

# MICHIGAN Country Lines



## Trail of Quilts

**4 Local. Trusted. Serving You.**

**5 Young Family Farm Marks  
150 Years**

**29 Audit Your Energy Use**



**dish**  
NETWORK®  
AUTHORIZED RETAILER

regular price ~~\$39.99~~

**\$24.99**  
a month  
for 12 months

over 120 channels *locals included!*  
(where available)

**HD FREE**

*for life!*  
(with agreement)



FOR A **LIMITED TIME** RECEIVE:

**FREE**

**HBO® & SHOWTIME®**

18 channels for 3 mo.  
(with agreement)

**FREE**



**2 Room HD-DVR Upgrade**  
(\$6/mo DVR service fee applies)

**FREE**



**Activation (\$99 Value)**

**FREE**



**Up to 6 Room Installation**

**CALL TODAY**  
**1.877.770.8340**

**WWW.INFINITYDISH.COM**

**WE ARE OPEN 7 DAYS A WEEK 8 AM - MIDNIGHT EST • SUNDAY 9 AM - MIDNIGHT EST**  
OFFER ONLY GOOD TO NEW DISH SUBSCRIBERS • **SE HABLE ESPAÑOL**



**\$25 Visa®**  
gift card with activation  
(certain conditions apply)  
Respond by: 11/15/2010

Digital Home Advantage plan requires 24-month agreement and credit qualification. If service is terminated before the end of agreement, a cancellation fee of \$125/month remaining applies. Programming credits apply during first 12 months. Free HD for life of current account; requires Agreement, Activation with Paperless Billing, HBO/Showtime offer requires Activation with Paperless Billing; credits apply during first 3 months (\$72 value); customer must downgrade or then-current price applies. Requires continuous enrollment in Activation and Paperless Billing. Free Standard Professional Installation only. All equipment is leased and must be returned to DISH Network upon cancellation or unreturned equipment fees apply. Limit 5 leased boxes per account; lease upgrade fees apply for select receivers; monthly fees may apply based on type and number of receivers. HD programming requires HD television. HD channel availability will vary based on package. 200 HD channels require subscription to additional packages and VPP. \$32 receiver. All prices, packages and programming subject to change without notice. Local channels may not be available in all areas. Offer is subject to the terms of applicable Promotional and Residential Customer Agreements. Additional restrictions may apply. First-time DISH Network customers only. Offer ends 11/15/10 and related channels and service marks are the property of Home Box Office, Inc. SHOWTIME and related marks are registered trademarks of Showtime Networks Inc., a CBS Company. \$25 Visa® gift card requires activation and 5% shipping and handling fee. You will receive a claim voucher within 5-8 weeks and the voucher must be returned within 30 days. Your Visa® gift card will arrive in approximately 6-8 weeks. Introductory charges: a one-time \$4.95 non-refundable processing fee. Indiana C.F.S. Reg. No. 1.5. 10-1005.

Executive Editor  
Gail Knudtson

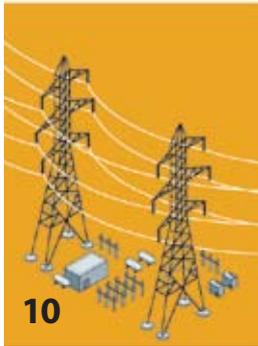
Design Editor  
Cindy Zuker

Ad/Recipe Assistant  
Jennifer Hansen

Publisher  
Michael Peters

Editor Emeritus  
Mike Buda

# MICHIGAN Country Lines



10



18



20

**Michigan Country Lines**, USPS-591-710, is published monthly, except August and December, with periodicals postage paid at Okemos, MI, and additional offices. It is the official publication of the Michigan Electric Cooperative Association, 2859 W. Jolly Rd., Okemos, MI 48864.

**Subscriptions** are authorized for members of Alger Delta, Cherryland, Cloverland, Great Lakes, HomeWorks Tri-County, Midwest Energy, Ontonagon, Presque Isle, and Thumb electric cooperatives by their boards of directors. Subscriptions are \$6 per year.

**Postmaster:** send address changes to Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864.

**Letters to the editor** should be sent to the same address. Phone 517-351-6322. **Email:** knudtson@countrylines.com.

Association officers are **Brian Burns**, PIE&G, chairman; **Ken Swope**, Midwest Energy, 1st vice chairman; **Tony Anderson**, Cherryland, 2nd vice chairman; **Eric Baker**, Wolverine Power, secretary-treasurer; and **Louis Wenzlaff**, Thumb, past chairman. **Michael Peters** is president and CEO.

Unsolicited letters, photos and manuscripts are welcome. *Country Lines*, however, will not be responsible for their safe keeping or return.

**The appearance of advertising does not constitute an endorsement of the products or services advertised.**

**Display ad representatives:**

Michigan—Al Mateus  
877-649-5620  
National—The Weiss Group  
480-860-5394  
National Country Market  
512-441-5200

**Change of Address:** Please notify your electric cooperative. See page 4 for contact information.

## 10 Grid Lines

Utilities prepare to repave America's electric highway.  
*Megan MCKoy-Noe*

## 12 Trail of Quilts

Enjoy a fall driving tour to see colorful quilt block designs that help preserve our art heritage, barns, buildings and communities. *Gail Knudtson*

## 15 Geothermal's Promise

Energy from deep in the earth has huge potential for electricity generation and heat.  
*Magen Howard*

### C O L U M N S

- 9 **Comment** *Michael Peters*  
In Your Best Interest
- 16 **Our Kids** *Linda Wacyk*  
Green schools
- 20 **Gardening** *Neil Moran*  
Raising chickens
- 22 **House & Home** *Jame Dulle*  
Bathroom lighting
- 23 **Outdoors** *Don Ingle*  
Blue jays
- 30 **Ramblings** *Mike Buda*  
Viva La Branche!

\*Not in all editions

Pages specific to your electric utility are: 1, 4-5, 8, 25, 28-29, 32

### D E P A R T M E N T S

- 6 **Readers' Pages**  
Co-ops & Members, Letters, Cheese Co-op
- 18 **Home Cooking**  
Stir-fry
- 24 **Wolverine Power\***  
Aerial patrols improve reliability
- 26 **Country Lines Marketplace**  
Classifieds from readers



MICHIGAN'S ELECTRIC  
COOPERATIVES  
countrylines.com



### C O V E R \*

A quilt block design that graces the Centennial Farm barn of Melanie (pictured) and Doug Wirth is part of the Osceola County Quilt Trail. *Photo—Andree Magsig, drephotography.net*



**Blanchard office:**

3681 Costabella Avenue  
Open 8 a.m.–5 p.m. Monday-Friday

**Portland office:**

7973 E. Grand River Avenue  
Portland, MI 48875  
Open 8 a.m.–5 p.m. Monday-Friday

**Electric bill/account questions:**

517-647-7556 or 1-800-562-8232

**Service questions/outages:**

517-647-7554 or 1-800-848-9333  
(24 hours for emergency calls)

**Tri-County Propane:** 1-877-574-2740

**Rural TV/DIRECTV:** 1-800-293-7112

**WildBlue** 1-800-668-8413

[www.homeworks.org](http://www.homeworks.org)

**E-mail:** [tricoenergy@homeworks.org](mailto:tricoenergy@homeworks.org)

**Board of Directors**

**District 1 — Philip Conklin**

5130 W. Gresham Hwy.  
Charlotte, MI 48813  
517-726-0127; [pconklin@homeworks.org](mailto:pconklin@homeworks.org)

**District 2 — Wayne Swiler**

Vice-Chairman  
11750 Ainsworth Rd.  
Lake Odessa, MI 48849  
616-374-3141; [wswiler@homeworks.org](mailto:wswiler@homeworks.org)

**District 3 — Carl Morton**

Chairman  
11280 Eden Trail  
Eagle, MI 48822  
517-626-2258; [cmorton@homeworks.org](mailto:cmorton@homeworks.org)

**District 4 — Laverne Hansen**

Secretary-Treasurer  
1190 E. M-46 Hwy.  
Edmore, MI 48829  
989-427-5851; [lhansen@homeworks.org](mailto:lhansen@homeworks.org)

**District 5 — Cara Evans**

10180 Roosevelt Rd.  
Bannister, MI 48807  
989-862-5590; [cevans@homeworks.org](mailto:cevans@homeworks.org)

**District 6 — Ed Oplinger**

10890 W. Weidman Road  
Weidman, MI 48893  
989-644-3079; [eoplinger@homeworks.org](mailto:eoplinger@homeworks.org)

**District 7 — Dean Floria**

1163 Taft Rd.  
Remus, MI 49340  
989-382-5230; [dfloria@homeworks.org](mailto:dfloria@homeworks.org)

**Editor:** Jayne Graham, CCC

**Design:** Doug Snitgen, CKAE

**Manager's Message**

Mark Kappler



**Local. Trusted. Serving You.**

Cooperative businesses were born when Benjamin Franklin and his neighbors formed an insurance company owned by its policyholders back in 1752. Electric cooperatives began in the late 1930s in response to Franklin Roosevelt's call for rural electrification. In each case, the cooperative was formed by a group of people to meet a common need.

Today, there are 28,000 different co-ops in more than 45,000 different locations in the U.S., collectively accounting for over a trillion dollars in total assets and meeting the needs of some 130 million members.

Since October is National Co-op Month, which you can read more about on page 11, this is a good time to remind you how HomeWorks meets co-op ideals all-year-round.

**Co-op Principle #2: Democratic Member Control**

In May, three of seven geographic districts held elections for a seat on the board of directors. Philip Conklin defeated John Lord to be re-elected in District 1 (Eaton, Ingham and Jackson counties), while Cara Evans in District 5 (Gratiot, Saginaw, Montcalm and Clinton counties) and Dean Floria in District 7 (Mecosta and Osceola counties) ran unopposed this year.

In 2011, Districts 2 (Barry and Ionia counties) and 4 (most of Montcalm County) will hold elections. The members of those districts' nominating committees were also elected at the district meetings in May.

**Coop Principle #3: Member Economic Participation**

In April, your board of directors authorized an allocation of capital credits. Over \$1.2 million in member equity was assigned to you

and your neighbors, based on your energy purchases during the year.

The board also approved a refund of \$350,000 in capital credits from 1984 and 2009, giving each member back a portion of your investment into HomeWorks from those years.

**Co-op Principle #4: Autonomy and Independence**

In January, your board of directors voted to return HomeWorks to self-regulation, which included taking responsibility for the oversight of our billing and accounting practices from the Michigan Public Service Commission (MPSC). While the MPSC retains jurisdiction over safety and territorial issues, billing and accounting questions will now be dealt with right here at home.

This short list doesn't even mention the other cooperative principles, such as education, cooperation among cooperatives, and concern for our communities. It would take a year's worth of *Country Lines* to tell all those stories, so we hope you'll keep reading in the months to come.

Mark Kappler  
General Manager



Join the conversation at  
[www.homeworks.org/blog](http://www.homeworks.org/blog)



## Young Family Farm Marks 150 Years

June Young of Essex Township, near St. Johns in Clinton County, displays her family farm's Sesquicentennial marker. The farm was established in 1847 by William D. and Nancy J. Young, great-great-grandparents of her late husband, Robert. Still the original 39 acres, the farm produces corn and soybeans.

The Young family generations continue with her six children, seven grandchildren, and seven great-grandchildren.

**Your historic Michigan Farm may qualify...** if it is a working farm of 10 or more acres that has been continuously owned by the same family for at least 100 years. Visit [michigancentennialfarm.org](http://michigancentennialfarm.org) or contact the Michigan Centennial Farm Association at 517-324-1828. Once the farm is certified, HomeWorks Tri-County Electric Co-op provides the yard sign.

## Rounding-Up Helps Families

Each month, when you round up your Tri-County Electric bill to the next dollar, your small change makes a big difference in someone's life.

In August, you helped families keep a roof over their heads, gave infants a safe start in life, and helped senior citizens enjoy a hot, nutritious meal.

The Tri-County Electric People Fund made five grants on Aug. 18, totaling \$6,153.62, including:

- ▶ \$1,000 to Pregnancy Services of Ionia County to purchase baby furniture for loan to new parents;
- ▶ \$2,500 to Housing Services for Eaton County in Charlotte to make housing payments for needy families;
- ▶ \$1,500 to the Ionia County Commission on Aging to assist with their home delivery meal program;

▶ \$595 to an Isabella County family to bring utilities up to date; and

▶ \$558.62 to a Clare County family to buy a new refrigerator.

Grants are made possible by donations from Tri-County Electric members who round up their monthly energy bills. The difference, averaging less than \$6 per year, is granted to individuals and community groups in need throughout mid-Michigan.

"We truly appreciate each and every Tri-County Electric member who contributes," says board chairman Richard Palermo. "Your small change adds up to make a real difference to our neighbors.

"And while we wish we could help everyone, the need around us keeps growing, so we hope any member who isn't rounding up each month will consider joining us."

## Your Board In Action

### Meeting at Portland, Aug. 23, your board of directors:

- ▶ Toured the Portland construction and renovation project to review progress.
- ▶ Reviewed the upcoming meeting schedule, including a special member meeting on Sept. 26 following the regular board meeting, and the district officers' meeting in conjunction with the October board meeting.
- ▶ Learned attendance at the 73rd annual meeting was the highest recorded in the past 10 years, with 138 registered members, plus their guests.
- ▶ Read and approved "Board Policy 204 – Contributions and Donations" and "Board Policy 205 – Written Hazard Communication Program."
- ▶ Reviewed July 2010 financial statements, and learned there were 111 new members for the month.
- ▶ Acknowledged the July safety report, with one incident and two safety meetings listed.

### How You Can Help

Tri-County customers can opt in or out of the voluntary Operation Round Up program at any time. Just enclose a note with your bill payment, or call us at 1-800-562-8232.

### How To Apply For a Grant

Write to 7973 E. Grand River Avenue, Portland, MI 48875. We'll send you an application form, grant guidelines, and other helpful information. You'll also find information and application forms on our website at [homeworks.org](http://homeworks.org).



# Co-ops Encouraged to Emphasize Communication with Members

Directors, managers and employees need to tighten their bond with co-op members in order to help them ride out the current firestorm of uncertainty about electricity costs and other challenges, NRECA CEO Glenn English told about 900 participants at the Regions 1 and 4 meeting, Sept. 8-9.

Speaking at the Amway Grand Plaza in Grand Rapids, English said co-op officials must improve communications with members and demonstrate that they are doing everything in their power to hold down monthly bills. Otherwise, higher bills and other contentious issues could trigger a backlash of member anger toward elected directors and co-op staffers at a time when

unity is sorely needed.

"If you build trust before the firestorm, it's just like putting money in the bank," English explained. "You'll need as much as you can, because when the firestorm hits, you'll spend it." Because they'll be the main target, he advised the co-op leaders to "use this time to reduce your co-op as a firestorm target."

This storm, he said, will last longer and affect 70 to 80 percent of the fuel co-ops use, so "we need 100 percent participation from you ... and it's a good use of member dollars to communicate on this issue. The membership has to feel that each and every director, each and every manager, and each and every co-op employee

is truly representing them and looking after their interests."

The government push to regulate coal, nuclear and natural gas generation sources means higher consumer bills, which are already showing up in some member mailboxes. Members will be angry at staff and directors for rate increases, and some co-ops have already lost managers, English said. "We need to retain experienced managers and directors to keep the trauma and cost down and make wise decisions." Co-ops can avoid these disasters by talking openly about issues to minimize the impact and by not ignoring problems.

Challenges facing co-ops will also look different in 2011, with new Congressional faces and maybe a different party, meaning that co-op leaders will have to get acquainted with new people and will gain and lose some friends, he said.

"The real issue is the electric bill and the intensity of members' concern about this—talk about it instead of ignoring it," English ended.

At the meeting, the following Michigan co-op directors also achieved recognition for completing advanced director education. Earning the Board Leadership Certificate were Melinda Lautner (Cherryland), Tamara Gady (Cloverland), Paul Byl and Susan Scott (Great Lakes Energy), and Carl Morton of HomeWorks. Ed Oplinger (HomeWorks) and Jon Zickert (Cherryland) earned the Credentialed Cooperative Director certificate.

The Michigan Electric Cooperative Association hosted the event that drew 76 people from nine Michigan co-ops. Other states in Region 4 include Indiana, Ohio and West Virginia. Region 1 members include Delaware, Maine, Maryland, New Jersey, New Hampshire, New York, North Carolina, Pennsylvania, Virginia and Vermont.



© iStockphoto.com/Darman Garcia

## Wind Better

It seems the general tone of your article ["Wind and Basic Math," Sept. 2010] is negative. I'd like to counter a little.

Small, residential-sized (2- to 10-kilowatt as you suggest) wind systems, when properly sited, work very well and can easily produce 100 percent of a household's electric needs. The key is energy consciousness by the homeowners and efficiency. My wife and I have powered our all-electric home (except hot water) 100 percent-plus using a 2.5 kW wind turbine. We are not even in an ideal wind site—annual average wind speed at our hub height (126 feet) is 10.5 mph. The key is proper siting using best practices known by qualified site assessors and installers.

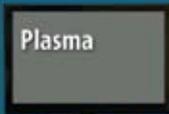
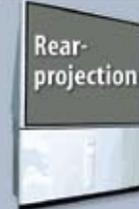
Sure, installing a quality wind system isn't cheap, but electric rates will likely only rise. And yes, regular maintenance is required that costs a small percentage of system cost, as well. But, saving money isn't the only reason to install a renewable energy system. Let's think about the long-term benefits of cleaner

## Recycled Paper

Michigan Country Lines is now printed on recycled paper from FutureMark Paper, which taps the "urban forest" of waste paper thrown out in Chicago every day. Using recycled paper reduces the carbon emitted in paper production, the paper deposited in landfills, and water and air pollution. The energy to produce recycled paper is about one-half the amount required to make paper from pulp.

### High-Definition Television Comparison Guide

The power used by an active television is determined by three factors: screen size; technology type, such as plasma or LCD; and picture brightness, which nearly always depends on user-selected picture settings.

Type of TV	Typical Size	Typical Price	Average Energy Used
 Liquid Crystal Display (LCD)	13-65 inches	\$200 to \$8,000	111 watts (standard) 101 watts (LED)
<i>LCDs are the most popular HDTVs, mainly because they're flat and available in a tremendous range of sizes and prices.</i>			
 Plasma	42-65 inches	\$800 to \$7,000	301 watts
<i>Available in a limited range of sizes (mostly big), plasma TVs outperform LCDs in tests comparing overall picture quality.</i>			
 Rear-projection	50-73 inches	\$1,000 to \$3,500	N/A
<i>Rear-projection TVs are the most efficient but are getting hard to find because flat-panel models are often cheaper.</i>			

Source: CNET.com (April 2010)

### Energy Efficiency *quick tip*

In general, TV energy consumption goes up as the picture quality gets better and the screen gets bigger.

air and resulting reduced health issues, less destruction of landscape to mining fossil fuels, *not* having to transport fossil fuels to power plants. Distributed electric generation has many benefits, including not having to build more power plants. Isn't this actually good for the utilities?

Yes, wind is not for everyone, and as you suggest, potential buyers should "get the facts" first and not allow themselves to be talked into wind by an un reputable salesperson. Let's face it, solar PV is better for those in urban areas. Either way, we need to change our mindset and dependence on fossil fuels. Wind is surely not the only answer, but it can play a key role in a more healthy, environmentally responsible, sustainable future. We should be encouraging energy consciousness and efficiency first. Only then will renewable energy sources, wind or otherwise, work well for more people.

*Sam Simonetta, Deerton  
Alger Delta Co-op member*

## Mustang Memories

I would like to thank all the people at *Country Lines* for the article written about our "Mustangs." A special "thank you" to Linda Kotzian for her special handling and follow-up to make this article as great as it is.

I have gotten over 20 telephone calls and emails from friends, neighbors and past fellow employees I worked with at Ford. Besides talking about the article, just about all remarked on the uplifting spirit this article gave to them in a "poor" economy!

Thank you again, Good job Linda Kotzian. Great

magazine, *Michigan Country Lines*; keep it up.

*Pat & Ellie Broderick*

This article is so special to our family. To be able to have my father recognized in such a manner for what he has loved and enjoyed doing for so many years is awesome! It's been a Broderick family legacy (Mustangs) and reading it in *Country Lines* magazine... What can I say besides how proud I feel and how much I love my dad! Thank you for yet another great memory!

*Jacqueline Broderick*

## More Blueberry Heroes

We have had a much warmer summer and in many areas rain has been ample, creating a good growing season for both cultivated and wild crops. Wild blueberry season is over in the U.P., and we have confirmed that the bears did not get all the berries. Recently, I saw my Wild Blueberry Hero, so I thought I should report in for 2010. [[countrylines.com/2009/11/10/my-blueberry-hero](http://countrylines.com/2009/11/10/my-blueberry-hero)]

Mr. K is 88 this year and he does not move as well and can not stand as long as he used to. Despite this, he was able to pick 251 ½ quarts—48 percent more than last year! Mr. K attributes his greater production to the weather and his new, smaller, light weight chair.

This year's production was used for blueberry pies for Mr. K's 101st Airborne Lunch Bunch and for a pancake breakfast at Mr. K's Finnish Club to honor Mr. Koskima's grandson, Matthew, who recently was killed by an IED in Afghanistan.

*Charles Day, Lambertville*

# The Big Cheese Challenge

**M**ove over Wisconsin, here comes Michigan cheese.

The 11 members of the new Michigan Cheese Makers Co-op hope to gain a foothold in the cheese market.

Co-op members will work together to market their products, leverage buying power, and help each other.

The Michigan State University Product Center for Agricultural and Natural Resources pulled the co-op together to "bring visibility to the fantastic cheeses made in the state by creameries using Michigan milk and artisanal techniques," says Matt Birbeck, supply chain specialist and counselor liaison for the Product Center.

Funded by a grant through the U.S. Department of Agriculture's (USDA) Rural Cooperative Development, the new co-op will help its members market their artisanal cheeses to food stores in the state.

"A co-op like this is very important in a state like Michigan that is not known, like Wisconsin, for its cheese. The possibilities are endless," explains Jim Turner, state USDA director.

Forming a co-op is in line with the Product Center's goals, says director Chris Peterson. "Each of the members has a unique product," he says. "And that's a wonderful thing. However, having your own unique product maximizes the workload when it comes to marketing, and it's difficult for one producer to develop a portfolio of products. By marketing these together, members now have a portfolio of products which make them much more attractive to a grocery supplier."

In fact, Meijer representatives have announced that the company plans to join. "We're interested in becoming an associate member of the co-op because half of our 190 stores are in Michigan," states Meijer CEO

Mark Murray. "These are spectacular small businesses [and] great products."



Photo - Leelanau Cheese Company

John [above] and Anne Hoyt, of Leelanau Cheese Company in Suttons Bay, see other benefits to their newly-formed co-op. "It's hard to do things yourself, there's more power as a team," Anne says. "We can share new ideas, new cheeses and recipes." They are also Cherryland Electric Co-op members.

For a new cheesemaker like Barbara Jenniks, of Cowslip Creamery in Grand Rapids, building camaraderie and a helpful spirit is key. "It's important to small cheesemakers like me, because we're all in this together," she says. "If we all make good products, there's room for all of us."

Four co-op members have been recognized for their cheeses, including Cowslip, Leelanau Cheese Company, Zimmerman's Creamery of Ann Arbor and Greenbush Farms of St. Johns.

"The fact that we have this many award-winning cheeses in Michigan is good because it tells the consumer that this is a good product," Peterson says. Although the co-op is small, he says it has a good spread across Michigan, and has the Lower Peninsula covered.

"They better watch out, we're on the way," Jenniks warns Wisconsin cheesemakers.

See [GreatLakesGreatCheese.com](http://GreatLakesGreatCheese.com) for a list of cheesemakers and [productcenter.msu.edu](http://productcenter.msu.edu) to find out about MSU's Product Center.

**COMING UP:** ▶ Favorite recipes: **SAUSAGE** by Dec. 10 and **BUDGET-FRIENDLY** by Jan. 10.

Mail to: Recipe Editor, *Country Lines*, 2859 W. Jolly Road, Okemos, MI 48864, or email [jhansen@countrylines.com](mailto:jhansen@countrylines.com)

# Use Your Space Heater Safely

**M**any people turn to space heaters—electric models or those fueled by kerosene or even wood—as a convenient source of warmth. However, space heaters can be dangerous if not used properly.

The Consumer Product Safety Commission (CPSC) estimates more than 25,000 residential fires every year are associated with space heaters. Over 300 people die in these fires. In addition, an estimated 6,000 people annually receive hospital emergency care for burn injuries related to space heaters.

Space heater hazards stem not just from fires caused by contact with or close proximity to heating elements. They also include fires started by flammable fuels used in the heaters; defective wiring in the appliance; and carbon monoxide poisoning caused by improper venting or an incomplete combustion of fuels.

Here are some tips for using your electric space heater safely:

- ▲ Don't try to use it as a substitute for central heating—space heaters are designed to only keep a room warm for a short time.
- ▲ Keep the heater at least 3 feet from flammable items such as curtains, furniture, or bedspreads.

- ▲ Select a space heater with a guard around the heating element.

- ▲ Use a heater that is certified by a nationally recognized testing institution such as Underwriters Laboratories® (UL).

- ▲ Buy a heater sized for the area that you want to heat.

- ▲ Read and follow the manufacturer's operating instructions.

- ▲ Never place heaters on furniture, since they may fall, dislodging or breaking parts in the heater, which could result in a fire or shock hazard.

- ▲ Keep children and pets away.

- ▲ Never leave the heater unattended.

- ▲ Never go to sleep with a space heater on.

- ▲ Never use or store flammable liquids near a space heater.

- ▲ Keep heaters away from water to prevent electrocution.

- ▲ Don't use an extension cord with a space heater and don't hide cords under rugs or carpets.

- ▲ Don't use it to dry damp clothes.

- ▲ Be sure the heater's plug fits snugly in an outlet. The cord and plug may feel warm when operating since the unit draws so much power, but should not feel hot. If they do, unplug the heater and have a qualified repair



Photo - Gregg Brooks, Walton EMC

Space heaters can be a source of comfort on a cold day, a fire hazard if operated in the wrong spot, and a big part of next month's electric bill unless you budget its use carefully.

person check for problems.

- ▲ Don't try to repair a broken heater yourself. It should be checked and repaired by a qualified appliance service center.

For safety tips about space heaters that use wood or kerosene, visit the CPSC's website at [cpsc.gov/CPSC/PUB/PUBS/463.html](http://cpsc.gov/CPSC/PUB/PUBS/463.html).

*HomeWorks Tri-County Safety Coordinator*

## Refund Checks Remain Uncashed!

**H**ere is a list of former HomeWorks Tri-County Electric Cooperative members or Rural TV of Michigan customers whose capital credit or inactive account refund checks remain uncashed.

We have previously attempted to deliver these checks by mail, to the last address given to us by the person or business listed.

If you know one of the people listed below, or have a current address at which we can contact them, please call HomeWorks at 517-647-7554 or 800-562-8232.

You can also contact us by email at [tricoenergy@homeworks.org](mailto:tricoenergy@homeworks.org) (or use the "Contact Us" link at [homeworks.org](http://homeworks.org).)

### Capital Credit Refunds

ANR Production Co, Jackson, MS	\$63.15
James S. Mush, Stuart, FL	\$90.99
Mobil Oil Corp., Dallas, TX	\$620.54
Ore-Ida Foods Inc., Greenville	\$735.15

Samuel Bacon, Coral	\$ 50.66
Wayne M. Marzolf, Clare	\$ 71.75

### Inactive Account Refunds

Angela Miller, Mecosta	\$112.43
David A. Berryhill, Mt. Pleasant	\$182.08
Deborah Sackett, Lake	\$54.86
Dennis M. Jenks, Vestaburg	\$171.60
Joshua H. Ehl, Grand Rapids	\$275.84
Lois Button, Mt. Pleasant	\$210.44
Paul C. Haggard, Mt. Pleasant	\$79.90
Rhonda L. Haubert, St. Johns	\$87.35
Roy D. Betham, Stanton	\$58.18
Tammy L. Rice, Eaton Rapids	\$79.32

### Rural TV Account Refunds

Janice Mahan, Eaton Rapids	\$86.16
Judy Minier, Pewamo	\$50.00

# In Your Best Interest

Observing National Co-op Month in October gives us yet another reason to tell our members that you are part of something special. More than 40,000 cooperative businesses serve more than 120 million people nationwide. From agriculture cooperatives in the Midwest, housing cooperatives in New York City, credit unions, and telephone and electric cooperatives throughout the country, service to the membership is the mission of each and every one. Just like these other cooperative organizations, your electric cooperative was formed to deliver a service, in this case electric service, on a not-for-profit basis, with local ownership and direct accountability.

Every day, electric cooperatives demonstrate their service and the benefits of cooperative ownership. At the top of the list is providing reliable electric power at the lowest possible cost. Year-in and year-out, your cooperative meets or exceeds the service reliability standards established

by the Michigan Public Service Commission. Service also means helping consumers manage their electric bills through Energy Optimization programs, being good stewards of the environment, and looking for workable solutions to address climate change.

Your cooperative has been in the energy efficiency business from day one. When cooperatives strung the first lines to serve rural America, they immediately started educating their new members on the wise and safe use of electricity. Many cooperatives also sold electric appliances in communities where no other options to buy existed. Today your cooperative is heavily involved in promoting energy efficiency (Energy Optimization) programs as required by Michigan law.

At a time of increasing national concern about the economy, especially rising energy costs, we also must communicate the cooperative difference to decision makers, whose actions affect our members and the communities in which they live and work. We have been to Washington, D.C., over the last year meeting with our members of Congress to discuss legislation affecting our ability to maintain reliable, affordable electric energy. We have discussed proposed legislation addressing climate change issues, Environmental Protection Agency (EPA) regulation, a national renewable energy mandate, Clean Air Act regulation, the Rural Utility Service loan program, a national energy efficiency mandate, and a host of other proposals. Oftentimes, we find our mission is to simply educate our members of Congress on the impact of various proposals on your electric rates.

We are faced with an issue right now of



**Michael Peters** is president and CEO of the Michigan Electric Cooperative Association. His email address is [mpeters@countrylines.com](mailto:mpeters@countrylines.com).

having the EPA begin regulating the emissions of greenhouse gases (GHGs), such as carbon dioxide from power plants, under the Clean Air Act, due to Congress' failure to pass legislation addressing the issue. As it stands now, Congress still has time to consider a bill proposed by Sen. Rockefeller (D-WV) that would put a moratorium on the EPA's regulation of GHGs for two years, thereby giving Congress time to act. We support this proposal and will be telling our members of Congress to, as well. We believe

this is good public policy.

The cooperative difference defines who we are and what we can achieve as we look out for our members' best interests.



# GRID Lines

Utilities prepare to repave America's electric highway. **Megan McKoy-Noe**

Imagine a major highway with vehicles all going one way. It's rush hour—rows of impatient cars try to merge, pushing to reach a final destination. Exits for cities appear, and a steady stream of cars spreads into the countryside.

Electricity today travels across the nation in much the same way—moving from power plants along major transmission arteries until off-ramps deliver it to a local electric cooperative and, finally, your home.

There's a national push to improve this setup—repave the electric highway, so to speak—to allow for two-way traffic of information. This would be accomplished by two steps: upgrading the physical network of poles and wires to bolster reliability and security, and deploying digital “smart grid” technologies that allow utility staff and equipment on power lines and substations to talk to each other. The ultimate goal: allow electric systems to operate at top efficiency and help consumers make better energy choices to keep bills affordable.

“Modernizing America's electric system is a substantial undertaking,” stated the U.S. Department of Energy (DOE) in its report, *Grid 2030*. “The nation's aging electromechanical electric grid cannot keep pace with innovations in the digital information and telecommunications network. America needs an electric superhighway to support our information superhighway.”

## Earth's Largest Interconnected Machine

A challenge lies before utilities: how to transform a largely mechanical power network into a digital smart grid.

North America's electric grid may be the largest interconnected machine on earth, consisting of power plants, high-voltage transmission lines, smaller transmission lines, substations, and distribution facilities. But it wasn't built with a master plan in mind. It was created as needed, one section at a time. As the nation's electric needs grew, so did the grid.

Today, the electric grid is split into three parts: the Western Interconnection, which reaches from the Pacific to the Rockies; the Eastern Interconnection, which continues to the Atlantic; and the Texas Interconnection, which covers most of the Lone Star State. Plans are under way in Clovis, NM, to connect all three segments, but today they remain fairly isolated.

The grid includes about 3,000 utilities and other entities operating 10,000 power plants, according to DOE. Over 1 million megawatts of energy courses over 300,000 miles of transmission lines nationally. Most of this vast network was designed at least 50 years ago—thus the need for a major upgrade.

## Grid of the Future

What will tomorrow's grid look like? Paving a new, smarter grid calls for unprecedented cooperation and communication, since everyone has a different idea of what our future power network should be. Electric cooperatives believe there should be three main goals behind grid improvements: affordability, efficiency and reliability.

To keep electric bills affordable, a smarter grid will provide tools to help members manage their electric use, while automation devices and tools help reduce operational costs. And since electric co-ops are nonprofit, any money saved on daily operations will ultimately be returned to members.

Technology focused on boosting efficiency could shrink a community's carbon footprint by letting members reduce their electric use during demand peaks and lowering line losses. Finally, a smarter grid should be more secure and can help electric co-ops restore service following an outage much faster and safer than before. While it will still take the same amount of time to remove a tree that's fallen onto distribution lines, a utility would be able to pinpoint that location remotely rather than walking a line to find the problem.

As with all construction projects, these

### The Grid:

 **3,000** Utilities  
**10,000** Power Plants  
**300,000** Miles of Transmission Lines

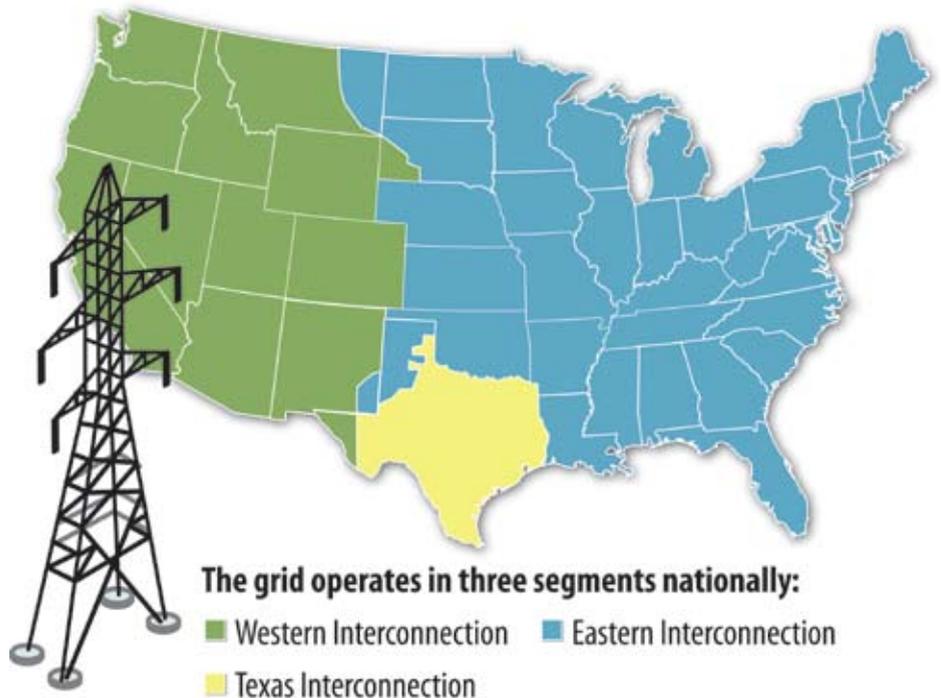
Illustration by Funnel, Inc., NRECA

improvements will require study to make sure consumer benefits outweigh costs.

Electric cooperatives, as consumer-owned and governed utilities, take a sensible approach to technology investments. This means the co-op business model, combined with DOE research funds, makes cooperatives an excellent test bed for exploring the smart grid's value for their members and how these new technologies might be able to help keep bills affordable.

To learn more, visit [smartgrid.gov](http://smartgrid.gov). For updates on how electric co-ops are leading the way with smart grid innovations, visit [ECT.Coop](http://ECT.Coop).

*Megan McKoy-Noe, CCC writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.*



## The Cooperative Difference

Every October since 1930, not-for-profit cooperatives of all stripes have celebrated Cooperative Month. During this time, it makes sense to highlight the qualities that make electric cooperatives different from other types of utilities and businesses.

For starters, electric co-ops are owned by those they serve. That's why those who receive electric service from us are called members, not customers. Without members, there would be no local electric co-op.

Members maintain democratic control of our co-op, which means every annual meeting they elect fellow members to represent them on the board of directors. As a bonus, co-op members receive special benefits through programs, such as

Energy Optimization, the Co-op Connections® Card, and *Michigan Country Lines* magazine. We also return margins ("profits") to our members in the form of capital credits.

One principle that sets us apart from other businesses is our concern for community. As a cooperative, we have a special responsibility to support the areas in which our members live and work. From sponsoring a local school's baseball team to supporting new jobs and industry through our economic development efforts,

we stand as a driving force in our community.

Of course, co-ops span all industries, including credit unions, dairy operations, health care, housing, and much more. There are more than 29,000 co-ops across the nation. And not all are small or rural. Just look at nationally

known co-ops like Sunkist®, Ace Hardware®, and Land O' Lakes®.

Overall, co-ops are more accessible than other types of businesses. We give our members a voice, and we are local—living and

working alongside those we serve. That's the cooperative difference.

**LOCAL.  
TRUSTED.  
SERVING  
YOU.™**



# Trail of Quilts

Driving Michigan's quilt trails offers beautiful scenery and small towns and events to browse. **Gail Knudtson**



Elsie Vredenburg is a professional quilt maker ("Designs by Elsie") and coordinator of the Osceola Quilt Trail. She's pictured with her great-granddaughter in front of the "Osceola Star" block she designed.

A graceful trail of quilt block designs can be found in the small-town fabric of Alcona, Grand Traverse and Osceola counties. Painted on barns and buildings, they are part of a National Quilt Trail project aimed at preserving the buildings, as well as the art, heritage and well-being of their communities.

Osceola's Quilt Trail was started by professional quilt maker Elsie Vredenburg, of Tustin, after she met the National Quilt Trail organizer, Donna Sue Groves, at a quilt show. Groves started the Trail in Ohio in 2001 by keeping a promise to her mother, a master quilter, to paint a quilt block on her barn.

Today, the National Trail meanders through 27 states, including Iowa, Wisconsin, Illinois, Kentucky and North Carolina, which has the highest number of sites.

Oceana's Trail has nearly 31 blocks installed on 28 sites, and Elsie says more are planned for 2011. The "Osceola Star" that she designed and is mounted on her garage, was the county's first.

Most of the work gets done through volunteers and donations, Elsie explains, which in Osceola is a committee of seven people, with two that do most of the quilt block painting at the Osceola League of Arts &

■ **OCT. 9** – "Quilt Trail Color Tour" – 1-2:30 p.m.; Osceola League for Arts & Humanities; 231-734-9900 ■ **NOV. 1 thru DEC. 22** – "Christmas Gift Shop" – 207 N. Main, Evart  
■ **ANYTIME** – Find an Osceola Quilt Trail map at [osceolaarts.com](http://osceolaarts.com) or call 231-825-2572



Photos-Elsie Vredenburg

**Opposite page:** Great Lakes Energy Co-op members Doug and Melanie Wirth own this barn (also on cover) near Ewart, and their 8x8-foot quilt block is based on a quilt made by Doug’s mother, Esther. It’s the largest on the Osceola Quilt Trail, and is called “54-40 or Fight!” It refers to the Oregon Territory’s northern latitude during the border dispute between the U.S. and Canada, and was James Polk’s 1844 presidential campaign slogan. Polk’s plan was to wage war to win the entire Territory for the U.S.

The Great Lakes Energy volunteer People Fund granted money for 13 quilt blocks.

Humanities (OLAH) studio. The OLAH group also helped Elsie grow her idea for a local quilt block trail.

Alcona County’s Quilt Trail, Michigan’s first, began as a possible way to bring tourism to that area and showcase its unique history. It has about 23 blocks, and more details are available by calling 989-724-7788, or visiting [alconaquilttrail.com](http://alconaquilttrail.com).

In Grand Traverse County, Google “Grand Traverse Quilt Trail” or visit the website [barnsofoldmission.com](http://barnsofoldmission.com) to bring up several information choices.

“Each quilt block shows the personality of each homestead by the design they pick out—whether it’s a quilt made by great-great grandma, or someone else—they’re all different,” says Trail participant Melanie Wirth (cover photo).

Like any community, locals in these counties are hoping the Quilt Trail will bring tourists to help their economies. For example, the OLAH group is sponsoring a “Quilt Trail Color Tour.” They also hold a “Christmas Gift Shop,” which is a community art sale and fundraiser that last year brought 660 shoppers and 35 artists (see box, page 12).

The nice thing is, you can travel the Quilt Trail any time of year.



**Above, left:** This “Sunflower Wreath” block rests at Christie’s Potting Shed and Florist in Marion. The building used to be a garage, and is now used for Christie’s “Antiques and Old Stuff.” Pictured (L-R) are Fred Prielipp, Carl Patterson and Christie Patterson Prielipp.

**Above:** Sometimes hanging the quilt blocks is a challenge. The former owner of the Steve and Melody Yarhouse farm near Ewart was known for her wonderful flower gardens. Melody has kept the gardens blooming and chose this “Amaryllis” quilt block to symbolize that legacy.



Barn Photos - Andree Magis@rephotography.net

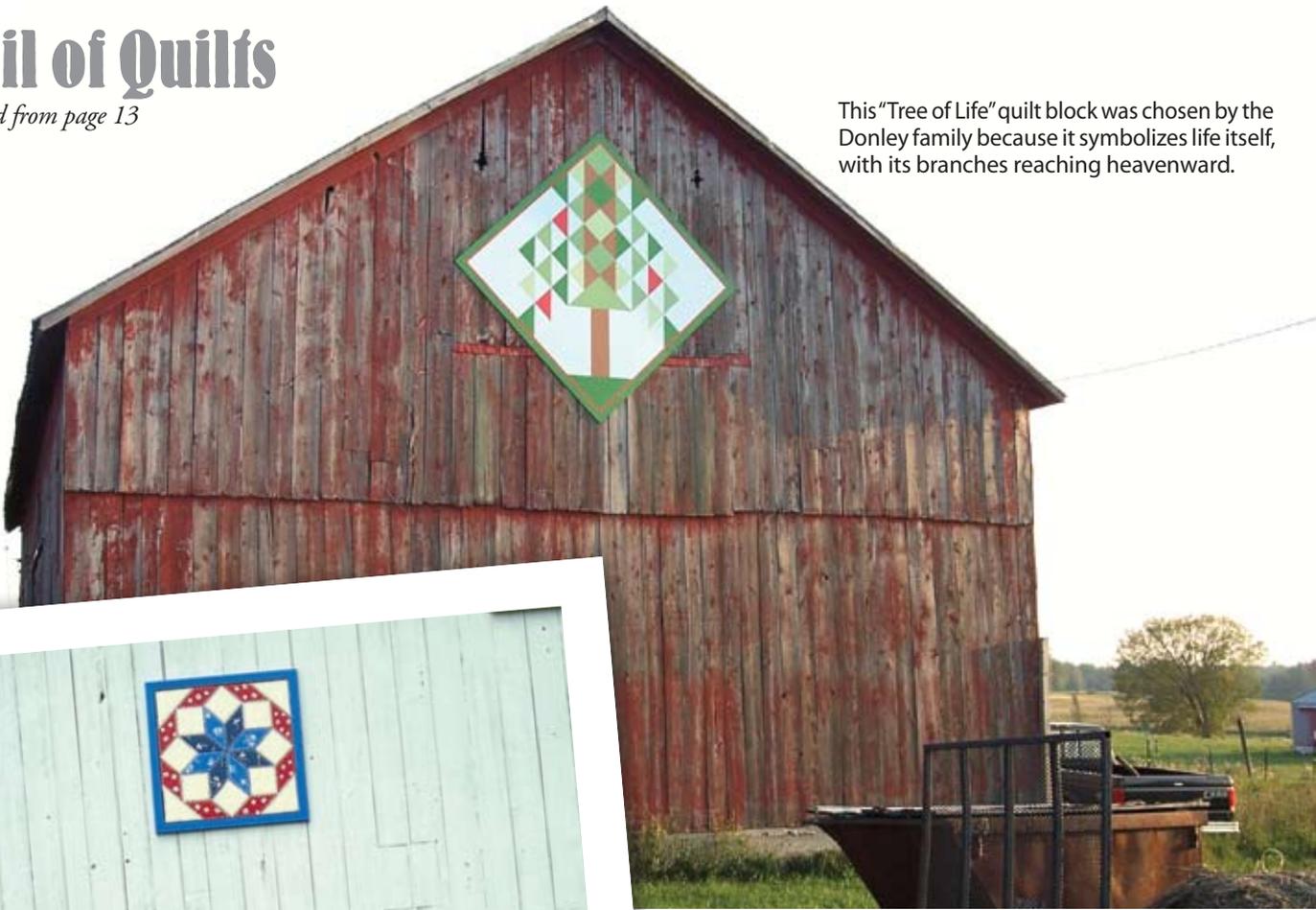
In August 2010, this variation of the “Dresden Plate” design came to rest on the hip-roof barn of Jim & Bonnie Neuman, of Marion. The barn was rebuilt with neighborly help after a fire in 1960. And, word has it that the Neumans, their children, grandchildren, great-grands, and international exchange “children” have all, in turn, found comfort under this family quilt that can always be found at the end of the couch.

**more >**

# Trail of Quilts

continued from page 13

This "Tree of Life" quilt block was chosen by the Donley family because it symbolizes life itself, with its branches reaching heavenward.



**Left:** Founded in 1871, the seven-generation Hall farm is one of the earliest homesteads near Marion, MI. Homesteader Sarah McElroy Hall created the "Rolling Star" quilt which inspired this block. The family cherishes the quilt, which includes scraps from Sarah's hand-stitched dress, also pictured here.

**Below, left:** This "Old Glory" quilt block stands proudly on the Osceola Township Hall in Evart. The Osceola League of Arts & Humanities plans to put a quilt block on all 16 of the county's township halls.

**Below:** This "Star of the Orient" design is at the Centennial Farm of Jerry and Lynn Mitchell of Hersey. Lynn chose this design because it reminds her of the old windmill spinning in the breeze.



Photos - Elsie Vredenburg



# Geothermal's Promise

Energy from deep in the earth has huge potential for electricity generation and heat. **Magen Howard**

**G**eothermal energy—created from Earth's natural heat—has been used by many cultures for thousands of years to cook and bathe. But modern technology has unlocked new ways to harness geothermal potential: producing electricity using hot water and steam locked below the surface; and heating and cooling buildings.

America leads the world in geothermal power production, with about 3,080 megawatts of capacity from more than 70 power plants, according to the Geothermal Energy Association, the national trade association for geothermal development companies. Western states boast the most geothermal energy, because it's easier to reach.

## How it Works

Typical fossil fuel-burning and nuclear power plants heat water to boiling to create steam. The steam then turns a turbine, which generates electricity.

Geothermal power stations essentially cut out the middle man, piping naturally heated water (which is changed into steam) or naturally occurring steam into a plant to spin turbines. Three different types of geothermal generation exist; the choice depends on the state of the hydrothermal fluid (whether steam or water) and its temperature.

**Dry steam:** The first type of geothermal power plants built, these facilities use steam from a geothermal reservoir (pulled from wells) and route it directly through turbines to create electricity.

**Flash steam:** The most common, these plants pump water boasting temperatures greater than 360 degrees F under high pressure to generation equipment. The steam is separated from the water and used to make electricity; leftover water and condensed steam are channeled back into the reservoir.

**Binary cycle:** Uses moderate- to low-temperature groundwater or steam. In a binary cycle system, hot water is pumped from a well and passes through a heat exchanger, where it warms a secondary fluid boasting a lower boiling point than water. This causes the secondary fluid to flash to vapor, which in turn drives a turbine. The secondary fluid then condenses and returns to the loop system; the

water gets pumped back into the well.

## Other Uses

Geothermal energy offers an array of benefits beyond electricity generation. In some cases, hot water can be piped directly into systems to heat buildings, greenhouses and fish farms. Some cities run hot water under roads and sidewalks during winter to melt snow and ice.

Geothermal heat pumps rely on the energy of the ground—the top 10 feet of the earth remains a fairly constant 50 to 60 degrees F year-round—to move heat into and out of a building, providing winter heating and summer cooling. Also called ground-source heat pumps, these appliances come in two types: an open-loop system uses well water; a closed-loop model moves a water and antifreeze solution through underground pipes to disperse heat.

While geothermal heat pumps generally operate more efficiently than their air-source cousins, they are more expensive up-front. A federal tax credit equal to 30 percent of the cost for materials and installation, with no limit on total project expenses, applies to geothermal

heat pumps through Dec. 31, 2016.

A full list of geothermal heat pump requirements, along with a product list, can be found at [energystar.gov/tax-credits](http://energystar.gov/tax-credits). To see if other rebates are available in your state, check the "Database of State Incentives for Renewables and Efficiency" at [dsireusa.org](http://dsireusa.org).

A geothermal heat pump might not always be the best option in every situation. Contact your co-op to determine whether a geothermal heat pump is the right choice for you. Go to [earthcomfort.com](http://earthcomfort.com) to find a local Michigan contractor.

*Magen Howard writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association. Scott Gates contributed to this article.*



Geothermal power stations go down to 6 miles deep to pipe naturally heated water (which is changed into steam), or naturally occurring steam, to a plant to spin turbines. **Inset:** One type of closed loop for a geothermal heating and cooling system.

# Schools are Finding It Is Easy To Be 'Green'

**K**ermit the Frog might sing a happier tune after visiting our kids' schools, where "being green" is a growing trend. Green Schools across the nation are making a commitment to providing healthy, comfortable and productive learning environments while saving energy, resources and money.

In Michigan alone, more than 500 schools in 65 counties are now part of a growing Michigan Green Schools network, dedicated to protecting the air, land, water and animals of our state. They also aim to leave their mark on the world through good ecological practices and teaching environmental stewardship to our kids.

**What is a Green School?** Green school leaders actively take steps to improve the health and energy-efficiency of buildings, ensure science-based environmental education in the classroom, implement healthy food choices into the cafeteria, promote alternative means of transportation, and more.

"Green schools seem to make decisions differently," said Tom Abramson, Green Schools Coordinator at Delta-Schoolcraft ISD. "They are more apt to think of long-term consequences of their everyday actions."

Abramson points to Rapid River schools as an example, where among other actions staff and students have evaluated the lunch program for ways that waste can be reduced. Another school found that through recycling they could reduce their waste disposal costs while recycling valuable resources.

Going green on a larger scale by committing to green design, construction and operations for new and existing buildings can bring even greater benefits. Abramson says green school leaders in the Delta-Schoolcraft area that continuously evaluate the schools' infrastructure (heating systems, doors, windows, lights, and more) to find ways to save energy.

Some schools raise the standard even higher. Whitmore Lake, a rural community north of Ann Arbor, made a bold move to construct a green, LEED®-certified high school by

following rigorous practices endorsed by the U.S. Green Building Council. Leaders there say that extra effort improves health and efficiency and—an added benefit—attracts new families to the district.

**Who gets involved?** Everyone, from students to community groups, can pitch in to make schools environmentally safe and responsible.

Student "Green Club" members at Gladstone Area Public Schools, along the northern shores of Lake Michigan, have accomplished a number of environmentally friendly projects earning them recognition as Michigan Green Schools.

Back in Rapid River, students recycle and collect paper and bring it to the library. Office staff have replaced all CRT computer monitors with more energy efficient LCD monitors, and custodians are using environmentally-friendly cleaners.

"Families participate in our Girls Scouts' waste-free lunch, they recycle in their homes, our American Legion recycles paper, local church groups recycle boxes, and we even have a local metal artist that recycles all of our cans from the kitchen," said Rapid River fifth-grade teacher Beth Larson.

Some of the best green initiatives are those that involve teachers and classroom activities. Science classes find a natural connection, but other classes can put learning into environmental action as well.

Gladstone High School recently received a grant that will allow them to study and use solar energy. By partnering with Energy Works Michigan, the school will have access to lesson plans and professional development for English, math, and social studies teachers who are interested in integrating this content into their instructional planning.

**What are the rewards?** Schools that earn Michigan Green School designation receive tangible rewards like a signed certificate, a web banner, and a flag designating the school as an "Official Michigan Green School." Many counties hold ceremonies each

spring to recognize participating schools.

Abramson says the intangible rewards are even greater.

"It is important for schools to do this so that they can model conservation and savings to the adults of the future," said Abramson. "Lessons learned at school may carry over to homes to expand the benefits of making wise decisions."

Best of all, studies show that schools that have adopted green practices improve student test scores, reduce sick days, and raise teacher and student retention. And as the commitment to "green" principles grows, so do the benefits, which can include impressive energy cost savings.

**How much savings?** Experts say a green school typically uses 33 percent less energy and 32 percent less water—enough savings to hire two additional full-time teachers.

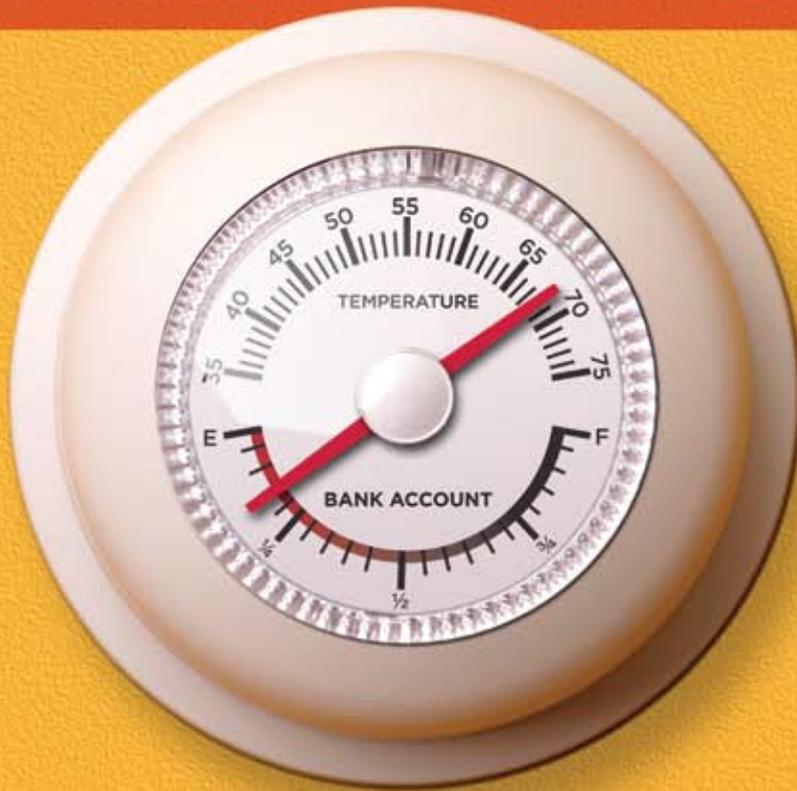
Marysville Public Schools, a suburban district northeast of Detroit, is putting those claims to the test. The district opened a new high school in 2009 that is almost 100,000 square feet larger than the old school. Yet they expect only a slight increase in energy bills because of sustainable building practices they adopted.

"If we're saving at least one teacher's job a year through our energy savings, we've made some great decisions along the way," former Marysville Superintendent John Silveri told The School Administrator.

Ultimately greening America's schools presents an extraordinary cost-effective opportunity to improve the health and educational settings for all students.

"Going green helps our schools learn to do more with less," said Larson. "It helps the kids understand what can be done to make our school and the world a better place, and that we need to practice what we preach."

michiangreenschools.us  
energyworksmichigan.org  
usgbc.org/k12toolkit



# WATERFURNACE HAS A SMARTER WAY TO HEAT YOUR HOME

**Wouldn't it be nice to set the temperature of your house based more on comfort and less on your bank account?** As the temperatures drop and the price of fossil fuels skyrocket, homeowners around the world are finding that a WaterFurnace geothermal system is a smart way to **reduce your carbon footprint and utility bills at the same time.** WaterFurnace units use the **clean, renewable energy found in your own backyard** to provide **savings up to 70% on heating, cooling and hot water.** It's good for the environment, great for your budget and thanks to a **30% federal tax credit**, now's the best time to act. Visit us at [waterfurnace.com](http://waterfurnace.com) to learn more and to find a local dealer.

## YOUR LOCAL WATERFURNACE DEALERS

### Bad Axe

B & D Heating  
(989) 269-5280

### Berrien Springs

WaterFurnace Michiana  
(269) 473-5667

### Big Rapids

Stratz Heating & Cooling  
(231) 796-3717

### Caro

All-Temp Heating  
(989) 673-5557

### Charlevoix

Ballard's and Great Lakes  
Plumbing & Heating  
(231) 547-1035

### Cheboygan

Jim's Handyman  
(231) 627-7533

### Carsonville

Certified Temperature Innovations  
(810) 300-7748

### DeWitt

S & J Htg & Clg  
(517) 669-3705

### Gaylord

Family Htg & Clg  
(989) 732-8099

### Grand Rapids

Montgomery Htg & Clg  
(616) 459-0261

### Hart

Adams Htg & Clg  
(231) 873-2665

### Harbor Springs

Ballard's and Great Lakes  
Plumbing & Heating  
(231) 526-6859

### Ionia

Home Experts  
(800) 457-4554

### Lapeer

Porter & Heckman  
(810) 664-8576

### Michigan Center

Comfort 1 Heating /  
Lenawee Heating  
(517) 764-1500

### Mount Pleasant

Walton's Htg & Clg  
(989) 772-4822

### Muskegon

Geofurnace Htg & Clg  
(800) 922-3045

### Petoskey

Ballard's and Great Lakes  
Plumbing & Heating  
(231) 347-3900

### Palms

Lakeshore Improvements  
(989) 864-3833

### Traverse City

Geofurnace Htg & Clg  
(231) 943-1000

### D&W Mechanical

(231) 941-1215

### Webberville

Applegate Home Comfort  
(800) 377-2272

### Zeeland

Mast Heating  
(616) 772-2252





# Stir-fry

Stir-frying is a quick sauté over high heat. While you can stir-fry in any type of skillet, the sloping sides of a wok allow you to move ingredients away from the hot bottom while cooking. Peanut or canola oil are good choices for stir-frying. They both have a high smoke-point—the point where oil breaks down and begins to smoke. Find more recipes sent in by readers at [countrylines.com](http://countrylines.com).

## Beef and Vegetable Stir-Fry

1 lb. beef top round steak  
1 ½ c. broccoli, cut in 1-inch pieces  
3 med. carrots  
1 t. salt  
1 t. cornstarch  
1/2 t. sugar  
2 T. soy sauce  
2 T. dry cooking sherry  
2 T. cooking oil  
1 med. onion, cut in thin wedges  
1 c. frozen peas, thawed  
1/2 c. water chestnuts, drained, sliced thin  
1/2 c. bamboo shoots, halved lengthwise  
hot cooked rice

Partially freeze beef; slice very thinly across the grain into bite-sized strips. Cook broccoli and carrots in boiling salt water for 2 minutes, covered; drain. Combine cornstarch, salt and sugar. Blend in soy sauce and cooking sherry; set aside. Preheat wok over high heat; add cooking oil. Stir-fry broccoli, carrots and onion in hot oil for 2 minutes or until crisp-tender; remove from wok. Add more oil, if necessary. Add half of the beef to wok; stir-fry 2-3 minutes until browned; remove beef. Stir-fry remaining beef 2-3 minutes. Return all meat to wok. Add peas, water chestnuts

and bamboo shoots. Stir soy mixture; add to wok. Cook and stir until thickened and bubbly. Return broccoli, carrots and onion to wok. Cover and cook 1 minute more. Serve with rice.

*Kathryn Ross, Bad Axe*

## Virginia Yee's Dry Fried Sichuan String Beans

1/4 c. chicken broth  
1 T. sugar  
1 t. salt  
2 T. vegetable oil  
1 lb. string beans  
2 T. minced fresh ginger  
1/4 c. ground pork  
1 T. balsamic vinegar  
1 t. sesame oil  
1 T. chopped scallions

In a bowl, combine chicken broth, sugar and salt. In a large wok, stir-fry string beans

in vegetable oil until beans look wrinkled with brown spots; remove beans to another dish. Add ginger and pork to wok and stir-fry until pork is no longer pink. Add broth mixture to wok; bring to a boil. Add cooked beans, tossing to combine and cook 2 minutes until most of the liquid evaporates. Add vinegar, sesame oil and scallions; toss to combine, remove from heat and serve at room temperature.

*Jennifer Van Wingen, Lake Ann*

## Chicken Cherryaki Stir-Fry

1 ½ c. fresh cherries, pitted  
(may substitute frozen or canned)  
2-3 boneless, skinless chicken breasts  
2 T. teriyaki sauce  
2 T. dry sherry  
1 T. lemon juice  
3 ¼-inch-thick slices fresh ginger  
1 T. cornstarch

*(Pictured above)*

► **Send in your recipes!** If published, you'll receive a free kitchen gadget. Send in: your **ALL-TIME FAVORITE** previously published Country Lines recipe by **Oct. 10** (no gadgets this category), **SAUSAGE** recipes by **Dec. 10**, and **BUDGET-FRIENDLY** recipes by **Jan. 10**. Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email [jhansen@countrylines.com](mailto:jhansen@countrylines.com).

3 T. vegetable oil  
 6 green onions, sliced diagonally in 1-inch pieces  
 2-3 sm. carrots, thinly sliced  
 2 c. snow peas  
 4 oz. sliced water chestnuts, drained  
 2 oz. Chinese rice stick noodles, cooked, or 2 c. hot cooked rice  
 1/4 c. slivered almonds

Thaw cherries if frozen; drain reserving juice and set aside. Cut chicken into bite-sized cubes. Combine teriyaki sauce, sherry, lemon juice and ginger in a small bowl; stir in chicken. Cover and marinate in refrigerator, one hour; stirring once or twice. Drain chicken, reserving marinade. Discard ginger. Blend reserved cherry juice into cornstarch; stir in marinade; set aside. Heat oil in wok or large skillet, over high heat. Add sliced green onion, carrots and snow peas; stir-fry 2-3 minutes until tender but still crisp. Remove vegetables from wok. Adding more oil if needed, add chicken and stir fry 3-4 minutes. Push chicken away from center of wok; add cornstarch mixture. Cook and stir until thickened and bubbly. Stir in chicken, cherries, vegetables and water chestnuts; heat through. Serve over noodles or rice and garnish with slivered almonds. Serves 4.

*Pam Assenmacher, White Lake*

### Stir-Fry Shrimp and Vegetables

1 lb. med. raw shrimp with shell on  
 1 t. cornstarch  
 1/2 t. salt  
 1/2 t. roasted sesame oil  
 1/8 t. white pepper  
 7 lg. bok choy stalks  
 6 oz. fresh pea pods  
 4 oz. fresh mushrooms  
 2 green onions with tops  
 2 T. oyster sauce  
 1 T. cornstarch  
 1 T. cold water  
 2 T. olive oil  
 1 t. finely chopped ginger root, optional  
 1 t. finely chopped garlic  
 1 T. olive oil  
 1/2 t. salt  
 1/2 c. chicken broth



Peel shrimp; pat dry and toss with 1 teaspoon cornstarch, salt, sesame oil and white pepper. Cover and refrigerate for 20 minutes. Remove leaves from bok choy and cut in 2-inch pieces. Cut stalks into diagonal 1/4-inch pieces. Remove strings from pea pods and place in boiling water; cover and cook 1 minute. Drain and rinse in cold water; drain and set aside. Cut mushrooms into 1/2-inch slices. Cut onions into 2-inch

pieces; shred lengthwise into fine shreds. Cover with ice water for 10 minutes or until pieces curl; drain. Combine oyster sauce, 1 tablespoon cornstarch and water in a small bowl; set aside. Heat wok until very hot. Add 2 tablespoons olive oil; tilt wok to coat sides. Add shrimp, ginger and garlic. Stir-fry until shrimp are pink; remove and set aside. Heat wok until hot; add 1 tablespoon olive oil. Add bok choy stalks, mushrooms and salt; stir-fry 1 minute. Add bok choy leaves and broth; heat to boiling. Stir in cornstarch mixture and cook until thickened. Add shrimp and pea pods; cook and stir for 1 minute or until the shrimp is hot. Garnish with green onions.

*Joyce Runberg, Beaver Island*

### Stir-Fried Beef and Peppers

5 T. cooking oil, divided  
 1 lg. green pepper, sliced  
 1 lg. red pepper, sliced  
 1 onion, sliced  
 3/4 lb. beef flank steak  
 3 T. soy sauce  
 3 T. cold water  
 2 t. cornstarch  
 1/8 t. hot pepper sauce  
 1 t. ginger  
 hot cooked rice



Slice beef across the grain into very thin strips; set aside. Heat a large skillet or Dutch oven over high heat for 3 minutes. Add 3 tablespoons oil, green and red peppers, and onion. Cook, stirring constantly until vegetables are coated with oil. Stir-fry 5 minutes or until vegetables are tender-crisp; remove from pan and set aside. Add remaining 2 tablespoons oil to skillet and heat. Add meat and stir-fry 3 minutes or until lightly browned. Combine soy sauce, 3 tablespoons water, cornstarch, ginger and hot pepper sauce. Pour over meat; cook until sauce thickens and boils. Return vegetables to skillet; stir to coat. Serve over hot rice. Serves 6.

*Mrs. John Clairmont, Bark River*

### Ginger Chicken

1 lb. chicken breasts, cut in 2-inch cubes  
 1/2 c. whole kernel corn  
 1/2 c. chopped broccoli  
 1/2 c. frozen carrots  
 1 c. sugar snap peas  
 5 T. butter  
 3 T. ginger teriyaki sauce  
 4 c. cooked white rice

In a large skillet, melt 3 tablespoons butter over medium heat. Add chicken; cook thoroughly. When chicken is cooked, add all vegetables and remaining 2 tablespoons

butter; mix well, cover and cook 5-8 minutes until vegetables are crisp-tender. Add ginger teriyaki sauce; stir well. Reduce heat to low and cook for an additional 3-5 minutes. Serve on top of rice.

*Danielle Cochran, Grayling*

### Stir-Fry Venison

2 T. vegetable oil  
 1 lb. venison cut cross-grain in 1/2 x 2-inch strips  
 3 med. potatoes, thinly sliced  
 1 med. onion, thinly sliced  
 thinly sliced green, yellow and red pepper  
 1 clove garlic, finely chopped  
 1 lb. mushrooms, thinly sliced  
 1/3 c. soy sauce  
 2 T. brown sugar  
 1 T. corn starch  
 1 T. water  
 cooked noodles or rice



Heat oil in a large skillet or wok over high heat. Cook and stir venison and garlic about 2 minutes or until browned. Add potatoes, onion, pepper and mushrooms; cook, stirring frequently until tender. Whisk together soy sauce and brown sugar in a small bowl. Add to skillet. Stir together cornstarch and water until smooth; add to skillet. Cook until heated through and sauce thickens. Serve over noodles or rice.

*Paula Brousseau, Bellaire*

### Indonesian Style Beef & Pasta

1 1/4 lb. boneless beef steak, sirloin or top round  
 5 T. Teriyaki sauce, divided  
 2 T. creamy peanut butter  
 1 T. water  
 1/8 - 1/4 t. crushed red pepper  
 1/8 - 1/4 t. ground ginger  
 6 oz. dry vermicelli or thin spaghetti  
 2 T. vegetable oil  
 1/2 c. seeded and chopped cucumber

Cut steak into 1/8-inch thick strips and place in a shallow baking dish. Add 2 tablespoons teriyaki sauce; toss to coat evenly and set aside. In a bowl, combine remaining 3 tablespoons teriyaki sauce, peanut butter, water, red pepper and ginger; set aside. Cook vermicelli according to package directions; drain and rinse. In a medium bowl, toss vermicelli with peanut butter mixture to coat well. In a large non-stick skillet or wok, over medium-high heat, heat oil until hot. Add beef, half at a time; stir-fry 1-2 minutes until no longer pink. Add cooked beef to pasta; toss lightly to combine. To serve, sprinkle with chopped cucumber. Serves 4.

*Duane Alvord, Port Sanilac*

# Raising Chickens Is Easy

It seems like a perfect match for the gardener or small farmer.

**M**ore and more people seem to be looking for ways to “grow it fresh” in their backyard. This includes the growing of vegetables, of course, but also the raising of livestock. One animal that seems like a perfect match for the gardener or small farmer is chickens. Chickens will provide you and your family with hormone-free meat and eggs in addition to manure for the garden.

Chickens seem to be the rave right now. There are as many new websites on the subject as there are different breeds of the bird. Even city folks are getting into the act as they approach municipal boards to approve ordinances for raising a few hens in the city limits.

This spring, at the pleading of my grandson, I hesitantly gave the okay to purchase some of those fuzzy chicks sold at the feed store. Buying a variety of types is the best way to get started. We bought 10 laying hens, a rooster, and one meat chicken (they all looked



Mitchell Miller, of Stalwart

the same to me as chicks!).

Raising chickens is really pretty easy. Their main requirements are space, food and protection from predators, including fox, skunks and the occasional neighborhood dog. They also need a protected area, such as a chicken coop, where they can be sheltered from the elements.

Chicks are sold in the spring and can be purchased from local feed stores or mail-order catalogs. The main thing with chicks is to keep them warm. They need temps at 90-100 degrees for the first week you bring them home, and then drop the temperature 5 degrees each week until you get them in a coop. A heat lamp will be needed to keep them

warm, but be careful not to create a fire hazard. One way to reduce the risk of fire is to hang the cord (which is clamped onto the side of a plastic box) above the container so that if the lamp comes loose, it won't fall into the sawdust bedding material. Also, be careful to keep children away from the lamp's heat, which can be pretty intense.

Chicks require a specially formulated feed and a constant supply of water. Feed chickens a starter feed until they are old enough to start laying eggs, which is about five months, according to Kristen Taylor, of Pickford Feed Service, in Pickford. At this time you should start feeding them a laying mash, which consists of about 17 percent protein, plus oyster shells, grit and vitamins, Taylor says.

Chicks also need room to grow. Last spring, after about four weeks of having a dozen chicks in our bathroom, we moved them to a corner of my heated greenhouse. I surrounded the fledgling chickens with makeshift walls that could be moved out wider as they grew, and eventually I got them into their own coop.

Chickens need about 2 to 3 square feet per bird inside the hen house and 3 to 4 feet per bird outside. Chicken wire appears

Source for unusual chickens:  
[mcmurrayhatchery.com](http://mcmurrayhatchery.com)

For more information on  
raising chickens:

[backyardchickens.com](http://backyardchickens.com)

to be the best fencing to keep the chickens in and predators out.

Chickens are a productive lot for the small-scale farmer. A healthy hen averages 255 eggs a year, and a good meat chicken can be ready to butcher in less than three months. They require minimal space and can even be free-ranged around the barnyard, providing they are safe from nearby dogs. However, they can be a problem if they enter the garden, which many gardeners can attest to. Keep them out of the garden at least until the end of the season, when they can go in and feast on the bugs. While eating bugs, they'll also be fertilizing your garden!

Meat chickens should be raised separate from laying hens since they require a different feeding regimen, Taylor says. These beefy birds, which are obviously bred to grow fast, need a regimen of 12 hours of feed, followed by 12 hours without feed. The reason for this, she says, is so the birds don't gorge themselves and also to develop strong bones and body structure. In just eight to 10 weeks they'll be ready to butcher.



Winter can be problematic for chickens, though it doesn't have to be. Make sure they are sheltered from drafts and have a constant supply of water. Keep the coop dry by providing some type of bedding material, preferably pine shavings. Predators become even more of a problem in the winter as they search for limited food reserves. Plug any holes in your coop and check often to make sure no new ones are being made by burrowing animals. Also,

make sure your chicken feed is kept in a tightly sealed container. Hens need about 14 hours of light to keep egg production going; artificial light, perhaps on a timer, will need to be provided.

It's been awhile since I've raised chickens, and I must admit to missing their barnyard strutting and scratching. As long as I can keep them out of my vegetable garden and flower beds, and they don't chase my grandson, we'll keep on raising them!

# Cyclone Rake Z-10

**NEW!**

Experience the unprecedented performance of the **Cyclone Rake Z-10**. The exclusive 10-inch diameter **JetPath™** Vacuum System gives 3-times the debris flow-area of six-inch systems to vacuum and mulch the toughest debris, even if it's wet. With 415 gallons of debris capacity, you can clear large areas without stopping. When you're done, the Cyclone Rake folds flat for storage.



**12-MONTH  
RISK-FREE  
TRIAL**

Models starting at  
**\$995**

CALL TOLL-FREE TO REQUEST A **FREE** CATALOG & DVD.

**1-866-816-1905**

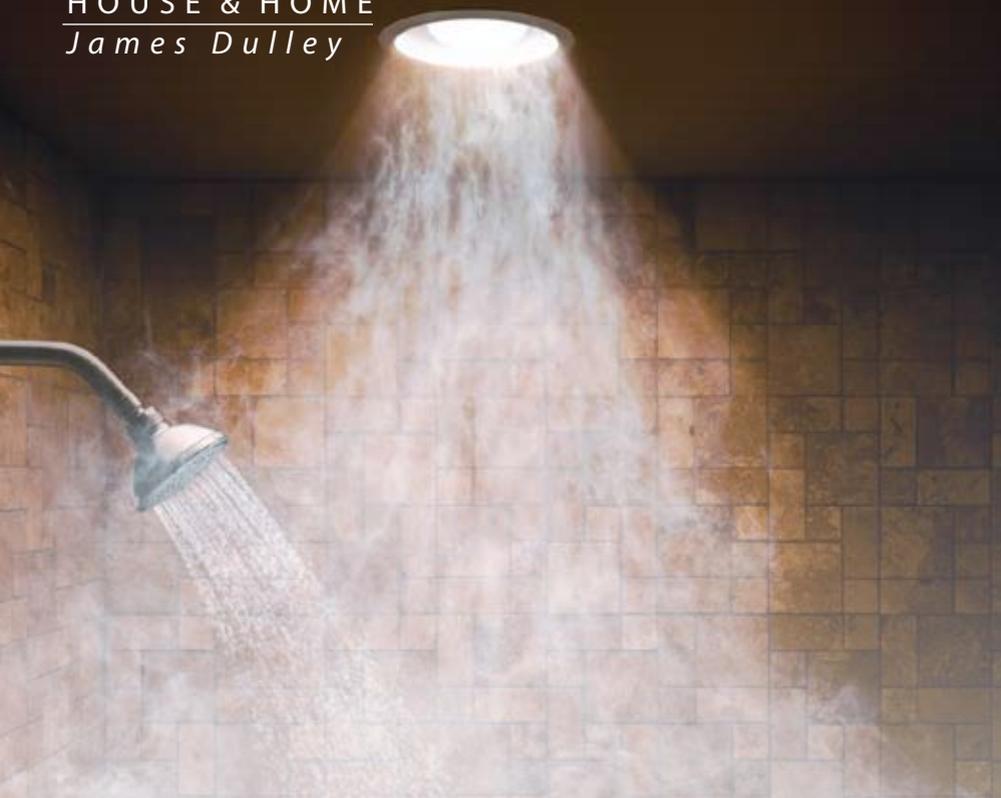
or visit **[www.CycloneRake.com](http://www.CycloneRake.com)**

Mention the Discount Code **MC1010** when you call, or enter it on our web site for a special discount on any Cyclone Rake model.

Woodland Power Products, Inc., 72 Acton St., West Haven, CT 06516

Folds Up Flat!





# Bathroom Lighting

Remodeling a bathroom? Make smart lighting decisions to get the most energy savings from your efforts.

People don't often think about lighting and energy efficiency when it comes to bathroom remodeling, but it's as important as installing the proper vanity or plumbing fixtures. Today's modern master bathrooms and dressing areas are often as large as some second bedrooms and are more than just a place to shower, shave, etc.

If the lighting in both of your bathrooms is like most older bathrooms, it consists of an overhead light, perhaps built into a vent fan if there is no window. If there is a window in the bathroom, very few builders went to the expense of installing a vent fan. Today, vent fans are almost always installed to address indoor air quality concerns in modern, more airtight houses. While remodeling, definitely install a vent fan.

The lighting for your children's bathroom will be simpler, so tackle it first. A basic overhead light should be adequate until they get old enough to shave or wear makeup. There's likely already an incandescent overhead light-only or fan/light fixture. In either case, replace it with a new Energy Star® qualified fan with a compact fluorescent lightbulb (CFL). It will use 75 percent less electricity

for lighting than a comparable incandescent bulb and the fan will be much quieter than the old builder-quality vent fan.

Since children often forget to turn lights or vent fans off when they leave the bathroom, select a vent fan with a motion or humidity sensor to automatically shut it off at the right time. This can save a significant amount of electricity. If you have only a light fixture, use a motion-sensing switch, such as the Lutron MeadowLark™ model. This allows you to program the length of time the light stays on after no motion is detected, along with several other energy-saving functions.

Planning efficient and effective lighting for your master bathroom and dressing area is a bit more complicated. Use a basic lighting design technique called layering to provide proper lighting for various activities. This is the same design technique professionals use for every other room of a house.

The three basic lighting layers are task, ambient, and accent or decorative. Bathrooms are task oriented (showering, shaving, applying makeup, general grooming), so adequate task lighting is most important.

Ideally, place lighting on both sides of the mirror and also on top for three-direction

lighting. This eliminates shadows that can be problematic when shaving or applying makeup. If the mirror is not too wide, wall-mounted vertical fluorescent tube lighting on each side of the mirror is best and efficient.

Several companies offer efficient decorative T2 or T5 fluorescent fixtures. Some

A recessed light with a built-in vent fan provides task lighting in the shower and exhausts humidity. The fan has an automatic humidity sensor switch.

can be attached to wide mirrors, and decorative sconces with CFLs are effective around narrow mirrors. Daylight-type CFLs provide the

best color rendition for makeup. Halogen bulbs may also be used, as they offer a longer life, are somewhat more efficient than standard incandescent bulbs, and provide a whiter light.

For over-the-mirror task lighting, Kichler® offers a new decorative rail design (this design also works well for accent lighting). It is similar to track lighting with three or four directional fixtures, but they are mounted on a rail that hangs down a few inches from the ceiling. It mounts to the ceiling over a standard ceiling electrical box. Several of the rail fixtures use super-efficient, long-lasting white light-emitting diode (LED) bulbs.

For the bath/shower area, recessed overhead task lighting works well. If you are remodeling on your own, consider installing low-voltage fixtures for safety and easy installation. Broan-NuTone® offers recessed light fixtures with built-in exhaust fans. These are efficient because excess moisture is drawn from the shower stall before it ever enters the room.

For ambient and accent lighting, lower-wattage incandescent fixtures—either overhead or sconces—are effective. These can be controlled by dimmer switches to save energy. The new Lutron Eco-Minder™ dimmer is a good choice. As the lights dim, an LED on the faceplate changes from red to green to remind you to dim the lights to save energy. On some models, the switch also functions as an efficient night light. It is wise to install separate dimmer switches for the various layers of light. Another daytime ambient light option is an ODL® tubular skylight with a solar-powered remote dimmer.

*Have a question for Jim? Send inquiries to: James Dulley, Michigan Country Lines, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit [dulley.com](http://dulley.com).*

Photo - Broan

# Blue Jays

Avian bullies at backyard feeders.

**T**hey're blue, boisterous and bold bullies.

As if that isn't enough, they are nest-robbers, thieves and loud-mouthed mischief-makers. (And also fun to watch when they turn up at your feeders to begin their avian pranks.)

Blue jays, with the Latin tongue-twister name of *Cyanocitta cristata*, are members of a larger family of birds called *Corvidae*. Cousins of the blue jay include crows, ravens, gray jays and magpies, but it's the blue jay that's the most familiar at bird feeders. Jays are very territorial. They are greedy, pushy and pugnacious towards other birds, often pushing or scaring off smaller or less bellicose birds in their eagerness to claim the larger share of seeds.

Did I mention they can also be loud, with a portfolio of shrill cries, metallic clicks and sounds effects? Good mimics, they sometimes imitate the calls of other birds, including hawks. To anyone listening, the variety of blue jay jabber seems endless.

In our part of the world, the blue jay is common. Other parts of the country have related, but differently marked and colored jays. Western states have Pinyon and Steller's jays. While their dress uniforms differ from our blue jay, their attitude and manners are much the same—that is, pushy, greedy and sometimes obnoxious with bullying ways.

Our common blue jay is a fairly large passerine (perching) bird. Physically, it is described as 9 to 12 inches long; bright blue on top and white-to-gray on its throat,



chest and belly. It's markings are a gray-blue crest on its head and black-and-white bars on the wings and tail. The bill, legs and feet are black, and it sports a black "necklace" on its lower throat.

The blue jay is omnivorous—that is, eating fruit, acorns, seeds, nuts, insects, mice and frogs. Sometimes a blue jay will raid a nest for eggs and young birds, though its nest-robbing reputation is bigger than it should be since studies show that such food is a very minor part of its diet.

Many trees and plants around the state are the result of blue jays burying food for later consumption, making them "accidental foresters." Like squirrels, they often bury food to eat later and some seeds and nuts are never recovered. The result is that some of the buried mast grows into plants or trees.

When mating time arrives each year, the mated female blue jay will lay four to six eggs in a nest made of sticks and twigs, and lined with grass. Nests are made in trees and shrubs, in secretive sites that are often very difficult to find.

The female incubates the eggs with some

male help. The eggs incubate for about 17 days, and once hatched, both parents will feed the chicks.

To call blue jays "bullies" is accurate. Groups of blue jays will often attack intruders and predators. This writer can attest to their aggressiveness in protecting a nest site. Before we remodeled the façade of our home there was a wide ledge running across the front. A female jay chose that as her nest site, and after the chicks arrived we had to duck when leaving the house—the female would buzz us, even getting a jab or two delivered to show her displeasure.

Blue jays are also one of the more intelligent birds. They will wait and watch for a camper to put food down on a picnic table. As the person walks away, they will dive down and grab it. Along with crows, jays will also watch someone planting seed crops and dig up and eat the seeds when the gardener walks away. Forever opportunists, they are cunning in their thieving ways.

While jays do migrate, enough stick around to keep winter feeder antics lively as those "bullies in blue" swoop in again.

# Aerial Patrols Improve Transmission System Reliability

**W**olverine Power Cooperative owns and operates 1,600 miles of transmission line to serve its member-cooperatives. One way that we monitor our transmission system to ensure its efficient operation is from the air.

Twice each year, in summer and winter, a Wolverine lineworker boards a helicopter to look for trouble spots. The helicopter generally flies low, just above the lines, for a visual inspection. Structural flaws

**Twice each year, our transmission lines are inspected by helicopter.**

on poles, insulators, cross arms and conductors

are documented for repair. From the air, the lineworker also checks sections that are difficult to reach by land, such as poles placed in swamp areas.

For the past several years, including this past August, Ed Boyer, a senior Wolverine lineworker based in Boyne City, has conducted the aerial patrols.

“Ed and the pilot found one area near Ludington with serious damage,” explains Klint Weaver, Wolverine’s transmission services supervisor. “The porcelain insulators on four of our poles appeared to be damaged by gunfire, placing thousands of area co-op customers at risk for a power outage.”

Wolverine discovered and repaired damage most likely caused by gunfire to this same section of its transmission system last fall. The area consists of farm land and hunting property. Deer hunting blinds have been placed on or near the cooperative’s right-of-way, creating safety hazards.

“We’ve conducted aerial patrols of our transmission system for several years now,” Weaver adds. “Our multi-year construction plan for maintaining and improving the system is paying off, as we’re finding fewer problems during aerial inspections.”



Damage to porcelain insulators on Wolverine’s 138 kilovolt (kV) transmission line near Ludington was discovered during the August aerial patrol of the cooperative’s transmission system. The damage appeared to be caused by gunfire.



The day after the broken insulators were discovered, Ed Straathof, a senior lineworker for Wolverine at Hersey, directed field work requiring a bucket truck to repair the damage. The hunting blind in the foreground poses safety concerns due to its location within the center 30 feet of the right-of-way.



Aerial inspections of Wolverine’s transmission system provide a different perspective of the cooperative’s facilities. Pictured is Wolverine’s new substation near Charlotte, which was energized in June.

2010



## Portland Renovation Progresses



With the east side of the HomeWorks Tri-County building, including member services, billing, and the lobby, back in operation since mid-August, construction has focused on the west side. Shown here is the former generating plant, which will house a training/community room and the accounting team. A new section, connecting the office to the Operations Center, will be home for the engineering and dispatch teams. The renovation project is a little ahead of schedule and should be complete by early December. The drive-up payment window and night deposit box for after-hours payments should also be ready for use then. (Graphic by Doug Snitgen)

An advertisement for Energy Optimization. It features a woman with blonde hair sitting at a desk, looking at a laptop. The background is a soft-focus office setting. In the top left corner, there is a logo with a green 'E' and the text "Energy Optimization". To the right of the woman, the text "USE LESS SAVE MORE" is written in large, bold, green letters. Below this, there is a question "Is your home wasting energy?" followed by a paragraph of text. At the bottom right, there is a small disclaimer in italics.

**E** Energy Optimization

# USE LESS SAVE MORE

**Is your home wasting energy?**  
Find out! Complete a free online audit to determine your home's efficiency, build your own energy optimization plan, and receive a FREE energy kit!

*You must be a Michigan co-op residential member to be eligible for the Online Energy Audit Program. Other restrictions may apply. For a complete list of participating utilities, visit [www.michigan-energy.org](http://www.michigan-energy.org).*

Start now at [michigan-energy.org](http://michigan-energy.org) • Questions? 877.296.4319

MISCELLANEOUS

**BECOME AN ORDAINED MINISTER** – Correspondence study. Founded in 1988. Free information. Ministers for Christ Outreach, 7549 West Cactus Rd. #104-207, Peoria, AZ 85381. ordination.org

**FREE BOOKS/DVDS** – Soon the “Mark of the Beast” will be enforced as church and state unite. Let the bible reveal. The Bible Says, POB 99, Lenoir City, TN 37771. 888-211-1715 thebiblesaystruth@yahoo.com

**FARM WINDMILL** – 30 feet high with direct stroke. 231-652-6363.

**??WORK CLOTHES, GOOD, CLEAN** – Rental type, 6 pants and 6 shirts, \$44.95; lined work jackets, \$10.95; denim jeans, \$6. Call 800-233-1853. 100% satisfaction guaranteed. usedworkclothing.com

OUTDOORS

**GARY'S STUMP GRINDING** – Cheaper by the dozen. 800-870-3871 or 231-587-9296.

**OUTDOOR WOOD BOILER** – Kits and welded, from \$1,295. 231-288-0066.

**SAWMILL FOR SALE** – \$4,995, new portable band saw, saws 36-inch x 16-foot log. 231-288-0066.

**NEW AND USED WOOD BOILERS** – 888-825-0808. comfortableheating.com

REAL ESTATE

**ATLANTA, ELK CAPITAL OF MICHIGAN** – 3-bedroom home, 4-car garage and workshop attached. Approximately 275 x 125 foot lot, \$21,000. Call 989-785-4110.

**ATLANTA, ELK CAPITAL OF MICHIGAN** – 3-bedroom, sunroom and balcony–top floor. 2-bedroom, 1 ½ bath, walk-in guest quarters, 20 x 40 foot pole barn, 300-foot stream frontage, bridge crossing, inland lake within 30 feet with fishing dock, boat included. Call 989-785-4110.

**49 ORGANIC ACRES** – 3 miles west of Traverse City, MI. M-72 frontage, 2-roads, house, farm buildings, appraised 2005, \$730,000, asking \$600,000. 517-663-5013.

**10 ACRES, HOUGHTON COUNTY** – Well, septic, fixer-upper, trailer optional. \$30,000 or best offer, 906-523-4716.

**200 FEET WATER FRONTAGE** – Morley Pond fishing, Morley, MI. 313-386-0924.

**ALCONA COUNTY 90 ACRES** – Joins state land. Will sell all or 2 forties and 1 ten. Great deer and partridge hunting. 2 small hunting cabins, willing to lease. Please call 517-423-8316 or 517-263-5409, ask for Pete.

VACATIONS

**KIAWAH ISLAND CONDO** – Near Charleston, 170 yards to beach, 2 bikes, miles of bike paths, beautiful area. Winter rate \$550/week \$975/month. Call 989-725-7794 or email fredherring57@yahoo.com

WANTED

**BUYING OLD WOODEN DUCK** – Goose, fish, decoys. 248-877-0210.

**BUYING GUN RELOADING EQUIPMENT** – Bullets, ammo, gun parts, back stock and more. 517-623-0416.

#1 Value. Escorted Tours Since 1952.

# Caravan.com

New from \$995! Panama Canal, Rainforests and Beaches.  
Call 1.800.CARAVAN for free 28 page info guide. Or, visit us online at Caravan.com.

Reach over 250,000+ households!

# Country Lines

Classified ad rates:

▲ \$3 per word (\$30 min.), including ALL business, agent and broker ads

▲ \$1.50 per word (\$15 min.) for co-op members running nonbusiness ads

Each initial, group of figures, phone number, abbreviation, email address and website address counts as one word. Hyphenated and slashed words count as two or more words. Ads are subject to editor's approval and editing. For member rate, attach your mailing label. To pay by credit card, include card number, exp. date, address related to the card and signature with ad. M/C or VISA only, please indicate which. Send your printed or typed ad and check made payable to MECA (advance payment required) by 15th of month prior to publication to: *Country Lines*, 2859 W. Jolly Rd., Okemos, MI 48864, or email jhansen@countrylines.com. Call 517-351-6322, ext. 201, for more information. **No classifieds accepted by telephone.**

Also, place order online at [countrylines.com](http://countrylines.com), and ads will be posted **FOR NO EXTRA CHARGE**

(Until the next issue of the magazine is published.)

*The Offbeat* First on the Market, Best in the Field.



**OUTSIDE WOOD FURNACE**  
"Since 1976"

- All stainless steel construction
- No smoke, ashes or wood trash in your home
- 12 hour burn
- 10 to 100 feet from your home
- Heats home and household hot water
- 25-year warranty
- Connects to your existing central duct or hydronic system
- Units from 120,000 to 250,000 BTU's
- Financing Available
- Dealer Inquiries Welcome

**Hardy Manufacturing Company, Inc.**  
Philadelphia, MS 39350  
**1-800-542-7395**  
www.hardyheater.com \* S&S@hardyheater.com

**FUTURE STEEL BUILDINGS**  
Do-It-Yourself Steel Buildings



**Ideal For:**

- Recreational Use
- Boat Storage
- Bunkie
- Equipment Storage
- Garage/Shop
- PWC/Snowmobile

- 30-year perforation warranty
- Full technical support from start to finish
- Fully customized to meet your needs
- Factory-direct savings

Call Toll Free Today for a **FREE!** INFORMATION PACKAGE

Our building consultants are ready to take your call  
**1-800-668-5111** Ask for ext. 91

# Electrical Safety During Storms

**E**arly fall can bring stormy weather. As a result, take precautions with your home's electrical system.

Keep in mind that storm debris can easily ignite if it comes into contact with downed power lines, especially when electrical wires are severed. Also, standing water and even appliances can become electrically charged.

Use these tips to keep safe after storms:

## General Electrical Safety

▲ Never touch a downed power line. Call your electric co-op to report it immediately. Avoid contact with overhead lines during cleanup and other activities. Assume all wires on the ground are electrically charged.

▲ Be sure all electric and gas services are turned off before entering buildings for the first time.

▲ If water rises above the electrical outlets in your home, contact a licensed electrician before turning on your main circuit breaker. Outlets and wiring that contact with water could present a fire and shock hazard.

▲ Allow all electrical appliances and equipment, once submerged, to dry thoroughly. Have them checked by a qualified repair person before turning them on.

▲ Replace damaged extension and appliance cords, loose prongs or plugs.

## Generator Safety

Portable electric generators are often put into use for temporary power. Be sure to follow the manufacturer's directions for installation and operation.

Use generators or other fuel-powered machines outside the home. Carbon monoxide fumes are odorless and can quickly poison you indoors.

Take special care not to overload the generator. Use appropriately-sized extension cords to carry the electric load. Make sure the cords have a grounded, three-pronged plug and are in good condition, and never run cords under rugs or carpets.

Never connect generators to another power source, such as power lines. The reverse flow of electricity can electrocute an unsuspecting utility worker.

Sources: U.S. Fire Administration, [usfa.fema.gov](http://usfa.fema.gov); Consumer Product Safety Commission, [cpsc.gov](http://cpsc.gov).

Visit new & improved  
**earthcomfort.com**

**EARTHCOMFORT**  
Natural Heating and Cooling

Learn how it works  
Estimate your savings  
Find contractors



Michigan  
Geothermal  
Energy  
Association

**FOR THE TOUGHEST JOBS ON PLANET EARTH®**



© 2010 Gorilla Glue Company

**GORILLA TOUGH**

1-800-966-3458 Made in U.S.A.

## 2-for-1 Book Sale! Also order on [countrylines.com/store](http://countrylines.com/store)



**VIEW FROM THE TOP** A collection of Jim Hough's columns from the past 10 years in *Michigan Country Lines*.



**ON THEIR OWN POWER** The only book to tell the Michigan electric co-op story, from their birth in the 1930s. Filled with first-hand testimonials and experiences of the people who blazed the trail for electric co-ops. Written by Ray Kuhl, former general manager of the Michigan Electric Cooperative Association.

Great gift idea!

**Both books only \$6** Includes tax and shipping. **No substitutions.**

### Book Order Form

Name (please print) \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

NUMBER OF BOOK SETS: \_\_\_\_\_ x \$6 = \_\_\_\_\_

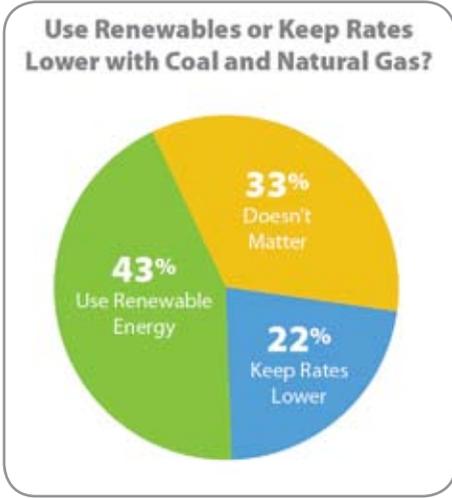
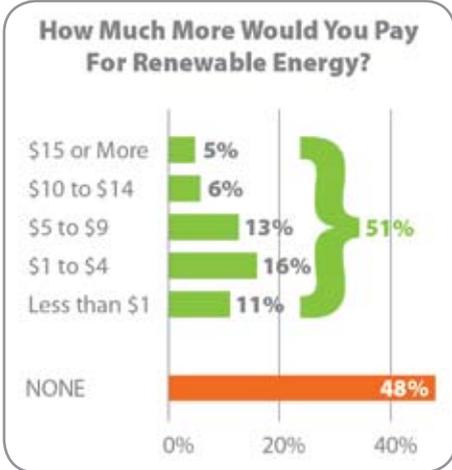
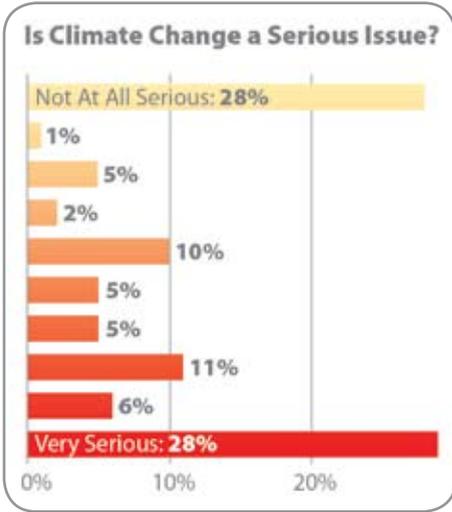
Credit card payment: \_\_\_ VISA \_\_\_ MasterCard

Account # \_\_\_\_\_

Name on Card \_\_\_\_\_

Exp. Date \_\_\_\_\_

Make checks payable and mail to: **MECA**  
2859 W. Jolly Rd., Okemos, MI 48864



# Member-Owners' Opinions Matter to Us

**H**ow do you feel about the way we do business? What do you think about energy efficiency or renewable energy issues? How can we continue to improve? These questions and more were covered on a recent survey to determine our members' satisfaction with our service.

Last month we reported on overall satisfaction. This month we're taking a closer look at how you feel we should balance affordable rates with environmental issues.

## Perceptions of Climate Change

"HomeWorks members have strong opinions on both sides of the climate issue," says marketing coordinator, Doug Snitgen. "While 28 percent said the issue was not at all serious, another 29 percent said it was very serious."

Co-op members younger than age 35 showed the greatest concern; 61 percent in this age group say it is a serious issue for them.

The survey followed up by asking how much members were willing to pay for renewable energy.

"We weren't surprised by the number of members supporting renewable energy," Snitgen continues, "but as a member-owned cooperative, it's ultimately the member who pays for those types of technology investments on their electric bill."

"Our members obviously want us to do the right thing, to look out for our environment," says Snitgen. "But renewable energy does not equal "free" energy, and many members are unwilling to pay more for renewables."

Just over one-half of the respondents indicated some level of increase would be acceptable, but 48 percent said they were not willing to pay more for renewable energy.

## Taking Action Already

Fortunately, HomeWorks has been able to partner with Wolverine Power Cooperative, our power supplier, to participate in the state's first commercial wind farm.

Located in the Thumb area, between Pigeon and Elkton, the Harvest Wind Farm has given Wolverine, and HomeWorks, a leadership role in Michigan's renewable energy industry. It also allows us to meet state requirements for renewables without having a noticeable impact on rates, Snitgen points out.

The cooperative also regularly provides information to members who inquire about investing in home-sized renewable installations—generally solar or wind—at their own expense.

## Renewable vs. Lower Cost

HomeWorks has always supported the use of renewable and alternative energies when it makes financial sense for our members.

The survey asked which is more important: investing in renewable energy technologies, which are often costly, or keeping rates lower using natural gas or coal generation.

"Forty-three percent of members said they support using the more expensive renewable energy generation," Snitgen explains.



**HomeWorks Tri-County members have used Co-op Connections Card pharmacy benefits**

**2,262 times, saving \$50,160.84**

If your local business would like to offer HomeWorks members a Co-op Connections® discount on your products or services, call Jayne Graham at 517-647-1252, or email [jayne@homeworks.org](mailto:jayne@homeworks.org).

# Looking for Expert Advice?

When it comes to saving energy around the house, there are a lot of low-cost, no-cost things you can do that are pretty simple.

- Change-out incandescent lightbulbs for CFLs.
- Set your water heater at 120 degrees.
- Dress warmer this winter and turn down the heat.
- Use your microwave instead of the oven whenever you can.

But what if you've already made these simple changes, and need good advice on what to do next? You could hire an expert, or you can use our *free* Online Energy Audit (see page 25) to get started. Simply go to [homeworks.org](http://homeworks.org) and click on the symbol shown above to get started.

Take a moment to register—it's a secure site and your information will remain private, other than letting us know when you've completed the audit. Registering will give you a log-in that lets you complete the audit in several stages, or update the profile once you've made changes.

You'll be asked to enter 12 months of energy history for your home; you can get

your electric history from our eBill service, also at [homeworks.org](http://homeworks.org).

You may want to print out the audit questions and take your time answering them, since you'll be asked such things as how many lightbulbs you have, and how big your windows are.

Once you're done, two things will happen. First, you'll get an immediate report that breaks down where the energy is being used in your home, and ideas for cost-saving measures you can do now.

Second, we will send you an energy-saving starter kit, including five CFLs, some water flow restrictors, and more information.

Finally, you'll have access to an "Appliance Calculator" that can tell you how much it costs to run various appliances, and to the "Energy Library" with a wide range of energy topics to read up on.

*Note: If you don't have online access, you can call us at 800-562-8232 and we'll send you a printed questionnaire. Once you complete and return it, we'll enter your data and send you the report that it generates.*



[www.homeworks.org](http://www.homeworks.org)



**Nick Rusnell**  
Energy Advisor

You can find more information about saving energy at [homeworks.org](http://homeworks.org).

Click on the green Energy Optimization tab and link to program details and rebates, plus outside resources such as the Department of Energy. And, there's a special area for teachers and students!



## Your Safety is Important to Us

Let's talk about container safety...

Did you know most propane-related accidents are caused by untrained individuals hooking up gas lines or appliances, or by connecting small, portable cylinders to a residential propane system?

When handled by trained individuals, propane is one of the safest fuels used for home heating, water heating, and cooking. However, making the proper connections takes training and practice.

Using a portable tank as a fuel source is extremely dangerous because the cylinder will not provide the BTUs needed to run a standard appliance.

Aside from the short burn-time, a small tank will not have the vaporization rate to meet the demand of most appliances; even 100-pound tanks are considered too small for most appliances.

The tank may freeze off, or worse, allow liquid to be drawn into your home; any nearby spark, pilot light or operating appliance could set off a

nasty explosion, risking life and property.

Such projects may also violate local mechanical codes. The Liquefied Petroleum Gas Code (NFPA 58) also prohibits these dangerous actions.

So, please use caution when having work done on your propane system by calling on qualified individuals only. Never let anyone hook up a portable propane cylinder to supply gas to a household appliance.

We also recommend that all households have a least one carbon monoxide detector along with smoke alarms. Please have your propane system checked if you have any of the following symptoms of carbon monoxide poisoning: headaches, dizziness, loss of muscular control, vomiting and watering of the eyes.

Your safety is important to us. If you need further safety information, visit [homeworks.org/propane](http://homeworks.org/propane) or call us anytime at 877-574-2740, and a member of our staff will be glad to assist you.



**Randy Halstead**  
Propane Manager

To learn more about propane service from HomeWorks, call 877-574-2740 or visit [homeworks.org](http://homeworks.org)

HomeWorks Tri-County Propane is a wholly-owned subsidiary of HomeWorks Tri-County Electric Cooperative.

# Viva La Branche!

**T**he new GM releases its new electric Chevrolet Volt this fall. If it catches on like many predict and hope, it will be a boost to our state's economy and a welcome move forward in the quest for a cleaner environment.

Will the Volt become the latest darling of our car culture? Will it generate the passion that followed the Corvette, Mustang, Camaro, or even the Prius? Will *you* buy one?

At a cost of \$41,000 and up, less a \$7,500 federal tax credit, the Volt won't be the 'people's car.' The prospect of being able to drive 40 miles on battery power alone is enticing, but if your daily drive requires you to travel longer distances, when the gas motor will have to kick in to recharge the batteries, you might not see the value.

The Volt is a cool-looking car. It has nice lines, enough space for average families, and all the latest gadgets.

But I'm sure it doesn't have backseat rear armrests that can each hold a six-pack like my parent's first car—a 1950 two-door Studebaker. (Don't ask.) Nor will it have the cavernous interior room of my first car, a 1948 Plymouth four-door sedan. When I bought it from my future father-in-law for \$100, it was already 15 years old and needed an engine overhaul. You'd think Larry would have sold me a more road worthy car since I was dating his daughter. A friend showed me how to take the engine apart and put it back together. I've found working on cars, especially old ones, to be a relaxing and satisfying pastime ever since.

The Volt certainly won't match my favorite car, a banged-up, baby blue 1963 Saab 96 we bought in 1973 to replace a wrecked Volvo 122S. The Volvo was my first new car, solid, dependable and a great road car. The Saab, well, it probably was solid when it was new, too. After all, it was made by the company that made Sweden's military jets. With a two-stroke, three-cylinder engine, it certainly was unique. Pouring a can of oil in the gas tank with every fill-up was a sure way to cause a lot of weird looks from other motorists. With its streamlined body and a gizmo that

let you freewheel down hills, the car was a miser on gas. Getting 42 miles to the gallon during the mid-70s oil crisis was great. Plus, I was back in school, and later couldn't get a job during a recession much like this one. We depended on Barbara's new teaching job for food.

My job was to keep that car on the road. We lived in married housing on the Michigan State campus. The car didn't like to start on cold mornings, so I would have to push the car from the open driver's side door down a slight incline, jump in and pop the clutch to start it. The car was warmed up for Barbara when she was ready to leave—what a treat. Of course, sometimes she got there first, tried to start the car, and then ran up to the apartment yelling for me to get the blasted thing running.

I still wonder how we got through that first teaching year.

On a trip back from Ironwood in the summer of '73, on the M-69 'shortcut' between Crystal Falls and Escanaba, the Saab blew its head gasket. That's pretty much like a heart attack. The coolant that keeps the engine operating at the appropriate temperature leaks into the cylinders, and since water and anti-freeze don't help the combustion process, the engine dies.

There we were, on a quiet road in the middle of empty countryside, stranded. My sister's boyfriend was riding with us back to East Lansing, so, while Barbara drove, he helped me push the relatively light car a mile down the road to La Branche, which largely consisted of the La Branche Tavern.

We went into the bar to see about using their phone to call a wrecker, although finding anyone able to actually fix that Saab seemed remote. Then the boyfriend said, "sorry," but he needed to get back today, and he left to hitchhike a ride.

So, Barbara and I sat at the bar and explained our predicament to the owner. A few seats away was a thin, long-haired, bearded guy in a plaid shirt and jeans, a

Viet Nam veteran. He heard our sad story and said he might be able to help.

He was a motorcycle mechanic and had tools in his truck. Maybe he could seal the head gasket tight enough

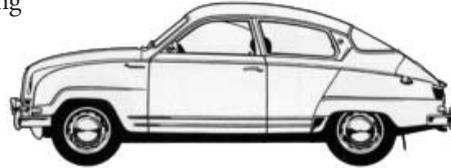
for us to get back to East Lansing. Better yet, I said, this is basically a motorcycle engine, and I have a head gasket in the trunk. (Appar-

ently, blown head gaskets were a common problem in these cars and the previous owner kept a spare!)

In the middle of a hot Sunday afternoon in August, the motorcycle mechanic vet got his tools out and helped this Air Force vet remove the head, clean off the old gasket, put in the spare, torque the bolts, and refill the radiator. We were done in two hours. The engine spit and sputtered for a few moments and then took off with its regular popcorn popper sound.

After grabbing a sandwich in the bar and buying our savior a beer and a meal—he wouldn't take anything else—we were on our way. I learned only a few years ago, when I mentioned this event at an annual meeting of Alger Delta Cooperative Electric Association, that our hero's name is Jack Fisk. I've always hoped to see him again and buy him another beer, although the La Branche Tavern is gone.

Now GM has dumped Saab, which it bought a few years ago, to concentrate on its core business, which now includes the Volt. I'm sure it will be dependable, but it could never be as lovable as that quirky Saab.



Can a Chevy Volt be as lovable as a 1963 Saab 96?

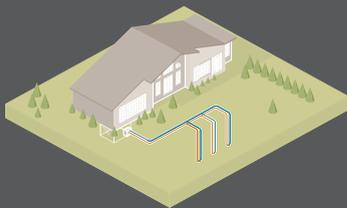


*Mike Buda, editor emeritus of Country Lines, has a 1951 Chevy pickup that needs a lot of attention.*

*Email Mike at [mbuda@countrylines.com](mailto:mbuda@countrylines.com) or comment on his columns at [countrylines.com/column/ramblings/](http://countrylines.com/column/ramblings/)*

# DIG HERE, SAVE THOUSANDS.

**30% TAX CREDIT**  
**CUT ENERGY BILL IN HALF**  
**FINANCING AVAILABLE**



An underground loop system and the constant temperature of the Earth combine to create a comfortable climate in your home.

For deep savings on your energy bills, look no further than your own backyard. With a ClimateMaster Heating and Cooling System, you get a 30% tax credit and can save more than half on your energy bill. ClimateMaster uses geothermal energy to tap the constant temperature of the Earth, keeping your home comfortable year-round. Best of all, a new system usually pays for itself in about five years and is a cleaner choice for the environment. If you're ready to uncover extra cash each month, visit [climatemaster.com](http://climatemaster.com).



[climatemaster.com](http://climatemaster.com)

**Ann Arbor**  
Jetstream Mechanical  
734-668-8010

**Cadillac**  
Cornwell Mechanical  
231-429-2996

**Charlevoix**  
MacGregor Plumbing  
and Heating  
231-526-9633

**Eaton Rapids**  
Stahl & Sons, Inc.  
517-663-4102

**Evart**  
Geo Connection, LLC  
231-734-0227

**Harbor Springs**  
MacGregor Plumbing  
and Heating  
231-526-9633

**Lansing**  
Doty Mechanical  
517-327-7777

**Lowell**  
Canfield Plumbing  
& Heating, Inc.  
616-897-0887

**Mt. Pleasant**  
Custom Heating &  
Plumbing  
989-772-5568

**Muskegon**  
Assured Comfort  
Heating & Cooling Inc  
231-744-7571

**Sault Ste Marie**  
Albert Heating &  
Cooling, Inc.  
906-632-6900

**Sunfield**  
Mark Woodman  
Plumbing & Heating  
517-566-8388

**Traverse City**  
Team Bob's Heating,  
Cooling & Plumbing  
231-941-4064

Do you know the

# 9 Crucial Questions

you need to ask your propane company?

If you're a typical homeowner shopping for a propane supplier, you'll probably call three to five propane companies and make a decision based on what sounds like the lowest price. Unfortunately, price-per-gallon can be a deceiving number. Many propane companies will attract new customers with a low advertised price-per-gallon, then surprise the customer with additional fees and hidden charges.

By asking your propane supplier the **9 crucial questions** found in our **FREE report**, you'll discover how much you *really* pay for service, and how to choose a company that will give you the **best value**. Our FREE report includes:

- The 9 crucial questions you need to ask when shopping for a propane company.
- A worksheet for easy side-by-side comparison of each propane company you call.

This report is a free service of HomeWorks Tri-County Propane. And we're so confident that we can provide you with the best value propane service, that **we'll even give you contact information for 12 of our competitors** so you can call and compare for yourself.

Get a copy of the **FREE REPORT** by visiting [homeworks.org/9questions](http://homeworks.org/9questions) or calling 1-877-574-2740.



Get a copy of the **FREE REPORT** by visiting **[homeworks.org/9questions](http://homeworks.org/9questions)** or calling 1-877-574-2740



**Tri-County Propane**  
**1-877-574-2740**  
[homeworks.org](http://homeworks.org)