

*We need your help. Contact Congress now! See page 11*

A SERVICE OF ONTONAGON COUNTY RURAL ELECTRIFICATION ASSN.

March/April 2010

# MICHIGAN Country Lines



**RESCUE ME**

**4 Co-op Director Elections**

**5 What The Energy Star® Means**

**28 Killing Energy Vampires**



**LOCK IN YOUR  
SAVINGS FOR 12 MONTHS**

**NOW AVAILABLE**  
**150+ HD CHANNELS**



**ACT NOW AND RECEIVE FREE:**



**Up to 6 Room  
Installation**

- No equipment to buy
- Installation within 24 hours in most areas



**HBO®**

(8 channels  
for 3 months)

**SHOWTIME®**

(10 channels  
for 3 months)



**Best HD-DVR Available\***

**HD-DVR Upgrade**

- Multi-room viewing and recording
- Pause and rewind live TV
- Skip recorded commercials

**CALL TODAY**

**877•899•2457**

**RESPOND BY: 5/31/10**



**WE ARE OPEN 7 DAYS A WEEK 8 AM - MIDNIGHT EST • SUNDAY 9 AM - MIDNIGHT EST**

**OFFER ONLY GOOD TO NEW DISH SUBSCRIBERS [WWW.INFINITYDISH.COM](http://WWW.INFINITYDISH.COM) • SE HABLA ESPAÑOL**

Digital Home Advantage offer requires 24-month commitment and credit qualification. If service is terminated before the end of commitment, a cancellation fee of \$17.50/month remaining will apply. Programming credits will apply during the first 12 months. All equipment is leased and must be returned to DISH Network® upon cancellation or unreturned equipment fees apply. Limit 6 leased tuners per account; lease upgrade fees will apply for select receivers; monthly fees may apply based on type and number of receivers. HD programming requires HD television. All prices, packages and programming subject to change without notice. Local channels only available in certain areas. Offer is subject to the terms of applicable Promotional and Residential Customer Agreements. Additional restrictions and fees may apply. First-time DISH Network® customers only. Offer ends 5/31/10. HBO/Showtime: Programming credits will apply during the first 3 months. Customer must downgrade or then-current price will apply. HBO® and related channels and service marks are the property of Home Box Office, Inc. SHOWTIME and related marks are trademarks of Showtime Networks Inc., a CBS company. InfinityDISH charges a one-time \$49.95 non-refundable processing fee. \*Rated 'Best HD-DVR Available' by c|net Editors' Choice, February 2008.



Editor  
Gail Knudtson

Design Editor  
Cindy Zuker

Ad Assistant  
Jennifer Hansen

Executive Editor  
Michael Buda

Publisher  
Michael Peters

**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. **E-mail:** [knudtson@countrylines.com](mailto: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 **Steve Boeckman**, Great Lakes Energy, 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.

# MICHIGAN Country Lines



10



18



20

## 10 Our Shifting Energy Future

Electric co-ops search for new ways to keep electricity affordable in the face of federal carbon regulation. *Scott Gates*

## 12 Lighting Innovations

Light emitting diodes (LEDs) are being hailed as the next great innovation in lighting. *Martha Carney and Brian Sloboda*

## 14 Rescue Me

Two *Country Lines* 2009 Volunteer of the Year nominees create 'Happy Tails.' *Linda Kotzian*

### COLUMNS

11 **Comment** *Michael Peters*  
A "glorious mess"

16 **Our Kids** *Linda Wacyk*  
Early intervention improves young lives

20 **Gardening** *John Bruce*  
Delightful, delectable daylilies

22 **House & Home** *James Dullea*  
Recessed lighting is more efficient than ever

24 **Outdoors\*** *Don Ingle*  
Whooooooooo dat?

30 **Ramblings** *Mike Buda*  
Are you Tweeting yet?

\*Not in all editions

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

### COVER \*

Pauline Hancock, executive director and founder of the Elk Country Animal Shelter in Atlanta, MI, is shown with a shelter resident. *Photo—Roger Boettcher/Leavenworth*

### DEPARTMENTS

6 **Readers' Pages**  
NRECA annual meeting, letters, scholarships

18 **Home Cooking**  
Tuna

24 **Wolverine Power\***  
Harvest Wind second year report

26 **Country Lines Marketplace**  
Classifieds from readers



MICHIGAN'S ELECTRIC  
COOPERATIVES  
[countrylines.com](http://countrylines.com)





**500 J.K. Paul Street**  
**Ontonagon, MI 49953**  
**Phone: (906) 884-4151**  
**Toll-free: (800) 562-7128**  
*after hours (866) 639-6098*

## OFFICERS & DIRECTORS

**Gordon Jukuri**, President  
**Frances Wiideman**, Vice-President  
**Randy Myhren**, Secretary/Treasurer  
**Barbara Bouwkamp**, Director  
**Wayne Heikkinen**, Director  
**Calvin Koski**, Director  
**Dan Shamion**, Director

## PERSONNEL

**Thomas Haarala**, General Manager  
**Bill Lundberg**, Line Supervisor  
**Donna Siren**, Billing Clerk  
**Wendy Tandlund**, Receptionist/Work  
 Order Clerk

## OTHER INFORMATION

**Date of Incorporation:** Sept. 30, 1937  
**Fiscal year-end:** Dec. 31  
[countrylines.com/coops/ontonagon](http://countrylines.com/coops/ontonagon)

The Ontonagon County REA office will be closed on Friday, April 2, 2010, for Good Friday. Please only call the office if you need to report a power outage.

# Ontonagon County Rural Electrification Association

## Three Districts To Elect Directors

Your co-op is a democracy, and it works best when you participate!

**T**he Ontonagon County Rural Electrification Association is comprised of seven districts, with directors elected for three-year terms.

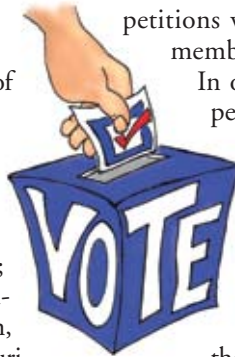
This year, terms will expire for directors representing District 2 – Lake Mine/Toivola; District 5 – Pelkie/Keweenaw Bay/Herman; and District 6 – Chassell. Incumbent directors are Fran Wiideman, Wayne Heikkinen and Gordon Jukuri, respectively.

If you are interested in running for the board, you must call or stop by the co-op office to request a nominating petition. You will have until the first Monday in May to return the petition to Ontonagon's office. Due to a change in co-op bylaws enacted at the 2002 annual meeting, nominating

petitions will no longer be sent to each member residing in these districts.

In order to be valid, a nominating petition requires the signature of five active members of the co-op that receive electric service in that district (husband and wife are considered one member so either may sign, but not both). The member who is being nominated must also sign the petition.

Ballots will be mailed to each member of the district 30 days before the annual meeting, which is scheduled for June 19, 2010. Ballots must be returned to the co-op office no later than noon on the Monday preceding the annual meeting (election votes will be counted and results shared at that meeting).



## Right-of-way Clearing Begins Soon

Your electric co-op's 2010 right-of-way clearing program will begin when weather permits. Roads scheduled for clearing by T&S Contracting, of Rapid River, include:



*Tree-trimming and brush-clearing around power line rights-of-way helps keep electricity flowing reliably to homes and businesses.*

### Houghton Area

- ◆ M 203
- ◆ U.S. Hwy 41
- ◆ Lake Annie Rd.
- ◆ Pontiac Rd.
- ◆ Haitunen Rd.
- ◆ Anderson Rd.

### Chassell

- ◆ Creamery Rd.
- ◆ Cabbage Rd.

### Toivola

- ◆ North Rd.
- ◆ Lakeview Rd.
- ◆ Church Rd.
- ◆ Misery Bay Rd.
- ◆ Barri Rd.

### Ewen

- ◆ North Fair Oaks Rd.
- ◆ Applekamp Rd.

### Firesteel

- ◆ Firesteel Rd.
- ◆ Calumet Rd.
- ◆ State Hwy M-38

### Aura

- ◆ Townline Rd.
- ◆ Skanee Rd.
- ◆ Pequaming Rd.
- ◆ Marszal Rd.
- ◆ Carmody Rd.
- ◆ Gauthier Rd.

### Keewenaw Bay

- ◆ Arnheim Rd.



# Star-crossed

Is the Energy Star rating a reliable guide to energy-efficient products? Yes—mostly, but some products aren't even rated. **Megan McKay**

**L**ots of Michiganders are cutting down on their energy use: improving a home's insulation, turning lights off, or exchanging traditional lightbulbs for more efficient lighting options. So when consumers shop for new appliances it's common to focus on finding a product with an Energy Star® rating.

But how do appliances get this rating, and why don't all appliances have them? The answers may surprise you.

Computers and monitors were the first products to receive an efficiency rating from Energy Star, a program launched in 1992 by the U.S. Environmental Protection Agency and U.S. Department of Energy. Since then, more than 60 product categories have been added, from dishwashers to windows and DVD players. According to the program, Energy Star-rated products deliver the same or better performance as comparable models while using less energy and saving money.

"We're recognizing the top performers when it comes to energy efficiency," explains Katharine Kaplan, Energy Star program manager. She notes the initiative works closely with folks in a wide variety of areas, including industry experts, governments, nonprofit organizations and utilities. "We agree on a fair way to test products. Manufacturers test products using that procedure, submit the data to us, and we say, 'These are the top performers. This is how much energy you can use to be considered a leader by Energy Star.' Generally, that means you're in the top 25 percent."

For example, qualified refrigerators must be at least 15 percent more efficient than the minimum federal standard. Energy Star-rated TVs consume 3 watts or less when switched off, compared to a standard TV, which consumes almost 6 watts on average. By pushing for the manufacture of more efficient products, Energy Star estimates the rating system saved businesses, organizations, and consumers \$19 billion in 2008 alone.

Consumers are taking advantage of the program. A survey by the Consortium for Energy Efficiency—a group including members like the quasi-governmental Tennessee Valley Authority and Bonneville Power Administration, a federal power marketing

administration in the Northwest—discovered 76 percent of American households recognize the Energy Star brand. Of these consumers, 73 percent purchased an Energy Star-labeled product within the last year.

But not all products are rated by Energy Star. The program gauges the average energy efficiency of different appliance technologies and evaluates whether there's potential for increased efficiency—generally at least 25 percent higher than minimum standards. According to Energy Star, the most efficient electric resistance water heaters on the market have an Energy Factor of 0.95, about 5 percent more efficient than the minimum federal standard. Since there's little room for improvement, Energy Star does not have a category for the product.

"The technology doesn't qualify for the Energy Star program—not because it's not efficient, but because it's already as efficient as possible," says Steve Koep, a regional manager for RHEEM/Marathon Water Heaters. "When it comes to purchasing an electric water heater, consumers should consider durability and energy factor [EF], a mandatory evaluation done on all water heaters regardless of fuel source. EF takes into account fuel use, standby energy loss, and insulation under simulated actual conditions."

Last October *The New York Times* revealed some manufacturers of household appliances were testing products for Energy Star-certification internally instead of using independent laboratories. In response, Energy Star ramped up oversight of product ratings and by the end of the year had revoked the Energy Star label for some refrigerators while raising the bar for the efficiency expected from TVs.

Energy Star remains a driving force not just in the United States, but in other countries, such as Australia, Canada, Japan, New Zealand, Taiwan, and the European Union. Federal energy efficiency tax credits for appliances and home heating and air systems typically require qualifying products to be Energy Star-rated.

If you're in the market for an appliance and have questions about which product might be best for you, feel free to contact your electric cooperative. To learn more about the Energy Star program, visit [energystar.gov](http://energystar.gov).



## An [Energy] Star is Born

Energy Star, a voluntary, international standard for rating energy-efficient consumer products, was created by the U.S. Environmental Protection Agency in 1992 for home computers and monitors. Since then, the program has expanded to cover more than 60 categories and been adopted by Australia, Canada, Japan, New Zealand, Taiwan, and the European Union. Devices carrying the Energy Star logo, such as computers and electronics, kitchen and household appliances, residential lighting, and homes, deliver the same or better performance and use 20 percent to 30 percent less energy on average than comparable models.

Since 1992, Americans have purchased more than 2 billion Energy Star-qualified products; the number of qualified homes tops 1 million. Here are some highlights:

**2005-2010** Battery chargers, power adapters, commercial dishwashers, and ice machines included.

**2002** Hotels rated and more than 100,000 new homes earn rating.

**2001** Supermarkets, acute care hospitals, dehumidifiers, ventilation and ceiling fans, small commercial heating and cooling equipment, and commercial freezers, refrigerators, and washing machines rated.

**2000** Water coolers and traffic signals rated; label extended to schools.

**1999** Audio/DVD equipment, roof products, and compact fluorescent lightbulbs rated. Label extended to office buildings.

**1998** TVs, VCRs, windows covered.

**1997** Residential light fixtures, scanners, and washing machines rated.

**1996** Exit signs, insulation, boilers, dishwashers, refrigerators, and room air conditioners rolled into the program.

**1993-1995** Energy Star for homes launched. Copiers, fax machines, printers, heating and cooling products rated.

**1992** Program begins with computers and monitors.

Source: Energy Star

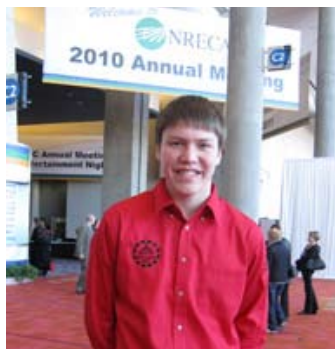
# Co-ops Agree to Push Affordability

Close to 6,000 key staff and locally-elected directors from the nation's cooperative electric utilities met in Atlanta, GA, in February to set 2010 policies for the National Rural Electric Cooperative Association (NRECA). They agreed that co-ops should strongly push Congress to take responsibility for climate change policy, and not leave it to the Environmental Protection Agency.

Glenn English, NRECA's CEO, told attendees they must demand that elected officials put affordability at the center of their energy policy discussions.

English said a unified, focused co-op position can help cut through the polarization and political stridency in the nation's capital that has stalled efforts to produce constructive energy-related legislation.

"Electric cooperatives cannot afford a scorched-earth politics. We cannot afford to participate in that kind of political debate.



Brandon Gregg, whose parents are members of Midwest Energy Cooperative, represented Michigan as a member of NRECA's Youth Leadership Council.

That divides co-ops," he said.

*Michigan Country Lines* was among the five finalists for the Haggard Award, which recognizes magazine excellence among state electric co-op publications.

In celebration of the 75th anniversary of rural electrification, film and TV actor Edward Asner opened the general session with a dramatic and moving portrayal of President Franklin D. Roosevelt.



## Lighten Up

Well, you gave me my laugh for the day. After reading your slightly condescending instructions on your publication's current name directing that we "notice the 'r' between the 't' and the 'y' in country" I turned to the [February] cover of *Michigan Country Lines*. Imagine my surprise to see someone's head covering *Country* in the title—all you can see is the "c" and the "y". Turns out the 'r' is invisible—also the "o", "u", "n" and "t".

So please lighten up, as you have plainly (or not so plainly) shown. We all make mistakes.

Sharon Miller, East Jordan

## A Question of Subsidies

I have to take issue with your statements about renewable energy. [Comment, February] First, with solar PV (photovoltaics), the generous 30 percent rebate coupled with programs like DTE SolarCurrents and Consumers EARP programs puts the payback time for PV at about 12 years. The life expectancy of a PV system is 25 years, so, after the payback period, the cost of producing

is almost zero. Also, the low cost of producing electricity from coal is greatly exaggerated when you factor in the cost of mining and transporting it and not to mention the environmental cost. Also, you say that interest is not as high as is reported because of the number of net metered customers in the state. Not all customers net meter and I hear of more customers pulling the plug than ever!

John Wagner, via email

Mike Peters replies: I took issue with the statement in the MPSC report that "solar is reaching price parity." Price parity implies that the cost to generate solar is equivalent to the cost to generate with other (coal, natural gas, nuclear) sources of fuel. Your comment addresses the fact that solar is heavily subsidized, actually confirming my comment that solar has not reached price parity with the cost of conventional generation. The real cost of solar PV is subsidized so the customer does not have to pay the full amount.

As for your comment about the exaggerated cost of coal not including mining and transportation costs, the cost to generate with coal does include those costs. When a generator purchases coal, the price they pay includes the cost to mine it. Transportation can be part of the coal contract or it can be separated. Either way,

## MYSTERY PHOTO

Everyone who identifies the correct location of the photo below by **April 10** will be entered in a drawing for a **\$50 coupon redeemable for electricity from your electric cooperative.**

Call in your entry to *Country Lines* at 517-351-6322, ext. 306, email [jhansen@countrylines.com](mailto:jhansen@countrylines.com), or mail it to *Country Lines*, 2859 W. Jolly Road, Okemos, 48864. Include your name, address, phone number and co-op. The winner will be announced in the May 2010 issue.

The **January** contest winner is **April Darga** of Posen, who correctly identified the old iron ore dock in the lower harbor at Marquette.



Do you know where this is?

## Scholarships Offered

Each year, the Michigan Electric Cooperative Association awards two \$1,000 scholarships to qualifying applicants. Individuals are chosen based on their scholastic achievement and extracurricular involvement during their high school career.

The applicant's parent or guardian must be a member or employee of a Michigan electric co-op, and the applicant must be planning to attend a Michigan college or school full-time.

Selection will be based on grade point average, character, leadership, academic achievement, extracurricular and community activities, and essay response.

Applications are available at [countrylines.com](http://countrylines.com); click on "Youth," email [wolford@countrylines.com](mailto:wolford@countrylines.com), or call 517-351-6322, ext. 205, to request an application by mail. Eligible applications must be postmarked by **April 1, 2010.**



the cost to generate with coal that I quoted in the comment includes the fuel, transportation, and all related generation costs. And the fact that a well-maintained coal generation facility can last for 70 years supports the fact that coal is a relatively cheap source of generation fuel. Some coal plants have an output cost of less than 4 cents per kWh.

You are correct that the cost to generate with fossil fuels does not include all of the environmental externalities. Although there are considerable environmental costs that have been added to power plants to make burning coal as clean as possible, such as scrubbers and precipitators to remove sulfur dioxide, mercury and nitrogen oxide, there are still environmental and societal costs that are not captured in the cost of generation. With advancements in technology, there will be carbon capture available that will greatly reduce CO<sub>2</sub> emissions, as well as less all other pollutants associated with burning coal. I also recognize there are advancements being made in solar technology every day. I am hopeful that at some time in the future solar PV really will reach "price parity."

Finally, as for individuals pulling the plug and going off the grid, it has been our experience

that out of the approximately 350,000 electric meters served by electric cooperatives no member has gone completely to self-generation. We have had a few dozen members install wind or solar generation units, but none have fully disconnected, yet.

The bottom line is that we need all forms of generation to adequately and affordably meet power supply needs now and into the future. We support a mix of renewables, fossil fuel and nuclear generation, as well as energy efficiency as the best way to keep the lights on and keep it affordable.

### CFLs vs. Incandescents

I have on occasion seen time duration break-even points for incandescent and fluorescent lighting, but have forgotten the time frames involved as to most efficient use versus shut-off. In other words, how long does each type of light need to be turned off in order to overcome the additional electricity needed to restart the light? And are CFLs the same as other fluorescents, or is there a different break-even time of shut-off?

As we try to become more energy conscious in our homes and businesses, this type of "rule of thumb" information is helpful in deciding whether to turn off each type of light when leaving a room or is it better to leave the light on?

Donald Pishney, Williamsburg

We'll quote Umbra Fisk, the popular energy columnist at *Grist.com*, who quotes Anne Ducey, residential lighting program coordinator at Seattle City Light. Here's her unflinching bottom line:

"Turn out the lights if you are the last to leave a room, unless you are coming back within two minutes. Contrary to popular belief, turning lights on consumes no more electricity than they use when already lit. This is true for both fluorescent and incandescent bulbs. Out! Out!"



The 2010 Centennial Farm calendar, depicting centennial farms throughout Michigan, are still available for a reduced price. The program has certified more than 6,000 farms since 1948. Calendar price is \$8 + \$2 shipping. Send your order with payment to Michigan Centennial Farm Association, Box 80151, Lansing, MI 48908.



**Appliance rebates are now available through the economic stimulus package.**

The stimulus plan provides rebates for consumers who replace an old appliance with a new, energy-efficient model rated by Energy Star.

Each state's plan is unique. Visit

**[www.energysavers.gov/rebates](http://www.energysavers.gov/rebates)**

to find out how rebates can help you keep your electric bills affordable!

The American Recovery and Reinvestment Act of 2009 appropriated funds to each state for the establishment and administration of appliance rebate programs. The amount available to Michigan residents for refrigerators, clothes washers and dishwashers is \$6,641,514.

This is a first-come-first-serve rebate program launched February 10. Michigan residents who replace an existing appliance from an eligible category with a new ENERGY STAR® or CEE qualified appliance after February 10, 2010 may apply for the rebate.

Approved applicants will receive a Visa® Prepaid card via mail. A goal of the program is to stimulate the economy by encouraging consumers to replace old appliances with new energy efficient models.

To apply for the rebate, visit the program's website at [www.MIrebates.com](http://www.MIrebates.com) or call 1-866-621-8782.

Eligible Appliance Categories	Visa® Prepaid Rebate Value
Dishwashers - ENERGY STAR rating	\$25
Dishwashers - CEE Tier 2 rating	\$50
Clothes Washers - CEE Tier 3 rating	\$50
Refrigerators - ENERGY STAR rating	\$50
Refrigerators - CEE Tier 3 rating	\$100

**COMING UP:** ▶ Favorite recipes: **MOREL MUSH-ROOMS** by Mar. 10 and **SAUCES** by Apr. 10.

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

# Coming Clean on Washers

Wash clothes efficiently without getting caught in the spin cycle.

**W**ashing machines perform a fairly simple function: getting dirty clothes clean. Yet prospective buyers can be overwhelmed with all of the different models and “bells and whistles” available—top-loading, front-loading, high-efficiency (HE), water-saver, steaming, and wrinkle removing, to name only a few.

Energy-efficient washing machines, easily identified by the Energy Star® label, are a priority for any cost-conscious consumer's list. Approximately 93 percent of all American households have a clothes washer, adding up to 102 million clothes washers across America. About 9 million washing machines are sold each year, and efficient models account for slightly more than one-third of sales.

Energy Star-rated washing machines cost slightly more than their less-efficient counterparts, anywhere from \$400-1,500, depending on other features selected. To get a handle on how much electricity a particular unit will draw, pay close attention to the yellow energy guide before

making a purchase.

An energy-efficient washing machine can save the typical homeowner around \$50 a year, or \$540-\$600 over the life of the appliance. Efficient machines also save more than 5,000 gallons of water annually. The energy and water efficiencies of clothes washers are measured according to their modified energy factor (MEF) and water factor (WF). These criteria generally limit Energy Star qualification to front-loading and advanced top-loading models.

Front-loading clothes washers use a horizontal or tumble-axis basket to lift and drop clothing into the water, instead of rubbing clothes around a central agitator in a full tub. These units use less energy than conventional clothes washers by reducing the amount of hot water

needed to clean clothes. Front-loading models also squeeze more water out of clothes by using spin speeds that are two to three times faster than conventional washers, reducing both drying time and energy use.

Energy Star-qualified top-loading models typically use spray valves to rinse clothes, rather than a new tub of water. This method not only reduces the energy required for water heating, but typically saves an average of 15 gallons of water per wash, compared with conventional clothes washers.

Qualified top-loading models also boast sensors to monitor and adjust incoming water temperature. This keeps water hot enough to dissolve the detergent and provide high-performance cleaning, but cool enough to save energy and minimize hot water damage to fabrics. One limitation of efficient top-loading washers is that many models do not offer a high-temperature standard wash option.

By looking for the Energy Star logo and shopping at a store with knowledgeable staff, you should be able to leave with a new washing machine that will, over time, pay for itself.

*Source: NRECA's Cooperative Research Network*



## What's an Energy Factor?



An Energy Factor (EF), a mandatory evaluation done on all water heaters regardless of fuel source (natural gas, electricity, oil, etc.), indicates a water heater's overall energy efficiency based on the amount of hot water produced per unit of fuel consumed daily. This includes:

- **Recovery efficiency:** How efficiently heat from the energy source is transferred to the water.
- **Standby losses:** The percentage of heat loss per hour from stored water compared to heat content of the water.
- **Cycling losses:** The loss of heat as water circulates through a tank and/or inlet and outlet pipes.

The higher the EF, the more efficient the water heater. But keep in mind higher EF values don't always mean lower annual operating costs, especially when comparing fuel sources.

*Source: U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy*





Try the  
**Energy Depot**  
online home  
energy audit



# A Helping Hand on Energy Costs

Little houses don't use much energy, but family-size houses do. They have a lot of lightbulbs, many windows, and all kinds of places that simply leak energy. Your electric co-op has Energy Optimization programs that will help you **use electricity more efficiently**, and will even **pay you** to make the switch to more efficient products.

At [www.michigan-energy.com](http://www.michigan-energy.com) you'll find an online package of programs called **Energy Depot® for Homes**, where you can perform your own **home energy audit**, calculate your energy costs and learn what you can do to reduce energy use by **hundreds of dollars a year**. Plus, you'll qualify for a **free energy improvement kit** that will help you immediately reduce your energy use.

The **Appliance Recycling** program is now available. **We'll pay you \$30** to take that old, working refrigerator—the one in the garage chilling your beer and pop—off your hands.

Plus, **rebates** for compact fluorescent lighting, water heaters, other appliances, and furnace blowers continue. **Combine them with federal and state rebates** and save more.

**Commercial and Industrial (C&I) customers** can earn **incentives** for the installation of energy-efficient equipment, such as high efficiency lighting, heating, ventilation and air conditioning (HVAC) equipment, motors/fans/pumps/drives, water heaters, refrigeration, food service equipment and controls.

See more information about your co-op's EO program elsewhere in this magazine.

You'll find all these programs, and more, at  
[www.michigan-energy.org](http://www.michigan-energy.org) or call 877-296-4319



# Grappling with a Changing Energy Future

Electric co-ops search for new ways to keep electricity affordable in the face of federal carbon regulation. **Scott Gates**

Escalante Generating Station in Prewitt, NM, will utilize solar thermal technology—using mirrors to reflect sunlight to heat a liquid and create steam—to scale back the burning of coal. This illustration shows where the new solar facility will be located.



Tri-State Generation and Transmission Association

For decades, electric utilities across the country have relied on fossil fuels to do most of the grunt work, burning coal and natural gas to create steam, spin turbines, and generate electricity. While fossil fuels remain the most cost-effective way to create massive amounts of electricity, that may not be the case in the future.

Looming government regulations targeting climate change and carbon dioxide will add to the costs of operating fossil fuel-fired power plants. As the cost of generating electricity goes up, the cost to consumers inevitably goes up with it. As a result, electric cooperatives, along with other electric utilities, have launched several initiatives to limit carbon emissions while keeping electricity flowing and your electric bill affordable.

## Looming Regulations

In December 2009, the U.S. Environmental Protection Agency (EPA) declared that six greenhouse gases, including carbon dioxide, are “endangering public health and welfare” of current and future generations. Emissions from motor vehicles of four of those greenhouse gases, including carbon dioxide, were also said to contribute to air pollution.

The action comes in response to a 2007 U.S. Supreme Court decision (*Massachusetts v. EPA*) that opened the door to regulation of greenhouse gases under the federal Clean Air Act.

“The Clean Air Act as written was never designed to deal with carbon dioxide, and it could be awkward at best and probably a disaster, at worst,” warns Glenn English, CEO of the National Rural Electric Coop-

erative Association (NRECA).

In addition to potential carbon regulation from EPA, Congress is mulling over its own set of regulations, and English urges electric co-op members to continue to ask that any resulting legislation be fair, affordable and technologically achievable. If passed, Congressional legislation should also preempt use of any other existing laws—like the Clean Air Act—in order to avoid a regulatory disaster that would only add to costs for consumers.

“Regulation of carbon dioxide as a pollutant will occur with or without congressional input,” English explains. “But Congress must not simply add new legislation on top of old regulations. Any climate change bill should become the roadmap—the single strategy—for reducing carbon dioxide emissions at federal, state and local levels. By staying engaged in the process, electric co-ops can have a measureable impact on the outcome in order to keep electric bills affordable.”

## A Smarter Way of Doing Business

Once regulations are in place, whether under the Clean Air Act or from Congress, electric co-ops will be faced with the daunting task of meeting our nation’s growing electricity demands while finding cleaner ways to burn fossil fuels. Since coal, natural gas, and other fossil fuels currently account for more than 70 percent of all electricity generated in the United States, new technology will be key to keeping the lights on. Cleaner use of fossil fuels, an increased use of renewable energy, and a big commitment to energy efficiency

will all be necessary.

Simply using electricity more efficiently in residential, commercial and industrial sectors could lead to total energy savings of 236 billion kilowatt hours by 2030, according to the Electric Power Research Institute (EPRI), a non-profit, utility-sponsored consortium, whose members include electric co-ops. That’s a lot of power: equivalent to the electricity used in a year by New York City—14 times over.

A more efficient electric grid—often called a “smart grid”—could provide co-ops with a big payoff. More than 50 co-ops and public power districts in 15 states recently captured U.S. Department of Energy smart grid investment grants, a part of the American Recovery and Reinvestment Act of 2009 (better known as the federal stimulus bill).

The not-for-profit utilities are receiving more than \$215 million of the \$3.4 billion total awarded, amounts they will match with their own funds.

In addition, NRECA’s Cooperative Research Network (CRN) received a \$33.9 million smart grid grant for a wide-ranging project that joins 27 electric co-ops in 10 states. Local co-ops will match the grant money awarded, creating a pool of nearly \$68 million for technology development.

“Cooperatives, who are leading the industry in the deployment of smart meter infrastructure, have the potential to drive the national effort to understand which smart grid technologies work best and are cost effective,” remarks English.

Cooperatives’ use of advanced, or “smart,” electric meters, a fundamental smart grid



technology, jumped from 3.8 percent in 2006 to 16.4 percent in 2008—well above the industry as a whole—according to the Federal Energy Regulatory Commission (FERC). Michigan co-ops are well ahead of the curve in installing advanced metering infrastructure (AMI) on their systems, and some 30 percent of co-ops nationally have begun to integrate AMI with other systems, according to NRECA. AMI includes devices and software applications that enable two-way communications with smart meters and provide electric utilities, using frequent meter reads, with near real-time oversight of system operations.

Smart meters, which help consumers save money by lowering co-op operating costs, will be a big part of CRN's project: Approximately 132,000 are planned for installation. Other cost-saving components include 18,000 load control switches; nearly 4,000 in-home displays, smart thermostats, and other personal energy management devices.

"This represents the first opportunity for a nationwide pilot that tests end-to-end smart grid connectivity from a power plant all the way to a consumer's home," says CRN Executive Director Ed Torrero.

## Generating Innovation

While technology will get electricity to your home more efficiently and help consumers use it more efficiently, new methods of generating electricity are also being tested. Looming regulations make carbon dioxide-mitigation research a priority for any future fossil fuel-fired power plants.

Tri-State Generation and Transmission Association, a Westminster, CO-based generation & transmission co-op that supplies wholesale power to 44 local electric distribution co-ops in four western states, has recently joined with EPRI to host a study that will convert a 245-MW coal-fired power plant into a "hybrid plant."

Escalante Generating Station in Prewitt, NM, will utilize solar thermal technology—using mirrors to reflect sunlight to heat a liquid and create steam—to scale back the burning of coal when possible. The hybrid plant will work like this: on a hot summer afternoon, when the sun is scorching, air conditioners are on full-blast, and electricity demand peaking, solar generation will switch on so less coal needs to be burned. When the sun goes down and the flow of solar power begins to drop, the coal generation side of the plant steps up to keep electrons flowing.

In this way, a plant will emit less carbon dioxide while also using less fuel.

We need your help to avoid...

## A "Glorious Mess"

**W**ashington and politicians in general have slipped in the eyes of the American people. Recent polls show that only 37 percent express a favorable opinion of Congress, while 52 percent hold an unfavorable view. Positive opinions of Congress have been declining for some time.

Sometimes, the American people are justified in their dim view of Congress. The partisanship seems to be running at an all-time high as both parties believe they can "pick up seats in the next election." "Rule or ruin" seems to be the game plan on both sides of the aisle.

But there is one issue that appears to have bipartisan support: the EPA should not move forward with regulating carbon dioxide under the Clean Air Act without clear authorization by Congress. Although Congress has yet to pass legislation to control greenhouse gases, the Environmental Protection Agency (EPA) is considering new rules and regulations under the Clean Air Act to limit greenhouse gas emissions from power plants, and that could lead to higher electric bills for everyone.

EPA bureaucrats want to use the Clean Air Act to enforce their new rules—but Congress never intended for EPA to address climate change this way. The Clean Air Act was not designed to address climate change. It's the wrong tool for the job and if allowed, says Michigan Congressman John Dingell, one of the primary authors of the Clean Air Act, it will result in a "glorious mess." I couldn't agree more.

This issue is the responsibility of Congress. It is not for bureaucrats at EPA to decide. This is where your help is needed. We must convince our members of Congress that they need to put the partisan wrangling aside and come together to rein in the EPA and their efforts to regulate without Congress-



**Michael Peters** is president and CEO of the Michigan Electric Cooperative Association. His email address is mpeters@countrylines.com.

sional direction. We know that regulating CO<sub>2</sub> will lead to higher energy costs. We have seen various estimates of those costs based on the various approaches. Some approaches are more manageable than others. Although we don't know which direction Congress will ultimately take,

cap-and-trade or a carbon tax, we do know that if EPA does move ahead on their own, the regulations will be more onerous and more costly than if Congress were to act.

Your representative in Congress and your U.S. senators need to know you're concerned about this issue. Tell your legislators that Congress needs to step in and prevent EPA from using the Clean Air Act as a tool for reducing greenhouse gas emissions. It's the role of Congress to determine any climate change policy—and to ensure that the impact of that policy is fair and keeps electricity affordable for all Americans.

Thankfully, some in Congress understand this. They've recently introduced legislation to stop EPA from acting. **You can tell our delegation to support this legislation**

**by logging-on to OurEnergy.coop.** By doing so, you will be telling your member of Congress that this issue is important, too important to let unelected EPA bureaucrats take the lead. Your emails and postcards can urge lawmakers to co-sponsor legislation to stop EPA from moving forward, because it's Congress' responsibility to determine how to best deal with greenhouse gases—while at the same time keeping electric bills affordable. Let's help Congress help themselves improve their record in the eyes of the American voter.



# Lighting Innovations on the Horizon

A new lighting product quickly making gains in the market may one day overtake compact fluorescent lights (CFLs) and other types of lights in many applications. Light emitting diodes (LEDs) are being hailed as the next great innovation in lighting, promising long life, great light quality, and super efficiency. However, the ultimate promise of LED technology is still on the horizon.

The Cooperative Research Network (CRN) partnered with several electric cooperatives throughout the United States to test a variety of LED lamps as alternatives to conventional lighting or CFLs. Electric co-ops are optimistic about LED technology because of the following consumer benefits:

- ▶ LEDs last longer, perhaps for decades;
- ▶ LEDs can run on substantially less energy than CFLs or other fluorescents;
- ▶ With no mercury content, LEDs are more environmentally friendly;
- ▶ The products are rugged and more resistant to breakage;
- ▶ LEDs perform well in cold climates, especially outdoor applications;
- ▶ LEDs are dimmable and produce a more pleasing light.

As promising as the technology appears, the path to seeing store shelves stocked with reliable and affordable LEDs may be a long and rocky one. Limited light output and high initial prices are barriers to widespread LED use. In the current economy, consumers will not purchase LED lighting until manufacturers bring down costs significantly.

## The Cost of an LED

An initial investment in an LED fixture is far greater than for an incandescent bulb—sometimes as much as 100 times more expensive when compared to a 100-watt Edison bulb priced at \$1. However, the total cost of ownership over its lifetime, including the energy cost to run the light and replacement costs, puts the LED in a more favorable light.

When LEDs are perfected, it should take about 50 incandescent bulbs, or eight to 10 CFLs, to equal the life of one LED lamp. LEDs also are expected to be about 20 times more efficient than an incandescent bulb.

The Edison lightbulb creates light by heating a filament, an inefficient process that actually produces more heat than light. LEDs, on the other hand, create light through



## Comparing Lifecycle Lighting Costs

	Incandescent Bulb	LED Lamp
Useful Life	50,000 hours. Requires 50 replacements	50,000 hours. Requires no replacement
Wattage	100 watts	10 watts
Cost of bulb/lamp	\$1	\$100*
Energy costs to operate	\$500	\$54
Total Cost of Ownership	\$550	\$154

Source: Cooperative Research Network \*Estimated cost of high end LED lamp. Even at this exaggerated cost the lifetime savings of the LED may make sense for some consumers.

GE's 7-Watt Energy Smart PAR20 LED, created for use in restaurants and other commercial settings, cuts energy use by 77 percent—but typically costs more than \$30. When you compare the lifecycle cost of a light source, the question is: Which would you rather pay—\$550 to use an incandescent bulb, or \$154 to use an LED?

a semiconductor chip mounted on an electronic circuit board. When energy passes through the chip, it creates bright light and almost no heat on the bulb itself.

LEDs are not entirely new. In fact, they are the familiar red or blue indicator lights on electronics panels, computers, and even traffic lights. Over the last two years, there have been technological strides in the development of white, high-brightness LEDs. This opens opportunities for much broader lighting applications within our homes, offices, and for outdoor street lighting. Several electric co-ops are working with CRN to test LED

lamps in parking lots, roadways, farms and schools. The test results will give co-ops a strong voice with manufacturers in creating new LED lamps that will be less expensive, last longer, and benefit consumers.

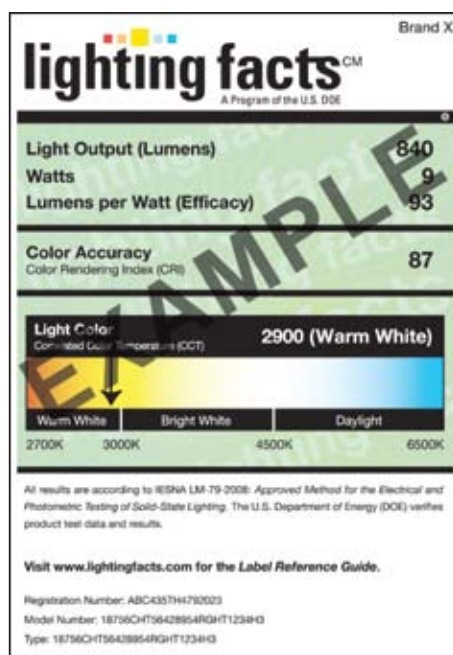
## A Strong Word of Caution

Poor quality LED products are flooding the marketplace and are easily purchased on several well-known websites and through big box retailers. Many products promising to be “good for the planet” are not as environmentally friendly as claimed. Several of these products are manufactured outside the United States with components that produce low light levels, don't last long, or have exaggerated energy-saving claims.

With LED lamps, you get what you pay for. A product that costs \$15 is likely to provide less light and have a shorter life than one that costs \$50. Even high-quality LED lamps are in a relatively early stage of development and few have undergone rigorous testing.

The Department of Energy (DOE) is establishing Energy Star® standards for LEDs. Until this happens, DOE encourages consumers to become educated before investing in LEDs and to look for the SSL Quality Advocate label (see left), which is similar to the one used by the FDA for food labeling.

LED lighting holds a great deal of promise. However, most ready-for-prime-time LED products are in only a few niche applications, such as task and display case lighting. General illumination lights are still a work in progress. Smart consumers will do a little homework before purchasing LED lights.



Sample of what a SSL (Solid-State Lighting) Quality Advocate label looks like.



# Soy

## April is National Soyfoods Month

Eating soyfoods daily has many health benefits:

- Protection against osteoporosis
- Alleviation of menopausal symptoms
- Make room for soyfoods on your plate, a great way to support your health and Michigan agriculture.
- Prevention of certain cancers
- Help with lowering cholesterol

### *Better Bran Muffins*

1 ¼ cups flour  
½ cup soy flour  
1 cup bran flake cereal  
½ cup brown sugar  
1 teaspoon baking powder  
1 teaspoon baking soda  
¾ teaspoon ground cinnamon  
⅛ teaspoon ground cloves  
2 slightly beaten eggs  
⅔ cup soymilk  
½ cup raisins  
¼ cup soyoil



Spray muffin pan with vegetable cooking spray or line with paper baking cups. Stir together all dry ingredients. Combine eggs, soymilk and soyoil. Add egg mixture to flour mixture; stir until moistened. Fold in raisins. Fill muffin pan ⅔ full.

Bake in a 400°F oven for 15-20 minutes. Yield: 12 muffins.

Per serving (1 muffin): 134 calories, 4.7 grams protein, 26.4 grams carbohydrates, 6.7 grams total fat, 0.8 grams saturated fat, 30 mg cholesterol, 188 mg sodium. Source: [www.soyfoods.com/recipes](http://www.soyfoods.com/recipes)



**MICHIGAN SOYBEAN  
CHECKOFF**

*Effective. Efficient. Farmer-Driven.*  
[www.michigansoybean.org](http://www.michigansoybean.org)





Abby

**T**wo-year old Toad was left by the roadside, so dirty and matted that he had open sores.

Five-year old Chester was discovered lying in a yard with his leg shattered from a shotgun blast.

Had these victims been human, the people responsible for such cruelty would have faced criminal prosecution. But these were dogs.

Lucky for Toad and Chester, there are people like Pauline Hancock of Atlanta, MI, and Sandy Bassett of Caro. With other dedicated volunteers, they care for thousands of unwanted and injured pets while seeking "forever homes" for them.

### Elk Country Animal Shelter

For years, the Montmorency County Sheriff's Department animal control section provided the only stray dog shelter in Atlanta. The animals had to be housed outdoors and minimal care was available.

In fall 2002, Pauline Hancock, a Presque Isle Electric & Gas Co-op member, held a meeting with fellow citizens and started a volunteer group called the Elk Country Animal Shelter (ECAS). The volunteers helped at the shelter with cleaning, vaccinations and promoting adoptions.

In April 2009, ECAS opened its own facility after volunteers raised enough funds to renovate a building next to the Sheriff's Department.

Through strictly volunteer efforts, Pauline explains, "they created something from nothing with only their hearts, brains and hands." About 30 volunteers now work at the shelter, and many more help with fundraising. As executive director, Pauline also sits on the board of directors, and her husband Dave chairs the building committee.

Since opening, the new shelter has already accepted 206 dogs, 131 cats, and five other animals, including a pet rat named Stuart. So far, 78 dogs, 88 cats, and all the other animals, including Stuart, have been adopted.

"We're good at what we do," Pauline explains. ECAS provides vaccinations, worm-

**Left:** Sandy Bassett, of Caro, cuddles puppies she is sheltering at her home until they can be adopted to "forever homes."

# RESCUE ME

Two Country Lines 2009 Volunteer of the Year nominees create 'Happy Tails.' **Linda Kotzian**





Elvira



Jena



John and Jean



Chewy

Photos: Pet Friendz

ing, and basic care. Local veterinarians volunteer to provide rabies vaccines, microchip all the animals, and spay or neuter them at no charge before they are adopted.

Pauline describes Montmorency County as one of the poorest in Michigan. "But that doesn't stop the help from coming to us," she adds, and is grateful for that.

Pauline first rescued a litter of barn kittens when she was 12. "I loved animals even when I was little and always thought it was an honor to be liked by them," she says.

Cathy Hehir, a fellow volunteer who adopted a golden retriever says, "Pauline is a tiny powerhouse of a woman who knows how to relate to animals, even injured and frightened ones. She's our own little 'dog whisperer.'"

Pauline acknowledges how difficult it is to see animals in pain and afraid, but the breakthrough can be as simple as a friendly lick on the hand, and the work can also bring unexpected smiles. While she and Dave were bathing a rabbit named Emily, they noticed what appeared to be two tumors on the animal's underside. It turns out they weren't tumors, and Emily was renamed Elmer.

Pauline and Dave adopted Elmer, plus three dogs, a cockatiel, and three cats, and she still says the best part of their work is seeing an animal placed in a "forever home." It benefits the animal *and* enriches the life of the person who adopts.

### Cass River Pet Friendz

Sandy Bassett, a Great Lakes Energy Co-op member, brought so many animals home when she was little that her parents threatened to banish her.

As an adult, she took early retirement and began a "critter sitter" business in Caro. But people began bringing her strays, and so she started trying to find homes for them, too.

By 2001, Sandy and a group of volunteers started a rescue operation called Cass River Pet Friendz. Unlike most shelters, rescue organization volunteers generally care for animals in their own homes. At Pet Friendz, just five people care for the animals, handle paperwork, and hold fundraisers.

Since 2001, Sandy has cycled over 1,842 animals through her home, and adopted two

shih tzus, Charley and Marley.

Since cats reproduce in large numbers if not fixed, they are the largest challenge in time and expenses. With an unemployment rate of 17 percent locally, Sandy worries about the group's revenues.

"Money is down and calls for assistance are way up," she reports. Grants subsidize local fundraising, but they often come earmarked for spaying and neutering, so Sandy hesitates to label the group as a "no kill" refuge.

"We have to make hard choices that can result in euthanasia if an animal is vicious or not trainable," she explains. "We try to do the best thing for the animal, but there are many sleepless nights."

"No one except those who work with her understand the sacrifices Sandy has made to follow her heart with this endeavor," says Susan Green, a fellow volunteer.

Cindy Fox, who's miniature Schnauzer, Sully, is a steady customer of Sandy's pet day care, became a Pet Friendz volunteer out of admiration for Sandy. Eight years ago, Cindy brought a grimy dog to Sandy after finding him running loose. When Cindy visited a few days later, a beautifully groomed dog greeted her—it was Sully, and she adopted him.

### As for Toad and Chester...

A truck driving couple adopted Toad after Sandy transformed him from a mass of tangled fur into a beautiful shih tzu. They bring Toad to visit her when they pass through.

Chester's leg was amputated, and the Hancocks adopted him. Pauline says the Lab-mix dog "can run like crazy" even with just three legs.

To Pauline and Sandy, the best happy endings come with tails.

## Donkeys Need Friends, Too

There are many animals that need our help, but one of the more unique rescue operations we found in Michigan is for donkeys.

Sharon Windsor is the founder of Turning Pointe Donkey Rescue, where she currently shelters nearly 70 of all types on her farm near Dansville. With a few volunteers to help, she finds homes for about 20-25 per year.

Why? "Because they are the most loving, intelligent, fun, and given enough time and patience, the most forgiving of any creature I have ever met," she explains. Donkeys are very intelligent, she says, and due to their cautious, not stubborn, nature they cannot be forced to do anything they feel is unsafe.

"One of the most loving donkeys here was the victim of a shooting," Windsor

adds, and another was so abused her only defense was to kick at anyone who came near because she was too lame to run away from her tormenters. Others were loved pets, but due to an owner's ill health or death they needed new homes. Still others come from auctions, a law enforcement seizure, or from people that never should have gotten a donkey in the first place.

If you have a donkey(s) you want to surrender, Turning Pointe is happy to welcome your animal and find it a new home.

If adopting a donkey just doesn't work, sponsoring one with a donation makes a unique gift for an animal lover, who will be sent regular news and pictures of their rescued donkey. Contact Sharon Windsor, as noted in the box below.



Joe Blow

Photo: Sharon Windsor

**Elk Country Animal Shelter, Atlanta**  
989-785-3738  
elkcountrysanctuary.org

**Cass River Pet Friendz, Caro**  
P.O. Box 513, Caro, MI 48723-0513  
petfriendz.org

**Turning Pointe Donkey Rescue**  
517-623-0000  
turningpointdonkeyrescue.org

**Adoption/Find a Shelter/Your Area:**  
adoptapet.com  
800-728-3273

# Early Intervention Improves Young Lives

**A**t the risk of sounding hopelessly uncool, I confess that every so often I long to turn back the clock for today's children. Back to a time when families had fewer things, but more time together. When children sought adventure in family-friendly neighborhoods. When teens talked to people in the room, undistracted by digital "chats."

But then I remember at least one thing I don't miss about raising and teaching children in the "old days." We used to wait for children to fail before we'd take much action to improve their chances of success. "Don't worry," we'd tell parents. "What will be, will be. Let's wait and see if things get better on their own."

These days, we know better. We know that if a child experiences a developmental or learning delay, this can compound over time. By intervening early with appropriate therapies for children and families, we minimize these delays and maximize our kids' chances of reaching normal milestones in development and learning.

"Don't worry, but don't wait," we tell parents today. And this philosophy is making all the difference, both before and during their days at school.

## Reaching the Youngest Learners

Two free services exist in counties across Michigan to help young children who may not seem to be growing, developing or learning at the same pace as others their age. Early On provides services and support to infants and toddlers up to age three.

Project Find serves children ages three and older by making families aware of special education supports and services provided in public schools. Both programs offer answers to questions parents may have, and deliver services and support to children who qualify.

Early On is a federally-funded system of early intervention services under Part C of Individuals with Disabilities Education Act. Project Find is funded under Part B of the same act through a grant from the Michigan Department of Education. Both programs

are coordinated by Michigan's intermediate school districts or regional service agencies.

Early On intervention involves specialized education and therapy services for the child, as well as support for the whole family through information, advocacy and emotional support. The process may begin with a telephone call from a parent, referral from a physician, or a visit in the hospital when a child is born. It may lead to a home visit to learn more about the child's needs.

If the child needs help, Early On staff will tell parents how to get it at little or no cost. Infants or toddlers up to three years old may qualify for speech services, physical or occupational therapy, or other support. Services are often delivered directly to the child at home, and parents and caregivers are also given tips and support on how to assist the child.

Anyone who has concerns about an infant or toddler's development, behavior, speech and language, physical impairment or delay, can visit 1800EarlyOn.org or call 800-EARLY-ON.

Project Find addresses concerns about children or youth over age three. Project Find refers individuals up to 26 years of age for a free evaluation to help identify physical, social, emotional or learning conditions that prevent a young person from learning in school. The evaluation is the first step in getting the help he or she needs. These young people may be eligible for free special education services provided by Michigan public schools.

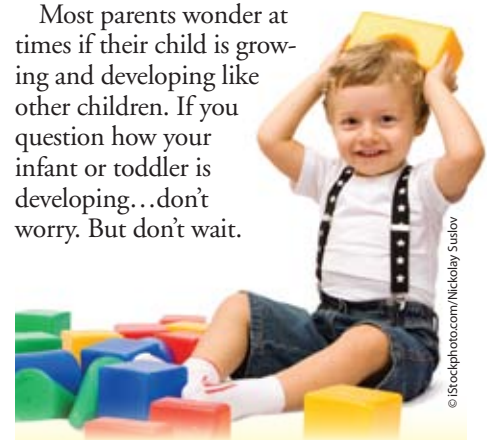
Early intervention is an important factor in special education for children with disabilities. Research during the 1960s and '70s showed that the earlier children received special education, the better their outcomes. Research also showed that families who were supported earlier were more empowered to advocate for their child later on.

In Michigan, eligible children, youth and young adults may receive special educational services from birth through 25 years of age. And by the way, all Michigan's children with disabilities, including those who are homeless or wards of the State, and who attend private schools, regardless of the severity of

their disabilities, are eligible under the law for special education services.

Anyone can make a referral for a Project Find evaluation. A free evaluation is available for individuals from birth to age 26. All information contained in the evaluation and educational program is confidential. To learn more, visit [ProjectFindMichigan.org](http://ProjectFindMichigan.org) or call 800-252-0052.

Most parents wonder at times if their child is growing and developing like other children. If you question how your infant or toddler is developing...don't worry. But don't wait.



## Step-by-step guide to your baby's growth

### By 3 Months, Does your baby...

- Roll from side to side?
- Play with her hands?
- Laugh out loud?
- Look at a rattle?

### By 6 Months, Does your baby...

- Pass things from one hand to the other?
- Look at herself in the mirror?
- Sit up with little support?
- Roll over?

### By 12 Months, Does your baby...

- Wave goodbye?
- Drink from a cup without help?
- Stand alone for at least two seconds?
- Use a few short words like "mama?"

### By 24 Months, Does your toddler...

- Walk and run well?
- Handle a spoon well?
- Ask for things by name?
- Use two or three words together?



NOW EXTENDED UNTIL MARCH 31st!

# GEO THERMAL HOMEOWNERS STIMULUS

## EVENT

Available to ALL geothermal customers

30% tax credit from Uncle Sam

Up to \$2000 rebate from WaterFurnace

*Thanks to the Geothermal Homeowners Stimulus Event, there's never been a better time to buy WaterFurnace products.* WaterFurnace is offering up to **\$2000 in rebates to returning customers and \$1000 to owners of any other geothermal brand** who upgrade to Envision or Synergy3D units. When added to **the 30% federal tax credit\*** and any local incentives, it's clear this is a very special opportunity.

**Update:** Due to the tremendous success of the Geothermal Homeowners Stimulus Event, WaterFurnace has **extended the program to March 31st!** Call your local WaterFurnace dealer today, or *visit [waterfurnace.com/event](http://waterfurnace.com/event)* to learn more.

### 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**  
Great Lakes Plumbing & Htg  
(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**  
Great Lakes Plumbing & Htg  
(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**  
Great Lakes Plumbing & Htg  
(231) 347-3900

**Palms**  
Lakeshore Improvements  
(989) 864-3833

**Traverse City**  
D&W Mechanical  
(231) 941-1215

Geofurnace Htg & Clg  
(231) 943-1000

**Webberville**  
Applegate Home Comfort  
(800) 377-2272

**Zeeland**  
Mast Heating  
(616) 772-2252

**WaterFurnace.**  
Smarter from the Ground Up™



visit [waterfurnace.com/event](http://waterfurnace.com/event)

\*Consult a tax professional for advice on tax credit. Rebate available only to residential customers through participating dealers. WaterFurnace is a registered trademark of WaterFurnace International, Inc.



Canned or fresh, a healthy favorite any time. Find many more recipes at [countrylines.com](http://countrylines.com).

### Crustless Tuna Quiche

- 1 T. butter
- 1/3 c. chopped onion
- 1/4 c. chopped red or green pepper\*
- 4 eggs
- 3 T. flour
- 1/4 t. salt
- 1/8 t. pepper
- 1 1/2 c. milk
- 1 1/2 c. shredded cheddar cheese
- 1 6 1/2-oz. can tuna in water, drained and flaked

Melt butter in a small skillet. Sauté onion and pepper until tender, about 3 minutes. Combine eggs, flour and salt in a medium-sized mixing bowl; beat until well-blended. Stir in milk; add cheese, tuna and sautéed vegetables; mix well. Pour into a well-buttered 9-inch pie plate. Bake at 350° for 45-50 minutes or until knife inserted near center comes out clean. Cool 10 minutes before serving. \*Pimento, carrots or mushrooms can be substituted for peppers.

Olivia Hayward,  
South Boardman

### Tuna Florentine

- 6 T. butter or margarine
- 1/2 c. chopped onion
- 1/4 c. flour
- 1/2 t. salt
- dash nutmeg
- 2 c. milk
- 6 oz. Gruyère cheese, shredded
- 2 7-oz. cans tuna, drained and flaked
- 2 10-oz. pkgs. frozen, chopped spinach, thawed and drained
- 1/2 c. fine dry bread crumbs
- 1/4 c. grated Parmesan cheese

Melt butter or margarine in a medium-size saucepan; sauté onion just until soft. Stir in flour, salt and nutmeg; cook, stirring constantly, just until bubbly. Stir in milk; continue cooking and stirring until sauce thickens and bubbles, about 1 minute. Remove from heat. Stir in shredded cheese just until melted; add tuna. Place spinach in the bottom of a lightly greased 6-cup baking dish. Spoon tuna-cheese mixture over top; top with crumbs and parmesan cheese. Bake at 350° for 25 minutes or until golden. Yield 8 servings.

Nancy Krzykwa, Alto

### Hot Crossed Tuna with Cucumber Sauce

- 2 6 1/2-7 oz. cans tuna, drained
- 1 10-oz. pkg. frozen peas, thawed
- 1 c. shredded sharp cheddar cheese
- 1 c. diced celery
- 1/2 c. bread crumbs
- 1/4 c. chopped onion
- 1/4 t. salt
- Dash pepper
- 1 c. mayonnaise or salad dressing
- 8 oz. pkg. crescent rolls

#### Cucumber Sauce:

- 1/2 c. mayonnaise or salad dressing
- 1/2 c. sour cream

- 1/2 c. chopped cucumber
- 1 T. chives
- 1 t. parsley
- 1/4 t. dill weed

Combine sauce ingredients; mix well and chill until casserole is ready. Combine all casserole ingredients, except rolls; mix well. Spoon into a 7x10-inch baking dish. Separate dough into 2 rectangles. Press perforations to seal. Cut into 4 long and 8 short strips. Place over tuna mixture in a lattice design. Brush lightly with a little salad dressing and sprinkle with sesame seeds if desired. Bake at 350° for 35-40 minutes. Serve with chilled cucumber sauce.

Sharon Walcott, Grandville

### Tuna Cakes

- 2 6-oz. cans light tuna in water, drained
- 1 pkg. stuffing mix for chicken
- 1 c. shredded cheddar cheese
- 1/2 c. shredded carrots
- 1/3 c. mayonnaise
- 2 T. pickle relish
- 3/4 c. water

Mix all ingredients, cover and refrigerate for 10 minutes. Heat 3 tablespoons oil, in a skillet, on medium heat. Scoop tuna mixture into a skillet with an ice cream scoop. Flatten cakes, cook 3-4 minutes on each side or until golden brown on both sides. Yields 6 servings.

Mary Waterbury, Fenton

### Tuna Fish Pie With Cheese Roll Crust

#### Cheese Roll Crust:

- 1 1/2 c. flour
- 3 t. baking powder
- 1/2 t. salt
- dash cayenne pepper
- 3 T. shortening
- 1/2 c. milk
- 3/4 c. grated cheddar cheese, or other
- 2 pimentos, chopped

Combine flour, baking powder, salt, pepper, shortening and milk. Mix with a fork until a soft dough forms. Roll dough into an 8x12-inch rectangle. Top with cheese and pimentos. Roll up jelly-roll style. Cut into 8 slices; flatten slightly.

#### Tuna Fish Pie:

- 1/2 c. sliced green pepper
- 1 onion sliced
- 3 T. butter
- 6 T. flour
- 1/2 t. salt
- 3 c. milk
- 1 lg. can tuna, drained
- 1 T. lemon juice
- grated cheddar cheese, or other

In a saucepan, melt butter. Add peppers and onions; cook until brown. Add flour and salt; blend. Add milk slowly, stirring constantly. Boil 2 minutes. Add tuna and lemon juice. Pour into a 9x13-inch baking dish. Top with prepared cheese rolls. Cover with grated cheese; bake at 450° for 30 minutes.

Sylvia Behrens,  
De Tour Village



## Tuna Fish Dip

1 12-oz. can tuna fish,  
drained  
8 oz. cream cheese  
1/4 c. soy sauce  
1 med. onion, finely diced  
1 T. parsley flakes  
1/4 c. chopped nuts

Combine all ingredients, except nuts, in a bowl; mix well. Shape mixture into a ball and roll in nuts. Chill well. Serve with crackers or chips.

*Dorothy Hessell,  
New Haven*

## Tuna Crunch

1 c. chopped celery  
1/2 c. chopped onion  
1 T. butter  
1 T. water  
1 can cream of mushroom soup  
3/4 c. water  
6 oz. can tuna, drained and  
flaked  
3 oz. can Chinese noodles  
1/2 c. frozen peas

In a saucepan, sauté celery and onion in butter and 1 tablespoon water until tender. Add soup, water, tuna, noodles and peas; mix well. Place mixture in a buttered, 1 1/2-quart casserole dish. Bake, uncovered, at 350° for 30 minutes.

*Connie Foltz, McMillan*

## Broccoli and Tuna Roll-ups

1 can cream of mushroom soup  
1 c. milk  
1 12-oz. can tuna in water,  
drained and flaked  
1 10-oz. pkg. frozen broccoli  
florets, thawed and drained  
1 1/2 c. shredded cheddar  
cheese, divided  
1 lg. can French-fried onions  
6 super-sized flour tortillas

Combine soup and milk; set aside. Combine tuna, broccoli, 1 cup cheese and 1/2 can onions; stir in 3/4 cup soup mixture. Divide the tuna mixture into the tortillas and roll up. Place seam-side down in a lightly greased, 9x13-inch pan. Pour remainder of soup mixture over the tortillas. Cover with foil and bake at 350° for 35 minutes. Top with remaining cheese and onion; bake uncovered 5-7 minutes longer, until onions are brown and cheese is melted.

*Lynn Bischof, Traverse City*

## Mashed Potato Tuna Patties

2-3 c. mashed potatoes  
6 oz. can tuna, drained  
1 sm. onion, diced  
flour



Combine potatoes, tuna and onion. Form into balls and roll in flour. Flatten balls into patties. In a skillet with a bit of oil, fry patties on both sides until crispy.

*Beverly Callewaert, Hersey*

## Tuna Tulips

### Biscuit dough:

2 c. flour  
1/3 c. shortening  
3 t. baking powder  
3/4 c. milk  
1/2 t. salt

### Tuna filling:

1 c. chunk tuna  
1 c. diced celery  
1/4 c. salted peanuts  
1/2 c. mayonnaise  
1 T. lemon juice  
1 t. grated onion

To prepare dough, stir dry ingredients and shortening together until mixture forms coarse crumbs. Add milk; stir with fork until blended. Turn mixture onto a board and knead 10 or 12 times. Roll dough 1/2-inch thick, forming a 12x18-inch rectangle. Cut into six squares. Place squares into a greased muffin tin. Combine filling ingredients; mix well. Spoon mixture into dough-lined muffin tin. Fold corners over and seal by pinching tops together. Bake at 400° for 15-20 minutes until brown.

*Velma Mahler, Berrien Springs*

**Send in your recipes!** If published, you'll receive a free kitchen gadget. Send in: **MOREL MUSHROOM recipes by March 10, SAUCE recipes by April 10 and APPETIZER recipes by May 10.** Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email [jhansen@countrylines.com](mailto:jhansen@countrylines.com).

## Curried Tuna

1/4 c. butter  
2 t. curry powder  
2 green onions, with tops, thinly  
sliced  
3 c. cooked rice  
1/4 c. hot water  
1/2 t. salt  
1/4 t. ground ginger  
1/8 t. garlic powder  
1/8 t. ground red pepper  
1 12 1/2-oz. can albacore tuna  
in water, drained

1 hard-boiled egg, chopped  
1 T. parsley

In a large skillet, over medium heat, cook and stir butter, curry powder and onions. Stir in rice, water, salt, ginger, garlic powder, red pepper and tuna. Cook and stir until tuna is hot, about 5 minutes. Sprinkle with egg and parsley.

*Cheryl Murray, Armada*

got recipes?  
want coupons?

[www.justapinch.com](http://www.justapinch.com)

## Delightful, Delectable

# Daylilies



Photo - PerennialResource.com

**Y**ou can have your flowers and eat them, too, with this hardy perennial.

The daylily (*Hemerocallis* species) is an old-time favorite that grows in all climates. Early settlers carried it to all ends of America because of its beauty, endurance and adaptability to a wide range of soils, and for another practical reason: It's edible.

Today, more and more gardeners are rediscovering the delicious daylily. Not to be confused with true lilies, daylilies grow from tuberous, fleshy roots rather than bulbs. Daylilies have been eaten for centuries in Asia, where they originated.

During summer, the daylily buds and blossoms are the sweetest parts—particularly the yellow and orange, which contain more vitamins A and C than beans. Raw or boiled, stir-fried or steamed, they can be eaten with other vegetables. With their savory taste and gelatinous consistency, the blossoms add a flowery zest to soups and vegetable dishes.

Blossoms may also be dipped in a light batter of flour and water and fried. Unopened flowers are boiled 3 to 4 minutes, then served with butter and salt or dipped in egg batter and quickly fried golden-brown in hot oil. Dried petals are an ingredient in Chinese hot-and-sour soup.

At almost any time, roots can be eaten raw

or added to salads, soups and stews. Boiled, stir-fried or creamed, they can be served as a side dish to substitute starches such as peas or potatoes. The flavor is similar to asparagus.

A strong word of caution: Some people are allergic or otherwise sensitive to daylilies, just as they can be to other vegetables. When first sampling any part, try only a small bite, and do so only when other people are around. Don't swallow if it tastes bad. If it tastes good, then wait at least an hour before trying again, and then only a small amount.

Tolerating freezes, hot temperatures, dry spells and dampness, the hardy daylily thrives in full sun, semi-shade, in containers, in the yard, or on a balcony. Almost any soil works, but for best results, add plenty of compost or other well-rotted organic material. Keep them moist during the flowering season. Side dressings of compost or seasoned manure can improve performance. Usually they respond very well to fertilizer.

The American Hemerocallis Society (AHS), the top authority on daylilies, recommends selection of varieties to plant from winners of its Popularity Poll. Winners are judged annually across the nation in each AHS region.

Winners from each region perform well in each geographic area. For the 2009 winners, access [daylilies.org/PopPoll/2009](http://daylilies.org/PopPoll/2009). Visit

[daylilies.org/AHSreg.html](http://daylilies.org/AHSreg.html) for a map of the 15 AHS regions. Winners can be found at gardening centers nationwide. Local daylily clubs are a good source of cultural information for specific locations, and clubs are listed for each region.

### Planting and Care

In northern areas, daylilies should be planted six weeks before the first hard frost, typically by Sept. 1. Southern growers may be able to plant during winter. Over-wintering in containers or raised beds is not advised in extremely cold climates, such as USDA hardiness zone 5 and colder.

Each plant needs about 2 feet of space, as they multiply rapidly and form large clumps. Those planted in winter usually flower the first season and reach full bloom during the second and third year.

The time to feed is when plants show new growth after dormancy, usually March. If possible, it is also a good idea to fertilize daylilies a second time, a few weeks after they finish blooming.

You can safely leave a daylily clump to grow for 10-15 years. Dividing is simply a matter of digging up, cutting into quarters with a spade or sharp knife, then replanting separately.

Apart from their tastiness and beauty, daylilies are resistant to most pests and diseases, and are sold in nearly every shade of the rainbow, with various forms and bloomtimes.

More than 65,000 varieties of daylilies have been bred since the early 1900s, when only yellow, orange and rusty reds were available. Modern hybrids offer a wide range of heights, a broader spectrum of colors and patterns, more robust flowers of varying sizes, and higher bud counts.

### Daylily Resources

Many daylily recipes can be found on the internet, for example through Recycled Gardens, a division of POPPA Inc., at [poppainc.org/pdfs/Daylily\\_recipes.pdf](http://poppainc.org/pdfs/Daylily_recipes.pdf).

The American Hemerocallis Society publishes *The Daylily Journal*, a quarterly magazine featuring new cultivars, how-to articles on care, feeding, hybridizing and more. Visit their website at [daylilies.org](http://daylilies.org) for membership details and access to a wealth of resources, including retailers and a list of the society's Daylily Display Gardens.

GrowDesignerPlants.com is another good information source, and daylilies also ship well by mail order.

*John Bruce is an editor, writer and gardener.*



**Enjoy your best garden ever  
—without breaking a sweat.**



## DR® ROTO-HOG™ POWER TILLER

**FAR FASTER & EASIER** to use than hard-to-handle, walk-behind tillers.

**BIG ENGINE POWER** is ideal for large gardens, landscape projects, and food plots.

**TILL A 3-FOOT SWATH** with each pass — twice the width of most walk-behind tillers!

**CREATE PERFECT SEEDBEDS** with smooth and deep-tilling action of 24 steel bolo tines.



68439X © 2010 CHP, Inc.



**CALL TODAY for a FREE DVD and Catalog!**

**TOLL FREE 1-888-206-0185**

**www.DRrototiller.com**



**For smaller jobs...**

The new DR® ROTO-HOG™ Mini Tiller is perfect for tight spots.



**DR® Towable Backhoe**



## BIG DIGGING POWER FOR HOMEOWNERS.

**ALL THE POWER of a Tractor-Mounted Backhoe at a FRACTION OF THE COST!**

The DR Backhoe has its own engine and powerful hydraulic system, so there are no connections to hassle with — just hitch and go! Tow it around your property with your ATV or Lawn Tractor. Hook it to your pickup for easy **highway transport** (no trailer required). It's a truly different kind of digger!



**Call for a FREE DVD & Catalog!**

**TOLL FREE 1-888-206-0185**

**www.DRbackhoe.com**

68440X © 2010

## TURN A ROUGH DRIVEWAY INTO A SMOOTH RIDE...

**with the patented new DR® POWER GRADER!**

**Featuring...**

### **CARBIDE STEEL SCARIFYING TEETH**

which are 10X longer-wearing than regular steel, to shave down bumps, washboard, and high spots.

### **REAR LEVELING BLADE**

with patented geometry, fills in potholes, ruts, and wash-outs with loosened material.

### **REMOTE CONTROL**

allows you to make precise adjustments from your towing vehicle.

### **POWERED ACTUATOR**

with static holding strength of 3000 lbs. — raises and lowers the scarifying teeth to suit the conditions at hand.



**Call for a FREE DVD & Catalog!**

**TOLL FREE 1-888-206-0185**

**www.DRpowergrader.com**

68441X © 2010

# Recessed Lighting is More Efficient Than Ever

**R**ecessed lights have been popular for decades, and remain the lighting fixture of choice for overhead lighting. As with any other home product, some recessed lights are more energy efficient than others. Efficient options can use 80 percent less electricity than inefficient versions which provide the same amount of light output with practically the same appearance.

Recessed light fixtures are unique because they penetrate and are mounted in the ceiling of a room. From an energy conservation standpoint, this is not an issue when installed in the first floor ceiling of a two-story house. However, if fixtures are installed in the second-story ceiling or the first floor ceiling of a one-story house, a hole is created between a conditioned living area and the open, unconditioned attic area.

Without an efficient design and proper installation, a recessed lighting fixture can allow conditioned air to leak out of the house. This is particularly true during winter, when the warmer air inside a home naturally rises to the ceiling. This not only wastes energy, but may create a chilly draft in rooms where cold outdoor air leaks indoors.

There are new energy-efficient recessed light designs that meet Energy Star standards. All of these fixtures use fluorescent light sources instead of inefficient incandescent bulbs. This fact alone reduces electricity consumption by 75 percent. The inside surface of the new fixtures is also more reflective, which reduces the amount of light trapped and dissipated inside a fixture before ever getting into a room.

For fixtures in ceilings where indoor air leakage seems likely, select a new airtight design with a sealed canister. When installed properly, this unit forms an airtight seal between the ceiling and the fixture. These types of fixtures are most often used in ceilings beneath an unconditioned attic, but they are also effective for unheated basement ceilings,



Juno angular recessed lights fit a sloped ceiling for downlighting that highlights a home's architectural design features.

minimizing drafts between floors.

As a safety note, if you already have recessed lighting in your home, do not go into the attic and wrap them with insulation to try to save energy. Wrapping older fixtures with insulation can hold in too much heat, particularly when standard incandescent bulbs are used. These fixtures are not designed to be airtight and the excess heat buildup can become an electrical or fire hazard.

If recessed lighting will be installed in a ceiling under an insulated attic floor, select an insulation contact-rated (IC) design. These are designed to touch insulation without overheating the fixture. When installing new non-IC fixtures, the insulation must be kept away from the canister. This insula-

tion void increases heat loss from the room below even if the installation is airtight.

When installing recessed light fixtures yourself, first determine your lighting goals. To brighten an entire room, downlighting can be quite effective. In a normal-height ceiling, a 4-foot spacing provides an even lighting pattern at floor level. Typical 6-inch-diameter fluorescent fixed vertical fixtures work well for downlighting. If you'd like to dim some of the lights, consider installing a second circuit and dimmer switch with incandescent bulbs in those fixtures.

For task lighting, a single fixed vertical unit directly over the work area seems effective. Wall-wash recessed lighting can be used to accent a painting or other wall hangings. An eyeball recessed light is best for this application because the light path can be adjusted. For a sloped cathedral ceiling, install an angular recessed fixture—preferably an IC model, since it will contact with ceiling insulation.

It's not difficult to install recessed lighting fixtures by yourself. For an attractive, efficient installation, cut the mounting holes the exact size recommended by the manufacturer.

This makes it much easier to create a good seal between the fixture and the ceiling. Before drilling and cutting holes, make sure your fixture layout clears all the floor joists.

The following companies offer efficient recessed fixtures: Capri Lighting, 800-234-1890, [caprilighting.com](http://caprilighting.com); Cooper Lighting, 770-486-4800, [cooperlighting.com](http://cooperlighting.com); Juno Lighting, 847-827-9880, [junolighting.com](http://junolighting.com); Lightolier, 800-215-1068, [lightolier.com](http://lightolier.com); and Sea Gull Lighting, 800-347-5483, [seagulllighting.com](http://seagulllighting.com).

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



Visit new & improved  
**earthcomfort.com**

**EARTHCOMFORT**  
Natural Heating and Cooling

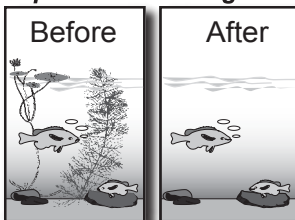


Michigan  
Geothermal  
Energy  
Association



Proven **AQUACIDE PELLETS**  
Marble size pellets. Work at any depth.

*"Spread it and forget it!"*



10 lb. bag treats up to 4,000 sq. ft. \$77.50.  
50 lb. container treats up to 20,000 sq. ft. \$299.00.  
**FREE SHIPPING!** Certified and approved for use  
by state agencies. State permit may be required.  
Registered with the Federal E.P.A

**800-328-9350**  
[WWW.KillLakeWeeds.com/381](http://WWW.KillLakeWeeds.com/381)

Write for FREE information:

**AQUACIDE CO.**

Our 55th year  
PO Box 10748, **DEPT 381**  
White Bear Lake, MN 55110-0748



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



© 2010 Gorilla Glue Company

**GORILLA TOUGH** COM

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

**Modern Solar!**



**Solar Electric Roofs Available!**

**Up to 80% Covered By Rebates**

- ♦ Lower Your Utility Bills
- ♦ Revenue Grade Solar
- ♦ Permanent
- ♦ Can be Installed with Any Roof Type

**Own Your Electricity with Solar  
Instead of Renting it.**

**\*DTE Customers SAVE approximately  
80% with Local and Federal Rebates.  
Rebates vary by location.**

**AmericanEcoEnergy.com**

Call Now For a **FREE**

**Solar Analysis: 888-729-4618**

**Liberate Yourself from Utility Bills**

**METAL ROOFS**

**PERMANENT & BEAUTIFUL**

**YES IT'S A  
METAL ROOF!** **Installation Statewide!**

For more information CALL:

**888-221-1869**

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

In the Upper Peninsula CALL:

**888-854-1435**

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

\*Offices independently owned and operated.

- ♦ Homes
- ♦ Offices
- ♦ Churches

**\$1500 Energy Tax  
Credit Available!**

**FINANCING AVAILABLE**

**Visit our Showrooms**

6140 Taylor Dr.  
Flint, MI. 48507

1875 Lansing Rd.  
Charlotte, MI. 48813

3125 Birch Rd. Ste 1  
Suamico, WI. 54173

**Homes Wanted**

We are looking for 5 Homes in Southern Michigan and 3 Homes in Northern Michigan. If your home shows well and you will help us advertise our beautiful Metal Roofs, we would like to talk to you. Limited Availability. This is not a free roof, but you will receive a deep discounts if your home is chosen. Call today for your **FREE ESTIMATE!** Call today to schedule an appointment to see if your home qualifies.



# Whooooooo Dat?

A nosey neighbor inquires of our cook.



One of our neighbors tends to be a little nosey. “Who-cooks-for-you, who-cooks-for-you-all,” our inquisitive backyard questioner asks.

That perennial curiosity about our chef tells us that a barred owl has taken up residence in our wooded acres. He’d been gone for awhile, but since we had heard the calls of a great horned owl late this summer, we wouldn’t really expect to hear the barred owl doing any talking. If this owl has one enemy to worry about, it is the great horned one, and a wise owl knows it must keep quiet when the big guy is around less it becomes the main course for the larger owl, a ruthless predator of anything edible that gets its attention.

But the woods had been silent of *any* owl talk in recent months, until the other night when we heard him asking that question about who is preparing our meals. We are happy to welcome him back, since this is the time of the year when mice and voles seem to find ways to get inside our house as they sense spring coming.

Between setting a Have-A-Hart® live trap or putting out De-Con®, we hunted for the hole they are getting through, but with a little luck our barred owl friend will head them off at the pass. These owls love dining on small rodents. It is nice to know the barred one is back, since we have gone way overboard on our De-Con budget. A barred owl can consume a lot of mice and voles before they ever get a chance to snuggle in with us.

This owl’s voice is constant, a resonant series of eight or nine hoots—“hoo-hoo-to-hoo, hoo-hoo-to-hoo-aw”—in a raucous, far-carrying sound.

*Strix varia* (there go those Latin name tags again) is a large, typical owl that also goes by many names besides the barred owl, including night hooter, rain owl, wood owl, and striped owl, but is probably known best as the hoot owl.

Its breeding habitat is dense woods across Canada, the eastern United States, and south to Central America. Its nest is often in a tree cavity, but it may also take over an old nesting site used by a crow or squirrel. It is a permanent resident, but may wander after the nesting season.

It has a pale face with dark rings around dark eyes, and a yellow bill. The under parts are light with brown streaks and the upper parts are mottled brown with brown bars on the chest. The legs and feet are covered in feathers up to the talons. This owl does not have ear tufts, a distinction from the short-eared owl. In size, it ranges from 17-20 inches in body length, with a wingspan between 39 and 43 inches, and weight from 16 to over 37 ounces. The sexes look alike in plumage, with the female larger.

Barred owls hunt by waiting on a high perch at night, or flying through the woods and swooping down on their prey. They may also hunt near dawn or dusk. They mainly eat small mammals, such as mice, rabbits and small birds. Of the North American owls, they are the species most likely to be active during the day, especially when raising their chicks.

The humans most familiar with the barred owl are turkey hunters, many of whom learn to call and imitate this owl as a way to get a wild turkey to respond in the early morning roosts. Knowing how to “owl hoot” is an important skill for the turkey hunter to master.

After his absence from our woods, it was good to the barred owl once more asking about our chef. I guess you could say I really ‘give a hoot’ about this neighbor, even if he’s a little nosy.



# More About Energy Rebates

Heating and cooling makes up about 50 percent of a home's energy use, but you'll reap *savings* by being part of Ontonagon County REA's heating, ventilating and air conditioning (HVAC) program. It's a chance to upgrade to a more efficient system and watch your energy savings grow.



The program is available to co-op members with residential service in Michigan. The energy-saving measure you install must meet program efficiency requirements. Except for water heaters, all measures must be installed by a state of Michigan-licensed contractor and

identified by name on the rebate form.

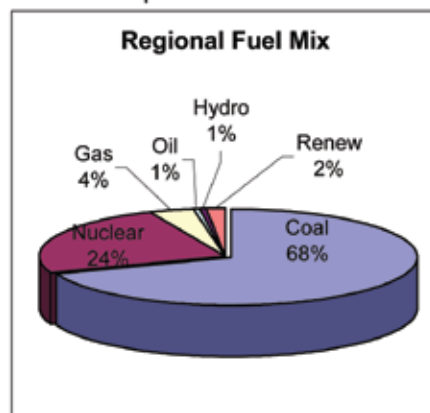
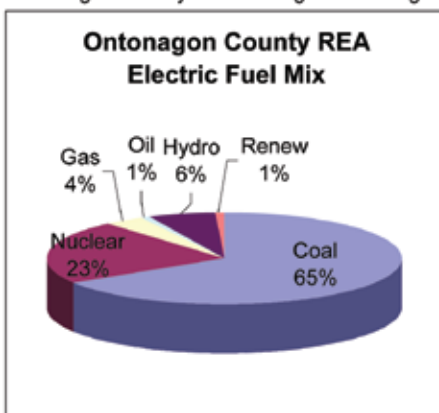
Go to [michigan-energy.org](http://michigan-energy.org) and click on the Ontonagon link for a rebate application, or call 888-963-4732. Receipts for equipment bought on or after Nov. 20, 2009, must be included with the application and documentation to: Energy Optimization HVAC Program, 500 J.K. Paul St., Ontonagon, MI 49953. Please allow six to eight weeks for processing.

## Ontonagon County REA

The environmental characteristics of your electricity as required by Public Act 141 of 2000.

### Comparison of the Fuel Sources Used to Generate Electricity

Ontonagon County REA vs. regional average for the 12-month period ended 09/30/2009



Fuel Sources	Percentage of fuel types used to produce Ontonagon County REA electricity.	Percentage of fuel type used to produce electricity in Michigan, Illinois, Indiana, Ohio, and Wisconsin (12/31/09)
Coal	66.02	69.4
Nuclear	22.51	23.9
Gas	3.77	4
Oil	0.78	0.5
Hydroelectric	6.06	0.6
Total Renewable Fuels	0.86	1.6
Biomass	0	0
Biofuel	0	0
Solid Waste Incineration	0.31	0.6
Wind	0.14	0.3
Wood	0.41	0.7
Solar	0	0

Note: (1) Biomass above excludes wood; solid waste incineration includes landfill gas.

### Airborne Emissions and High-Level Nuclear Waste Comparison

Ontonagon County REA vs. regional average for the 12-month period ended 12/31/2007.

Type of emission/waste	Ontonagon County average lbs/MWh	A regional average of all generation in Michigan, Illinois, Indiana, Ohio, and Wisconsin
Sulfur Dioxide	0.5	10.4
Carbon Dioxide	2,598	2,049
Oxides of Nitrogen	14.6	3.1
High-level nuclear waste		0.0083

Note: Purchased electricity accounted for 100% of the electricity supplied by Ontonagon County REA during the period. Information based on UPPCO data.

## Over \$370 in Rebates!

■ **ECM Blower Motor\*** ..... \$300  
Upgrades on existing furnaces only.

■ **Electric Water Heater** ..... \$50  
Replace existing electric unit with .93 or higher efficiency.

■ **Programmable Thermostat\*** .. \$20

■ **Pipe Wrap-5 ft.\*** ..... \$4  
For electric water heaters only.

*Rebates are subject to change and availability.  
\*Must be contractor-installed.*

**See the outside back cover of this issue for CFL rebate information!**

## Fiberglass Doors Save Energy

Sealing cracks and air leaks around your exterior door isn't the only way to better insulate the entrance. What the door is made out of matters, too.

Fiberglass doors can be made to look so much like wood you'll have a hard time telling yours isn't. The replacement is worth it, as manufacturers say fiberglass doors are three to seven times more energy efficient than traditional wood doors.

As an added benefit, fiberglass won't warp, split or swell like wood doors can. That's why they usually come with a longer warranty—10 to 25 years. Getting a wood door with a one-year warranty is lucky. And, fiberglass can be stained, painted or made to look just like wood.

Though steel doors are prone to denting, they are another highly-insulating alternative to wood, and usually cost less than fiberglass. When choosing your next entrance door, weigh the benefits of efficiency, performance and durability for your specific use.

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, e-mail 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 [jhsansen@countrylines.com](mailto:jhsansen@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.)

### BUSINESS OPPORTUNITIES

**PIANO TUNING PAYS** – Learn with American Tuning School home-study course. Tools included. 1-800-497-9793.

### FINANCIAL

**HOMEOWNERS 62 OR OLDER** – With an FHA government insured "Reverse Mortgage," can borrow against the equity in their home with no monthly payments. Call James Harry, 231-972-8898. 

### MISCELLANEOUS

**INSTANT RENEW ROOF COATING** – Saves replacement metal, rubber, flat roofs. 573-489-9346.

**ONAN 30KW GENERATOR** – 17 hours use, information and pictures. 231-651-1991. [kodiakkayak@yahoo.com](mailto:kodiakkayak@yahoo.com)

**WHEAT, WHITE WINTER HARD** – Barley and rye for home bakers and cooking or planting. Naturally grown in Michigan, bulk bag or pail, \$1 per pound. Also clean rye straw. 231-797-5468 or [coxx.com](http://coxx.com) anytime.

**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](http://ordination.org)

**SOON THE "MARK OF THE BEAST"** – Will be enforced as church and state unite. Let the bible reveal. Free books/DVD's. The Bible Says, POB 99, Lenoir City, TN 37771. 1-888-211-1715 [thebiblesaystruth@yahoo.com](mailto:thebiblesaystruth@yahoo.com)

### OUTDOORS

**OAK SEMI-LOADS, 10 CORDS** – 8-foot lengths delivered. [coxx.com](http://coxx.com)

### REAL ESTATE

**OLD MISSION HOME** – With shared waterfront \$260,000. 231-631-0319.

**PRIVATE LAKEFRONT COTTAGE** – Indian Lake, \$145,000, Traverse City. 231-631-0319.

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

**200 FEET ON LITTLE MUSKEGON RIVER** – High and dry. Hunt, fish, kayak, canoe, includes cabin with wood burner to heat, \$64,900. 616-785-8793.

### ST. LAWRENCE RIVER CRUISE

2 to 6 night cruises on calm inland waters aboard the elegant riverboat **CANADIAN EMPRESS**. 1000 islands...historic villages and International Seaway locks.

Montreal, Quebec City, Ottawa & Kingston Departures

1-800-267-7868 [www.StLawrenceCruiseLines.com](http://www.StLawrenceCruiseLines.com)

## FREE TREES

AMERICA'S LARGEST ONLINE NURSERY  
OVER 2200 ITEMS AVAILABLE  
[WWW.SUMMERSTONENURSERY.COM](http://WWW.SUMMERSTONENURSERY.COM)  
FREE CATALOG 931-668-7991

## "Earth" Outdoor Wood Furnaces

Starting  
At **\$3,995**

**417-746-0043**

[www.EarthWoodFurnace.com](http://www.EarthWoodFurnace.com)



Great  
gift idea!

## 2-for-1 Book Sale!



**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.



### VIEW FROM THE TOP

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

Both books only **\$6**

Includes tax and shipping.

**No substitutions.**

Also order on [countrylines.com/store](http://countrylines.com/store)

### 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



**LAKE FRONT FOR SALE** – Two mobile homes in Oakwood Resort on Campbell Lake near Hesperia. Purchase separately or together 231-798-2712.

**PRIVATE 3.3 ACRES** – In Suttons Bay. Walking distance to town. Priced well below market value at \$38,500, firm. 231-271-3321. klctsp@charter.net

**LAKEFRONT CABIN** – Near Big Star Lake, Baldwin. 110 feet lake frontage, paved road, 1 mile to Pere Marquette River, 1.4 acres, garage, bunkhouse, perfect condition, \$99,000. 616-669-8424.

**FABULOUS VIEW 200 FEET** – White, sandy beach on Lake Superior, Bay Mills, MI. Near trails, 3-bedroom, 2-bath, mobile home, \$134,900 negotiable. Let's talk 231-879-4381.

#### VACATIONS

**3-BEDROOM BREVORT** – Lakefront vacation home. 20 minutes north of the bridge. lindafarquhar@cox.net, 316-721-3420. lakefrontvacationrental.com

**DONNELL LAKE RENTAL** – Southwest Michigan all-sports lakefront, sleeps 4-6, no pets, \$725 weekly. Book early for reduced rates. Call 574-272-5200.

**BIG STAR LAKE COTTAGE RENTAL** – Near Baldwin, MI. Sleeps 6, 1-bath, air conditioned, great for all water sports, near golf course, ideal family vacation, \$800 weekly, \$750 for bookings by April. 269-372-8928.

#### WANTED

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

**OUR ENERGY.COOP** – Join the 456,000 American consumers who have asked their elected officials tough questions about our energy future.

**EdenPURE Infrared ZONE HEATER**

Bob Vila endorses and recommends the EdenPURE Heater.

**Absolute BEST 2010 pricing while they last! Call immediately!!**

Heats up to 1,000 sq. ft. Gen 3 Model 1000 3-yr. warranty

**Made in USA**

**ProProducts & Service**  
**800-614-1298**  
Your Michigan Distributor

**ALASKA FARM TOUR**

Join Other Farmers  
Denali National Park Via Train  
7-day Inside Passage Cruise  
Alaska State Fair  
Tour Actual Farms In Alaska!

**14 days from \$2299\* pp**  
**Departs August 31, 2010**

Start in Anchorage. Travel to the agricultural community of Palmer and visit a local farm and Palmer Botanical Garden. Enjoy a visit to the Great Alaska State Fair, where you will view, first-hand, monster-sized vegetables grown in Alaska's 24 hour daylight! Board the Alaskan Railroad for your scenic journey to Denali National Park for two nights. "Motor-coach" back to Anchorage on a scenic drive for more sightseeing in Anchorage including the Veteran's Memorial, Iditarod Headquarters, and another local farm. Visit Alaska's Sealife Center then in Seward board your 5-Star Holland America Line Ship the *ms Ryndam* for a 7-day cruise to College Fjord, Glacier Bay, Haines, Juneau, and Ketchikan. Transfer from Vancouver to Seattle for a city tour, spend the night, then fly home. \*Per person, dbl. occ., plus \$349 taxes, services, gov't fees, visitor's tax. Based on limited inside staterooms. Upgraded cabins are available. Airfare is extra. Space is limited on dates that can include the Alaska State Fair, so call today! **OPEN SUNDAYS**

**1-800-888-8204**  
**YMT VACATIONS**  
Carefree Vacations Since 1967

## Never have to buy fuel — oil, gas, kerosene, wood — ever again!



Lifetime Warranty

Hydro-Sil is a high performance individual room heating system that allows you to control your home heating cost by replacing old and inefficient heating. It can replace or supplement your electric heat, gas or oil furnace and woodstoves.

A one-time purchase that will last a lifetime: inside the heater is a sealed copper chamber filled with a harmless silicone fluid designed for heat retention qualities. The fluid is quickly heated by a varying amount of micro-managed proportional power. This exclusive technology greatly increases energy efficiencies.

#### Your Benefits with Hydro-Sil:

- Zone controlled heating cost with Hydro-Sil
- No service contracts. Lifetime warranty.
- Safe, complete peace of mind
- Clean, no fumes, environmentally safe
- U.L. listed
- No furnaces, ducts, or chimneys
- Preassembled — ready to use
- Portable (110V) or permanent (220V)
- Whole house heating or single room

**Contact us today for info and FREE catalog!**

220 VOLT PERMANENT	Approx. Area to Heat	S&H	Discount Price	Qty.
8' 2000 w	250-300 sf	\$25	\$319	
6' 1500 w	180-250 sf	\$25	\$289	
5' 1250 w	130-180 sf	\$25	\$259	
4' 1000 w	100-130 sf	\$18	\$239	
3' 750 w	75-100 sf	\$18	\$189	
2' 500 w	50-75 sf	\$18	\$169	
Thermostats — Call for options & exact heater needed.				
110 VOLT PORTABLES (Thermostat included.)		S&H	Discount Price	Qty.
5' Hydro-Max 750-1500 w		\$25	\$229	
3' 750 w — Silicone		\$18	\$179	
Heavy-Duty 240v		\$25	\$329	
Total Amount				

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ St \_\_\_\_\_  
Zip \_\_\_\_\_ Phone \_\_\_\_\_  
MasterCard, Visa or Discover Account Information:  
Acct # \_\_\_\_\_  
Expiration Date \_\_\_\_\_

**The Hardy Heater**  
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 BTUs
- 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

Our building consultants are ready to take your call  
**1-800-668-5111**  
Call Toll Free Today for a FREE! INFORMATION PACKAGE

Check ■ MasterCard ■ Visa ■ Discover

**1-800-627-9276**

**www.hydrosil.com**

Hydro-Sil, P.O. Box 662, Fort Mill, SC 29715

# Killing

## Energy Vampires

Energy parasites are costing you hundreds of dollars a year.

Brian Sloboda

### Typical Power Consumption of Household Items in Watts

Device	On	Standby Mode	Off
40-inch LCD TV	200	—	1-3
42-inch Plasma TV	240-320	—	1-30
DVD player	13	10	2.3
Stereo	123	—	23.4
Xbox 360	173	168	2.2
Nintendo Wii	17	10	1
Power tool battery charger	33.7	4.2	—
Coffee maker	1,100	70	0.8

Vampires have frightened people for generations. The fangs, the wings, the immortality: it's scary stuff. While that's all legend—a subject for movies and Halloween costumes—a different breed of vampire could be lurking in your home right now. These vampires don't drink blood; they consume electricity.

An "energy vampire," also called a phantom or parasitic load, is any device that consumes electricity when it's turned "off." These electronic devices provide the modern-day conveniences we love, but they also waste energy and cost us money.

Vampire loads can be found in almost every room, but a favorite spot is the entertainment center. When the TV is turned off, it isn't really off. It's sitting there, waiting patiently for someone to press the "on" button on the remote—and waiting uses energy. TVs also use energy to remember channel line-ups, language preferences, and the time. VCRs,

DVD players, DVRs, and cable or satellite boxes also use energy when they're off.

The problem is significant. According to a study by the Lawrence Berkeley National Laboratory, the average home loses 8 percent of its

#### Common energy vampires include:

- TVs
- Stereos
- VCRs, DVD players, and DVRs
- Cable/satellite boxes
- Computers
- Battery chargers

monthly energy consumption to these energy vampires. A full 75 percent of the power used to run home electronics is consumed when those appliances are turned off, according to the U.S. Department of Energy.

According to the Arlington, VA-based National Rural Electric Cooperative Association, the average electric co-op residential member consumes roughly 13,900 kilowatt-hours (kWh) per year. If 8 percent of this power is consumed when electronics are turned off, the average home wastes 1,112 kilowatt hours annually. Assuming a cost of \$0.10 per kWh, the average household spends \$111 per year to pay for these vampire loads.

The good news is that a sharp stake isn't necessary to kill these vampires. To eliminate the power consumption of an energy vampire,



© iStockphoto.com

© iStockphoto.com/Robert Payne



simply unplug the device or plug it into a power strip and use the power strip's switch to kill the electricity to everything plugged into it. Power strips work like an extension of the wall outlet, and they cut all power to plugs completely when they are switched off.

Of course, there's always a catch. Some devices use standby power to make life more convenient. If you unplug your TV or cable/satellite receiver box, what happens? When plugged back in, the TV or set top box usually will have to run its initial setup program. Depending on the particular device, it could take up to 20 minutes for channels to be recognized or for the user to reset preferences, which isn't something most are willing to do every day.

But there are numerous devices in the home that can be unplugged easily and safely, or plugged into a power strip without causing any inconvenience. Computer equipment, such as printers, scanners, desktop computers and broadband modems, can be "unplugged" without harm. Cell phone, tool and other battery chargers should also be unplugged when not in use. Even though the charger is not charging anything, it is still drawing power.

A new device called the "smart" strip is beginning to find its way onto store shelves. Smart power strips allow you to plug devices into a specially marked section of the strip so they will still have power when turned off. Other devices that can be turned off safely are plugged into the rest of the strip. This allows you to turn off parts of a home entertainment system, such as the stereo, DVD player, or home theater audio system, without losing the ability to record programs to a DVR or having to reprogram the TV every time you want to watch a show.

For devices that cannot be turned off, consumers should look for those that are Energy Star® certified or ask the salesperson about the device's standby power consumption. There can be big differences in power consumption between manufacturers, and sometimes even between models from the same manufacturer.

As in the movies, it is impossible to kill off all of the energy vampires in your home—but every one that's vanquished will mean that much less of a bite out of your wallet.

*Brian Sloboda is a program manger specializing in energy efficiency for the Cooperative Research Network, which evaluates and applies technologies that help electric cooperatives control costs, increase productivity, and enhance service to their consumers.*

# Tracking the Electricity You Use

**E**at potato chips straight out of the bag and they'll be gone in no time. Pour them into a bowl first and they disappear a little slower.

The same goes for electricity. Learning to track how much electricity your home consumes remains a good way to start managing electric use billed by your electric co-op in kilowatt-hours (kWh).

Devices are appearing in stores that provide a constant, digital reading of how much electricity your home or even individual appliances are using. One type, like the Kill A Watt™ meter, fits between an electrical outlet and an appliance to give you an instant reading of how much electricity the appliance draws.

Another type connects to your electricity meter and wirelessly relays use information to a small screen inside. Called an "in-home display," the device looks like a wireless weather monitor and can help make consumers more aware of their daily energy use.

Research conducted by the Cooperative Research Network (CRN), the research arm of the National Rural Electric Cooperative Association, shows that most consumers who have an in-home display use less energy than those without one. And even after homeowners stop paying attention to the devices, most still use 1 to 3 percent less energy than before.

"The question of whether in-home displays catch on and become permanent fixtures in the American home is still open," explains Brian Sloboda, program manager with CRN. "However, for anyone wanting to take a proactive

approach to understanding electric consumption, the in-home display may be worth exploring. You could use the knowledge that an in-house display provides to change the way you use electricity in your home and save some money."

There's also the old-fashioned way of tracking electricity use: reading your meter. As your home draws current from power lines, your electricity meter keeps a steady record of every watt used.

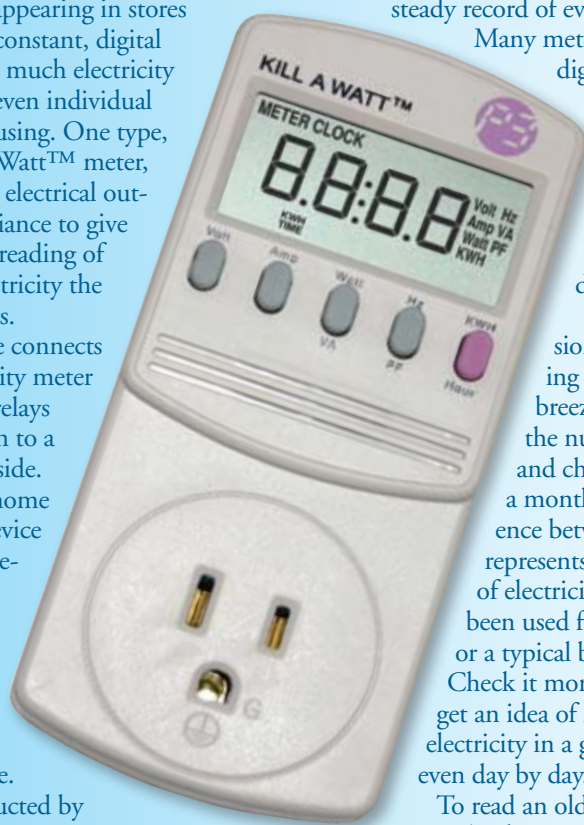
Many meters today are digital, replacing the older—though still reliable—design that uses spinning disks and dials.

Digital versions make tracking energy use a breeze: jot down the number you see, and check it again in a month. The difference between the two represents the amount of electricity that has been used for that month, or a typical billing period. Check it more frequently to get an idea of how you use electricity in a given week, or even day by day.

To read an older model meter (with spinning dials), write down the numbers as shown on the small dials from left to right. Some of the dials spin clockwise, some counter-clockwise, but record each number closest to the dial hand. Once you have the full reading it can be compared to later readings, as described above.

If you have any questions about reading your meter or learning more about how much electricity your home uses, please contact your electric co-op.

*Scott Gates writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.*



# Are You Tweeting Yet?

**M**y son Jon took the train up from Chicago a few weekends ago. We ate out, cooked together, saw the movie *Crazy Heart*, watched the Olympics and a Spartan basketball game on TV, and capped the weekend with a terrific concert by Wilco. We try to pack things in because the weekends we spend together, whether we go to Chicago or he comes to Mason, are precious to us.

We're glad Jon's close and we can see him once in awhile. It's tougher to get to Austin, TX, for short visits to see Dan, so those longer visits take on the trappings of a vacation.

We're not unlike other parents whose children have left the state in the midst of the worst economy for young people that any of us remember. If Michigan's economy were in better shape, it's possible our kids wouldn't be leaving to find the work they want. But our parents went through the same thing. There weren't many opportunities in the western U.P. in the 1960s. When the mines closed, the jobs disappeared, so most of our classmates scattered across the country. That's happening now all over the state and we're poorer for it. It's nice to travel to visit our kids, but it's not an ideal arrangement.

So, like most parents, we compensate by staying in touch by phone, email and even texting. It's the way of the modern family.

Now the question is whether we should use any of the new social networking tools, like Facebook and Twitter, or Skype for video chatting.

Twitter allows people who need a constant communications fix to stay connected to just about anyone who is also connected to Twitter. Your message can be seen by a few people or thousands, even millions. In just three years, Twitter has almost 400 million users.

So, what you do is sign up for a Twitter account and find people who you want to stay connected to, like your kids, doctor,

bowling team, best friends, people who like the same rock band, or the President. Then you wait for all those important messages to start rolling in, like "I just saw a great movie," or "the dog wants to go outside," or "I bought a green bowling ball," or "the Senate's got to pass health care." Anything you can say in 140 characters. And everyone you Tweet can Tweet you back. Then you can direct your Tweets to Facebook or any of several other sites that will collect those Tweets for you. See how easy it is?

Those of you who grew up with personal handwritten letters and a phone tethered by wire to a wall outlet are probably shaking your head. This is mostly an age thing.

Like other parents our age, Barb and I live in the middle, between the stone age and the space age.

Our older relatives don't email or tweet or Facebook or text. So we talk on the phone. (Barbara also likes to write notes, cards and even full-blown letters. Me, not so much. Frankly, my handwriting has gotten so bad I can't decipher it myself. I should sign up for a remedial handwriting class. Remember the Palmer Method? But, probably because of computers and texting, kids are having trouble with cursive writing, too. I hear teachers are now printing notes to students because they can't read a cursive message.)

Phones still work great. You can dial a number and talk. A five-minute conversation can cover a lot of ground.

Remember when a long-distance phone call was a major event, simply because it was so infrequent? College students, members of the military and long-moved family would call every few months and talk long enough to let the folks at home know they were alive. Back then, a long distance call meant someone might be in trouble. The recipient's first comment might be, "What's wrong?" Now if loved ones don't

regularly call or send a message of some kind—like daily—we think they're in trouble.

Computers, cell phones and smart phones have given us multiple ways to stay in touch. I am grateful for all this new technology. But you can have too much of a good thing.

I recall a meeting last year where a woman, hyped on social media, kept three panels open on her laptop, one each for email, Twitter and Facebook discussions—and she also could talk on her cell phone—while she was following an in-person presentation.

Now we are being told that *Country Lines* magazine should have a Facebook page, so we can encourage friends of the magazine to engage with us online. Is this a good idea? Other magazines have a page. I've seen their fan count—as high as a few hundred—compared to a circulation of several hundred thousand.

But, maybe we'll try it anyway. It's another way to stay in touch with all those folks who have reluctantly left the state in search of work. If you'd like to become a fan, just search for *Michigan Country Lines* in Facebook.

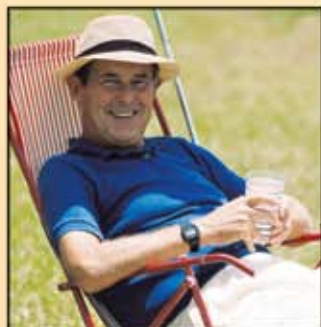
That Twitter thing will have to wait. We need to hear our kids' voices.



*Mike Buda is the founding editor of Country Lines and continues to work on the magazine, as well as other activities of the Michigan Electric Cooperative Association. He lives in Mason with Barbara. Their boys, Dan and Jon, have flown the coop.*

Email Mike at [mbuda@countrylines.com](mailto:mbuda@countrylines.com)





Flatten your stomach without gut-wrenching exercises.



Clogged arteries could virtually disappear when you add this to your life once a day.



What you should never eat when taking prescription drugs.

# "HONEY Can Heal WHAT?"



(By Frank K. Wood)

If you want to learn how to use gentle folk remedies to unleash your body's healing power instead of resorting to dangerous prescription drugs or risky surgery, you need *The Folk Remedy Encyclopedia: Olive Oil, Vinegar, Honey and 1,001 Other Home Remedies*, an informative new book just released to the public by FC&A Medical Publishing® in Peachtree City, Georgia.

You'll be amazed by how many inexpensive, easy, natural cures you can find all around you — in your pantry, garden, garage, and grocery store.

The authors provide many health tips with full explanations.

- ▶ A natural way to rejuvenate your veins and arteries that will have you feeling brand new.
- ▶ That "spare tire" is doing more than just slowing you down ... it raises your risk of many life-threatening illnesses! Burn it off without gut-wrenching sit-ups or grueling fitness regimens.
- ▶ One super vitamin protects your vision, fights infections, keeps skin, bones, and cells healthy, plus fights heart disease, cancer, memory loss, arthritis, liver disease, Parkinson's, and complications of diabetes. Are you getting 100%?
- ▶ Miracle healing seed lowers blood pressure, reduces risk of stroke, plus fights arthritis, heart disease, type 2 diabetes, stomach disorders, and even mental problems!
- ▶ Prevent high blood pressure, colon cancer, senility, and fragile bones. All with one — yes, one — inexpensive daily supplement that keeps you healthy and strong.
- ▶ Nature's wonder food for your body — once praised by Gandhi. Fights heart disease, high blood pressure, stroke, arthritis, type 2 diabetes, and even protects against breast, colon, and prostate cancer!
- ▶ Clogged arteries virtually disappear when

you add this to your life every day.

- ▶ Here's the secret to naturally block out calories from foods. Just add this when you eat — and watch the weight melt away.
- ▶ It protects your heart, lowers your cholesterol, fights cancer, and much more! Researchers take a good look at this "miracle" mineral.
- ▶ Kills cancer cells dead in their tracks! Duke University study proves this tiny seed packs a powerful punch!
- ▶ Just 2 glasses a day of (you won't believe this — but it's true!) lowers your cholesterol — and prevents heart attacks too!
- ▶ Trick your body into losing weight! Melts off fat safely, naturally, and best yet, easily.
- ▶ Give your brain the nutrients it needs for a better memory. Don't let your brain deteriorate when you can so easily power it up.
- ▶ Discover an antioxidant that's so powerful for your eyes that it fights night blindness, cloudy corneas, and can even successfully treat an eye disorder that leads to blindness!
- ▶ What you should never eat when taking this prescription drug. This is critical news you won't hear from your doctor or pharmacist!
- ▶ You can improve your eyesight without glasses, without contact lenses, surgery, drugs, or medicine of any kind.
- ▶ Tomato juice for high cholesterol? Yes, tomato juice can keep your cholesterol from oxidizing and attaching to your artery walls. A new study shows how much you need to drink each day.
- ▶ Rebuild your joints and relieve arthritis pain. Natural ways to help your body repair itself.
- ▶ Unclog your arteries with purple grape juice! Studies show that purple grapes can reduce blood clotting by 91%.
- ▶ The amazing healing power of honey. It's not just a sweetener anymore. Use it to cure these 4 common problems.
- ▶ Frustrated because you can't lose weight? Forget dieting! Just "fluff" up your foods

instead and watch the pounds drop off. Pennsylvania State University study.

- ▶ Flex your mental muscle and send Alzheimer's packing. Simple mental activities that build your brainpower and ward off the ravages of Alzheimer's.
- ▶ Open up blood vessels narrowed due to heart disease. Relax with this beverage and decrease your chances of suffering a debilitating stroke.
- ▶ Nature's insulin controls blood sugar and type 2 diabetes. What is it? Cinnamon! It helps your fat cells recognize and respond to insulin better.
- ▶ High blood pressure? You know you have to limit alcohol and salt, but did you also know certain oranges can cause your blood pressure medication to build to toxic levels? Read about some other hidden dangers and some unusual methods of defense.
- ▶ Keep your arteries clean with this simple bean!

Learn about all these natural healing folk remedies and more. To order a copy, just return this coupon with your name and address and a check for \$9.99 plus \$3.00 shipping and handling to: **FC&A, Dept. PF-3305**, 103 Clover Green, Peachtree City, GA 30269. We will send you a copy of *The Folk Remedy Encyclopedia: Olive Oil, Vinegar, Honey and 1,001 Other Home Remedies*.

You get a no-time-limit guarantee of satisfaction or your money back.

**You must cut out and return this coupon with your order. Copies will not be accepted!**

**IMPORTANT — FREE GIFT OFFER EXPIRES APRIL 26, 2010**

All orders mailed by April 26, 2010 will receive a free gift, *Eat to Beat the 27 Top Health Problems, guaranteed*. Order right away!

©FC&A 2010



# Switch *and* Save

One of the fastest and simplest ways to reduce your energy bills is to switch from incandescent to fluorescent lighting. To help make the switch easier on the pocketbook, we now offer **up to \$5 cash back\*** on Energy Star® compact fluorescent light bulbs (CFLs). Purchase them in any wattage, in any style, from any retailer!

More rebates and incentives are also available. Visit **michigan-energy.org** or call 1-877-296-4319 to learn more.

## Energy Star® CFL Rebate Coupon

Ontonagon County REA members with an active service account may purchase Energy Star® certified CFLs from any retailer. *Limited to \$5 per account.* To receive \$1 rebate per CFL, submit this coupon with your sales receipt to:

**ONTONAGON – Energy Star® Rebate**  
3474 Alaiedon Parkway, Suite 600  
Okemos, MI 48864

**\$5** Maximum  
Rebate Per  
Account

Coupon expires Dec. 31, 2010, and has no cash value. Rebates subject to change and availability. **Do not return coupon with Ontonagon bill payment or to the co-op.** For information call toll free 1-877-296-4319 or visit **michigan-energy.org**.

Ontonagon REA Account No. \_\_\_\_\_

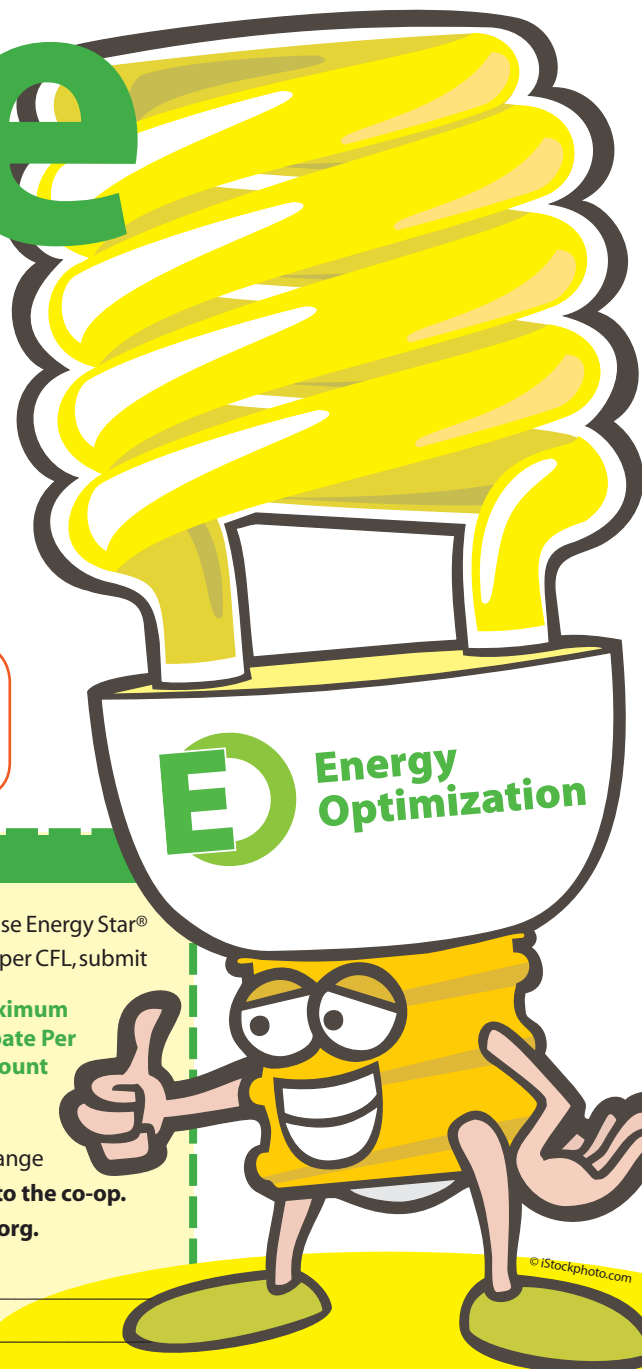
Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_

# of CFLs (max. 5) \_\_\_\_\_



© iStockphoto.com