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A SERVICE OF PRESQUE ISLE ELECTRIC & GAS CO-OP

January/February 2010

Jim Says Farewell

JIM HOU~4

JIM HC

JIM HOUGH

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Flush out your arteries with oats!



Ease arthritis — with honey!



Keep your brain sharp with blueberries!

"The #1 Cause of Big Bellies — It's Not What You Th

(By Frank K. Wood)

If you want to discover foods that will lower your blood pressure, cut your risk of heart disease, help you lose weight, and more — while trimming your grocery spending, too! - you need Your Body Can Heal Itself: Over 87 Foods Everyone Should Eat, an informative new book just released to the public by FC&A Medical Publishing[®] in Peachtree City, Georgia.

You'll be amazed to know your kitchen is full of proven remedies — right now! See the delicious fruit juice that can help keep your mind sharp, the tasty sweet treat that can give you a good night's sleep, and the easy breakfast favorite that can lower your cholesterol. And that's just the tip of the iceberg!

The authors provide many health tips with full explanations.

- One miracle food contains nutrients that coat your arteries like a non-stick spray!
- ► #1 cause of big bellies: Trim your waistline by switching to a tastier alternative!
- ▶ Before you use an herbal supplement, make sure it's safe by checking here.
- Get a good night's sleep when you munch a handful of this fruit before bedtime.
- One extra serving a day of this fruit can fight strokes, obesity, and heart disease!
- Drink it to boost bones and battle osteoporosis. Surprise! It's not milk.
- Cut your risk of memory failure in half! Just eat this once a week. Incredible!
- ► Don't lose your vision! Eat the foods that'll keep your eyesight sharp for years to come.
- ► This little fruit not only fights off pesky infections, it actually works when antibiotics don't!
- The berry that may protect your vision!
- ► How a healthy 50¢ meal can help you lose weight and lower your cholesterol!
- ▶ The most important food you can eat —

for more energy, a more youthful body, and longer life.

- ► Slash your risk of Alzheimer's with just 3 glasses a week!
- ▶ The 6 most dangerous foods in the country: One could be on your breakfast plate!
- ► Foods that lower your blood pressure, cut your risk of heart disease, and lose weight!
- Common spice blocks inflammation, helping you ward off arthritis, heart disease, and Alzheimer's!
- Delicious three-in-one remedy soothes a sore throat, stops a cough, plus helps you sleep.
- ▶ Digestive problems, joint pain, fatigue, and more could be caused by this common food ingredient!
- ► Want to live a longer, healthier life? Then you should eat this twice a week.
- ► The seasoning that can help reduce deaths from heart disease, diabetes, and high blood pressure.
- Eat this cereal daily and help prevent constipation, colon cancer — even weight gain!
- ► The most inexpensive meat goes from tough to tender ... with just a tablespoon of this pantry item.
- ► Save \$50 to \$150 a month on the foods you love when you follow these 9 shopping secrets.
- Crush your cravings for sweet snacks with one simple secret. Try it. It's easy!
- ► Give your arteries a good scrub naturally with this food.
- ► Little-known herbal medication can help reduce dementia symptoms and make people more cheerful!
- ▶ Just one serving per day lowers your risk of heart disease and stroke by 11%!
- ► One creamy, delicious food fortifies the immune system, bolsters bones, and helps you lose weight!
- Lose weight, lower cholesterol, and improve insulin levels with this fruit!

- ► One healthy oil lowers cholesterol and blood pressure, plus it relieves constipation, naturally!
- Avoid high blood pressure and add delicious flavor to your meals with spices rich in antioxidants.
- ► What type of fruit should you avoid? You'll find it in nearly every store.
- ► This could be your body's first line of defense against stroke, high cholesterol, and heart damage.
- ► Gain strength, stay sharp, and keep your bones strong with this energy-boosting power food!
- ► Arthritis pain? Try ginger!
- ► If you're feeling bloated or gassy, reach for this tropical treat.
- ► Sweep artery-clogging cholesterol right out of your system with this little seed.
- ► Have it before dinner, and you'll eat less. Weight-loss secrets your doctor doesn't tell you.
- ► Keep your energy up throughout a busy morning with this fruity, high fiber breakfast.

Learn all these amazing secrets 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. 3F-3103, 103 Clover Green, Peachtree City, GA 30269. We will send you a copy of Your Body Can Heal Itself.

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 FEBRUARY 24, 2010

All orders mailed by February 24, 2010 will receive a free gift, Lose 150 Pounds in 15 Months, Naturally: Your Handbook to Permanent Weight Loss, guaranteed. **Order right away!** ©FC&A 2010

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







Lighting the World

Co-op efforts deliver power and hope to over 100 million people across the globe. Megan McKoy

A Diverse Solution for Energy

Using a combination of technologies, we could slow, halt and eventually decrease carbon dioxide emissions while still getting safe, affordable and reliable electricity. Scott Gates

Building Tomorrow's Co-op Leaders

A Hesperia Girl Scout troop earns the "Co-ops for Community" patch. Jan Tableman

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MICHIGAN'S ELECTRIC COOPERATIVES countrylines.com

COVER*

Jim and Darl Hough have moved from Paradise to a new home in East Lansing. The long-time Country Lines columnist reflects on page 30. Photo: Roger Boettcher

countrylines.com



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PIE&G's natural gas operations are not regulated by the Michigan Public Service Commission.

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PRESQUE ISLE ELECTRIC & GAS CO-OP

Energy Mandates Impact Cost

Climate change will be the next one.

Ithough we've made progress (see box below), cost pressures will continue to impact electric rates—from escalating material prices and wholesale energy to Mother Nature (damage from trees, wind, snow and ice) and government mandates many beyond the control of a small, not-for-profit utility like



Brian J. Burns President & CEO

Washington must insure a

reasonable balance between

mandates and affordability.

Presque Isle Electric & Gas Co-op.

For instance, consider Michigan's Public Act 295 of 2008. In brief, this legislation

mandated Michigan utilities to obtain no less than 10 percent of their energy requirements from renewable sources by 2015 and to institute energy efficiency programs (Energy Optimization or 'EO') to encourage consumers to use less energy. But mandates come with costs that impact

Residential Rate Comparisons for MPSC-Regulated Electric Utilities

As of December 1, 2009

COOPERATIVE	Monthly Bill 500 kWh	Monthly Bill 1,000 kWh
Presque Isle	\$59.12	\$106.23
Cloverland Electric	\$59.94	\$109.77
Great Lakes Energy	\$63.04	\$114.08
Midwest Energy	\$63.14	\$114.28
Thumb Electric	\$63.25	\$118.50
HomeWorks Tri-County	\$66.43	\$120.86
Ontonagon REA	\$107.29	\$202.58

your electric bill—renewable energy is more expensive than traditional base load energy, and energy efficiency programs are funded by a surcharge on your bill.

Try as we may to remain competitive and hold your costs down, the onslaught continues. It appears the next mandate may be climate change legislation.

Regardless of your views on climate change—whether you believe it's principally man-made or simply a cycle

of nature—the politics are real and the impact on your electric bill is expected to be real (see the May-June issue of *Michigan Country Lines*). How much and how soon? Only time will tell.

Our intent is not to argue the merits of either side of the climate change debate,

but to advocate on your behalf to ensure the ultimate impact of climate change to your electric bill, whether by legislation or regulation, will be fair and affordable. We are lobbying your representatives in Washington to ensure a reasonable balance between the competing goals of government mandates and affordable electricity.

Natural Gas Safety

To protect the integrity of PIE&G's natural gas pipeline system, we inspect and perform maintenance, such as corrosion control and leak surveys, when necessary. For your safety, employees are trained to monitor and inspect the pipeline system and respond quickly to any natural gas emergency.

PIE&G's gas leak hotline is 800-655-8565 and is designated for gas leak reporting only. Emergency service is available 24-hours-a-day, seven-days-a-week.



Manage Your Bill Online

Tired of the hassle of buying stamps and checks to mail your utility bills? Why not take advantage of our online account management tool, "E-Bill"?

It's easy for you to monitor your PIE&G account online. This payment processing system allows you to review your monthly

PIEG.com

bill, track monthly usage and payment history, and submit

monthly meter readings. Simply pay your bill using your credit or debit card and enter your meter readings each month.

All you need to do is register. If you previously had an online account with us, you will need to register again as a new user. At pieg. com, click on "Login" in the "Manage My Account" box in the upper left corner of the home page, and follow the instructions for "New User." You will need to provide your account number, name and email address.

Once you're registered, all you need to do is enter your email address and password to log-in. Payments are usually posted to your account within 24 to 48 hours.

We encourage you to save time, stamps and money by signing up for E-Bill today!

Want Efficient, Safe Laundry? Leave No Lint Behind

ousehold chores, such as doing the laundry, seem fairly safe. But hidden problems like lint buildup in a dryer can lead to inefficiency and therefore higher energy bills and, ultimately, hazardous conditions in your home.

"Lint is the bane of our existence," declares Brian Wallace, president of the Coin Laundry[®] Association in Oakbrook Terrace, IL. "We have to clean lint, not only as a safety issue, but to keep our energy costs down and ensure proper performance."

At coin-operated laundries, dryers are key to customer satisfaction. Other amenities pale if clothes don't dry fast enough, so laundry owners remain adamant about maintaining proper air flow through commercial dryers. With 30 to 50 dryers at an average laundry, operators clear trash cans of lint everyday from their screens.

The same principle applies at home, although on a smaller scale.

"Cleaning the lint filter after every cycle is one habit we want to encourage," recommends Jill Notini, communications & marketing director for the Washington,

Scholarships Available

The Communities First Fund awards up to three scholarships per year for graduating high school seniors who are dependents of a PIE&G member and plan to attend Alpena Community College, Kirtland Community College or North Central Michigan College. Applications are online at pieg.com or call 800-423-6634, ext. 813. **Deadline for completed applications is March 30.**

Your Board In Action

At their October and November meetings, the PIE&G Board of Directors:

- Passed resolutions acknowledging retiring directors Alsobrooks' and Bruder's years of dedicated and loyal service to the PIE&G membership.
- Approved new memberships for September and October.
- Adopted the 2010 Work Plan of \$3,525,000 for capital investments in system improvements, including member requests for electric and natural gas service.
- Discussed PA 167 of 2008 The Electric Co-op Member Regulation Act. A proposal was made to become member regulated

- in accordance with PA 167.
- Revised the Co-op's Strategic Plan.
 Accepted the reports of CEO Burns and CFO Sobeck.
- Approved 2009 3rd quarter write-off of \$19,997.68 for bad debt.
- Welcomed and listened to PIE&G member Prell, who encouraged the Board to adopt a more aggressive capital credit retirement policy.
- Completed and discussed annual conflict of interest disclosure statements.



D.C.,-headquartered Association of Home Appliance Manufacturers (AHAM). "Repetition builds a habit."

Consumers are urged by AHAM to clean the lint filter after each load and occasionally remove the filter and wash it with a nylon brush and hot, soapy water to remove residue. This simple chore not only improves air flow and energy efficiency, but also reduces the chance of a dryer fire.

Statistics on dryer fires show no difference between natural gas and electric dryers, says John Drengenberg, consumer affairs manager for Underwriters Laboratories (UL), Inc., a Chicago, IL,-based nonprofit firm that tests and sets minimum standards for electricconsuming items. "If you forget to clean the lint screen too many times you're going to get a buildup, and that's where ultimately you could have a problem."

Manufacturers whose products carry the UL mark are required to ship dryers with safety instructions that specify cleaning the lint screen before or after each load. These instructions also recommend keeping dryer exhaust openings and surrounding areas free from accumulated lint, dust and dirt, and having qualified service people periodically clean the dryer's interior and exhaust duct.

Without adequate air circulation, heat flow becomes stymied, clothes take longer to dry, and it costs more to operate the appliance. Like ovens and stoves, dryers apply extreme heat on potentially flammable materials.

"You wouldn't leave something cooking unattended for long periods of time—at least you shouldn't, for safety and edibility," Drengenberg notes. "Dryers, though, often run up to an hour or more, forgotten in a basement, garage or utility space."

This out-of-sight, out-of-mind practice makes it essential that a dryer be maintained on a simple and regular basis.

Source: Underwriters Laboratories



Carbon and Climate

Your "Comment" (Nov/Dec, 2009) does an excellent job of describing just how misguided legislation requiring an 80 percent reduction of GHG [greenhouse gas] emissions by 2050 is. I think an important point you missed is that technology cannot be invented by simply passing a law requiring it. Your examples show clearly that new technology is required. The current legislation is all about raising taxes, but does little to grow the technology required.

Once the technology is discovered that is economical compared to conventional energy supplies, then you can encourage it with tax policy. Legislation will only create winners and losers—but for sure will do it wrong or create other problems that are not knowable today. Ethanol and windmills show what can happen to companies that invest in governmentcreated industries without solid economics.

Dave Lamp, via email

The last paragraph of Mr. Peters' "Comment" says it all. We need nuclear generation plants, clean-coal fired power plants, and carbon capturing technology. Without these new and improved old technologies, the American taxpayers will eternally be paying billions of \$\$\$\$ in taxes and user fees.

Lou Schomberger, Pellston/Paradise

Unfortunately, a large number of people have been misled by the threat of "global warming/ climate change." For those who believe in this theory should view the documentary, "Not Evil Just Wrong." It provides a balance to this theory. Mackinac Center reports that the U.S. Energy Information Administration found that, "emissions here have been better controlled than in other countries," even by those who signed the Kyoto Protocol. "Carbon dioxide emissions

MYSTERY PHOTO

Everyone who identifies the correct location of the photo below by **Feb. 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**, 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 March 2010 issue.

The **Nov/Dec** contest winner is **Myrna Smith** of Walkerville, who correctly identified the South Pier Light in Pentwater, featured in the Nov./Dec. issue of *Country Lines*.





Do you know where this is? from the burning of fossil fuels only increased by 0.7 percent in the U.S. from 2000 to 2006, compared to 27.7 percent in India, 45.8 percent in Malaysia, and 103 percent in China."

Requiring the U.S. to drastically reduce carbon dioxide emissions without support for the same around the world puts the U.S. at a great disadvantage in the world economy. *Max Binkley, Williamsburg*

I thought I'd do a little research of my own. To meet the 2050 goal we would have to eliminate all modes of transportation, all power generation, our complete economy, and about 20 percent of our current population. Our current CO₂ content in the atmosphere is 500 percent less than it was during the days of the dinosaur.

Looking at the real data and not selected sets of data, maybe we need to start looking at other causes of global warming. One may be that the alkalinity of the oceans is rising, causing the water temperatures to rise and the CO₂ levels to decrease. What is the cause of the increased acidity in the oceans? We all know the oceans are the reason for temperature moderation around the world. As water temperatures increase, so does the air temperature. Maybe we have the whole thing backwards.

Jim Capehart, DeTour

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.

Survey Winners

Congratulations to Cherryland Electric co-op member James Heisenfeldt for winning the top prize of a 40-inch LCD TV in this magazine's reader survey, conducted in November. Survey results, to be shared in future issues, will be used to improve the magazine.

Volunteer Nominee

Hooray for Pauline Hancock, she takes great care of homeless animals.

Barbara Petersen

Thanks for the Recipe

Just want to thank one of your contributors for a recipe: Glenda Wuori of Hancock for Banana Salad. My mother is on the Memory Floor at a nursing home and they are having a Christmas supper. The guest is to bring a favorite dish of the person. I asked Mom what she would like and she said, 'Banana Salad.' I remember her making it, but it was not something I cared for and never paid much attention to it. After searching, I finally found this recipe, and I am sure this is it. Please thank her for me. Sharon Tob. via email

Wild Blueberries

Jim Hough's article about Bill McNamara, nominating him

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; click on "Youth," email 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*. as Wild Blueberry Hero, was a great story. That he picked 250 quarts and can still stand and walk is phenomenal! I would like to nominate another man as "My Blueberry Hero."

He first is my hero because he was a 101st Airborne paratrooper in WWII. He jumped into Normandy on June 6, 1944. He trucked into Bastogne, Belgium, and went on to the Eagle's Nest in Austria.

George Koskimaki spends his summers in the U.P. and picks blueberries when they are ready. He gives most of them away, bringing them downstate where many are baked into pies at his church. Last year, George picked 230 quarts. He recently told me, "The berries were a bit smaller this summer, so I only got 170 quarts." George is 87, and he jokingly added, "I slowed a bit on picking too, because I had to carry my lawn chair into the berry patch so I could sit while picking." Charles Day, Lambertville

I so enjoyed the article "My Blueberry Hero" in the Nov/ Dec 2009 issue. It is heartwarming and encouraging in these stressful times to read about folks like Mr. McNamara, and I appreciate Mr. Hough's articles. I always enjoy checking out the recipes, too. Thanks for your magazine. *Deanna Williams, Cheboygan*

CFLs & LEDs

I like the idea of the LED lights, and plan on purchasing some this year. I wonder though, what is the average life span of each individual light? *Simone Smith, via email*

Unlike incandescent bulbs, which die when the filament breaks, LEDs gradually dim over time. The lifespan of an LED is rated as the point where lumens drop to 50 percent of the original output. A typical LED could last 8 years, based on 4 hours of use per day. Why don't we use the lumen as a means of light intensity rather than watts? Currently we are given the comparison of light emission from an incandescent lamp at so many watts to a CFL, say, at a lower wattage rating. When I place them side-by-side, the CFL reported xxx wattage equivalent of the incandescent lamp is no where near as bright as the incandescent.

I think there is some fudging by the industry here. We don't traditionally see incandescent lamp output given in lumens. We just see how much energy it consumes.

William Felmlee

Many brand name manufacturers do include light output on the packaging, not the bulb. -ed.

Co-ops & Rates

The Nov/Dec issue had a letter from George Wellman that needs to be broadcast, and hopefully embraced, by all utility companies across America. An excellent place to start is the non-profit co-ops. A co-op's mission is not only to serve it's customers with affordable electric service but also, as *Country* Lines demonstrates, to keep it's members informed and up to date on public policy concerning energy. Over the last couple years, the single issue obtaining the most press has been our growing energy dependence and the direct conflict created by the mounting evidence, and growing public concern, with global warming.

So what is Mr. Wellman's brilliant idea that we should encourage our co-op to embrace? Quite simply, [it's] adjusting [rates] to reward less consumption vs. more. All utility companies I have known use a graduated scale of pricing that rewards more consumption: The more you consume, whether it's city water, natural gas, or heating oil, the less you pay per unit

Cap-and-Trade Economics 101

Under a cap-and-trade system, major sources of carbon dioxide emissions would have to account for them with "allowances," or permits, issued by the federal government. Colorfully named cost control proposals could keep allowance prices—and electric bills—from skyrocketing.

Legislators could mix-and-match from the options below; The top two options would best protect electric co-op members

Safety Valve



Establishes an unlimited pool of federal allowances available at a set price. The set price would remain stable every year to guarantee a worst-case, maximum "cap" on costs.

Price Collar

Similar to a safety valve, but sets a maximum and minimum price for carbon allowances. In an allowance auction, bidding would start with the minimum price.

Strategic Reserve

A small percentage of allowances would be skimmed from future years' allotments and set aside. Emissions sources needing extra allowances could buy them from this pool.

Emergency Off-Ramp

If a certain trigger is reached (for example, prices for allowances skyrocket to predetermined amount) the entire cap-and-trade program stops.

Throttle

If a certain, predetermined trigger occurs, the cap (which is lowered over time) could be lowered at a faster or slower rate.

Banking and Borrowing

Source: National Rural Electric Cooperative Association

If allowances were cell phone minutes, **banking** would be equivalent to rollover minutes: unused allowances could be carried over to the next year. **Borrowing** would allow an emissions source to borrow allowances from what it would otherwise use the next year.

of consumption. Ironically, increased consumption generally leads to increased rates for everyone. That calls into question the "use more, pay less" fee schedules that are in place.

Such changes are always easier stated than implemented, but I have little doubt that with enough public support, and perhaps allowances for a few exceptions to the rule that may be required (i.e., homes that use electric heat in the winter)—management at our co-op can help us achieve this.

[This change] will issue a new era of heightened awareness towards consumption, rewarding those who choose to conserve rather than to consume. It will help keep energy affordable for all, while also helping preserve our planet for future generations.

I feel so passionate about making this concept a reality, I'd like to VOLUNTEER my own services to help.

Jason Vallier

Beautiful October

Mother Nature "lives" near the south end of Sugar Island, near Sault Ste. Marie.

[This] photo taken of our son's cabin provides elaborate proof that, "Yes, Mother Nature lives nearby," and from all indications has an elaborate crew of talented assistants. The end result of Her recent special endeavor is profoundly breathtaking.

Eileen Hughes, Sugar Island





Back To Basics With Solar Water Heating

inter, with fewer hours of sunlight and dropping temperatures, might not seem the most obvious time of year to consider solar power. But you can fight the chill in the air—at least when bathing—with solar water heating.

In general, solar water heating systems can meet more than one-half of a household's water heating needs over the course of a year. In addition, the solar panels used for water heating are not "high-tech" like those needed to produce electricity. This makes them more affordable.

Solar water heaters, you see, don't focus on converting sunlight into electricity. Instead they harness the radiant heat energy of the sun to dial up the temperature of your home's water.

The placement of solar water heating panels matters, though. For best results, they should face south. Be careful when planting trees; the panels should remain unshaded year-round.

There are several types of solar water heating systems, each employing a similar method. All depend on a dark, heat-absorbing material inside a collector—a glazed box or tube. A heat-exchange fluid passes through the collector, gets hot, then runs through a heat exchanger, which transfers the heat to water in a storage tank.

Different Systems For Climates

In four-season climates, closed-loop antifreeze systems are the most popular, using an antifreeze heat transfer fluid in the collector.

Closed-loop drainback systems, on the other hand, use distilled water with a corrosion inhibitor. When operating, the drainback tank is mostly filled with air. But when the heat transfer fluid cools below a useful temperature, it flows into the drainback tank, forcing air into the collector and protecting the system from freezing. Drainback systems are most useful in warmer climates.



Open-loop direct systems heat and circulate household (potable) water directly through collectors. A batch heater, one type of open-loop system, simply consists of a tank filled with water and placed on the roof either in a glazed box or attached to a solar collector panel. Because batch heaters have few parts, they're highly reliable. However, the tank *must* be protected from freezing or drained before winter. This design is common for do-it-yourself projects serving summer homes or workshops.

Solar Shopping

Several resources are available to help you choose a solar water heater. You can also get advice on reputable installers from your state



Energy Tip

Replacing just four 75-watt incandescent lightbulbs with four 23-watt compact fluorescent equivalents will save almost \$200 over life of the bulbs.

Source: Alliance to Save Energy

or regional chapter of the Solar Energy Industries Association, seia.org, and the American Solar Energy Society, findsolar.com.

You should be confident in both the equipment and the installer. Solar water heating equipment routinely gets tested by the Solar Rating and Certification Corporation at solar-rating.org. The U.S. Environmental Protection Agency's Energy Star® program, energystar.gov, certifies solar water heating equipment and other energy efficient water heaters.

Investing in a certified system gives you confidence and helps your bottom line. Federal solar tax credits, available through 2016, can cover 30 percent of the cost of investing in a qualified solar water heating system. On top of this, consumers in some states may qualify for additional incentives. Check the national database of incentives for renewable energy at dsireusa. org for details.

– Jill Cliburn & Megan McKoy

Source: Cooperative Research Network, an arm of the Arlington, VA-based National Rural Electric Cooperative Association.

Deal With Carbon In Congress, Not EPA

Regulating carbon through congressional action is better than relying on the EPA.

Our Energy, Our Future A Dialogue With America OurEnergy.coop

ederal curbs on emissions of carbon dioxide, a greenhouse gas blamed as a principal cause of climate change, are quickly becoming a reality. It's just a matter of which government branch gets there first: legislative, executive or judicial.

In December the U.S. Environmental Protection Agency (EPA), part of the executive branch, declared that six key greenhouse gases, including carbon dioxide, are endangering public health and welfare. Emissions from motor vehicles comprise four of those greenhouse gases (including carbon dioxide), which are also said to contribute to dangerous air pollution under this "endangerment finding." The EPA's "endangerment finding" puts a "foot in the door" for it to promulgate sweeping new regulations that could impose strict limits on carbon emissions from power plants, driving up consumer electric bills. This is clearly something that was not considered in 1970, when Congress implemented the "Clean Air Act" (CAA), created the EPA, and gave it the primary role in carrying out the new law. At the time, carbon dioxide wasn't considered a pollutant, so the law and regulations that followed were not drafted with it in mind. Michigan Congressman John Dingell, who helped write the CAA, said that if the EPA moves forward to regulate carbon dioxide under the CAA, it will "be a glorious mess." We can't agree more.

Electric co-ops believe that any controls on carbon dioxide should be estab-

lished by Congress, where the impact of these proposals can have a full public debate. Unfortunately, a climate change bill passed by the U.S. House last summer (H.R. 2454), and another reported by the U.S. Senate Environment and Public Works Committee in November (S. 1733), include unachievable goals and timelines for reducing carbon dioxide emissions, inadequate technology development incentives, and no guarantee that electric bills will remain affordable. Current proposals will unfairly penalize consumers in fossil fuel-dependant states by saddling them with higher bills to essentially subsidize and lower electric bills for those in other regions. Our Senators Carl Levin and Debbie Stabenow recently signed a joint letter with 12 other senators



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

questioning the formula that was adopted by the Senate committee, calling it "unfair to Michigan."

We have taken the position that any climate change legislation should protect consumers and preempt use of the federal Clean Air Act and any other existing laws. Otherwise, utilities and businesses could be burdened with the task of trying to comply with more than one set of regulations.

On the judicial front, two federal courts of appeal have

allowed lawsuits to proceed against different groups of utilities. The lawsuits claim that emissions from the utilities' coal-fired power plants have contributed to climate change, causing damages to the environment or property. The cases have a long way to go, but with the courts getting involved we now have all three government branches racing to see which one is first to regulate carbon dioxide and other greenhouse gases.

While we may not like any one of these "winning the race," the fact remains that we will see regulation—probably sooner rather than later. All we ask is that if Congress wins the race, they simply not add new legislation on top of old regulations. Any climate change bill should become the road map—the single strategy—for reducing carbon dioxide emissions at federal, state and local levels.

Our position from the very beginning of this debate has been that any climate change policy goals adopted be fair, affordable and achievable. We only hope that whatever branch of government gets to the "finish line" first hears us.

To make your voice heard in this debate, join NRECA's "Our Energy, Our Future™" grassroots awareness campaign at ourenergy.coop. To date, more than 600,000 of your fellow co-op consumers across the country have done so.

Electricity Remains a Good Value

Electricity continues to be a bargain, especially when compared to other consumer goods. In the face of increasing price pressure from carbon regulation and worldwide demand for energy, your electric cooperative is committed to providing safe electricity at the lowest possible cost.





Lighting the World

Co-op efforts deliver power and hope to over 100 million people across the globe. Megan McKoy

s electric co-ops celebrate 75 years of providing affordable electricity for rural Americans, another story unfolds globally. Volunteer lineworkers from electric co-ops across the nation are spreading rural electrification overseas, sharing light and hope with wartorn or forgotten communities.

"When I told my daughter, Katie, she couldn't believe some places in the world don't have electricity," relates Craig Larkin, a lineman from Troy, MO-based Cuivre River Electric Cooperative who spent several weeks lighting up Yei, a city in war-torn Southern Sudan. "If we can help them out, that's an awesome thing."

The lineworker efforts are coordinated by NRECA International Programs, a division of the National Rural Electric Cooperative Association. Since the program was established in 1962, over 100 million lives in more than 40 developing nations have been empowered with access to safe and reliable electricity. Funding for this global goodwill effort comes in part from the NRECA International Foundation, a registered charitable organization partnering with electric cooperatives in the United States and others to bring power and economic development to rural villages overseas.

Michigan co-ops support the Foundation with monetary contributions. They include Cherryland Electric, HomeWorks Tri-County Electric, Midwest Energy, Wolverine Power Marketing, and the Michigan Electric Cooperative Association.

NRECA International Programs doesn't simply bring American lineworkers into a country for a few weeks and then pull up stakes. Staff members and volunteers teach locals how to build and maintain simple power grids and run their own utilities.

"The ultimate rewards we see are the longterm benefits," explains Ixcan, Guatemala, volunteer Chris Stephens, manager of engineering for Palmetto, GA-based Coweta-Fayette Electric Membership Corporation (EMC). "We're not only providing a service, we're providing expertise and best construction practice skills by sharing information and technologies from our linemen to their linemen. They may not speak the same language, but they speak the same work."

The initiative also introduces folks to the co-op business model and shows them what electric power can do for schools, health clinics, farms and local economies. But the job's far from over. Today, these NRECA projects are under way in Bangladesh, Republic of the Philippines, India, Bolivia, Haiti, Senegal, Dominican Republic, Costa Rica, Southern Sudan, Yemen, Nigeria and Guatemala.

Valued Volunteers

For American lineworkers, volunteering overseas provides a crash course in old-school line-building techniques. Without access to bucket trucks in most locations, linemen manually climb up and down each utility pole to work on wiring—and that's after each pole, weighing as much as 2,000 pounds, has been set upright in the ground.

Before that work begins, deep holes for the poles are dug by locals. Then the poles are unloaded by hand and carried to their new



homes. Simply lifting, or "piking," the pole to place it in the hole—something done by utility trucks in the United States—takes a large group of men, all pushing and working together to lift the heavy burden in unison.

Many American volunteers, upon finding local linemen lack even basic climbing gear and tools, leave personal equipment behind when the work's done.

"It's a life-changing experience to be part of something like this, giving somebody power who's never had it before and doesn't realize what it can do for their life," notes Bobby Ball, a lineworker from Pahrump, NV-based Valley Electric Association who also volunteered in Yei. "It's an overwhelming feeling of joy, it really is."

Poles, Lights, Action!

Electricity evolved in America from a luxury to an essential part of American life during the last century. Yet more than 2 billion people around the globe still live without power—64 million in Latin America, 500 million in Africa, and more than 1 billion in Asia.

Of course, folks in distant lands use far less electricity than the 916 kilowatt hours (kWh) consumed each month by the average U.S. household, a pattern similar to how rural Americans responded when the "lights first came on" in the 1930s and '40s. In September 2009, for example, the typical rural consumer in Bangladesh used 71 kWh of electricity—just enough to power a single 100-watt light bulb for a month.

But internationally, every kilowatt counts.

"I volunteered to experience seeing people the first time they get electricity," says Monroe, GA-based Walton EMC Lineman Keith Kirk, who volunteered in Ixcan, Guatemala. "The excitement of running power lines down a road and watching people come out of huts, they couldn't wait for us to energize the lines so they could hook up. It makes their quality of life a little better."

According to NRECA International Programs, reliable electricity strengthens communities by providing better educational opportunities and increasing safety. Access to power also paves the way for progress in a community, giving small business the boost needed for success.

"It was a humbling experience, to see people and the way they lived compared to what we have," recalls Clarkesville, GA-based Habersham EMC Lineman Craig Carlan, who also worked in Guatemala. "I felt real

NRECA International Programs: Lighting the World

NRECA International Programs and volunteer linemen are building electric distribution lines in Bangladesh, Bolivia, Costa Rica, Dominican Republic, Guatemala, Haiti, Nigeria, Philippines, Senegal, Southern Sudan, and Yemen. As this map shows, co-op

linemen are working around the world to provide power.





good about what we had accomplished. In the village we electrified, kids will have the opportunity to get a better education. They have dreams too, just like we have dreams. Maybe they can set higher goals now."

Rewarding Results

NRECA International Programs has played a critical role in the electrification of rural Bangladesh, where there are now 70 co-op-like utilities. More than 40 million consumers in 85 percent of the rural villages dotting that South Asian nation boast lights and 1,000 new connections are made every day—bringing a brighter future to thousands more.

"Electrifying farms has had a huge social and economic impact, including a third rice crop annually," Habib Ullah Majumder, chairman of the Bangladesh Rural Electrification Board points out.

The Republic of the Philippines, where rural electric co-ops were first launched in 1970, now boasts 119 co-ops. In Bolivia, NRECA and a North Carolina co-op helped start what has become the largest electric co-op in the world. And wherever it goes, NRECA International Programs promotes energy efficiency and renewable energy resources such as solar power, biomass and micro-hydro.

Helping Hands

Many of the projects undertaken by NRECA

International Programs—which is comprised of two distinct entities: NRECA International, Ltd., and the NRECA International Foundation—are funded though the U.S. Agency for International Development (USAID). Other financing partners include the World Bank, U.S. Department of Agriculture, Asian Development Bank, and Inter-American Development Bank.

Local electric cooperatives across the United States have contributed funds, bucket trucks, line construction equipment, and hand tools through the NRECA International Foundation. Many have also sent volunteers overseas to train foreign utility workers, organize co-ops, and build power lines. Some coops band together to help communities in a specific nation; Georgia lineworkers routinely volunteer in Ixcan, Guatemala, and several teams of Missouri lineworkers have assisted onging work in Yei.

Despite widespread support, NRECA International Programs needs help to continue bringing electricity to the world, one village at a time. To watch videos of lineworkers volunteering across the globe or to make a donation supporting the program, visit NRECAFoundation.coop.

Megan McKoy writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association. Frank Gallant also contributed to this article.



A Diverse Solution for America's Energy

ongress has been debating climate change legislation for months. Now the U.S. Environmental Protection Agency has begun gearing up for its own possible set of regulations to slash emissions of greenhouse gases like carbon dioxide, which is blamed for contributing to global warming. With more than 70 percent of our nation's electricity coming from greenhouse gas-emitting fossil fuels like coal and natural gas, the question becomes: how to reduce emissions while still making enough electricity available?

For the past several years, the Palo Alto, CA-based Electric Power Research Institute (EPRI) has been working on an answer. EPRI, which includes electric co-ops as members, recently released an updated set of possible remedies that could meet our energy needs while dramatically reigning in carbon dioxide emissions over coming decades.

Called the "EPRI Prism" after the broad spectrum of solutions described (and resulting colorful graphics tracking emissions cuts associated with each), the proposal consists of recommendations in eight technology areas that, if adopted nationally, would allow electric utilities to slow, halt and eventually decrease carbon dioxide emissions by 2030 while still supplying safe, affordable and reliable electricity.

The eight components are: boosting end-use energy efficiency; making transmission and distribution system lines more efficient; improving the operating efficiency of fossil fuel-fired power plants; investing in renewable energy; expanding nuclear power capacity; capturing and storing carbon dioxide produced by coal-fired power plants; deploying electrotechnologies, like arc furnaces, for industrial and commercial use; and putting plug-in hybrid electric vehicles on the road.

The key involves utilizing all technologies together, with each doing its part to reduce emissions. Failure to maximize any of the eight technologies in the "full portfolio" will dramatically jack up the cost of achieving climate change goals, according to EPRI.

"There just isn't going to be a free lunch," remarks Revis James, director of EPRI's Energy Technology Assessment Center. "If this type of policy is actually implemented, it's going to cost money, even in an efficient scenario."

Assuming the full range of carboncurbing technologies are up and running by 2050 (the target date being discussed in congressional climate change proposals), EPRI pegs the real wholesale cost of electricity to increase 80 percent. But continuing business as usual under tightening carbon dioxide emissions restrictions would spike wholesale power costs more than 210 percent.

Diversifying the nation's generation fuel mix could lead to major savings down the road. Employing the full EPRI Prism, as opposed to relying on a few, less technologically advanced resources, will slash the impact on the nation's economy by more than \$1 trillion.

"Policymakers need to be made aware that the full portfolio carries a lower cost overall to the economy than a more limited approach," James stresses. "Heading in that direction clearly is in our national interest."

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

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Building Tomorrow's Co-op Leaders

A Hesperia Girl Scout troop earns the "Co-ops for Community" patch. Jan Tableman

fter they shared stories of "who said what to whom" at school and giggled a lot, the Senior Girl Scouts of Troop 20412 got down to business—cooperative business, that is.

The eight girls earned their "Co-ops for Community" patch by completing 10 of 14 requirements related to the cooperative business model over four weeks in November.

"I learned what a co-op is and how they are run," Mariah Walzer, 15, says. "It's interesting how some businesses use the seven cooperative principles."

Sponsored by the National Cooperative Business Association and Cabot Creamery, a dairy cooperative in Vermont, this patch program is designed to help girls become more business savvy, appreciate the advantages of cooperatives, understand how cooperatives contribute to their communities, and develop their business leadership skills.

After learning about electric co-ops, food co-ops, housing co-ops, credit unions and more, the girls compared the Seven International Cooperative Principles to the Girl Scouts Promise and laws. Characteristics common to both groups include open membership and concern for community.

"I learned how co-ops work to help their communities, just like we do," Nicole Thompson, 15, says.

To fulfill one patch requirement, the girls created thank-you posters to recognize Great Lakes Energy members for their contributions to the community through the co-op's People Fund. Another requirement resulted in the production of a board game, "Co-opland."

"It's like Candyland," Jessica Hall, 14, laughs. "You draw a card that has a question about co-ops on it. If you answer it right, you get to move ahead to the colored space listed on the card. If you don't, you have to go back."

The girls' most daunting task was to

draft their own co-op on paper. Troop 20412 created the Girl Scout Cookie Co-op, complete with logo, budget, membership guidelines, goals and more. Cookie sales will begin this month, and the girls decided to donate any profits they make to their school.

"These girls are very

creative," Troop Leader Shanon Buozis says. "They recently completed the Silver Award, which took them two years to earn."

The Silver Award is the second highest award in Girl Scouts. The troop's final project required each girl to make a blanket to donate to the Linus Project for children who are seriously ill, traumatized, or otherwise in need of support. Many of the girls made two blankets.

The girls began as Girl Scout Daisies when they were in kindergarten. Buozis has been one of their leaders since second grade. The troop is part of the Michigan Shore to Shore Council out of Grand Rapids.

"Shore to Shore has only been in existence for a little over a year," Buozis explains. "In August 2008 four Girl Scout councils merged to help centralize operations and reduce costs."

The merger was part of the new core business strategy which Girl Scouts USA began implementing in 2004 to better accommodate the changing needs of girls in American society. The new strategy includes changes to the uniforms, programs and the structure of the organization itself.

Today, the Michigan Shore to Shore Council serves over 20,000 girls, ages 5-17, in 30 west and northern Michigan coun-

Troop 20412: Naomi Elenbaas, Jamine Hall, Jessica Hall, Becky Stitt, Mary Stitt, Nicole Thompson, Ashlee Tinkham, and Mariah Walzer. Leaders: Shanon Buozis, Vonda Hall, and Dawn Stitt.



for Great Lakes Energy Cooperative, helps Girl Scouts Nicole Thompson, Ashlee Tinkham, Naomi Elenbaas, Jasmine Hall and Mariah Walzer learn about energy and electric co-ops for their "Co-ops for Community" patches.

ties. To learn more about Girl Scouting in Michigan, call the council at 866-566-7434 or visit gsmists.org.

To learn more about the "Co-ops for Community" patch, call 202-383-5471 or visit co-opmonth.coop/toolkit/girl scout materials.html.

Girl Scout Mission - Girl Scouting builds girls of courage, confidence, and character, who make the world a better place.

Girl Scout Law - I will do my best to be... honest and fair, friendly and helpful, considerate and caring, courageous and strong, and responsible for what I say and do, and to ... respect myself and others, respect authority, use resources wisely, make the world a better place, and be a sister to every Girl Scout.





MICHIGAN'S FARMERS OFFER "FREE GROCERIES FOR A YEAR!"

What is the Farmers Feed US Program?

Farmers Feed US is a program encouraging Michigan citizens to meet and engage with the farmers of Michigan who grow their food.

What is at the FarmersFeedUS.org website?

FarmersFeedUS.org offers Michigan consumers the chance to register to win \$5,000 in "Free Groceries for a Year" while also meeting Michigan farmers and touring their farms.

Who is sponsoring this program in Michigan?

This program is supported by the soybean, beef, egg, corn, sheep, pork, dairy, apple and vegetable farmers of Michigan who are eager to show the consumers of Michigan how we work to produce safe, affordable, nutritious food each and every day.

How long is the program running in Michigan?

The program launched Nov. 16th and runs for three months through Feb. 12, 2010. That gives the consumers of Michigan a lot of chances to register to win. People can register once with each Michigan farmer per day – that's 10 possible chances per day for up to 90 days!

"As Michigan farmers, we're thrilled to offer free groceries for a year to the consumers of our great state. This is an opportunity for us to share our values with the consumers - taking care of our families, taking care of our animals and land, and giving back to our communities."

Ed Cagney, soybean farmer, Scotts, Michigan

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It's January. Got bills?

s inevitable as snowstorms, December's generosity has once again ushered in a whole stack of January bills.

Of course, smart shoppers spend only what they have on holiday gifts, and they don't use credit cards to do it. Smart shoppers don't drop \$25 for a battery powered figurine of Winnie–the-Pooh either, even if it does play recorded Christmas music and light up my granddaughter's eyes when she powers it up... over and over and over.

So maybe I'm not a smart shopper, but even I know enough to charge only what I can pay back in January. Not all families can say that.

Even if you don't face a stack of unpaid statements, January might be a perfect time for the whole family to brush up on financial literacy skills.

Financial Literacy Important At Any Age

According to the Harmony Financial Network, financial literacy is the knowledge, skills, and ability to make wise decisions about financial matters—how to earn, save, spend and invest money. It is about making informed, thoughtful decisions about finances that will lead to success, security and self-sufficiency.

The Michigan Jump\$tart Coalition, among others, believes that increased financial literacy among our citizens is the key to preventing a repeat of today's national financial crisis—a crisis they believe was caused in large part by our citizens making unwise decisions with regard to credit cards, mortgage debt, savings and investments.

The Coalition also believes that the best time to teach financial literacy is during childhood. They are working toward ensuring that all our kids have access to personal finance education in order to develop the necessary skills to be financially competent when they graduate from high school. They are making some progress, too.

In December 2008 they helped pass a law that allows for a semester of financial literacy to count as one credit of math toward high school graduation. Now, the Michigan Jump\$tart Coalition is supporting legislative efforts to make such courses mandatory or to allow them to count towards meeting the state's Michigan Merit Curriculum.

Put Money In Its Place

Arun Abey, a former investment strategist and author of the book "How Much is Enough?" believes that teaching kids to be smart about finances early will help protect them now and in the future. To that end, he offers some basic tips for families.

Don't Let Money Be Invisible – Workingclass families during the Great Depression routinely set jars out in full view of the family marked "Rent," "Food," "Clothes," and so on, showing everyone where the money went. Today, money comes out of ATMs, and is spent via debit cards and credit cards – invisible to kids as to where it comes from and where it goes.

Give Kids Responsibility for Spending – Place children in charge of their optional spending. If they receive an allowance, require them to map out the money they have coming and also where it goes. Seeing it on paper or in a computer chart will give them a sense of reality about their money, and also build healthy financial habits.

Teach the Power of Investment – Help children set up a savings or investment account, but don't stop there. Spell out the value of their investment. For example, a simple investment of \$100 in a basic savings account can result in a balance of \$12,000 after 20 years. If they invest that same \$100 in a bond or a stock that returns merely 6 percent a year, that balance grows to \$42,000-plus.

For Love or Money? – Many families try to direct their children toward high-earning or high-status careers, such as medicine, law or business management. However, there is an alternative method, which directs children toward career paths that stress what they love to do. Ask your kids what they are passionate about and what they are good at. The answers to those questions will lead to a better quality of life than one centered on the pursuit of wealth.

"It's not easy to say that money isn't everything in a recession, but it isn't," Abey said. "If we leave out the part about lasting fulfillment, we're shortchanging them."

Abey's last point makes me feel better about



paying the bill for my singing Winnie-the-Pooh. How do you measure the value of wide-eyed wonder? What price do you put on the motivational power it leveraged? ("We'll make Pooh sing after your nap!")

Maybe a little toddler kitsch is worth the memories it makes. And maybe I'm a smart shopper, after all.

Resources That Can Help

• *Michigan Jump\$tart's Monthly Newsletter* – Helps educators promote financial literacy among youth. Subscribe or read issues at mijumpstartcoalition.org.

• "How Much is Enough?", by Arun Abey, Greenleaf Book Group Press (2009, howmuchisenough.net). Guides readers through a holistic approach to financial planning, based on money being only one element in the overall chemistry of a happy life. An online quiz helps viewers discover, "Can money make you happy?"

• *"Tips for Parenting in a Commercial Culture,"* by New American Dream. Call 877-68-DREAM or visit newdream.org. A 32-page booklet packed with tips and resources to help parents deal with the effects of advertising and marketing on children.

Did you know?

- 60% of teens say learning about money management is a top priority.
- When asked about concerns parents have for their children's futures, parents rank developing good personal financial skills and being able to handle money (74%) ahead of both following the wrong crowd (58%) and drug/alcohol use (56%).
- Only personal safety ranked higher with parents.
 - Source: Michigan Jump\$tart Coalition for Financial Literacy, January 2009

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Clinical Study Shows^{††}-On Nutrisystem D, people with

- type 2 diabetes who wanted to lose weight:
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†† In a 3-month clinical study at Temple University School of Medicine and published in the Journal of Postgraduate Medicine, Nutrisystem program participants lost an average of 18 lbs., and lowered fasting blood sugar levels from 149.5 to 115.2, compared to those following a diabetes support and education program, who lost 1.3 lbs, and lowered fasting blood sugar levels from 151.4 to 144. Not all menu items were included in the study. Study funded through an unrestricted educational grant from Nutrisystem.



On Nutrisystem you add-in fresh grocery items.

Nutrisystem D is a comprehensive weight loss program. It does not treat, cure or prevent diabetes, and is not a substitute for diabetic medications. Consult your physician before starting this or any weight loss or exercise program.



The two types of lobster found in the United States are the northern lobster, which is the basic lobster found on the East Coast, and the spiny lobster, found off the coast of Florida. Find many more recipes at **countrylines.com**.

Lobster Bisque

6 T. butter, divided 1/2 c. finely chopped fresh mushrooms 1/2 c. finely chopped onion 1/2 c. finely chopped celery 1/2 c. shredded carrot 1 15-oz. can chicken broth 1 lb. lobster meat, real or imitation 1 t. sea salt 1/4 t. cayenne pepper 3 c. heavy cream 3 T. flour 4 oz. cooking sherry paprika

(Pictured above)

Lobster Party Dip

8 oz. pkg. lobster ready-to-eat chunks
8 oz. cream cheese, softened
1/2 c. chopped sweet red pepper
1/4 c. chopped sweet onion
1/4 c. mayonnaise
1 T. flaked parsley
1/4 t. garlic powder
salt and pepper to taste Combine cream cheese and mayonnaise; mixing well. Stir in red pepper, onion, garlic powder, parsley, salt and pepper. Chop lobster into small pieces; stir into mixture. Chill at least one hour. Serve with crackers.

Melt 3 tablespoons butter in a large saucepan over mediumlow heat. Add mushrooms,

onion, celery and carrots. Cook

and stir until tender, about

10 minutes. Stir in chicken

broth, lobster, salt and pep-

per; bring to a boil, simmer

10 minutes. Stir in cream. In

a small saucepan, melt remain-

ing 3 tablespoons butter; stir in

flour. Immediately add to soup

mixture, cooking and stirring

constantly until thickening

occurs. Add sherry; mix well

and serve. Garnish each bowl

of bisque with a sprinkle of

Jenn Rekuz, Detroit

paprika.

Judy Durrant, Portland

Seafood Sensation

1 1/2 lb. lobster meat 16 oz. cream cheese, softened 1/4 c. milk 2 T. honey 2 T. lemon juice

Topping:

2 c. ketchup or cocktail sauce 1/4 c. prepared horseradish 1 t. dried parsley flakes 1/2 t. Worcestershire sauce 1 t. lemon juice

Lobster Spread

8 oz. cream cheese, softened 1 T. milk 1 1/2 c. flaked lobster meat 2 T. chopped onion 1/2 t. horseradish 1/4 t. salt dash pepper paprika 1/4 c. sliced almonds

Broccoli Lobster Mornay

bunch fresh broccoli
 lb. lobster meat
 stick butter
 T. flour
 c. milk
 c. heavy cream
 c. grated Gruyere cheese
 T. dry sherry
 1/4 c. grated Parmesan cheese
 c. bread crumbs

Separate broccoli into flowerets, place in a saucepan with a bit of water, and cook until crisp-tender. Remove from Shred lobster meat into a 9x11inch glass baking dish, spreading evenly. Sprinkle with lemon juice. Blend cheese, milk and honey until smooth. Spread over lobster meat. Combine all topping ingredients, mixing well. Spread topping evenly on lobster in pan. Chill well; serve with crackers.

Eileen Hughes, Dayton, OH

Combine cream cheese with milk, mixing until smooth. Add lobster, onion, horseradish, salt and pepper. Spread into a greased 8-inch ovenproof dish. Sprinkle with paprika and almonds. Bake at 375° for about 15 minutes until bubbly. Serve warm with crackers of choice.

Bonnie Gauld, Fife Lake

heat and blanch in cold water. Cut lobster into bite-sized chunks. In a saucepan, melt butter; stir in flour. Stir in milk and cream; stirring constantly, cook until smooth and thickened. Remove from heat and add grated cheese and sherry. In a buttered casserole dish, arrange broccoli and lobster. Pour mornay sauce over all. Sprinkle with Parmesan cheese and bread crumbs. Bake at 400° for 10-15 minutes until sauce bubbles and top is lightly browned.

Anita Harris, Mason



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Fabulous Fondue

1 15-oz. jar Cheese Whiz 2 sticks butter 2 lbs. lobster chunks, real or imitation 1 lg. loaf good quality bread

Place Cheese Whiz, butter and lobster chunks in a fondue pot or on stove top in a non-stick saucepan. Heat slowly until hot. Cut bread in chunks. Dip bread into mixture.

Mary Scodeller, Lansing

Florida Spiny Lobster

1-2 lobster tails per dinner guest 1-2 c. drawn butter lemon, cut into wedges seafood seasoning large pot of low-boiling water

If tails are frozen, defrost. Place tails in a pot of low boiling water, around 195°. Boil for 9 minutes; remove from water and cut in half lengthwise, shell and all. Brush meat with drawn butter and sprinkle with seasoning. Place tails in a very hot cast iron skillet, meat side down, for 30-45 seconds to seal in the flavor and give them some color. Serve immediately with lemon wedges and drawn butter on the side.

Jim Larson, Grayling

Cheesy Hot Lobster Dip

8 oz. cooked lobster meat 2 c. mayonnaise 1/2 med. onion, finely chopped 1/4 c. chopped fresh parsley 1/8 t. pepper 2 c. shredded, mild cheddar cheese paprika

In a medium bowl, shred lobster meat. Stir in mayonnaise, onion, parsley, pepper and cheese; sprinkle with paprika. Spoon mixture into a shallow 1 1/2quart casserole or baking dish. Bake uncovered at 350° for 20-25 minutes, until heated through. Serve with crackers or bagel chips.

Janice Harvey, Charlevoix

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The Efficiency of Space Heaters

pace heaters are small, versatile, and generally good at warming a room, and at some point most people consider purchasing one. However, some manufacturers claim that their electric space heater can significantly cut a home's heating bill. Do these claims make sense?

Some basic facts about space heaters will help get at the truth of the matter. Space heaters work best as a supplement to a furnace or heat pump—they are rarely used as the primary heating source. Three main types of space heaters are available, which can usually be bought for \$30 to \$100: radiant heaters, convection heaters and combination heaters.

Radiant Heaters

A radiant heater heats objects and people not the air—in a room. They are best used in rooms where the person who wants to be warmed can be in direct line of sight of the heater. Radiant heaters can be a good choice if you are in a room for a short period of time and want instant heat. They can pose a burn or fire risk and should not be placed near furniture, drapery, pets or small children.

Convection Heaters

Convection heaters are designed to heat the air—not people or objects—in a room. Hot air from the convection heater rises to the ceiling and forces cooler air to the floor. The cooler air is warmed by the heater and rises to the ceiling, creating a cycle that continues as long as the heater is on. These are typically either baseboard heaters or oil- or water-filled heaters. The oil- or water-filled heaters are the most efficient and typically look like a small radiator. Convection heaters are generally warm to the touch and, compared to a radiant heater, have a decreased fire and burn risk.

Combination Heaters

As the name implies, a combination heater tries to bring the best of the radiant and convection heaters into one package. They often have an internal fan that aids in distributing heat throughout the room. These heaters are versatile and more common as a result, although they do not typically perform as well as a radiant or convection heater.

Before purchasing a space heater you should



Before you buy...

Before buying a space heater it will likely be beneficial to perform some easy and inexpensive energy-saving measures at your home. Any of these could solve your heating problems without any additional heating equipment:

- Add caulk and weather stripping around doors and windows
- Add insulation to attics and exposed walls
- Clean or replace furnace filters
- Move furniture or obstacles from heat registers
- ✓ Insulate duct work
- Close blinds or curtains at night

determine how and where it will be used and whether a radiant, convection, or combination heater will do the job best. Combination units are versatile, but you will most likely get better performance from a radiant or convection heater. Use a radiant heater if you want heat instantly and will not move from one spot. If you need to warm an entire room, a convection heater should do the trick.

Most space heaters use between 600 and 1,500 watts of electricity. If a homeowner were to use a space heater eight hours a day, five days a week for a month it would cost approximately \$15.26. So can using a space heater cut your home heating bill? Maybe.

Space heaters can only heat a small space. You can save significant money if you use the space heater with this in mind: turn the thermostat of your central heating system down considerably (as low as 50 degrees in some cases). Place the space heater in a room that is occupied by people, and close that room off from the rest of the home. This method of "zone heating" will save money.

Space heaters do have their place in warming a house. But they simply cannot replace energy efficient central heating or weatherization improvements to the home. For example, *all* electric space heaters produce 1 unit of heat for every 1 unit of electricity consumed, meaning they are 100 percent energy efficient. Those that use natural gas are 80 percent efficient. In comparison, geothermal heat pumps can produce more than 3 units of heat for every unit of electricity consumed, making them 300 percent efficient.

As with any technology, before buying a space heater understand how the device is to be used, and understand the energy claims of the manufacturer. While it may be technically possible to cut your heating bill by 50 percent using a space heater, it is impractical for most people.

Brian Sloboda is a program manager specializing in energy efficiency for the Cooperative Research Network, a service of the National Rural Electric Cooperative Association.



Geothermal Heat Pumps: Energy Efficiency From The Ground Up

eothermal heat pumps are extremely energy efficient and generally yield the lowest utility bills of any residential heating and cooling systems available. With the high cost of energy today and the available energy tax credit, installing a geothermal heat pump could make economic sense

for some families.

A geothermal heat pump operates similarly to a standard heat pump except it exchanges heat with the ground instead of the outdoor air, essentially using renewable energy from the sun's rays that are stored as heat in the ground. The temperature of the outdoor air can vary 40 degrees or more from day to night and more than 100 degrees from the coldest winter night to the hottest summer day. In contrast, the temperature several feet below the ground surface varies relatively little.

In order to capture the heat energy from the ground

(in the winter) or exhaust the heat during summer, a long pipe is usually buried in the ground. An antifreeze/water solution running through the pipe acts as the heat transfer medium. If there is a pond or wells which can be dug on your land, this water can run through the heat pump heat exchangers. All of the new models use earth-friendly R410A refrigerant instead of freon.

Since no outdoor condenser coils and fans are needed, the entire heat pump and all mechanical components are located in an indoor unit. So, it operates quietly and there is no noise to bother neighbors or your family at night. This also reduces wear and tear from constant exposure to outdoor weather (and playing children).

During winter, in the heating mode, a geothermal heat pump can produce up to \$5 worth of heat for each \$1 on your electric bill. Unlike standard heat pumps, which lose efficiency and maximum heat output as the outdoor temperature drops, the efficiency and heat output from a geothermal system remains relatively constant.

Moist ground has a huge thermal energy storage capacity so the amount of heat your system pulls out to warm your house all winter has little effect on the ground tem-



This schematic shows how a geothermal heat pump works during winter and summer.

perature. Some models can also be combined with solar systems to gain more free heat. The most efficient models use a two-stage compressor and variable-speed indoor blower for the best comfort.

In summer, a regular heat pump or central air conditioner loses efficiency and cooling output when it is hotter outdoors. Unfortunately, this is when your house requires the greatest cooling capacity. Cooling efficiencies for geothermal units are as high as 30 EER (energy efficiency ratio). A standard heat pump or central air conditioner is typically less than half as efficient.

Another summertime advantage is free hot water when the geothermal heat pump is cooling your house. Instead of exhausting the waste heat to the outdoor air as a standard heat pump does, this waste heat is diverted to your water heater. This device is called a desuperheater and it is offered as a standard or optional feature on most geothermal heat pumps.

The initial cost of installing a geothermal heat pump is significantly more expensive than a standard air-to-air heat pump, and the final cost of the installation depends upon the type of ground loop needed and the topography of your land. But the federal energy

tax credit, which provides a 30 percent tax credit covering the entire cost of installing a geothermal heat pump, does make the initial expense more affordable.

To qualify for the credit, the unit's efficiency must meet or exceed Energy Star® requirements and be installed after Dec. 31, 2007, and before Dec. 31, 2016. Units installed in 2008 were subject to a \$2,000 cap on the credit, so if you already installed one during 2008, you can amend your 2008 taxes and still take the credit.

For any units installed in 2009 through 2016, you can take advantage of the full 30 percent tax credit. File for it by

completing the Renewable Energy Credits subsection on your tax return forms. No proof of purchase is required; however, in case of an audit, keep a detailed invoice of your purchase. The contractor who sold and installed the product should list the purchase as a "Geothermal Heat Pump" on the invoice and that it "Exceeds requirements of Energy Star program currently in effect."

The following companies offer efficient geothermal heat pump systems: Climate Master, 800-299-9747, climatemaster.com; Econar GeoSystems, 800-432-6627, econar. com; Florida Heat Pump, 954-776-5471, fhp-mfg.com; Hydro-Temp, 800-382-3113, hydro-temp.com; and WaterFurnace, 800-436-7283, waterfurnace.com.

Have a question for Jim? Send inquiries to: James Dulley, Michigan Country Lines, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit dulley.com.

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Wolverine Teams With Walloon Lake Trust And Conservancy

ne of Wolverine Power Cooperative's four core values is environmental stewardship. The co-op is committed to the thoughtful use of environmental resources.

So, when given the opportunity to partner with conservation groups on the maintenance and improvement of its 1,600 miles of transmission line rights-ofway, Wolverine is on-board.

"Our first priority in our right-of-way work is to make sure our transmission lines are free and clear to keep power flowing," said Adam Helminiak, a utility forester for Wolverine. "But, we can go about our work in ways that protect wildlife habitat we encounter and even improve it."

This summer, Wolverine and its contractor, Trees, Inc., teamed with the Walloon Lake Trust and Conservancy to clear a quarter-mile right-of-way section located within the Conservancy's Frog Hollow Preserve near Walloon Lake in Charlevoix County.

"The Frog Hollow Preserve plays a direct role in keeping our famous Walloon Lake healthier," said Karie Jeisel, a land protection specialist for the Conservancy. "It's the headwaters of South Arm Creek, one of three main inlets to the lake."

Helminiak worked with Conservancy members on a specific plan for Frog Hollow that included the following:



Members of the Walloon Lake Trust and Conservancy who assisted Wolverine with right-ofway work were, from left, Karie Jeisel, Bob Charlton, Maureen Parker and Bill Stetson.

• Manual clearing of tall, woody vegetation within the right-of-way. Conservancy volunteers completed a majority of this work using chainsaws, rather than heavy mowing machinery, thus reducing soil compaction.

• Scattering of brush, rather than piling,

"Energy for Wildlife" Member For Over 5 Years

Wolverine Power Cooperative became a certified Energy for Wildlife member in 2004, meeting requirements for the program set by the National Wild Turkey Federation (NWTF). Certification is the program's highest level of membership and requires the development and implementation of a vegetation and wildlife management plan.

Wolverine was honored in 2009 with NWTF's Energy for Wildlife Corporate Achievement Award recognizing the co-op's success in integrating wildlife conservation into its right-of-way management program.

Energy for Wildlife strives to create or improve wildlife habitat on utility rights-ofway and other property owned or controlled by energy companies. The program is open to all energy companies including electric, natural gas, gasoline, oil, coal wind and other emerging energy source companies.



to maintain regular water flow patterns.

• Removal of woody brush directly under the transmission lines and dead, weak or leaning trees along the rightof-way.

"Our mission is to provide reliable power to our members," Helminiak said. "We accomplished this at the Frog Hollow Preserve and took our efforts a step further in partnering with the Conservancy to protect nearby waterways."

Putting Our Communities First!



HOW IT WORKS: Presque Isle Electric & Gas Co-op asks members to take part in the Communities First Fund, where their bills are rounded up to the nearest dollar. For instance, if your electric bill is \$64.75, it is rounded up to \$65 and the extra 25 cents goes into the Communities First Fund. It is an opt-in fund, meaning members must let us know if they want to be part of this opportunity to give.

WHO GETS THE MONEY: Since 1998, the Communities First Fund has awarded \$1 million in grants and scholarships to a wide range of people and organizations within the PIE&G service area—from schools and fire departments to individuals who encounter hard times. Funds from the Communities First Fund are distributed by an all-volunteer board representing each of the nine counties served by PIE&G. The volunteer board is appointed by the directors of PIE&G and meets six times a year.

HOW TO SIGN UP: Simply call the PIE&G member service department at the number below, include a note in your bill requesting participation, or visit pieg.com, "Contact Us."

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Green Collar Job Search

Michigan's growing renewable energy industry promises jobs. Where are they? Linda Wacyk and Lisa Doublestein

hen the Electrolux refrigerator factory closed its operations in rural Montcalm County, plant controller Norice Thorlund-Rasmussen doubted she would find a new job in the area.

Electrolux had provided 2,700 jobs to area residents. In fact, having also been home to brands Gibson, Hupp of Canada, White Consolidated, and Frigidaire, the city of Greenville had been known as the "Refrigerator Capital of the World." When executives announced the plant's production was moving to Mexico, locals were devastated. In an already failing economy, the loss of the city's major employer would be crushing.

"Electrolux had announced their closing and most of the team members had left," Thorlund-Rasmussen recalls. "I was closing the books and there wasn't a whole lot of work locally. I thought I'd have to drive to Grand Rapids." Instead, Thorlund-Rasmussen, who has degrees in accounting and management, landed a job with United Solar Ovonic, which manufactures lightweight, flexible, thin-film solar cells used to create electricity from the sun. United Solar started operating in Greenville in November 2007, and currently employs 412 people who live in the area. Thorlund-Rasmussen is now the company's plant controller.

"I was very, very excited to be hired," she said. "It's a green company with a new, very exciting process. The culture is fantastic."

Solar Joins Growing Line-up of "Green Jobs"

Solar panel production—one of the bright spots in Michigan, even though it has temporarily slowed due to the world recession represents just one of the green technology industries on the rise in Michigan today.

The Michigan Department of Energy, Labor & Economic Growth (DELEG) considers industries that provide products or services in these areas to be "green":

- Agriculture and natural resource conservation;
- Clean transportation and fuels;
- Increased energy efficiency;
- Pollution prevention or environmental cleanup; and
- Renewable energy production.

The Michigan Green Jobs Report released in May 2009 reveals that a sample of 358 green-related firms has added over 2,500 jobs over three years.

"We found that Michigan currently has

Left: Solar Ovonics' Norice Thorlund-Rasmussen with a machine that cuts roll-to- roll processed coils into uniformly sized solar cells.

109,067 private-sector green jobs," says John Groen, communications representative for DELEG. "This includes 96,767 direct green jobs and 12,300 support green jobs."

This represents about 3 percent of Michigan's overall 3.2 million private sector jobs. While that may not sound like a lot, the report suggests there is a huge potential for expansion. From 2005-2008 green jobs grew by 7.7 percent, while the state's private-sector employment shrank 5.4 percent.

In Brownstown Township, the General Motors Company will invest \$43 million to assemble lithium-ion battery packs for extended-range electric vehicles. The plant is expected to provide more than 100 advanced technology jobs.

Renewable energy production might be the fastest growing of all green industries. "Among renewable energy firms in the sample," Groen adds, "the [job] growth rate hit 30 percent."

Renewable Energy Jobs Top List

Renewable energy is generated from sustainable, natural resources such as sunlight (solar), wind, water (hydro), geothermal (deep earth) heat, and biomass (wood, agricultural, animal, municipal, or food waste), that can be naturally regenerated in the shortterm. Related businesses include firms that produce and supply parts or equipment like solar panels or wind turbines.

Spurring the growth in renewable energy is a host of local, state and federal policies and incentives, most notably a state mandate that utilities provide an increasing amount

Where to get info on jobs:

No Worker Left Behind – michigan.gov/nwlb

Michigan Talent Bank – michworks.org/ mtb. More than 20,000 jobs posted.

Michigan Department of Career Development– michigan.gov/mdcd

Where to find training:

No Worker Left Behind – michigan.gov/ nwlb.Find job training courses by county or region and by skill or degree.

My Career Education – mycareereducation.org. A guide to education and training opportunities in Michigan.

Renters: How To Save On Your Energy Bills

Reducing electricity use as a renter may seem tough when you have little control over the biggest energy users in your place, like your refrigerator, dishwasher or heating and cooling system.

But there's still plenty you can do to lower your energy bill without making permanent—or expensive—changes. Follow these tips to reduce energy use in your rented space:

✓ If your home has an individual water heater, call your landlord and ask to have the temperature lowered to 120 degrees. Most water heaters are set at a default temperature of 140 degrees—which can be hot enough to scald your skin. The lower setting will still be hot enough to keep your showers steamy.

✓ Look for an Energy Star[®]-qualified window air conditioner if you are responsible for purchasing it. An Energy Star air conditioner uses about 10 percent less energy than others. In the winter, cover your window air conditioner with a tight-fitting cover to prevent the heat from escaping, or remove the unit from the window.

✓ While blinds offer privacy, hanging heavier curtains will help keep out the heat in the summertime and cold in the winter. Tape clear plastic sheeting around window frames to help insulate thin windows in the winter also.

✓ Install sink aerators on all faucets. They

are cheap and non-permanent, but can significantly reduce your hot water use while offering the same water pressure.

✓ Replace incandescent light bulbs with more efficient compact fluorescent light bulbs. They use about 75 percent less energy than incandescents, and last six to 10 times longer—so you can take them with you when you move.

✓ If the windows and doors are drafty, ask your landlord about installing weatherstripping to seal off cracks. It's an easy do-it-yourself task and cheap, too—so even if your landlord won't cover the cost, it will be worth it because it will increase the comfort of your home and reduce your heating bills.

of electricity from renewable sources and the American Reinvestment and Recovery Act (ARRA). The federal stimulus bill, as it is commonly called, dedicates about \$21 billion to extending tax incentives for wind, solar and other renewable energy manufacturers.

"This funding should accelerate green job growth in Michigan," Groen explains. "For example, in June, Vice President Biden announced over \$1 billion of ARRA grants to companies and universities based in Michigan. This could lead to the creation of a substantial number of jobs."

Education, Training Key for Green Employers

All these potential jobs require new training, which is driving Michigan's colleges and universities to scramble to meet the need. In August, a dozen in west Michigan—including seven community colleges, Ferris and Grand Valley State universities, and Northwestern Michigan College—formed the West Michigan Community College Collaboration to produce the next generation of skilled workers for the wind turbine industry.

This month, Kalamazoo Valley Community College will launch the first Wind Turbine Technician Academy in the U.S., with a 26-week program to train workers on the giant turbines found on wind farms. The Center, which partners with nearby Western Michigan University's engineering department, has an active on-campus 50-kilowatt turbine, and 50- and 350-kilowatt decommissioned turbines, and provides installation, operation and maintenance technician training for small, commercial, and utility grade turbines.

The Detroit area's Macomb Community College is expanding its alternative energy and sustainability job training programs, thanks in part to \$800,000 in federal grants to train people for jobs in the wind, solar, biomass, geothermal, battery technology, and hydrogen fuel cell industries. Macomb is creating a Renewable Energy Certificate.

Grand Valley State created the Michigan Alternative and Renewable Energy Center in 2003. It's a self-sustaining distributive energy center that features a high-temperature molten carbonate fuel cell, photovoltaic solar

Top Ten

Engineering and construction jobs are prominent in Michigan's new "green" economy, but other jobs of all skill levels are open. Today's Top Ten* high-demand occupations in Michigan include:

Energy auditors Home Energy Rating System (HERS) raters	
Skilled trades (all)	
Lead/hazardous materials workers	
Accountants	
Wind technicians	
Agri-tourism specialists	
Food safety specialists	
Aquaculturalists	
Urban farmers	
Truckers	
* Top ten of many, according to focus group	

* Top ten of many, according to focus group employers interviewed for the "Michigan Green Jobs Report: Occupations and Employment in the New Green Economy 2009." roof tiles, and nickel metal hydride battery energy storage system. The center includes teaching facilities and has a \$1.4 million federal appropriation for a water-based turbine demonstration project on Muskegon Lake.

Everyone Can Play a Role

Experts and employers agree that green opportunities are expanding, and that training for "green skills" starts as early as high school and continues right on the job.

"In multiple focus groups, employers emphasized the need for basics in math and reading with additional skills to be acquired on-the-job or in school, depending on the precise green job in question," Groen adds.

United Solar has partnered with area schools to help them teach energy conservation to students from elementary to college levels. They have also worked with Montcalm Community College (MCC) instructors to create a class on vacuum technology, as part of MCC's Integrated Manufacturing Technology curriculum.

Thorlund-Rasmussen says on-the-job training at United Solar is one of the reasons its employees succeed. She recently attended a class taught by a fellow employee who wanted to expand his knowledge on how cells work. "Everyone has knowledge they can give to others, and we make time to teach it to those who want to learn, she says.

"Our technology is new technology that is not common in traditional manufacturing," adds United Solar plant manager, Gary DiDio. "We have a responsibility to create a learning environment and to teach this technology to the team."

RIGHT AT HOME Jim Hough

Farewell to Paradise

emember that great movie, "On Golden Pond?" My wife Darl and I have recently identified with Henry Fonda and Katherine Hepburn, the stars of that film. As readers of this column know, I have been legally blind for over 40 years and Darl has done all the driving, checkbooks, cooking, and more. Her health now interferes with her driving, and more. So, we have sold our beautiful home on the Lake Superior shore and moved to a retirement home in East Lansing to be near our family.

There were tears on the keys of my typewriter as I wrote this in late October, looking out on Whitefish Bay.

Leaving Paradise, after nearly 25 years of retirement bliss, will be very hard for both of us. But the time has come and we look at it all as another chapter in our lives. At 77 and 76, and 55 years of marriage, we promised our family to move into the future with all the grace we can muster.

While I felt it important to share all this news with so many readers who have been special to us, I do not want it all to sound like an end or a funeral. Let me show you some of the "other side of the coin."

We completed a 30-year newspaper career in Lansing that got me into several halls of fame and Darl did as much as a successful school teacher in Lansing.

Perhaps more important is that we have enjoyed nearly 25 years of great retirement in Paradise. What's more, Darl has hauled me all over the United States in our travel trailer. She should have been an 18-wheeler driver.

For more than 25 years, I have also written this "Right At Home' column in *Michigan Country Lines* magazine and developed a relationship with some very special readers. So many letters and phone calls have put me in tears as you helped me battle cancer, and other low spots in our lives. I am glad I never got around to quitting *Country Lines* earlier because it kept me from getting brain-dead, and readers have vastly enriched our lives.

So, what's next for us? We've moved to a two-bedroom retirement apartment, Independence Village, 2530 Marfitt Road, Apt. 319, East Lansing, 48823. With two sisters, a brother, two kids, five grown grandkids and Darl's brother living in the area, we are in good hands.

At a time when it is most difficult to sell a home, we lucked out to get a good deal from two of our special friends, Steve and Fran Findley of Oshkosh, WI. They and their two teenage children, Steven and Elizabeth are excited, and we know that our home has a great future with them.

Because it is just too hard to say goodbye to you readers, I won't do it. My longtime friend, Mike Buda, current executive editor of this magazine and the guy who hired me to do this column so many years ago, has insisted that I will have space in this magazine any time I want it. Mike is a great writer, so I have been urging him to personally take over this column for now.

As we so reluctantly leave our beloved Upper Peninsula, each of you need to know how much we treasure all the memories you gave us.

P.S. I have signed books for you to order from the advertisement on page 27. All proceeds go to scholarships for rural kids.





Clockwise from top left: Cleaning smelt, May '09; Clyde the chipmunk hunter, July '07; Jim and his welcome sign, May '05; Candy, Jim's first dog, May '86; bad birds, April '05; John Ward and Bubba, Sept. '04; Jim in the '80s; winter in Paradise.



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By attending Co-op Teen Days in April—a three-day event sponsored by your electric co-op—with students from across the state, you'll learn about electrical safety, energy efficiency, and some valuable career information. You may then be chosen to represent your co-op at the Rural Electric Youth Tour to Washington, D.C., in June, and along with 1,200 students from across the U.S., you'll go on tours, see the sites, and even visit U.S. legislators and their staff on Capitol Hill.

Don't miss out! Teen Days: April 28-30 Youth Tour: June 12-17

If you're a 10th or 11th grade high school student who will be 16 or 17 by June 2010, and your family receives electric service from Presque Isle Electric & Gas Co-op, you are eligible to apply to win the free trips to Teen Days and Youth Tour. Contact Sharon Krzywiecki at 989-733-8515, ext. 813, or email her at sharonkr@pieg.com, for an application or more information.

Learn more about Michigan Electric Cooperative Teen Days and Youth Tour at **countrylines.com**, and click on "Youth." Also check out **youthtour.coop** to see more videos and photos.





