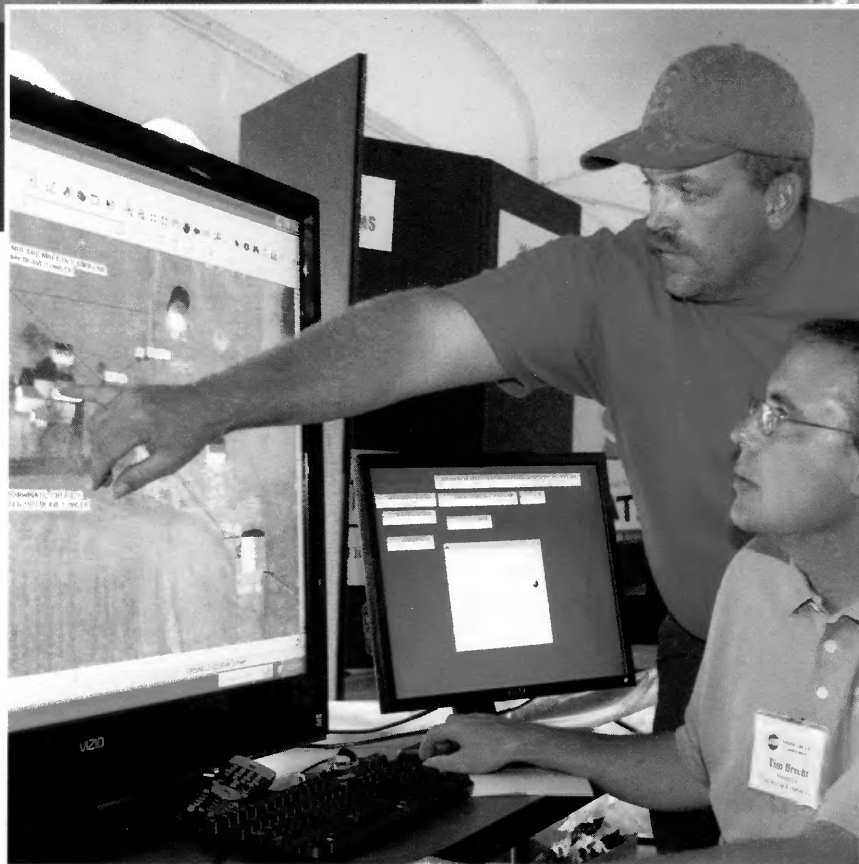
"We've made something that is far more than just a mapping system. It's an operational tool. I'd recommend this to other co-ops and invite anyone to come see our system."

The program was designed and implemented by Josh DeWees, Spoon River Electric's Manager of Forestry and Engineering Support. The co-op had been using old paper maps to locate poles, transformers and other equipment. Some of those maps were nearly 70 years old.

Updates to those maps were done



Tim Brecht, Manager of Engineering and Operations at Adams Electric Cooperative, shows Adam's customer, Craig Burwinkel of Fowler, the topography of his property via the GIS mapping system Adams uses. "We have it at the office and in our trucks and can zoom into each customer's location." Brecht had the GIS mapping system available at Adams Electric Cooperative Annual Meeting in September at Bailey Park in Camp Point.



by hand, DeWees says. His plan did away with the old maps by creating more accurate electronic ones with all equipment – meters, poles, transformers, regulators and capacitors – precisely plotted.

But the process wasn't easy. Co-op employees had to drive to each piece of equipment and collect more than 69,000 location coordinates with GPS handheld devices.

"Two people were dedicated to this project every day for 15 months," DeWees says. "It was very intensive."

As the GPS coordinates were gathered, DeWees entered them into the GIS software, which allowed him to produce layered maps of the co-op's territory and equipment.

Now Spoon River Electric employees can locate members on the maps by name, phone number or address. They can zoom into maps of individual homes and see what equipment is there. The layered maps can show all equipment or just certain components.

In an outage, knowing exactly where equipment is located is a plus.

"It makes our response faster and

it makes us more efficient," DeWees says. "That means better service for our members."

After successfully implementing the new technology, the co-op added GPS technology to company trucks. Units in bucket trucks communicate back to the main office about a lineman's location. This can help the co-op's dispatcher know where the nearest truck is during an outage, which in turn helps to speed repairs and improve day to day efficiency.

"This creates accountability for time and documentation of when we were at a member's house and how long we spent there," DeWees says.

The units also improve safety. Knowing exactly where other linemen are located can help ensure their safety when a line is re-energized. When line employees can't be reached by cell phone or radio, employees at the

main office can see where their trucks are located. And in case of an accident, 911 dispatchers can be given an exact location.

In the future, DeWees hopes to expand on the GPS and GIS programs by tying into the existing automated meter reading (AMR) program, improving outage response time by allowing workers to see exactly what equipment is affected. The new smart maps will be a building block for the smart grid infrastructure every utility is working to build.

If the co-op implements broadband service in the future, DeWees says employees could have immediate laptop access to up-to-the-minute accurate electronic maps and other information on the co-op's computer network.

The GPS and GIS programs have become bigger and better than DeWees first imagined. "Providing the best ser-

vice to members is our priority," he says. "This technology helps us do that."

Other Illinois cooperatives using this technology include: Adams Electric Cooperative in Camp Point, Corn Belt Energy Cooperative in Bloomington, Egyptian Electric Cooperative in Steeleville, Illinois Rural Electric Cooperative in Winchester, Jo-Carroll Energy in Elizabeth, Menard Electric Cooperative in Petersburg, Monroe County Electric Co-Operative, Inc. in Waterloo and Wayne-White Counties Electric Cooperative in Fairfield.

How Farmers Are Using GPS

Duane Noland, President/CEO of the Association of Illinois Electric Cooperatives, also helps farm his family's farm established in 1833. Like many farmers across the state, he has dramatically improved the productivity and efficiency of his farm with GPS technology.

In the spring he fills his planter's hoppers with soybean seed. He climbs

into the cab of the tractor, ready for a morning of planting. But, before he turns on the tractor's motor and before a single seed ever hits the ground; Noland fires up his GPS and GIS mapping system. After the coordinates are locked into the GPS unit, he is ready to start planting the field — the same field his father, Neil

Noland, and seven generations before him plowed by hitching up a team of horses. This is precision farming where the soil characteristics of every foot of the farm's soil is mapped in the GIS and the GPS helps deliver the precise amount of fertilizer and seed for that location on the farm.

"Using GPS technology, we can now easily calculate yield monitoring, yield mapping, variable rate application of fertilizer and sprays, machine guidance and weed mapping. Each of these de-

mands absolute driving accuracy. But with a GPS, everything is automatic after you set the coordinates. GPS allows

farmers to work during low visibility field conditions such as rain, dust, fog and darkness," Noland says.

Emerging technologies are helping farmers gather information from their fields that they can use to harvest more crops

than ever before. For instance, sensors in Noland's soybean field can measure how fertile the soil is. This technology prevents farmers from over or under-fertilizing their crops.

"It's been a huge benefit to today's farmers," Noland says. "GPS satellites overhead read where the sensors are, and then a computer puts the data together and draws a map to show which areas need more fertilizer, and what kind. It's pretty remarkable." Other sensors see where pests inhabit crops.

Noland says when he thinks back at how far we've come in technology for farming, it amazes him. "When my great grandfather farmed, he harvested corn by hand. At the end of the day, if he got 100 bushels, that was considered a very productive day. Not only have I never had to harvest corn by hand, but technology has made it so that a good day for us is 18,000 bushels

This is precision farming where the soil characteristics of every foot of the farm's soil is mapped...



Planting a straight row in 1833 on the Noland family farm near Blue Mound meant controlling a team of mules. Today, Duane Noland can plug in a few coordinates on the GPS guidance system and the tractor steers itself. GPS and GIS mapping technology have made yield monitoring and precision crop input application possible. Noland, who also serves as the President and CEO of the Association of Illinois Electric Cooperatives, says mapping technology is also key to helping electric co-ops improve efficiency.

of corn per day," Noland says. "I will be interested to see how far technology will bring us in another 30 years."

Recreational Uses of GPS

Recreational uses of GPS devices are almost as varied as the number of recreational sports available. GPS is popular among hikers, hunters, snowmobilers, mountain bikers and cross-country skiers, just to name a few.

One recreational use that's quickly becoming a favorite pastime among owners of handheld GPS units is geocaching. Geocaching started in May 2000 soon after GPS technology became available for civilian use. Geocaching is essentially a game of hide and seek treasure hunting. The word geocaching is the combination of two words. Geo is taken from the word geography, and caching is a term used in hiking/camping to mean a hiding place for concealing and preserving supplies. Push them together and let the games begin.

"Geocaching is a game that is played worldwide and sends eager GPSers on the hunt for hidden treasure with a pair of coordinates as the only clue," says Mark Pitchford, a Springfield resident who enjoys geocaching with his wife, Julie, and their son, Ian.

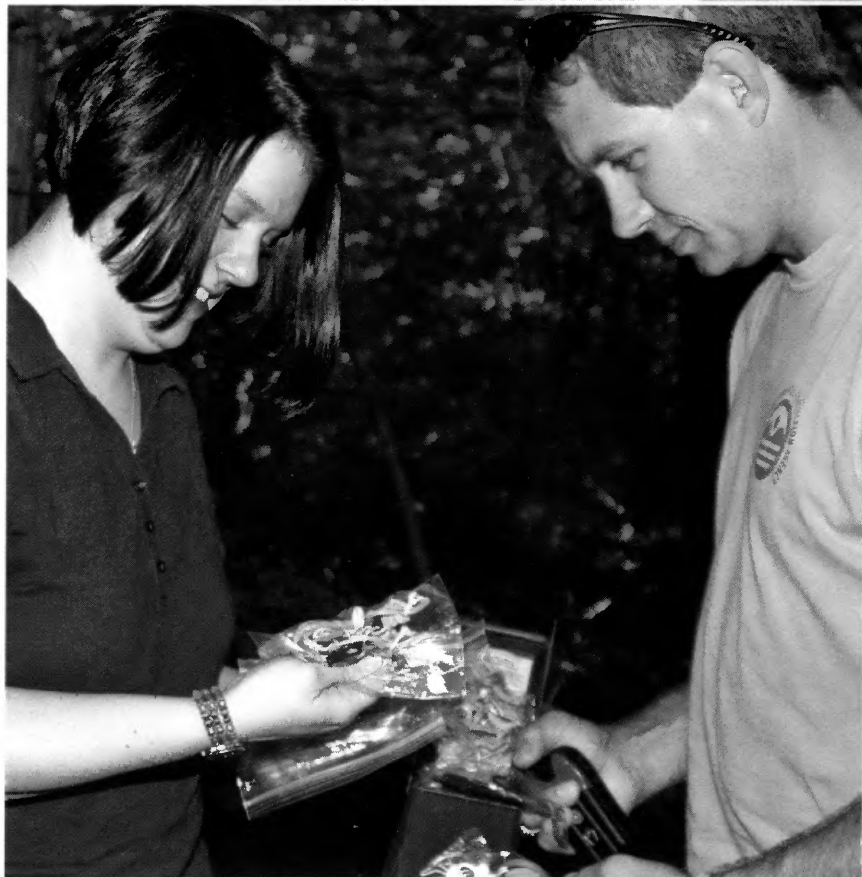
"A geocacher can place a geocache (treasure) anywhere in the world, pinpoint its location using GPS technology and then share the geocache's existence and location online at a listing site. Anyone with a GPS unit can then try to locate the geocache," says Julie.

The Pitchfords began geocaching when their son, Ian, who is now 6 years old, was a baby. It was an inexpensive way to get the family out together enjoying nature. "We'd pack a picnic lunch and head out for the day," says Julie. And the family just fell in love with the sport from there. "It's interesting to see the little trin-

kets and treasures other geocachers leave behind. Some have family significance; others historical and others are just silly such as a kid's meal toy. The most interesting treasure we've found so far was a Dan Hampton Hall of Fame Induction pin," remembers Julie. "It just goes to show that one person's junk is another's treasure," she laughs.

The Pitchfords even found time to geocache while on their vacation in Austria. "We found three caches in Austria. The most memorable of those was in Maribel Gardens in the gnome garden. They had 12 gnome statues in this garden, and there were two additional statues somewhere else in Austria. Our job was to find the missing two gnomes," Mark says.

"Ultimately, we found ourselves walking completely around a mountain into a residential area where the gnomes were part of someone's landscaping. That one was pretty cool," Julie remembers.



Julie and Mark Pitchford sift through the contents of a kiddie cache, a cache filled with toys intended to be found by children.

"We've set a small goal to geocache everywhere we go, and we're trying to find at least one cache in each of the 50 states," Mark says.

"If nothing else, it's a good excuse to see the world," says Julie.

There are only three rules to geocaching. They are:

1. If you take something from the cache, leave something of equal or greater value.
2. Write about your find in the cache logbook.
3. Log your experience at www.geocaching.com.

So, what are you waiting for? Go find some treasures! ■

Danger Is Lurking Behind Your Walls

You can prevent electrical accidents by installing GFCI outlets

Danger lurks behind those walls. Sounds like a bad horror story doesn't it? But sometimes those things we take for granted in and around our homes can be very deadly. Electricity is one of those things that we hardly notice. When it does not work correctly it can be deadly. You can easily prevent many of the hazards by using ground fault circuit interrupters (GFCI).

If you ever experienced an electric shock it most likely happened because a part of your body was in contact with the source of an electrical current and your body provided a path for the electrical current to go to the ground.

When this happens it is called a ground fault. Current flow in an electric circuit normally travels from the energized conductor through receptacles, light fixtures, etc., and back to its source through the neutral conductor to the transformer completing this path. If your body provides a path to the ground in this circuit you could be injured, burned, severely shocked or electrocuted.

It may happen because you are using that frayed extension cord that you should have thrown away last year, or while using that old coffeemaker that keeps giving you a tingle every now and again.

A common misconception with electricity is the higher the voltage the higher the possibility of death. In reality it is not the voltage but the current that kills people. People have been killed by 120

volts AC in the home and with as little as 42 volts DC. The real measure of a shock's intensity lies in the amount of current (in milliamperes) forced through the body. The reality is that any electrical device under the right conditions could transmit a fatal amount of current. Currents between 100 and 200 milliamperes (0.1 ampere and 0.2 ampere) are fatal. Here is what happens:

- At 1-8 milliamps you may feel little to no sensation of electrical shock.
- At 8-15 milliamps you will receive a painful shock, but will not lose muscular control.
- At 15-20 milliamps you will experience a painful shock and loss of muscle control and will not be able to let go of what is shocking you.
- At 50-100 milliamps you could experience ventricular fibrillation, an uncontrollable twitching

in the walls of the ventricles of the heart, a condition that could result in death.

- At 100-200 milliamps ventricular fibrillation occurs and if immediate medical attention is not available death could occur.
- At 200 milliamps and over, severe burns and severe muscular contractions occur. The contractions can be so severe that chest muscles clamp the heart and stop it for the duration of the shock.

Amazingly, this can actually prevent ventricular fibrillation and if the victim can be removed from the electrical circuit and the heart restarted a victim could survive. However, at this stage the body's internal organs would have suffered severe damage and a long and painful recovery would ensue.

GFCIs are designed to prevent electrocution by detecting the leakage current, which is typically more than 4-6 milliamps opening the circuit in as little as 25 milliseconds for class A devices like the ones used in our homes. GFCIs are intended to be used only in circuits where one of the conductors is solidly grounded.

According to the 2008 National Electrical Code article 210.8, installation of GFCIs is required in all new and remodel construction projects in dwelling units for all 125-volt, single-phase, 15- and 20-ampere receptacles installed in the following locations:

- Bathrooms
- Garages and accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas and areas of similar use.
- Outdoors
- Crawl spaces
- Unfinished basements
- Kitchens where receptacles are installed to serve countertop surfaces
- Laundry, utility and wet bar sinks where receptacles are installed within 6 feet of the outside edge of the sink.
- Boathouses ■

"Any electrical device under the right conditions could transmit a fatal amount of current."

Michael L. Ashenfelter is the Sangamon County Electrical/ Mechanical Inspector and a member of the Safe Electricity Advisory Team (www.safeelectricity.org), 217-747-5111, MikeA@co.sangamon.il.us.



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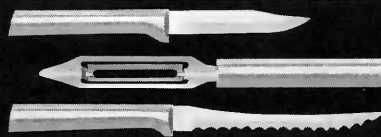
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Apple Cider Making Explained

The perfect apples for the cider press may be falling now

As happens, fall air can be as crisp as a Honey Gold apple, or as damp as a gallon of apple cider. Sometimes, both.

Apple cider has been around for centuries, if not a millennium. As more and more apples are being grown, more and more apple cider is being produced.

Most ciders are opaque, while apple juice tends to be clear. The main difference is the filtering of the apple particles, which can give cider a full body texture on your tongue compared with the smoothness of the juice.

In years past, you could judge a cider's freshness by sniffing or tasting a drop on your tongue. If it smelled and tasted like vinegar, it wasn't fresh, but still good for cooking and cleaning out the kitchen drain.

Several years ago, cider was required to be pasteurized. It's next to impossible to find the pure unadulterated apple pressings unless you did it yourself. Most of us don't have the large wooden cider presses, which means younger generations will never get that mixture of apples, worms, leaves, stems and anything else that might be on the apple at the moment it's squeezed.

Of course, pasteurization means the cider will last longer. No longer after three days is the "Honey, does this taste right to you?" sentence bounced around kitchens.

In most cases, cider will last weeks, if not a month, in the refrigerator. (You can always freeze it, removing some from the gallon to allow for expansion unless you thrive on cleaning up frozen apple liquid in your freezer. Frozen cider can last for a year or more, though

the flavor does start breaking down. As it thaws, though, the sugar and water don't thaw uniformly, so wait until it's fully unfrozen before drinking.)

Cider quality is directly tied into the quality of the apples that go into the jug.

You can imagine that less-than-perfect apples are used for cider. The cream of the crop go on to the market as out-of-hand eating, or cooking apples, though it never ceases to amaze me, while watching at a farmer's market, the customers who

will pour over a display of apples, looking for the most perfect ones, to make applesauce.

Our philosophy with our half dozen apple trees growing up was if it just fell off the tree, it was okay for sauce. If it had fallen off the tree within the last week, it probably was good enough for cider. If it was black, it stayed to fertilize the tree the coming year.

These days, even dropped apples are seldom used for cider. Growers tend to know to the second when the apple might fall and are out there picking it so it's not bruised at all. Spray programs have curtailed most of the worms or half worms you might find in the apple.

These days, cider tends to be the culled apples, or less than beautiful, but if you were to really think about it, the apple would still be good enough to eat.

Cider presses are no longer the little wooden barrel-like contraptions with a screw press. Walk into a modern orchard and you'll see stainless steel vats and drums to hold the cider until it's sent to the conveyor line to fill the jugs.

Not every apple is a good cider apple, just like not every apple is a good cooking apple.

Red delicious, with their aroma and high water content are a component of many ciders. (They turn to mush when cooked.) You may find tart Jonathans, low acid Golden Delicious, and sweet smelling McIntosh in a cider. State law does NOT require the percentage of apples or even their types to be listed.

No two orchards create a similar cider, nor does the same orchard have the same combination throughout the entire season of pressing because not all apples ripen at the same time.

Most orchards can get about 3 to 4 gallons of cider out of a bushel of apples. Home presses usually top out at 2 gallons.

Of course there are all the benefits that cider provides: all the wonderful vitamins, all the great fiber. All the opportunities that keeps Charmin in business. ■

"Our philosophy was if it had fallen off the tree within the last week, it probably was good enough for cider."

David Robson is an Extension Educator, Horticulture, at the Springfield Extension Center, University of Illinois Extension, P.O. Box 8199, Springfield, IL 62791. Telephone: 217-782-6515. E-mail: drobson@uiuc.edu.





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The Energy Saving Sermon Continues

The King of Caulk says you can easily seal energy hog holes

With air infiltration being such a major energy problem you surely didn't think the topic could be covered in one column, did you? As I often say in seminars, the three most important items in energy efficiency are: 1) air infiltration, 2) air infiltration, 3) air infiltration.

Remember if the cold air doesn't get in your house this winter, it doesn't take much fuel to heat your house.

When we perform a blower door test in a house it is absolutely amazing how many places air can and does come into a house. If a pull-down attic stairway is located inside the house, it is always an energy hog. In many houses, the heating and cooling thermometer is located near this energy hog. On a cold winter day, the poor old thermostat doesn't know what to do. It doesn't really know if it is in the house or the attic. Solution: Seal it, seal it, seal it. Installation of an Attic Tent (www.atticent.com) or an Energy Guardian kit (www.essnrg.com) is a great answer to that problem.

Many older homes have what we call whole-house attic fans. Hot and cold air pours into the house through the fan's louvers in the ceiling. Actually, there are very few days when such a fan is beneficial. Our preference is to simply remove the fan and louvers and finish the ceiling. However, a very simple solution is to install a sealed, insulated cover on the ceiling, attached to the louvers.

If you can't remove the fan, you can build a box out of foam board and mastic tape. Simply cut the foam board to fit and seal tightly with the mastic tape. Then place it over the fan unit.

Okay now. No, we aren't finished yet. Just think with

me for a moment. Where are some other places where air can come into your home? Think of it this way. Anywhere an ant can get in, air can get in.

Here are a few major problem areas:

1. Where your wall touches your slab.
2. Cracks between the wood framing in your home's walls.
3. Around electrical receptacles and light switches in your house, even on interior walls. (When the north wind is blowing, go feel the electrical outlets and switches on your north wall.)

4. Holes and leaks around your sink plumbing. To heck with the ants, sometimes a mouse can get through these holes.
5. Gas and fireplace flues.
6. Recessed can lights that are not IC-rated. Between 3 and 10 cubic feet per minute of air will pass through one of these lights. A typical plastic garbage bag is 3 cubic feet. So that means that three garbage bags full of air can leak out of one of those lights every minute.
7. The return air system of your heating/cooling unit. In the average house, gigantic amounts of air enter though this system.

So how are you going to stop the cold air from penetrating your home this winter? "Caulk it. Caulk it. Caulk it." For big holes, such as those under the sink, use expandable foam. For the smaller cracks, use a clear siliconized caulk. For electrical outlets and light switches, install the insulated foam gaskets and childproof plug inserts.

Installing cellulose insulation in your attic will also help reduce air infiltration from your attic space. There are also professionals who can test your home and correct the problems. The surest way to find the leaks is through a blower door test, which reveals where all the air leaks are, even those you can't see. ■

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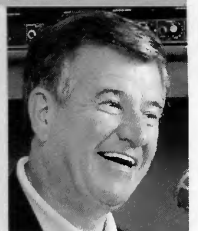
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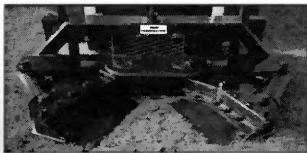
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Radio Reaches Rural Illinois During Disasters

By Les O'Dell



Photo by Steve Davis

Families, sometimes two or three of them together, congregated on front porches and back yards. Young and old alike, they sat, leaned and stood around a battery-powered radio, trying to catch the latest weather report and to find out when electricity would be coming to their area.

Sounds like a scene from the 1930s, but this was a common occurrence in several southern Illinois counties last May, as a *derechoe*, called by many an inland hurricane, swept through the region causing millions of dollars of damage and knocking out power to more than 70,000 homes, some for more than a week.

Throughout the recovery, residents and power company officials relied on local radio stations to provide information on the availability of emergency supplies, the locations of stores and gas stations that were open and, most importantly, when the power would be restored.

"Radio was the only way we had to communicate. Especially in the first four or five days after the storm, there was no electricity for people in several counties," said Bryce Cramer,

Member Service Manager for Egyptian Electric Cooperative, which had some 10,000 members without power.

"We had no television and newspapers were very limited. Radio, battery-operated units and car radios, were all we had," said Cramer.

Station Manager Steve Falat of River Radio of Illinois, which includes six southern Illinois stations, said immediately after the storm, the decision was made to simulcast the same broadcast on all of the company's stations, and that programming would focus on the needs of the area.

"This is what we are here for," Falat said. "We are to be the voice of comfort and reason and to provide information that people would be starved to hear."

For more than 125 consecutive hours, the stations broadcast news and weather as well as updates on storm recovery efforts. Often, the broadcasts included first-person updates from area mayors, legislators, emergency officials, sheriffs and, of course, power company officials.

"We were on three to four times each day with updates about the

progress our crews were making in restoring power," Cramer added. "Radio was the only medium people had to gather information."

Even in times of nice weather and normalcy, radio is still vital to the people in rural parts of Illinois.

"Radio is the fiber of any community, large or small," explained Dennis Lyle, president and CEO of the Illinois Broadcasters Association. "Especially in rural areas, radio is a major part of day-to-day life. It is our daily source of information and lets neighbors know what is going on in their areas."

It is this support to the area that makes radio stations in rural areas different from their big-city, corporate cousins, according to B.J. Stone, general manager of WBYS-AM in Canton. Stone calls the difference "super serving" the area.

"I really believe that if it has to do with our county, it's going to be on our news," he said.

Stone said this often means offering programming not found on metropolitan stations.

"We read lost dog reports and cover high school sports. We do trad-

ing post shows and give obituaries," he said. "If the guys in the big cities want to call it 'hokey,' we take it as a compliment. We do what our listeners want. We cater to our clients."

Other stations include programming of particular interest to people involved in agriculture. Alan Jarand of RFD Radio Network can be heard daily on nearly 70 stations across the state. He said radio is vital to people who live in the country.

"I think radio in rural Illinois is more important than in urban areas. In rural areas, radio provides local news and information that just isn't available from any other source," he said.

Mike Hulvey, vice president of operations for Neuhoff Communications, which operates radio stations in Decatur, Springfield and Danville, agreed.

"Our role is to first, inform and second, to entertain. Most of the great rural radio stations are part of the local community," he said.

Being a major part of the area that they serve is not a role that radio stations discount.

"Your station has to be very intertwined with the community," said John Hoscheidt, owner and general manager of WRMJ-FM in Aledo. "Stations are learning that they have to invest in local people."

Lyle calls it "backyard responsibility."

"Stations and listeners have a very special relationship, but it is more than that, it is a responsibility. It means going above and beyond the call of duty and making sure that everything they do is serving their extended family of listeners," he said.

To many rural broadcasters including Bruce Knopp of Salem's WJBD, it is a multi-faceted responsibility.

"In many respects, our role is to be the lifeblood and pulse of the community as well as cheerleader for the area," he said. "We become a part of everything that goes on."

Rural audiences understand the importance of local stations.

"Our listeners tell us how important we are, and how much information they would be lacking if we weren't on the air," Hoscheidt said.

Lyle said that even with the growth in new media such as the In-

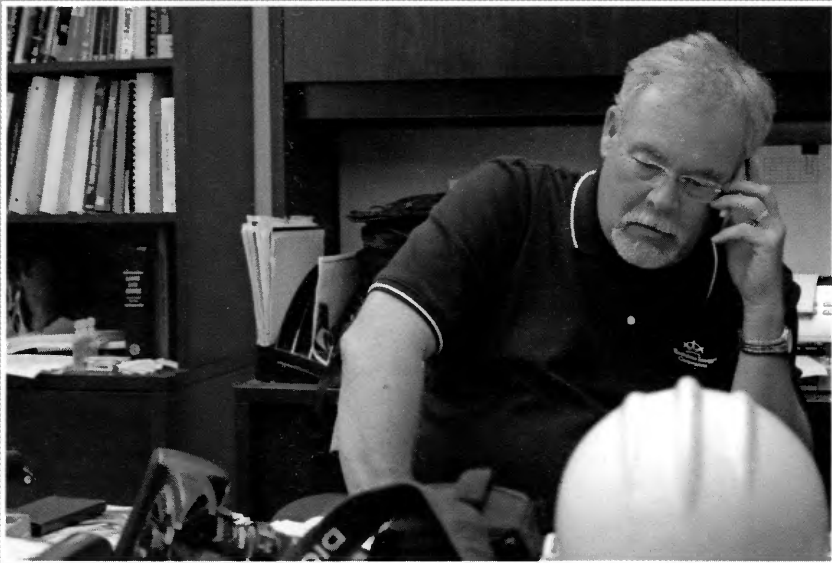


Photo by John Lowery

During the severe wind and tornado storm that devastated southern Illinois in May, Bryce Cramer, District Office and Member Services Manager for Egyptian Electric Cooperative, phoned local radio stations to get the latest news out about storm repair progress.

ternet and cellular phones, there will always be a place for radio.

"It's very easy for some people to cast aside traditional media such as local radio," he said. "But at the end of the day when the Internet is not working, cable television is off, and when cell phones are down, good old, battery-operated radios keep people calm in very tough situations."

Rural listeners are grateful to be kept informed and entertained by local radio stations, especially in times of severe weather or disasters, but

that's not why broadcasters take to the airwaves.

"We didn't go on with storm coverage for the accolades and the 'atta-boys,' Falat said of River Radio's post-storm efforts. "We did it because it was our job and it was the right thing to do, providing our listeners with as much accurate and immediate information as we can."

Throughout rural Illinois, the same can be said for radio stations up and down the dial.



Photo by Steve Davis

Broadcaster Mark Bixler, News Director (and Farm Director) at WBYS/WCDD in Canton, knows residents depend on radio when storms push through the area.

Sharing Our Best

Who: Saint Mary's Church of East Dubuque, Ill.

Cost: \$10, including shipping

Details: hard-backed, comb-bound

Pages of recipes: 241

Send checks to: Ms. Barbara Schuler,
12 Truman Dr., East Dubuque, IL 61025
or call 815-747-8888.



Brownie Chip Cookies (above)

- 1 box fudge brownie mix
- 2 eggs
- 1/4 C. oil
- 1 C. chocolate chips

Grease cookie sheet. Combine brownie mix, eggs and oil. Beat with a spoon for 50 strokes. Stir in chocolate chips. Drop by teaspoon, 2 inches apart onto cookie sheet. Bake at 350° for 8 to 10 minutes. Cookies are soft to the touch. Cool slightly before removing from the cookie sheet.

Brownie Chip Cookies

Crock Pot Beef Stew (below)

- 2 lbs. beef stew meat
- 4-5 potatoes, cubed
- 3 onions, sliced
- 1 C. celery, chopped
- 6 carrots, chopped
- 1 large can tomatoes
- 1 T. sugar
- 1 T. salt
- 1/2 tsp pepper
- 3 T. tapioca

Place all ingredients in crock-pot. Cook on low about 8 hours or until tender.

Crock Pot Beef Stew



Orange Cream Fruit Salad

- 1 (20-oz.) can pineapple, drained
- 1 (16-oz.) can peach slices, drained
- 1 (11-oz.) can mandarin oranges, drained
- 2 medium firm bananas, sliced
- 1 medium apple, chopped
- 1 (3.4-oz.) pkg. instant vanilla pudding
- 1/3 Ctn. frozen orange juice concentrate
- 3/4 C. sour cream

In a large salad bowl, combine fruits and set aside. In a small mixing bowl, beat pudding mix, milk and orange juice concentrate for 2 minutes. Add sour cream; mix well. Pour over fruit and toss. Cover and refrigerate for 2 hours. Yield: 8-10 servings

Hot Ham Sandwiches

- 1/4 lb. butter
- 1 T. poppy seed
- 1 T. prepared mustard
- 1 T. onion, finely chopped
- Hamburger buns
- Sliced ham
- Slice Swiss cheese
- Aluminum foil

Mix top 4 ingredients together and spread on both sides of hamburger buns. Put 1 slice of ham and 1 slice of cheese on each bun. Wrap in aluminum foil and bake in oven at 250° for 20 minutes or until sandwich is warmed through and cheese is soft. Canadian bacon can be substituted for ham.

C.G.'s Cinnamon Ornaments

- 1 C. Cinnamon
- 2 T. white glue
- 3/4 C. applesauce (room temperature)

Mix ingredients with hands for 2 to 3 minutes. Roll out dough and cut into shapes for any season with cookie cutters or knife. Poke a hole in top with a toothpick to hang with cord or ribbon. Dry on cookie rack for several days, turning often while drying. Decorate as desired.

Welcome to Our Table

Who: First Christian Church of Bloomington, Ill.

Cost: \$22, plus \$5.00 shipping

Details: hard-backed, wire-bound

Pages of recipes: 311

Send checks to: First Christian Church,
Welcome to Our Table, 401 West Jefferson St.
Bloomington, IL 61701



Hamburger Stroganoff

Hamburger Stroganoff

- 1/2 C. minced onion
- 1/4 C. butter or margarine
- 1 lb. ground beef
- 1 clove garlic, minced
- 2 T. flour
- 1 tsp. salt
- 1/4 tsp. pepper
- 1/4 tsp. paprika
- 1 lb. sliced mushrooms
- 1 can condensed cream of mushroom soup
- 1 C. sour cream
- Parsley (optional)

Sauté onion in butter until golden brown. Add beef and next 7 ingredients. Sauté uncovered for 10 minutes. Stir in sour cream; sprinkle with parsley. Serve on rice or noodles. Makes 4-6 servings.

Apricot Barbeque Chicken

- 3-4 lbs. boneless, skinless chicken breasts
- 12-oz. or less jar apricot jam
- 1 sm. bottle (16-oz. or less) French dressing
- 1 ctn. dry onion soup mix (Lipton recommended)

Cut chicken breasts into tenders (3-6 pieces each). Arrange chicken pieces in a single layer in a 2-inch deep 9x13 inch baking dish. Sprinkle chicken with the dry soup mix. Mix together the apricot jam and French dressing. Pour over chicken. Bake 1 1/2 hours at 325°, basting at least twice.

Visit www.icl.coop to see
an archive of past
Illinois Country Living recipes.

Fruit Salsa

- 1 pint strawberries
- 1 kiwi
- 2 Granny Smith apples
- 2 T. brown sugar
- 2 T. apple jelly
- Orange or lemon zest to taste

Mix brown sugar and apple jelly together. Dice all the fruit. Mix together. Serve with cinnamon tortilla chips or graham cracker sticks.

Gorp

- 10-12 (1/2-oz.) whole unpeeled almonds
- 1 T. (1/4-oz.) unsalted roasted peanuts
- 1-2 T. (1/4-oz.) dried cranberries
- 1 T. chopped pitted dates
- 1-1/2 tsp chocolate chips, opt.

Combine all in a bowl.

Three-Two-One Dip

- 1 (8-oz.) Ctn. cream cheese
- 1 can condensed cream of celery soup
- 1/2 lb. sliced pepperoni, finely chopped
- Assorted crackers

In a small crock-pot combine all ingredients except crackers. Cover and cook on low for 1 to 2 hours. Serve warm with crackers.

Photos by Catrina McCulley Wagner

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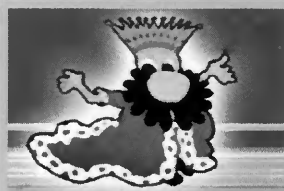
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Cleaner Generation on Horizon

Co-ops emerge as leaders in addressing climate change and energy with innovative technology

By Megan McKoy

Electric co-ops are working on new clean energy sources and several technologies for carbon capture and storage (CCS) both here in Illinois and across the country. Co-ops have also been innovative leaders in renewable energy projects and energy efficiency technology and education.

Capturing carbon from coal and natural gas fired generating plants is possible, but it will take time and large investments to make the goal achievable. That's why co-op leaders and members are asking for climate change legislation that is fair, affordable and achievable.

The Electric Power Research Institute (EPRI), a non-profit, utility-sponsored consortium whose members include electric co-ops, offers a seven-part strategy that, if implemented, will allow the electric utility industry to eventually decrease carbon dioxide emissions while continuing to meet demand for affordable, reliable electricity. The strategy recommends investing in renewable energy, improving the operating efficiency of coal-fired power plants, developing the technology for large scale CCS, boosting energy efficiency, expanding nuclear power capacity, adding distributed generation resources, and putting plug-in hybrid electric vehicles on the road.

Capturing Carbon

Researchers are testing CCS to remove carbon dioxide gas released during power generation, compress it

into a liquid, and then pump it deep underground into spent oil and natural gas wells, saline reservoirs, or inaccessible coal seams for permanent storage.

Basin Electric Power Cooperative, a Bismarck,

Cooperative CEO & General Manager Ron Harper. "But it requires a balanced approach in which consumers continue to conserve, the industry continues to invest in and apply new technologies, and the government supports more rapid advancements while avoiding crippling and economically devastating timelines."

In Illinois, Decatur based Archer Daniels Midland Company (ADM), in conjunction with the U.S. Department of Energy, is also conducting a CCS project. And the FutureGen project near Mattoon, Ill., is back on track to develop a commercial scale, fully integrated carbon capture and sequestration project.



N.D.-based generation and transmission co-op (G&T) supplying

wholesale power to 125 distribution co-ops in nine states, is conducting a carbon capture demonstration project on a portion of its Antelope Valley Station power plant near Beulah, N.D. The move marks the first attempt by a U.S. utility to retrofit a coal-fired power plant with CCS technology.

Also, a subsidiary of the North Dakota G&T operates the only commercial-scale coal gasification plant in the United States, where more than 16 million tons of carbon dioxide from the production of syn-fuels have been safely captured, piped to an oil field in Weyburn, Saskatchewan, and injected to enhance oil recovery.

"We believe we can protect the climate and maintain a strong economy," remarks Basin Electric Power

Cleaning Coal

Electric co-ops are improving traditional power generation in other ways. Through Integrated Gasification Combined Cycle (IGCC), coal gets converted into a clean-burning gas, stripped of other elements. During the IGCC process, both heat from the gasification procedure and hot exhaust from the gas-fired turbine produce steam that is used to generate additional power. Because of these efficiencies, IGCC plants emit about 20 percent less carbon dioxide than traditional coal-fired power plants when producing the same amount of electricity.

One of the nation's first IGCC demonstration facilities, the 292-MW Wabash River Coal Gasification Repowering Project in West Terre Haute, Ind., is partially owned and managed by Wabash Valley Power Association, the wholesale power supplier for 28 electric cooperatives in Indiana, Illinois, Michigan, Missouri and Ohio.

Rick Coons, Wabash Valley Power Association CEO and President, says, "IGCC technology makes great sense as we plan for a cleaner energy future. We have the flexibility to use coal or petroleum byproducts as our fuel source, and the resulting syngas is far cleaner than traditional fossil fuels."

Renewable Energy

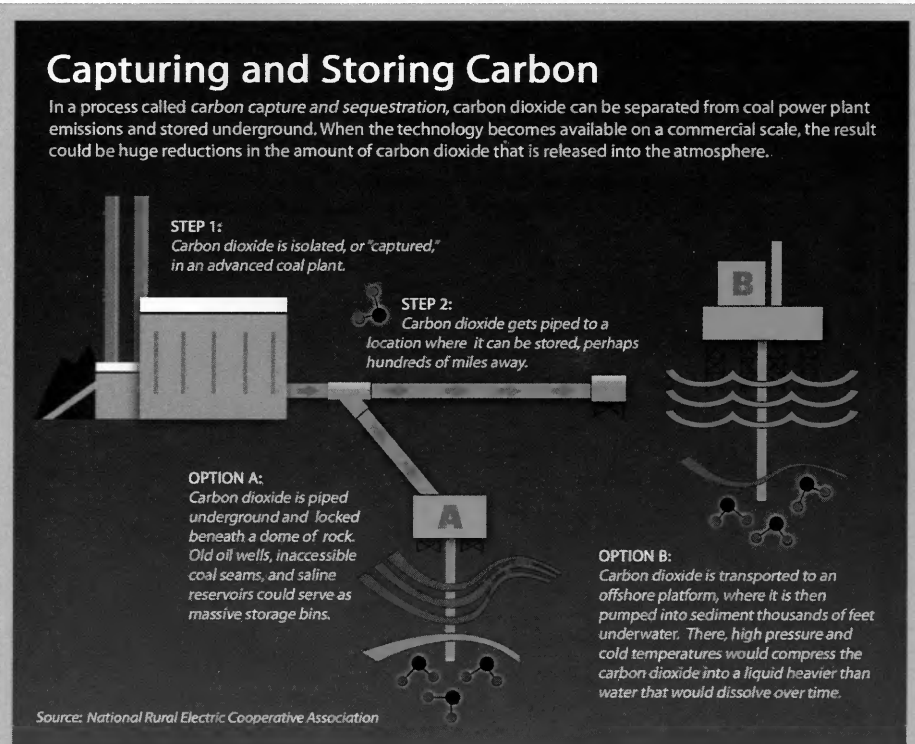
When it comes to generating renewable electricity, electric cooperatives lead the industry. Co-ops receive 11 percent of their power supply from renewables compared to 9 percent for electric utilities as a whole.

Hydropower generates 87.4 percent of renewable co-op energy while wind provides a healthy 10.8 percent. Other resources produce about 2 percent.

Biomass power plants use a wide range of biological materials to create electricity. Oglethorpe Power Corporation, a G&T based in Georgia, and East Kentucky Power Cooperative, a G&T in the Bluegrass State, are experimenting with harnessing the power-production potential of trees, pecan hulls, peanut shells, residue from sawmills, and switchgrass.

Jo-Carroll Energy, Elizabeth, Ill., is also working on an 80 MW biomass plant. "The biomass plant will be an important part of our energy supply portfolio," says Jo-Carroll Energy President and CEO Michael Hastings. "We hope that it will serve as a base for relatively stable energy prices for the next 20 years."

According to U.S. Energy Information Administration (EIA), 11 percent of all renewable energy last year came from biomass. Within 22 years that figure will grow to 32 percent, second only to hydropower. Wind energy production is also a growing resource and Illinois co-ops have also been very progressive in this area. Illinois Rural Electric Cooperative, Winchester, Ill., was the first co-op in the nation to own a utility grade wind turbine. Rural Electric Convenience Cooperative, Auburn, Ill., soon followed with a similar sized



In a process called *carbon capture and storage*, carbon dioxide gas gets separated from power plant emissions and entombed permanently underground. When the technology becomes available on a commercial scale, it will greatly reduce the amount of carbon dioxide released into the atmosphere. Source: National Rural Electric Cooperative Association

wind turbine from a different manufacturer. And Adams Electric Cooperative, Camp Point, Ill., has a similar wind turbine under construction.

Energy Efficiency

According to the Arlington, Va.-based National Rural Electric Cooperative Association, 92 percent of co-ops sponsor energy efficiency programs. Electric co-ops in Illinois have a long history of providing energy audits, energy efficiency education and promotion of energy efficient technology. Just one example is the GeoAlliance grant program. Illinois electric cooperatives and the Illinois Clean Energy Community Foundation have provided \$1 million in grants to schools, churches and community facilities for geothermal heat pump installations helping to reduce heating and cooling costs as much as 70 percent.

Many electric co-ops employ some type of load management pro-

gram that helps reduce peak demand for energy during the hottest part of the summer. In many cases, consumers volunteer to have special "load control" equipment attached to electric water heaters, air conditioners, and other appliances, allowing the co-op to switch them off during demand peaks. Controlling peak demand will be a major component of next generation smart grid, and many of the Illinois electric co-ops have begun preparing by installing a smart metering systems called automated metering infrastructure (AMI).

How You Can Help

Co-ops are asking lawmakers to provide funding necessary to speed development of these technologies and you can help. Through the Our Energy, Our Future™ grassroots campaign at www.ourenergy.coop, you can ask Congress to work with co-ops to bring about an affordable energy future.



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Looking out for you.

1, Singles in Agriculture Annual Thanksgiving Dinner at Harding. Turkey and trimmings, dancing to DJ. Contact Pam at 309-288-5061 or visit www.singlesinag.org.

1, Open House & Ski Swap at Chestnut Mountain Resort just outside Galena. Open house, hayrides, chairlift rides, resort tours, refreshments and ski swap with both new and used equipment available. Discount on season passes. 800-397-1320 or www.chestnutmtn.com.

1, Stade's Shades of Autumn Fall Festival located just north of McHenry open from 10 a.m. to 6 p.m. Pick your own pumpkin, take a hayride, enjoy the petting zoo, corn maze, and lively outdoor concerts. Pumpkin cannon and a big purple combine named "Frank." For more information visit www.shadesofautumn.com.

1-15, Royal Oak Farm Orchard located between Harvard and Hebron open from 9:30 a.m. to 5:30 p.m. Monday through Saturday. Gift shop, full-service restaurant, petting zoo, picnic pavilion, kid's fun park and musical entertainment. For more information visit www.royaloakfarmorchard.com.

3, Edgar Allen Poe Presentation at the East Dubuque District Library in East Dubuque. Duffy Hudson, Broadway and Film veteran will bring his talent and fascination for Edgar Allen Poe to life in his unique one-man play. Refreshments will be served. 815-747-3052.

7-8, Heritage Festival at Southeastern Illinois College, 4 miles east of Harrisburg on Rt. 13. Crafts, food, demonstrations. Free puppet show 1 p.m. Sat. Local band 2 p.m. Sun. Contact Donna Hearn 618-252-5400 Ext 3213 or donna.hearn@sic.edu for more information. Booths available.

7, 10th Annual Wantlandway Plowday 5 miles east of Clinton. On Rt. 10. Antique tractor plowing. Free admission. For information call 217-935-5287.

7, Wine and Cheese Festival at Collver Family Winery in Barry. 217-335-3279.

7, Souls Harbor Southern Gospel Music 7 p.m. hosted by The Barn located between Tower Hill and Pana. Homemade Pie Month! For more information contact Joanne at 217-562-3562 (bjoanne@consolidate.net) or Judy at 217-539-4221 (jjksmith@frontier.net).



7, Leopard Feeding at Miller Park Zoo. Watch as zookeepers feed the Amur Leopard at 4 p.m. Free with zoo admission. For additional information: 309-434-2250 or www.millerparkzoo.org.



7, Chocolate, Champagne, and Candlelight event sponsored by the Galena History Museum 6:30 to 8:30 p.m. at the DeSoto House Hotel, 230 S. Main St. in Galena. Admission \$14, includes 1 glass champagne. All-you-can-eat sweets, cash bar. For information call 815-777-9129 or visit www.galenahistorymuseum.org.



7, Arts and Craft Fair at the Murphysboro United Methodist Church, from 9 a.m. until 3 p.m. in Murphysboro. Over 30 vendors, unique handmade arts, crafts & gifts. Lunch stand and bake sale available. Free admission. Vendor booths \$25. Please call Clara at 618-687-2235 or email pontiac@egyptianpontiac.com for more information or a vendor application.

7, Third Annual Holiday Open House 9 a.m. – 2 p.m. 101 North Capitol in Mt. Sterling. Tupperware, Pampered Chef, Tastefully Simple, Celebrating Home, Longaberger, Crafts, Baked goods and much more. For information call 217-289-3365.

14, WNOI Holiday Bazaar. 9 a.m. – 4 p.m. at the Floyd Henson Jr. High School, 609 N. Stanford Rd. in Flora. Do your Christmas shopping early all in one location, over 70 booths, plus pictures with Santa (time tba). For more information or to have a booth contact Brenda Miller, Sales Mgr., WNOI-FM, Flora. 618-662-8331.

15, Raven Moon Concert at Music Folk, 8015 Big Bend, in St. Louis at 7 p.m. Raven Moon presents exceptional acoustic music with an American pulse. Admission \$7. For information visit www.ravenmoonband.com or call 618-939-7453.

21, Victorian Christmas Memories With The Tea Ladies, 2 p.m. at the Abraham Lincoln Presidential Library – Lincoln Reception Room in Springfield. Learn how the Victorians prepared for Christmas, including their take on handmade ornaments, Christmas cards, Santa Claus, handmade and purchased gifts and famous candy treats, such as the “Peppermint Pig.” Tickets are \$35. 217-558-8934 or www.presidentlincoln.org.

27-29, Julmarknad. 10 a.m. – 5 p.m. Sights, sounds and aromas of Christmas past. Swedish Music, Swedish food specialties, abundance of handmade wares, folk art, antiques. Christmas Cookie Walk: Select from a large array of delicious holiday cookies, homemade by community bakers. 9 a.m. – 4 p.m. For information email bishophill@winco.net or call 309-927-3345.

27-28, Shopping in the Hills 2nd annual Art and Craft Fair sponsored by Heartlandarts.net. Various locations in southern Illinois. For more information visit heartlandarts.net, call 618-713-2896 or e-mail heartlandartsnet@gmail.com.

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20-22, 25th Annual Nouveau Wine Festival in downtown Galena. Celebrating 25 years! A celebration of the release of Galena Cellars Vineyard and Winery Nouveau Wine. Enjoy a traditional French stew at local restaurants followed by horse-drawn wagon deliveries on Main Street. Afternoon wine and cheese parties at various downtown locations. 815-777-3330.



20, 21, 22, Little Station and Herbal Tea Room. Put warmth in the holidays with home-spun gifts, furniture, McCall's and Cheerful Giver Candles and antiques. New outdoor decorations. Herbal Tea Room serving array of homemade meals, desserts. Reservations recommended for this one-weekend-only event. Darrell and Fran Pfeiffer at 309-597-2386.

21, 27, 28, The 7th Annual Christmas Bazaar, 119 South Appleknocker, Cobden. New and gently used, upscale and handmade items, including Christmas trees, trim, wrap, games and gifts. Shop in a restored 1892 building with old showcases and counters. 8 a.m. to 4 p.m. 618-893-2567 or 618-893-2865. Also on Dec. 5 and 12.

29, Cookies & Cocoa with Santa & Mrs. Claus 1 p.m. to 4 p.m. in downtown East Dubuque. Join the East Dubuque Business & Tourism Council along with the East Dubuque Fire Department to welcome Santa & Mrs. Claus to the city. Arriving on a big red fire engine! Cookies, cocoa, Christmas carols! Free to the public. 815-747-6860.

To be considered for inclusion, please submit events in the format used above. Preference is given to events sponsored by non-profit entities. Submitting an event is not a guarantee of publication. Photos are welcome, but will not be returned unless a self-addressed and stamped envelope is provided. Events are subject to change, so please contact the event sponsor for confirmation.

Deadline: October 15 for January Events. **Mail to:** Illinois Datebook, PO Box 3787, Springfield, IL 62708. **E-mail to:** cwagner@aiec.coop

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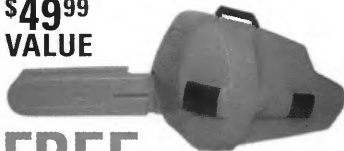
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