

MISSOURI

Sac Osage Electric Cooperative

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Teaching kids about electrical safety *What you can do at home*

One of a parent's highest priorities is to protect their children. One way to do this is by teaching them about safety around electricity in your own home. Start teaching kids at an early age about electrical safety.

Teach children that water and electricity do not mix. Children should never play with or use electronics around water. Make sure GFCIs are installed anywhere electricity and water could meet to help prevent shocks. GFCIs detect and prevent dangerous situations where an electric shock could occur.

Inform kids that the only objects that go into outlets are electric plugs. Sticking other items in an electric socket can lead to an electric shock or death. As a parent, you can help prevent this by having tamper resistant outlets (TROs) installed. A TRO has a shutter system that only accepts electric plugs. Another option is to use simple outlet plugs, however these can be easily removed.

Tell children that electric cords should be left alone. A curious child may put a cord into his or her mouth and could potentially suffer an electric burn. Additionally, kids should be taught to never pull a plug out of the socket by the cord. This could damage the cord. It is a good idea to leave cords out of sight so children are not tempted to play with them.

Emphasize that electronics and their accessories have to be handled with care. Also advise kids to never stick fingers or objects into toasters or any other electrical appliance. Encourage younger children to ask for help when they want to use an electronic device.

Include utility emergency numbers with other posted emergency phone numbers, and instruct children how to call for help in an emergency.

How Sac Osage can help

If you're interested in having a safety presentation for your classroom, Sac Osage Electric can put together a program catered to your group's age and needs. This is a service Sac Osage Electric provides in order to remind our youngest members about the importance of electrical safety. Contact Member Services at 417-876-2721 to schedule your safety demonstration. For more information on keeping your children safe around electricity, visit SafeElectricity.org.

Sac Osage holds safety presentation to local first responders

On a warm Thursday evening in August, Cedar County first responders met in the Stockton Community Building to hear a safety presentation from Sac Osage Electric Cooperative. Jim Davis, Engineer/General Manager, Rodger Culbertson, Line Superintendent, and Aaron Ash, Marketing Rep. met with more than twenty volunteer fire fighters, paramedics and peace officers to present the dangers of live electrical lines.

The presentation included prepared safety videos and real world situations as well as the Cooperative's Live-line Display. First responders were given the opportunity to ask the cooperative experts questions about emergency situations, and learned about the electrical distribution system and high voltage lines.

Sac Osage is happy to provide safety demonstrations free of charge as a community service. If you have a civic group, or organization interested in the program, please contact the cooperative.



Sac Osage Electric Cooperative is committed to the community and appreciates the opportunity to participate in the 3rd Annual Lake Stockton WILDLIFE CHALLENGE by loaning them our trolley to transport the people to the their destination.



SEPTEMBER 2016

Read all about it!

n Sept. 3, 1833, publisher Benjamin Day distributed the first issue of his New York newspaper, *The Sun*, a four-page daily selling for one penny. Day gave New Yorkers what he thought they wanted: sensational accounts of crime and horror, human-interest stories and no politics. One of the



first things Day did was to run this ad in his second issue: "To the unemployed — A number of steady men can find employment by vending this paper. A liberal discount is allowed to those who buy to sell again." Ten-year-old Barney Flaherty responded, was hired, and became the first "paper boy."

Grandma Moses

randma Moses was born on Sept. 7, 1860.

She was a farmer's wife who lived near Hoosick Falls, N.Y. In her late 70s, she decided to take up painting and displayed one of her "primitives" in a drugstore window in town. An art collector happened to see it and traced her to her farm, where he bought all 15 of her existing paintings. He exhibited them in 1939 in a show of contemporary unknown painters in New York City. Her fame began.



Autumnal Equinox

This year's autumnal equinox occurs at 10:09 p.m.
Central Daylight Time on Sept. 22. It is said that the wind and weather at the time of the equinoxes foretells the wind and weather during the following three months. If the autumn



is warm, it is reputed that the winter will be long. If there's much autumn fog, there will be much winter snow. If the autumn is clear, the winter will be windy. If the storms of September clear off warm, however, you can expect the winter storms to be relatively warm as well.

For recipes, gardening tips and weather forecasts, visit: www.almanac.com

Recipe for Quick and Easy Cupcakes



1/2 cup (1 stick) butter 1-1/4 cups sugar 2 eggs 1-1/2 teaspoons vanilla extract 2-1/4 cups flour 2-1/2 teaspoons baking powder 1 teaspoon salt

eat the oven to 350 degrees. Line a muffin tin with paper liners. Cream the butter and sugar, then beat in the eggs. Add the vanilla. Sift the dry ingredients and add, alternately, with milk. Fill paper liners no more than two-thirds full. Bake for about 20 minutes or until lightly browned. Frost as desired. Makes 12 cupcakes.

2/3 cup milk

THE OLD FARMER'S



WEATHER PROVERBS

Fair on Sept. 1, fair for the month.

September dries up ditches or breaks down bridges.

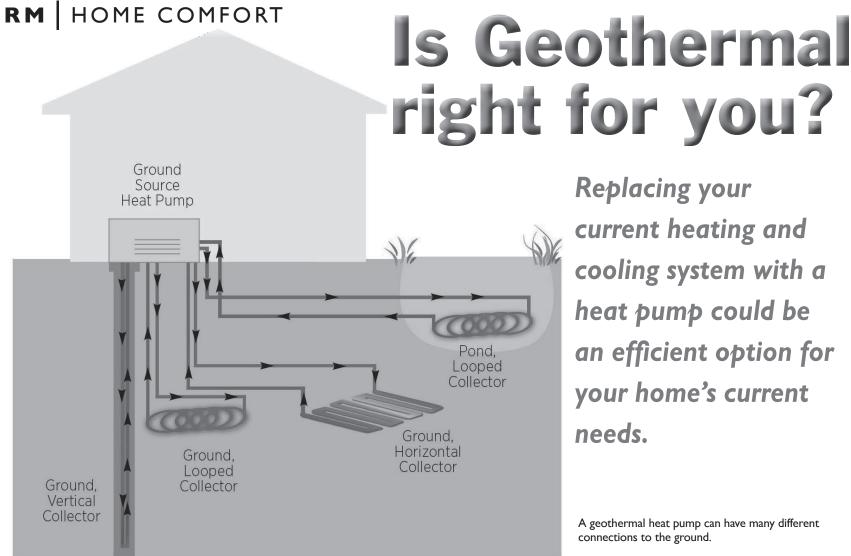
If St. Michael (Sept. 29) brings many acorns, Christmas will cover the fields with snow.

If red the sun begins his race, be sure the rain will fall apace.

Dew is produced in serene weather and in calm places.

When pigs carry straw to their sties, bad weather may come.

When the bubbles of coffee collect in the center of the cup, expect fair weather.



Replacing your current heating and cooling system with a heat pump could be an efficient option for your home's current needs.

A geothermal heat pump can have many different connections to the ground.

Dear Pat: I am planning to replace my current heating system with a geothermal heat pump. It is comparatively pricey to other options, but it seems like an efficient option, and I like the fact that it includes air conditioning. Would a geothermal heat pump be a good choice for me? — Ralph D.

Dear Ralph: In most areas of the U.S., space heating and cooling account for a large percentage of overall home energy use, so upgrading to a more efficient HVAC system is a great way to reduce your monthly energy bill. A geothermal heat pump, also known as a ground-source heat pump, is among the most efficient types of heating and cooling systems you can consider installing in your home.

Even when it is extremely hot or cold outside, the temperature a few feet below the surface of the ground remains relatively constant and moderate. A geothermal heat pump system uses this constant ground temperature to help heat and cool your home. As a result, geothermal heat pumps are quite efficient. For example, according to the Environmental Protection Agency, geothermal heat pumps use up to 44 percent less energy than traditional air-source heat pumps, and up to 72 percent less energy than electric resistance heaters combined with standard air conditioners.

A geothermal heat pump system is made up of three main compo-

- 1. The collector, or loop field, which is in the ground and cycles a liquid, like antifreeze, through dense plastic tubing.
- 2. The heat pump that is in your home.
- 3. The duct system that distributes the heated or cooled air throughout your home.

During the winter, the collector absorbs the heat stored in the ground and the liquid carries that heat to the heat pump, which concentrates it and blows it into the duct work, warming your home. In the summer, the heat pump extracts heat from the home and transfers it to the cooler ground.

The collector that exchanges heating and cooling with the ground can be set up in one of three main ways:

- Horizontal system: Plastic tubing is placed in trenches four to six feet below the surface of the ground. This system works well when a home or business has sufficient available land, as these systems may require up to 400 feet of trenches to be dug.
- Vertical system: If the site does not have sufficient space for a horizontal system, a collector can be placed vertically. In this system, a drill digs 100 to 400 feet below the surface and places the tubing. This system can be more costly than a horizontal system, but will have less

impact on any existing landscaping and can be used on smaller lots.

 Pond system: If a home has access to a pond or lake, a pond system (also known as a water-source heat pump) may be possible. The loop field is connected to the heat pump and then placed at least eight feet below the surface of the water. If a homeowner has access to a pond that is sufficiently wide and deep, this option can offer the lowest

Geothermal systems typically cost more than other heating systems, largely because of the collector and the associated digging or drilling, but their high efficiency can help reduce the payback time. The cost will vary based on whether new ductwork is needed and the type of collector you install, among other factors. However, there are incentives available for those who install qualified geothermal heat pumps. Most notably, there is a 30 percent federal tax credit for installing an Energy Star-rated system before the end of 2016 — so, if your system and installation cost \$20,000, you could take \$6,000 directly off your federal tax bill. Some states also offer tax incentives, and your electric co-op may offer rebates or financing to help you pay for the system.

For those with high energy bills resulting from heating and cooling, an efficient geothermal system is a good option to consider. In addition, those building new homes should consider at the outset whether to install a geothermal heat pump. With new construction, the system can be included in the mortgage and installing it before the home is completed means no disruption to your landscaping.

Speak with a qualified energy auditor at your electric cooperative who can help you evaluate the different heating and cooling options that would be best for your home.

This column was co-written by Pat Keegan and Amy Wheeless of Collaborative Efficiency. For more information on geothermal heat pumps, please visit: www.collaborativeefficiency.com/energytips.

> Have questions about your home's energy efficiency? Contact your local electric cooperative for more energy-saving tips.

The Seven Cooperative Principles

Open and Voluntary Membership

Membership in a cooperative is open to all persons who can reasonably use its services and stand willing to accept the responsibilities of membership, regardless of race, religion, gender or economic circumstances.

Democratic Member Control

Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. Elected representatives (directors/trustees) are elected from among the membership and are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote); cooperatives at other levels are organized in a democratic manner.

Members' Economic Participation

Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital remains the common property of the cooperative. Members allocate surpluses for any or all of the following purposes: developing the cooperative; setting up reserves; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership.

Autonomy and Independence

Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control as well as their unique identity.

Education, Training, and Information

Education and training for members, elected representatives (directors/trustees), CEOs, and employees help them effectively contribute to the development of their cooperatives. Communications about the nature and benefits of cooperatives, particularly with the general public and opinion leaders, helps boost cooperative understanding.

Cooperation Among Cooperatives

By working together through local, national, regional and international structures, cooperatives improve services, bolster local economies and deal more effectively with social and community needs.

Concern for Community

Cooperatives work for the sustainable development of their communities through policies supported by the membership.

These principles are underpinned by six ideals—the so-called cooperative values of Self-Help, Self-Responsibility, Democracy, Equality, Equity and Solidarity. In addition, the International Cooperative Alliance lists cooperative "ethical values" of Honesty, Openness, Social Responsibility and Caring for Others.





Don't let energy vampires increase your electric bill by sucking power from your home. Plug all electronics into a power strip and turn it off when they are not in use. Turn on energy-saving features on computers so they go to sleep when not in use. And be sure to unplug chargers once their job is done.

Labor Day

The office of Sac Osage Electric Cooperative will be closed on Monday, Sept. 5 in observance of Labor Day.