



RURAL
MISSOURI

Sac Osage Electric Cooperative

News

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September 2013

Visit us on the Web - www.sacosage.com

C.Y.C.L.E.



Kaitlyn Schrock, Osceola High School was one of 100 high school juniors who participated in the Association of Missouri Electric Cooperatives Cooperative Youth Conference and Leadership Experience program.

The annual CYCLE conference was held July 17-19, 2013, at the Double Tree Hotel in Jefferson City. Selected as an outstanding young leader by her local electric cooperative was Kaitlyn Schrock of Osceola High School. Shrock was sponsored by Sac Osage Electric Cooperative in El Dorado Springs.

Each year in July, an action-filled three days provides high school students opportunities to learn first-hand what it is like to be involved in politics, the cooperative form of business and being a leader. The program included nationally known speakers, a day at the Missouri State Capitol and education about electric cooperatives. The group was also divided up into smaller teams that competed in various events like the "build a cooperative" game. One highlight was hearing from the Rachel's Challenge group. This national program was founded by the father of Rachel Scott who was tragically killed in the Columbine High School shooting in 1999. Their challenge is to make a positive difference in your school and community.

The CYCLE program is in its ninth year and recently received the National Community Youth Service award from the National Rural Electric Cooperative Association as the top youth program among all electric cooperatives in the country.

For more information about this program, go to www.amec.org/youth.html#cycle.



Labor Day

The office of Sac Osage Electric Cooperative will be closed on Monday, Sept. 2 in observance of Labor Day.



Energy Efficiency

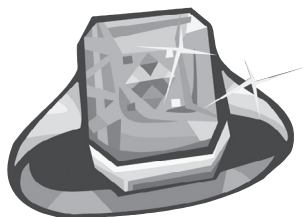
Tip of the Month

Be a "fan-atic." While they won't replace an air conditioner or heat pump, fans move the air so everyone feels more comfortable. On a milder day, a fan is a much more energy-efficient choice than cranking up the air conditioning. Fans cool people, not rooms, so turn them off when you leave.

September 2013

Peaceful Sapphire

September's birthstone, the sapphire, was dedicated to the mythical god, Apollo, perhaps for its heavenly blue color or possibly for its extreme hardness. Among gems, only the diamond is harder. St. Jerome insisted that anyone wearing a sapphire would



be able to make peace with his enemies so, theoretically, Apollo wouldn't have needed the gem to wear into battle. For mere mortals, the sapphire was supposed to help us gain favor with the gods. Pope Innocent III had these stones set in all his bishops' rings.

Michaelmas

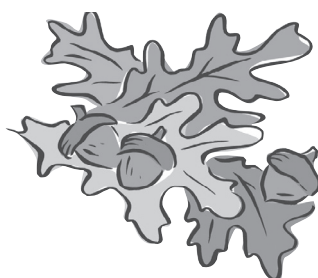
Originally celebrated as the feast day of St. Michael on Sept. 29, Michaelmas continues to serve as a seasonal signpost. In the British Isles, crops were harvested and sold by late September, and farmers paid their yearly rent on Michaelmas. Everyone ate goose at Michaelmas to bring prosperity,



so many included "a goose fit for the lord's dinner" with their payment. Market fairs occurred on the feast day, and large crowds made it convenient to hold elections then as well. The custom of fall elections has continued, but today they have shifted to November.

Autumnal Equinox

This year's autumnal equinox occurs at 4:51 a.m. Central Daylight Time on Sept. 22. It is said that the wind and weather at the time of the equinox foretells the wind and weather during the following three months. If the autumn is warm, it is reputed that the

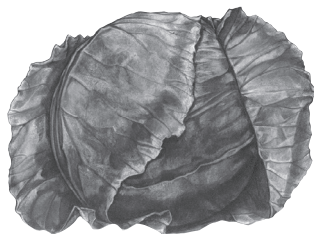


winter will be long. If there's much autumn fog, there will be much winter snow. If the autumn is clear, the winter will be windy. If the storms of September clear off warm, however, you can expect the winter storms to be relatively warm as well.

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



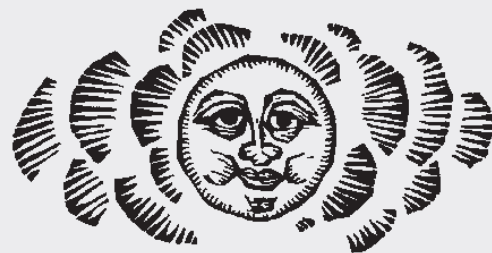
Recipe for Red Cabbage with Apples



1 onion, chopped
4 tablespoons bacon fat
1 head cabbage, shredded
1/2 cup dry red wine
2 tablespoons vinegar
2 tablespoons brown sugar
2 apples, peeled, cored and sliced
Salt and pepper, to taste

Sauté the onion in the bacon fat until tender. Add the cabbage and stir well to coat. Add wine, vinegar and brown sugar. Bring to a boil and add apples, salt and pepper. Reduce heat, cover tightly and simmer for about 45 minutes until tender, adding water as necessary.

THE OLD FARMER'S



WEATHER PROVERBS

Fair on Sept. 1, fair for the month.

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

Dew is produced in serene weather and in calm places.

A rainbow in the morn, put your hook in the corn; A rainbow in the eve, put your hook in the sheave.

When a cat sneezes, it is a sign of rain.

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.



H O M E C O M F O R T

Landscape for looks, efficiency

Dress up your property to lower your utility bills and improve your comfort

Dear Jim: We are landscaping our new house. We like a wooded yard for shade and to enhance our home's energy efficiency. Where should we plant trees, and which are best? What materials are good alternatives to grass for ground cover? — Mark G.



by Jim Dulley

Dear Mark: Wise landscaping can do more than just create an attractive yard. It also can lower your utility bills — summer and winter — and improve your family's comfort year-round. Trees, being one of the key components of any residential landscaping design, can have the greatest effect on your utility bills.

For one, the evaporation of moisture from the leaves on trees actually cools the air temperature around your home, akin to how perspiration cools your skin.

With the proper placement and selection of trees, you can use less electricity to heat your home during the winter by taking advantage of passive solar heating.

The primary goal of efficient landscaping with trees is to shade your home during summer, yet allow the sun to pass through during winter. Depending upon your climate, additional goals are to allow cool evening breezes to flow around your house or to provide moisture for evaporative cooling.

Before you start, check with a local landscaper to determine your temperature zone, which refers to the minimum winter temperature range. For warm climates in Zone 10, for example, the range is 30 to 40 degrees. For cold climates in Zone 1, the range is -30 to -40 degrees. If you select species of trees that thrive in a climate more than one or two zones outside your range, they may not do well and may require excessive care.

In an average temperate climate, a typical efficient tree landscaping plan has deciduous trees to the south, southeast and southwest of your house. The leaves block the sun during summer, but when they fall during autumn, the sun shines through to heat your home. Leave a small gap to the southwest to allow cooler evening breezes to flow through.

Plant dense evergreens, which block cold winter winds, along the north, northeast and northwest sides of your home. With shorter days and the sun lower in the sky, less solar heat comes from these directions during the winter.

In hot, humid climates, shading during summer is most important. Taller trees should be planted closer to your home to block the sun, which is higher in the sky. Leaving a gap for breezes is not as important.

There are alternatives to grass, such



Efficiently landscaping your yard can do more than add curb appeal to your home. It also can save you money.

as ground cover plants and gravel. Both have their advantages and disadvantages for landscaping a home. The benefits of either depend on your climate, house and yard. Even in the same neighborhood, what is good for one house may not be efficient for another.

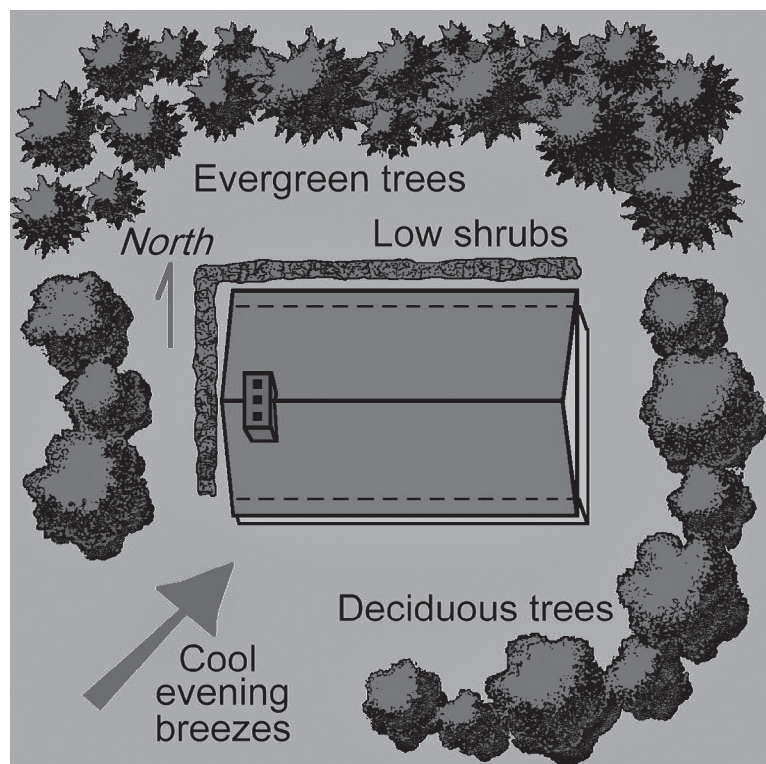
Low-growing ground cover near your house

can help to keep it cool during summer. The leaves block the sun's heat from absorbing into the ground, and they give off moisture for natural cooling. Ground cover has a lesser impact on efficiency during winter.

The cooling effect from ground cover is most effective in drier climates because there is more evaporation. In hot, humid climates, the additional moisture from plants near the house will further increase the relative humidity level. This is more of an issue if you rely on natural ventilation for your home rather than air conditioning.

Landscaping with gravel eliminates the need to water grass, but it can increase the air temperature around your house, particularly in the evening. The thermal mass of the gravel stores the afternoon sun's heat, which helps in the winter. If you use gravel, make sure it's shaded by deciduous trees during the summer.

A good location for ground cover is between an asphalt or cement driveway or walkway and the sunny side of your house. Not only does the driveway get hot and hold the heat, but it re-radiates the heat up to your house. Planting taller ground cover between the driveway and your house walls can block some of this heat.



In an average temperate climate, a typical efficient tree landscaping plan around a home has deciduous trees to the south, southeast and southwest and dense evergreens to the north and northwest.

Have an energy-efficiency question for Jim? E-mail him at contact@dulley.com or write to: James Dulley, Rural Missouri, 6906 Royalgreen Drive, Cincinnati, OH 45244. Visit www.dulley.com to read past articles on energy efficiency.



SMART METERS BETTERING SERVICE FOR MEMBERS

Over the past few months, Sac Osage Electric Cooperative has received numerous concerns about the subject of smart meters on the electric grid. Many of these concerns are on matters of privacy and choice when it comes to their electrical usage so this article aims to explain how our metering system works.

What is the grid and what makes it smart?

"The grid" refers to the electric grid, a network of transmission lines, substations, transformers and more that deliver electricity from power plants to your home. The current U.S. electric grid was built in the 1890s, and the cooperative's system was built beginning in the 1930s. Both have improved as technology advanced. To continue to move forward, we needed a new kind of electric grid, a smarter grid. This includes digital technology for two-way communication between the utility and its members along the transmission lines.

Like the Internet, a smart grid consists of controls, computers, automation, and new technology and equipment working together. One main component is a smart meter that digitally measures and records the amount of electricity used in a home.

What is a smart meter?

SOEC uses an automated meter reading system (AMR) or smart meter system. The two-way communication occurs between the substation location and the individual meters across our service territory. The communications channel for this system is our power line network. There is no telephone line access to our meters. There is no cell phone or radio access either. All communications pass back and forth over our power lines. The substations communicate back to the main office over our own fiber optic network which is a secured network and no other commercial communications occur on this secured network.

Our AMR system does not have any ability to communicate with any devices or appliances within a home or business. Some concerns have been raised that smart appliances can communicate with the electric meter and self-adjust the power level in order to reduce consumption, or avoid operating during peak alert times. SOEC cannot control anything in a member's home through the AMR or smart meter system.

A myth that has been surfacing is that smart meters are an invasion of privacy. Some believe that the meter can tell exactly what you are doing in your house and when. The fact is, smart meters measure how much energy you use, based on time of day, not how you are using that energy. Smart meters can-

not tell whether the energy used is from your oven, air conditioner or hair dryer. Our meters only send us energy readings from the hourly use at a member's home.

We adhere to strict policies, following laws that regulate the use of personal information for business functions like billing and member service. We have the responsibility to keep members' account information confidential. A member's consumption data is not shared with anyone.

Benefits of the smart grid and smart meters

Just as banking became more convenient with the creation of debit cards, ATMs and online banking, electricity has improved as well. The smart grid and smart meters will provide many benefits to our members. Some of the

benefits are:

- Improved reliability: With smart meters, the cooperative can locate outages more quickly and precisely. It also helps us know more precisely how many members are without power by knowing how many meters are not responding.

- Increased member control: Smart meters provide more detailed information on energy use, allowing members to better understand and control their use.

- Improved power quality: More information coming from the meters and other new applications, the cooperative can monitor the system better and improve power quality by reducing the number of outages.

