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Michigan







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*Not in all editions

On the Cover*

Valerie Donn, of Williamsburg, MI, is an artist gifted with the vision to paint and create on a variety of canvases—especially those related to gardening.

Photo - Sarah Brown/Traverse City sarahbrown-photography.com/





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Your Touchstone Energy® Cooperative

Being a Member Matters

n investor-owned utility, a city-owned electric system and a not-for-profit electric cooperative are all electric providers.

But there's one major difference between them.

Every home or business that receives power from an electric cooperative—18 million in 47 states—owns a portion of the utility. As a result, anyone who receives co-op electric service becomes a member and owner, not just a customer. Across the nation, electric co-ops serve more than 42 million people.

Being a member *matters*. Great Lakes Energy doesn't exist to make profits for distant investors on Wall Street. We exist to provide you with safe, reliable and affordable electric service—and do so in a way that raises the quality of life in our communities. Because electric co-ops operate on a not-for-

profit basis, they have no need to increase revenues above what it takes to run the business

in a financially sound manner.

Membership matters because a well-run co-op invests wisely and contains costs to keep its members' rates as stable as possible.

We regularly take advantage of refinancing opportunities that benefit the co-op. Millions of dollars in additional interest expenses on long-term loans are avoided this way. Lower-interest loans are the main source of operating funds for electric cooperatives.

We serve more members with fewer employees than many other electric cooperatives. Great Lakes Energy ranks 15th out of 816 electric cooperatives as having the most members per employee. Our employees serve members across a vast area covering 26 counties and over 14,000 miles of power lines. Only one other electric cooperative in the country has more miles of line than we do.

Membership matters because you receive returns on your investment in your co-op. Electric co-ops aim to operate at-cost, so any excess revenues, or margins, are

returned to members in the form of capital credits, based on their electric use.

We put unclaimed capital credit refunds to good use, too. Although we would hope everyone who leaves our co-op would pay their balance, the reality is that not all do. We help limit this loss by applying unclaimed capital credit refunds to the unpaid amounts.

Membership matters because you have a voice and a vote in how your co-op is governed. Through democratic control, members like you elect directors to serve on the Great Lakes Energy board. Control stays in local hands. Your board, along with those who work for your co-op,



Steve Boeckman Great Lakes Energy President/CEO

...because you have a voice and a vote in how your co-op is governed.

are your friends and neighbors.

Membership also matters because electric co-ops care about improving the quality of life in the areas they serve. That's why we rely on your generosity in supporting the People Fund that helps charities and non-profit groups in your community.

Membership matters because it entitles you to certain benefits like special rebates for energy efficient heating and cooling equipment, lower rates for electric heat and water heating, and new health savings benefits through the Co-op Connections program (see cover wrap attached to this magazine).

The bottom line: *Membership matters* because you matter to your electric cooperative.

Annual Kids' Coloring Contest

Hey kids! If you're 10 or under you can enter our coloring contest. This year's coloring page is a picture of the Touchstone Energy balloon. Great Lakes Energy is a Touchstone Energy Cooperative.

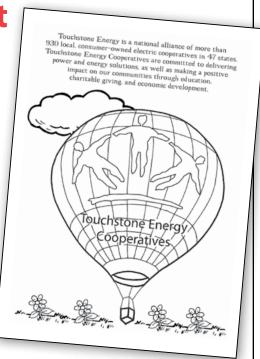


Download the entry form and contest rules at the "Your Community" section of gtlakes.com or pick them up at one of our offices. Ages 10 and under are eligible to enter. Entries must be received by April 20.

AGE GROUPS • 4 and under • 5-7 years old • 8-10 years old

PRIZES One grand prize for each age group: deluxe set of art supplies, valued at \$25. Plus, you will be pictured in one of our publications.

One second and one third prize for each age group: new crayons and markers, valued at \$10.



New Paperless Billing Option

Electronic Bill Presentment helps GLE members go "greener."

ome of the best ideas for business improvement come from Great Lakes Energy members themselves.

Paperless electric bills are now available with the new Electronic Bill Presentment (EBP) option, an idea first suggested by our members. EBP eliminates the need to send paper bills to participating Great Lakes Energy members. Saving paper makes GLE and participating members more environmentally friendly.

Members can request to be notified by email when their monthly billing statement is available to view online. Billing statements can be saved and stored by members on their own computers or they can access an online archive of statements through their GLE online eBusiness account.

With fewer paper bills, GLE saves on contracted costs for bill paper, envelopes, printing toner, bill stuffing and mailing time, and postage. The savings also help contain part of the cost of providing electric service.

Members—including those who currently use the eBusiness feature for online informa-

tion about their electric accounts—will see a page that encourages them to sign up for EBP when they log-in or click on the "Account Access" link on GLE's website. Once enrolled in EBP, they will receive a monthly email advising their bill is online and ready to view.

Using their eBusiness log-in procedure, members enrolled in EBP can access the current billing statement, plus review or retrieve up to 13 months of billing history. Unlike the bill summaries that appear on members' eBusiness accounts, EBP statements are exact replicas of the physical bill copy.

When members combine EBP with automated bill payment, GLE can realize a nearly paper-free circle of distributing bills and receiving payments. Launching EBP marks an achievement for GLE in cost containment, efficiency and member service.

Co-op reps can walk members through the process of enrolling in EBP and automated bill payment, including viewing statements through eBusiness accounts. To enroll, visit gtlakes.com and click on "Account Log-in" at the top of the page, or call 888-485-2537.

Attend Our Free Energy Seminar

You're invited to attend a free energy seminar Saturday, April 21, from 10 a.m. to noon at our Great Lakes Energy office in Newaygo.

Hear presentations on geothermal and air-source heat pumps, Marathon® electric water heaters, and more. Local heating and cooling companies and Great Lakes Energy staff members will be on hand to answer your questions relating to electric heat and electric water heaters.

Receive the latest update on energy optimization (EO) programs that offer incentives to help you save energy. Learn about other incentive programs offered by Great Lakes Energy, such as special billing discounts for electric heat and water heating.

Door prizes will be awarded. Winners will receive energy saving gifts.

Space is limited, so please register by calling 1-888-485-2537, ext. 8958, or email events@glenergy.com.

Letters

Praise for Barb Barton's natural living, Mystery Photo follow-ups, classified ads, and your thoughts on apples. It's all here in your reader letters.

In Tune With Nature

Barb Barton (February) is absolutely the most talented person I have ever known. Not only is she a musician, singer and song writer, she is a biologist to boot! She is a defender of nature, the earth, and human rights. If you have a chance to go to her "gathering," GO! You will learn so much about the earth, food, nature, music and compassion the list is endless. Thank you so much for publishing this article.

I have the privilege of knowing and have worked with Barb Barton. I didn't realize how much she taught me about nature and the woods until I was in the woods without her, telling someone else about what was there. Barb is truly a woman of the earth with great knowledge, and a big heart to boot! Her

- Diann King, Three Rivers

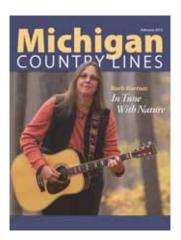
- Nahnie, Haslett

Woolsey Photo Is No Real Mystery

music? You'll be addicted!

I know the January Michigan Country Lines Mystery Photo VERY WELL!!! It is Clinton F. Woolsey Memorial Airport, and at one time the building was a creamery for cows.

My mother painted a picture of this building for my son, and he has it hanging in his bed-



Barb is an amazing woman and an inspiration to people to live closer to Mother Earth whether they live in Michigan or another part of the country! Please give more articles like this.

- Eddie, Gainsville

room. My sister and her husband own a cottage near this airport.

FYI: Charles Lindbergh and Amelia Earhart both flew here!

- Maureen Buchel, Howell

My husband proposed to me there [Woolsey Airport]. As of Feb. 24, we've been married 23 years.

– Elizabeth Chapelle, Honor

Woolsey Memorial Field is one of the most unique airport buildings in the country—it's a classic grass field that has the flavor of a World War II airfield in England. It's a great place to fly into in the summer and use one of the bicycles that are stored there for private pilots and passengers to ride into town. A real throwback to the good ol' days!

– Mark Wilke, Ellsworth

The airport, with its grass runway, is the scene every summer for a 'Fly-in Pancake Breakfast' (this year, July 28). The fly-in also hosts a car show and the two events draw a nice crowd.

> – Roger & Sandra Parkins, Suttons Bay

The Northport Pilots Association and other groups sponsor a fantastic 'Dawn Patrol' around the end of September each year, and all are welcome.

- Robert Evans, Traverse City

The north end of the grass runway leads to a beautiful little park on Lake Michigan with a lookout tower. It's a wonderful place to get away and relax!

- Steve & Michele Rambo, Howard City

If you enjoy Michigan history as I do, you might like knowing how the subject of the January Mystery Photo came to be. Visit http://bit.ly/b6Jv5L

- Charlie Johnston

My 86-year-old father was born and raised in Northport, and the Woolseys are distant relatives. My family has enjoyed many hours at this location over the years!

> - Catherine Hall McNalley, Hemlock

The cutest airport in the world! – Elizabeth Black, Traverse City

All About Apples

Enjoyed your column about Michigan apples, and wanted to comment on Honeycrisps. Here in Oceana County, we have quite a good supply, as well as the 'daughter' of Honeycrisp, Sweet Tango. If you haven't tried a Sweet Tango yet, get your tastebuds ready! Each September, at the Apple & BBQ Cook-Off Festival in Mears/Silver Lake, Honeycrisp and Sweet Tango run neck-and-neck for 'fan favorite'! - Gay Lynne Liebertz,

In 1954 or 55, my family bought a small farm in Rives Junction, MI, and though my dad worked full-time as a conservation officer, he began farming part-timeperhaps as a way to introduce

Pentwater

growing up.

We had a great yard with two large apricot trees along the driveway, two peach trees, and a pear tree that I spent hours climbing and eating its produce.

his children to the life he knew

My favorites, however, were the apple trees. I ate apples from mid-summer, when they were so bitter they made your face twist up, until they began to soften,



DO YOU KNOW WHERE THIS IS?

Every co-op member who identifies the correct location of the photo at left by April 10 will be entered in a drawing for a \$50 credit for electricity from their electric cooperative.

Please note that we do not accept Mystery Photo guesses by phone! Email mysteryphoto@countrylines.com, or send by mail to Country Lines Mystery Photo, 2859 W. Jolly Rd., Okemos, 48864. Include your name, address, phone number and name of your co-op. Only those sending complete information will be entered in the

drawing. The winner will be announced in the May 2012 issue. The January contest winner is Davina Clark of Traverse City, who correctly identified the Woolsey Memorial Airport north of Northport.



or when a normal person called them 'ripe.' They were the greatest combination of sweet, tart and crisp and have probably gotten sweeter with the passage of decades and the fact I've never seen them for sale at a grocery or fruit stand.

Fast foward 50 years to when my wife and I bought our current property. While leafing through a tree catalog to find fruit trees suitable for our growing zone, I saw an 'heirloom' variety that rekindled memories of those apple trees from my youth. You guessed it—it was a Transparent.

After reading Buda's article, it is apparent I'm not the only longsuffering [Transparent apple] addict. Last year, my tree had it's first and only apple, and true to my past I picked it too early, so can't say if they are as good as I remember. Time will tell, as I hope to have more than one this year. I'd invite you over, but I'm not sure I can bring myself to share yet.

- Charlie McCord

My dad and all seven of his brothers and sisters were fruit farmers in SW Michigan. As a result, apples have always been a part of my life, too.

Shortly after I got married, I planted two apple trees: a Macintosh and a Jonathan. I've taken good care of them ever since [annual pruning, fertilization, periodic spraying] and get a nice crop every year.

My wife makes five or six pies shortly after I pick the apples, and places them [well-wrapped and uncooked] in the freezer. Then, she can quickly bakes us a 'fresh' apple pie for most special occasions that arise. Another trick I learned is: The day I pick the apples, I sort out two 2-gallon plastic bags of the 'best,' and after squeezing out the excess air, seal the bags and place them in our basement refrigerator. Each time I hunger for an apple, I remove one or two from a bag, reseal it, and enjoy a fresh apple! When cared for this way, apples will There are apples for sale today, throughout Michigan, that are... a far better apple than the Yellow transparent ever was.

remain relatively fresh into April of the following year!

> - Bert Metzger, West Bloomfield

I just finished your essay on apples. You really like the apples in your memory! When it comes to today's apples, you: • Don't like the arsenic in seeds • Don't like the wax • Don't like the pesticides • Don't like the cost of the Honevcrisp...

...and all the wonderful gains we have made storing delicious, high-quality apples are not enough, so you suggest apples this time of year 'taste so old' they are from the year before??

I heartily contest your whole perception of today's apples. Why call the article 'An Apple A Day' when you're really saying today's don't measure up to the yellow Transparents in your childhood memories?

There are apples for sale today, throughout Michigan, that are crisp and tasty, and a far better

apple than Yellow transparent ever was.

> - John King, King Orchards, Čentral Lake

Mike Buda responds: I still eat an apple-a-day. And, I agree there are more and better varieties now than the old Transparents, but there was a short time before they fully ripened when they were spectacular, and there's no way to duplicate that taste with stored apples.

Also, I can live with wax now that I know why it's there, and I really think Honeycrisps are worth the cost. But, you'll have to convince me that some apples I buy now aren't over six months old because they sure have an old texture. Thanks for writing.

No More Classified Ads?

I noticed there haven't been any classified ads listed at the back of the magazine. Are you not going to have them anymore?

P.S. – I really enjoy your publication! Articles are informative and things that I can relate to, and the recipes are great! I have used at least one or two of them from every issue.

Jane Howe

Editor's Note: With so many cheap, easy ways to sell things online today (Craigslist, eBay), we were receiving fewer classified ads every issue. We made the difficult decision to discontinue the classified ads to make room for more great articles.

Shop Co-op!

here are over 900 electric co-ops in America. But your local electric co-op is just one type, and there are over 29,200 different co-ops operating nationwide, including many in the ag industry. From dairy to oranges, and almonds to cotton, our farmers know the value of the co-op business model.

The next time you grocery shop, see how many items you can buy that were produced by a co-op.

Starting with produce, pick up some Ocean Spray cranberries or Sunkist oranges, tangerines, grapes or grapefruit.

Then, cruise to the refrigerated cases for eggs - 95 percent of American eggs are produced and marketed by co-ops. Then, get some Land O'Lakes butter, Cabot or Tillamook Cheese. Need a warm drink? Try Equal Exchange coffee, tea and hot chocolate. Finally, grab some Blue Diamond almonds for a perfect pick-me-up snack.

Now that you're done grocery shopping, visit Ace Hardware or True Value for weekend project supplies. Or, replace your old blue jeans with new ones from GAP, Banana Republic, or Guess—they all get their cotton from the Plains Cotton Growers Cooperative's Denimatrix. But first, visit another co-op—your credit union—to make a deposit to cover your purchases.

The co-op business model promotes self-sustainment and local economic growth. Support all our co-ops as we work together to build a better world.

Find a co-op business near you at. go.coop.

Scholarships Offered

ach 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; click on "Youth," email tschafer@meca. coop, or call 517-351-6322, ext. 201. Eligible applications must be postmarked by April 6, 2012.





Reducing Tree Risks Before Trouble Falls

dying tree is a loss, but it's also a threat to Great Lakes Energy members' electric service if it's near a power line.

Contracted crews working for the cooperative trim or remove diseased and dying trees within the power line right-of-way (ROW) before they can damage overhead wires. Damage typically occurs during storms when high winds take their toll on weaker trees.

What about weaker trees outside the ROW?

When possible, diseased and dying trees not in the ROW are taken down before they become a problem. Normally they are discovered by GLE vegetation management workers, contracted ROW re-clearing crews, or co-op members.

However, weaker trees often aren't found until after they've damaged a power line. The co-op's ROW areas are re-cleared once every six to seven years. In that time, trees outside the ROW that were once healthy can become infected and die. They may fall on a power line before re-clearing crews return again. Some trees can withstand damage by insects and diseases for several years while others, like red oaks infected with oak wilt, can die within days or weeks.

Another challenge to monitoring off-ROW

tree problems is the cooperative's large size. Great Lakes Energy is second among electric cooperatives in the country with the most miles of power line. From Kalamazoo to the Mackinac Straits, over 11,000 miles of overhead power lines pass through wooded areas containing many hardwood and conifer species, including those highly susceptible to widespread diseases.

The cooperative's vegetation management department is taking a proactive approach this year to assessing how big a factor off-ROW trees are to GLE's ability to provide reliable and safe electric service.

Field Survey Planned

A field survey will be conducted to identify suspected trouble trees outside the ROW throughout our 26-county service area. Two college interns will be hired to carry out the project. Their forestry background will enable them to identify the trees and their diseases, and record their locations. Interns will begin the first year of their work this summer over a 14-week period. The survey is expected to take at least two summers to complete due to the large area to be covered.

"Specifically they will be asked to look for diseased and dying trees that could fall into our lines," explains Steve Ryder, vegetation management and inspection supervisor. Kathy Massey, assistant vegetation management supervisor, marks one of several dead ash trees for removal near Great Lakes Energy power lines in Charlevoix County. Even if outside the right-of-way, diseased or dead trees can still pose a threat to the lines.

"Healthy trees will be noted, too, if they are a species like the ash tree that is most vulnerable to deadly attacks by insects or diseases."

He admits the project will be a big job with the many miles of line the interns will need to cover. But the data they gather will be valuable in helping his department keep tree-related outages to a minimum.

"Once we know the full scope of the problem, we can determine whether more funds will be needed in the years ahead to effectively control it," Ryder adds.

Ash trees are being plagued in this and surrounding states by the emerald ash borer. The beetles' larvae feed on the inner bark, which eventually leads to the tree's death. Millions of ash trees in southeastern Michigan have already been destroyed by this insect, and tens of millions more were lost in 12 other states and parts of Canada. Visit emeraldashborer. info for more information on this exotic beetle. The website was created through a joint effort of the U.S. Department of Agriculture Forest Service and Michigan State, Purdue and Ohio State universities.

A dead ash tree can be very destructive when it falls on a power line. The tree normally remains intact—large limbs and all—when it falls. A high wind can blow the entire tree into a line, creating more damage than just a few falling limbs or branches. A mature white ash tree can reach heights of 70 feet and weigh over a ton.

In addition to ash, other trees highly susceptible to widespread diseases pose a risk to GLE power lines.

Oak wilt is a fungus that kills thousands of oaks annually in the eastern United States. In its "Michigan Forest Health Highlights 2011" report, the state Department of Natural Resources Forest Management Division states that oak wilt "is established widely in the southern lower peninsula with spotty distribution in the northern lower and upper peninsulas."

Beech is another familiar tree Ryder will have the interns study. "Since its discovery in



A diseased beech tree is discovered near Great Lakes Energy power lines. It has a white fungus covering the bark and it became diseased within a few short months.



Exit holes created by the emerald ash borer beetle are clearly visible on this dead ash tree that is marked for removal near Great Lakes Energy power lines.

Michigan in 2000, beech bark disease continues to pose a serious threat to Michigan's forests," DNR foresters report. The disease is spreading through parts of the upper and northern lower peninsulas.

The field study will also include maple, hickory, poplar, black walnut, hemlock and other species believed to be more apt to fall prey to insects and diseases. Last year, the DNR increased efforts to detect the presence of the Asian long-horned beetle in the state after the destructive pest with an appetite for maples and other trees was discovered in neighboring Ohio. The 2008 discovery of this beetle in Massachusetts involved an infestation of thousands of maple trees.

Our vegetation management staff seeks property owner approval if trees outside the ROW need to be removed.

The cooperation of our members in these removal efforts will enable them to continue receiving safe, reliable electric service.

– Dave Guzniczak

Investing in Your Reliability And Safety

reat Lakes Energy will invest \$3.1 million in 2012 to re-clear about 1,444 miles of power line rightsof-way (ROW) in 17 counties and 75 townships.

The 2012 vegetation management program began earlier this year in the cooperative's central and southern counties with private contractors removing trees and limbs near power lines. Crews will move into the northern counties this spring.

Vegetation management helps reduce tree-related power line damage, which is a major cause of outages, and helps us maintain a safe, reliable power line distribution system.

The amount of trimming needed to maintain adequate power line clearance depends on the tree type, its location,

how it grows, and the line's voltage size. Some healthy trees may need to be removed if they pose an immediate threat to your electric service and safety. Also, trees may need to come down if they are weak, diseased, drying or severely damaged. Trees that would look unsightly or die if they were extensively trimmed are normally removed, too.

You will be notified by post card and phone if ROW work is planned near you. Please be sure we have your current billing address and primary phone number so we can contact you if needed.

Questions about our ROW re-clearing program should be directed to our Vegetation Management Department, 888-485-2537, extensions 8221 (central and southern counties) and 1295 (northern counties).

2012 Tree Re-clearing Schedule

Re-clearing along Great Lakes Energy power lines is scheduled this year in the following counties and townships:

Allegan: Dorr, Leighton, Wayland;

Antrim: Helena, Custer, Kearney, Echo, Central Lake, Forest Home, Chestonia, Jordan, Mancelona;

Barry: Irving, Orangeville, Rutland, Thornapple, Yankee Springs;

Clare: Redding, Winterfield;

Crawford: Lovells, Grayling, South Branch, Maple Forest;

Emmet: Friendship, Pleasantview, West Traverse, Readmond:

Kalkaska: Kalkaska, Excelsior, Bear Lake, Cold Springs;

Lake: Cherry Valley, Lake, Pleasant Plains, Sauble, Sweetwater, Webber, Yates:

Mason: Amber, Branch, Custer, Hamlin, Pere Marquette, Victory;

Montcalm: Pierson, Reynolds;

Muskegon: Montague, Ravenna;

Newaygo: Denver, Goodwell, Lilley, Merrill, Norwich, Troy, Wilcox;

Oceana: Benona, Claybanks, Golden, Grant, Leavitt, Newfield, Shelby;



Osceola: Burdell, Hartwick, Marion, Middle Branch, Sherman, Sylvan;

Oscoda: Big Creek;

Otsego: Bagley, Livingston, Charlton, Chester;

Ottawa: Allendale, Polkton.

Higher Power Costs On Horizon

Growing demand and environmental regulations stress electric rates.

hirty-five years ago disco was king, personal computers were born, and Americans needed more electricity. To meet this demand, nonprofit, consumer-owned electric co-ops—in partnership with their wholesale power suppliers—built or invested in power plants, mostly coal or nuclear.

Unfortunately, many of these plants may now be forced to make expensive changes to meet increasing environmental regulations and as electric demand keeps climbing, new generation will be needed to keep the lights on. Some coal-fired power plants may require modifications so severe that it will be more cost-effective to simply shut them down.

Accelerating Factors

Consumers, adding more plugged-in devices daily, already pay more for electricity. The average annual residential electric bill has risen \$263.40 since 2005, with electricity use outpacing efficiency efforts. Despite the recession, U.S. homes on average used an additional 50 kilowatt hours (kWh) every month between 2009 and 2010; retail electricity sales rose 4.4 percent.

Americans aren't the only people using more power; as worldwide energy use grows, resource competition (and prices) shoot up. By 2035, global energy consumption, primarily in China and India, will jump 53 percent from 2008 levels.

In spite of increasing energy needs, 37,600 megawatts (MW) of older coal-fired power plants are slated for retirement by 2018. The North American Electric Reliability Corporation (NERC), the Georgia-based organization charged with overseeing reliability of the electric grid covering the United States, most of Canada, and the Mexican state of Baja California Norte, predicts a worst case scenario of environmental regulations may force coal plants generating up to 54,000 MW of additional power to shut their doors

New power plants could offset this loss, with natural gas taking center stage. The National Energy Technology Laboratory, a branch of the U.S. Department of Energy, focused on advancing national, economic and energy security, predicts 20,000 MW of natural gas facilities will start operating this year, with another 28,000 MW proposed for 2013. A strong breeze from wind project proposals may add 42,000 MW this year and 28,000 MW in 2013—but only if federal production tax credits continue.

Shifting Fuel Focus

While about one-half of the nation's electricity comes from burning coal, co-ops rely more heavily on the fossil fuel—about 80 percent. That's because the majority of dioxides—compounds formed by burning fossil fuels—dropped at least 67 percent nationally even as electricity use climbed 38 percent. And, the large-scale expenditure isn't over. Another \$4 billion is slated for upgrades through 2021, with the bulk of the money-\$2.18 billion-marked for work this year and next.

Regulation Risks

"Environmental regulations are shown to be the number one risk to [maintaining electric] reliability over the next one to five years,"

Over the last decade, co-ops have invested \$3.4 billion to boost power plant performance and limit emissions. Another \$4 billion is slated for upgrades through 2021.

co-op coal power plants were built between 1975 and 1986, when using natural gas was prohibited by the federal Powerplant and Industrial Fuel Use Act.

Now, a series of U.S. Environmental Protection Agency (EPA) regulations impacting cooling water intake structures, coal ash disposal, interstate transport of air pollutants, and hazardous air pollutants like mercury are affecting all electric utilities. In most cases, co-ops will need to retrofit coal-fired plants with costly pollution control equipment; in others, co-ops could opt for early plant retirements.

"Time is tight—improvements take time and new technologies have to be tested before going mainstream," says Kirk Johnson, senior vice president of government relations for the National Rural Electric Cooperative Association (NRECA). "We're deeply concerned that EPA's strategy to require significant change within very compressed timelines may be unachievable and could damage the economy of rural America and affect service reliability."

Seeing the handwriting on the wall, coops have taken action. Over the last decade, power supply co-ops have invested \$3.4 billion to boost plant performance and limit emissions. In fact, since 1990, power plant emissions of nitrogen oxides and sulfur reports NERC's 2011 Long-Term Reliability Assessment.

Why the concern? Because steps required by EPA rules have the potential to cost the industry billions of dollars and don't provide enough time to comply.

"Regulation on top of regulation, and court decision on top of court decision, have compounded the situation to the point that we now have contradictory regulations and court decisions that don't make any sense," explains NRECA CEO Glenn English. "Our nation needs to adopt a balanced, common-sense approach to environmental protection that factors in electric reliability and affordability."

NRECA has been actively urging the EPA through comments, testimony and litigation to consider the negative impacts of increased electric power costs on consumers as it continues to move forward with its rulemakings.

Electric co-ops are leading the way to find affordable solutions to America's electricity demand. Find out how you can help at ourenergy.coop. – Megan McKoy-Noe

Sources: U.S. Energy Information Administration 2011 International Energy Outlook Table 5A; NERC 2011 Long-Term Reliability Assessment; NETL Tracking New Power Plants, July 2011

7 Questions

for Michigan Department of Agriculture and Rural Development Director Keith Creagh.

People might assume you grew up on a family farm. What has kept a city-kid like you in the agriculture industry for over 35 years?

I enjoy working with people who make their living from the land. They're salt-of-the-earth people who work hard and aren't afraid to tell you just exactly what they think.

What does your quote 'agriculture is more than just cows and plows' mean?

MDARD is involved with all kinds of things people don't traditionally associate with agriculture. We oversee everything from ag business development to certifying the scales for pharmaceuticals, gas pumps and trucks, regulating county fairs, and international exports.

Last year, Gov. Snyder signed an executive order officially adding "rural development" to the Dept. of Agriculture's mission. Will this focus lead to more jobs for rural Michigan?

Our role isn't to create jobs, but to create an environment where businesses can flourish and create jobs on their own. We help them create this environment by bringing groups and resources, such as bankers, realtors and others together with the Ag Department and other sectors. It's a fun, collaborative environment to be working in!

Gov. Snyder has also said that rural economic development is a key focus for his administration—particularly in agriculture, mining and exports. What is your role in this?

The governor is serious about reinventing Michigan, and we're having some good conversations about projects that will boost rural communities, businesses and the economy. Land-based industries need to be part of the state's rejuvenation. Sustaining the state's food processing plants and other businesses is crucial.

All state departments need each other—whether it's health, housing, tourism or agriculture—to help determine what's needed to reinvent Michigan and how rural communities can be involved. This means renewed cooperation among state departments to solve business problems.

Tell us some success stories about how the MDARD is benefiting rural businesses and communities.

We're partnering with the governor and the Michigan Economic Development Corporation on a plan that provides Asian food companies with healthy foods while promoting Michigan food exports—especially fruit. In fact, we run an export program that partners with foreign ag services around the world, and locally.

We also assist Michigan companies with other high-end marketing and exports, such as working with the Johnson & Johnson company, of Zeeland, to provide a new baby formula for infants in China.

Other projects involve everything from "Project Fresh" helping farm markets develop electronic readers they can use

to accept Michigan Bridge Cards (debit cards issued to Department of Human Services clients to buy certain food products)—to providing food

safety and science engineers to help establish a dairy plant in Coopersville.

We have helped Cherry Central Cooperative (Traverse City fruit grower/processor) develop new markets in France; Mastronardi Produce (Livonia gourmet vegetable grower) with bulk fertilizer storage and increasing their productivity.

We also work with food processors on logistics at the farm gate, including farm and pesticide safety, registering products, sorting out federal rules, and defining technology and expertise that gets projects moving.

What efforts are you most excited about?

There's just something happening in Michigan—we're iconic food processors with a water resource and value chain that is envied worldwide. But now our business expertise is also drawing the attention of foreign companies.

We've helped 22 companies with first-time food sales overseas. Exports in 2010 were \$1.75 billion in food and ag products, with top markets being Canada,



China, Japan, Mexico, South Korea and Taiwan. These exports boost farm prices and income while supporting 14,700 jobs.

There's renewed interest in developing the U.P. mining and forestry industries. We're working on the best tax structure, rewards for local people, and supporting needs, like access to workers with advanced degrees—all things that make a community prosperous. Of course, energy is front and center in those conversations.

There's also more optimism a new and exciting little pulse beating in Michigan that is relationship driven, and we are working with rural communities to increase their success.

Michigan Country Lines magazine has been featuring Michigan-made (or grown!) products. What is your favorite?

The things I love most about Michigan aren't physical things. I remember driving over the Mackinac Bridge with my son one fall day at sunset and asking him, 'is there anyplace else you'd rather be?' But as far as actual Michigan-made products, I would say fresh fish from Krueger's Fish Market in Mackinaw City is at the top of my list. Couple it with asparagus, a Michigan wine and Hudsonville Ice Cream, and you have a pretty nice meal. And, the Stormy Kromer hat gets an honorable mention!

THE CREAGH FILE:

- Raised in Detroit, earned a B.S. in forestry from Michigan Tech. Univ.
- Retired after 33 years at the Michigan Dept. of Agriculture, serving as chief deputy director, and pesticide/plant pest division director.
- Worked as industry affairs director for Neogen Corp., 2007-2011.
- Appointed by Gov. Snyder to return to MDARD as director in 2011.

Valerie Donn's JOUROLEM CAS



f you could stand among spring, you'd see a handmade birdbath whose design was inspired by the leafy reach of her rhubarb plant. And nearby, catmint and its leaves, you would find a whitetail fawn painted into there's a birdhouse with a family of raccoons handpainted in welcome.

It's these details that tell you Donn's garden is not just soil and seed. This place is hers, a place where her art and garden complement each other, one growing from the other.

Donn lives with her husband Ted in Williamsburg (and Hessel in summer, where they are Cloverland Electric Co-op members), and is mostly a self-taught artist who had her first success in high school.

"I remember my high school art teacher telling me to stay with it, to keep going with my art, before life brought with it a family and a career.

who, of course, loved to interrupt me," Donn says with a laugh.

wait. But once her children, Heather and Corey, were grown, she picked up her interest in art again. She started researching techniques and tools by checking out library books on art. Next, she took a decorative painting class.

"It was cutesy stuff," she says, "but I wanted to do more, do different things.

It wasn't until she took a workshop from Rod Lawrence, a well-known wildlife artist in Kalkaska, that she finally found

"I started learning how to draw animals, their fur, things like that. It was so inspiring," she says. "He really emphasized painting what you liked, things you were drawn to."

Donn soon started creating better, more detailed garden art, along with paintings like those of Roxie, her pet Pug, and of her son at a young age holding his father's hand.

> She soon found herself experimenting with sculpting again, too—like the day she broke the lid of her ceramic olive oil bottle. Instead of tossing it, she sculpted a piece of clay into the shape of a playful woman, painted her with grapes in-hand, and topped the bottle herself. Today, Donn is still learning as an artist and

Her artwork can be found at a handful of area of mouth. (She was once commissioned to







Create Your Own...

Artist Valerie Donn encourages you to release your inner artist and create your own garden art. "Most people say, 'I can't do this!' but they would be surprised," she says. "Adding one small personal detail turns even a store-bought item into art."

Go online. Donn's favorite website is etsy.com, a snappy marketplace of homemade and vintage items from around the world, where she cruises for ideas and inspiration. "If I find something I like, I try it," she says. "It's fun to see what others are doing or, sometimes, to see if I'm doing something no one else is."

Hit the books. Donn visits the library and scouts out painting and photo books. If she finds something she likes, she makes a color copy to reference later, and paints pictures based on them.

Try it all. Consider working with stone, wood and/or glass. Looking at Donn's varied collection confirms that there is no one "way" to create.

Go simple. Use stencils, Donn says, to make a store-bought purchase your own. One of her projects was a plain, wooden birdhouse bought from the store. She painted it, then stenciled it. Voila! A one-of-a-kind, personal touch to her garden.

Buy the right paint. Donn purchases outdoor paint from craft stores like Michaels and Jo-Ann Fabrics & Crafts in Traverse City. "Outdoor patio paint won't fade," she says. "I have projects that have stood outside for years that haven't lost their color."

Protect it. Spray a clear finishing coat for the final touch on any outdoor project. Donn uses Krylon® acrylic clear coating, also from the craft store. "Be sure to get the nonyellowing outdoor coating," she says. This is key to keeping your craft in its original condition over the years.

Corn Is Kyn

o get the best taste explosion from sweet corn, you need to grow it yourself. That way, you can "get the pan boiling and go pick the corn." It doesn't get any fresher than that, and regardless of where you live in Michigan, you can grow sweet corn. Here are some tips to get you planning your crop now, so you can enjoy the ultimate sweet taste of summer later.

Variety Selection

Sweet corn has been cross-bred more than most vegetables. Breeders are always seeking ways to make it sweeter, bigger and more disease resistance. There are four ways to classify sweet corn in regards to sugar content: normal sugary (su), sugary enhanced (se) and (se+), synergistic, and super sweet (sh2) (see yellow box for descriptions).

The goal is to choose a variety that both meets the approval of your taste buds and can be grown successfully in your area, based on the growing days listed on the packet. These refer to the number of *good* growing days available in your area. For example, if you have up to 75 days of warm weather, nights averaging in the lower 60s or better,

then choose a variety that requires 75 days to maturity or less.

If you garden south of Gaylord, you're most likely in zone 5 and should have from 70-85 good growing days. Select your sweet corn variety accordingly. One of the sweetest I remember from growing up in the Thumb area is Illini Sweet Corn (sh2) (Burpee.com), an 85-day variety that produces very large, sweet ears. It holds its sugar content well, even if you don't cook it right away after picking it. Kandy Korn EH Yellow (se) (jungseed. com) is another 85-day variety, and a favorite among Jung customers. Of course, there are other varieties for southern Michigan growers, some that don't require as long a season, such as the popular Ambrosia Bicolor (se) from Jung's and Sugar Buns (se+), a 70-day, easy-to-grow variety from Johnny's Selected

CORN TYPES: What's the Difference?

NORMAL SUGARY (su) • Traditional corn flavor, sugar turns to starch quickly after harvest.

SUGARY ENHANCED (se) and (se+) • Increased tenderness and varying sweetness.

SYNERGISTIC • Comprised of 75% se and 25% sh2; combining tenderness with super sweet.

SUPER SWEET (Sh2) • High sugar content, slow to turn to starch after picking.



Photos – © iStockphoto.con

Seeds (johnnyseeds.com).

For northern gardeners, there are a few varieties that will do just fine in our cold belt, providing you follow the growing tips below. The varieties that have preformed consistently for me are Northern Extra Sweet Yellow (sh2), 67 days, and Early Xtra Sweet Yellow (sh2), a 68-day crop. These may produce a little smaller ear than the ones noted above, but they're just as tasty.

Planting

Corn is a sun-loving crop that performs best over a long, hot summer. It is also a big feeder, so have an organic or inorganic fertilizer to use.

Plant your corn in fertile, well-drained soil. A slightly sandy soil is fine as long as you've added copious quantities of well-rotted manure or aged compost. And, planting seeds directly in the soil often works better than using transplants.

Consider ordering seeds that are coated with a fungicide, especially if your soil is slow to warm up in the spring. Corn should be planted no later than June 1 to have time to ripen. Plant in blocks of at least four rows side by side, to ensure good pollination. Most varieties need to be separated from others by at least 25 feet to avoid cross pollination, which can result in changes in starch and sugar.

As the seedlings emerge, fertilize lightly with an all-purpose liquid or low nitrogen organic fertilizer, such as Milorganite. Side-dress the plants about every two weeks with an organic or inorganic plant food. Take care not to apply too much nitrogen, and avoid direct contact with the roots. Water during dry spells and keep the rows properly weeded and cultivated. Also, thin the plants to at least 8 inches apart, as this move alone will help ensure ripe ears.

The three problems that seem to plague sweet corn are the ear worm, which bores directly into the ear, corn smut, and raccoons. Crop rotation can prevent the first problem from becom-

ing endemic, but if these become a serious problem, treat with Bacillus thuringiensis (Bt). Raccoons can be a serious matter since they come around to spoil the party just as the ears are turning yellow. The best defense against raccoons has proven to be the tall woven fence that surrounds my garden.

Now, it's time to get eating. When the pot comes to boil, drop the shucked corn in for no more than three minutes. Sweet corn also tastes great in corn fritters and freezes real well, giving you the fresh taste of corn all year long.

Neil Moran is the author of "North Country Gardening with Wildflowers: A Guide to Growing and Enjoying Native Plants in the Upper Great Lakes Region."



A Corn Chip Worth Eating

orn. You can see it growing from spring to fall—those thick green leaves waving to us in the wind until they turn crispy gold and fly away. But did you know there are over 11,000 corn farmers in Michigan whose labor contributes over \$1 billion per year to our economy?

The corn products you're probably most familiar with—fresh on the cob, frozen, canned, popcorn, and corn syrup—represent only a fraction of what is made with corn.

Another popular corn product is tortilla chips, and there are actually several producers in Michigan. One is in North Branch, and was nominated by Country Lines reader Cathy Isbell.

"Our favorite Michigan-made product is FarmBoyTortillaChips...made on the Simmons family farm," says Isbell, a member of Presque Isle Electric & Gas Co-op.

The farm's current owner, John Simmons, started working alongside his dad and uncle when he became big enough to ride a tractor. Now, at 56, he runs the 150-year-old farm under the brand names of FarmBoyTortilla-Chips and FarmBoyFlapJacks mixes, with help from his own family, especially daughter Stacey, who helps with the business side.

In the early '90s, seeing demand for organic food on a steep rise, John decided to focus the entire farm on diverse organic production. Today, FarmBoyFlapJacks mixes and the heirloom corn that became FarmBoy-TortillaChips are made with organic grains.

"Much of the planning was similar to the planning involved in farming—projections of ingredient needs, costs versus projected revenues, storage requirements, and cash flow versus expense flow projections," he says of the transition. "Some new considerations were packaging, label creation, promotion of products, and public relations."

FarmBoyTortillaChips are packaged in unpretentious brown paper bags with white stickers illustrating John himself, and exclaiming "Heirloom Corn!" and "No GMO."

But, what he loves most about running his business is the people. "I love the interaction with people—retail store owners, restaurant owners, cooks/chefs, wait-staff, consumers every person who tastes the food I've grown and prepared, and reacts with an expression



John Simmons is the owner of FarmBoyTortillaChips in North Branch.

of surprise, satisfaction and joy!"

"Much of what I've found leading to success in my food business may be contrary to industry norms," he adds. "I have an unusual product line, and as an innovator, I've just had to 'figure some things out' through trial and error."

John is happy to talk details about his corn chips, and he is not a bystander in their production. "We use open-pollinated heirloom corn, which gives our chips an amazing depth of flavor," he explains. The corn is then parched and prepared into homestyle tortilla chips that are fried in organic sunflower oil.

For the future, he continues, "I hope to expand production and provide delicious wholesome food to as many people as I can."

FarmBoyTortillaChips are sold in over

50 stores throughout the state, and now in Illinois and Kentucky. Chip varieties include Celtic Sea Salt, Lime, Garlic, Jalapeño, Cracked Black Pepper, and Holiday Spice. To find a store near you, visit farmboytortillachips.com or order directly from the website.

"My favorite chip person who I meet at food shows is a person that says, 'Oh, I don't eat corn chips," John laughs. And he responds, "Well, perhaps you've never had a corn chip worth eating!"

Writer Jodi Bollaert is a lifelong Michigan resident and enthusiastic locavore (person interested in eating food that is locally produced, not moved long distances to market). Find more wonderful Michigan-made products on her special listing at facebook.com/favoritemichiganproducts.

Tell us about your favorite, or a unique, Michigan-made product. Email your submission to czuker@meca.coop or send to: Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Be sure to share why you like it, or a unique story to go with it.





Tech Tips for Tots

Modern technology tools help us learn anytime, anyplace.

o area has greater potential to transform the lives of children than education. And no technological innovation in our lifetime has greater potential to transform education than broadband internet. That's a message from more than 150 rural education and technology experts who participated in a National Rural Education Technology Summit in July 2011.

Paired with mobile devices like the iPad, the internet is expanding access to more teachers and lessons—which can be a big boost for rural communities. Modern technology can make learning more personal and engaging, and it can turn a remote schoolhouse into a global community of learners.

Technology can also turn a grandma into a liar.

In my defense, the child's mother made me do it. She claimed the only way to get my grandson to nap during a recent road trip was to pretend my iPad batteries had died. Since a tired 2-year-old is no one to mess with, I played along.

Not everyone approves of computer use for children under age 3. Critics prefer toddlers to learn through their bodies, first mastering developmental skills such as crawling, walking, talking, and making friends.

Try telling that to a toddler trapped in a car seat—especially after he's saved a story with "Super Why," and actually made "the wheels on the bus go 'round and 'round" (over and over, and over again).

The truth is, tablet computers like the iPad change the technology game considerably. The big screen, touch interface, and fun learning apps make it a child magnet, prompting both ComputerWorld and The New York Times to call the iPad the "toy of the year" in 2010.

Rural Learners Gaining Ground

The benefits of educational technology for school-aged children are even greater. And in rural schools, technological developments are helping to launch students into the outside world.

Just look at the payback from online learning alone—for learners of any age.

- Unlimited access: Students gain knowledge and information from recognized experts at a minimal cost.
- Flexibility and convenience: Online learning is available 24/7. This flexibility makes it possible for learners to take breaks for work, sports, travel, or even child care.
- Job-readiness: The workplace is going progressively digital. E-learning has made it possible to acquire digital literacy skills.
- Mobility: The learner does not need to commute every day to gain knowledge.
- Accessibility: The learner can access information from any location with an internet connection.

Lack of Connectivity Still **Limits Results**

In too many rural communities, however, lack of connection prevents students from joining the technology revolution. For many rural districts, infrastructure, including little or no access to broadband or the internet, is among their biggest problems. The 2011 report, "Bringing Broadband to Rural America" (available at fcc.gov), revealed 28 percent of rural Americans lacked access to broadband, compared to 3 percent who lack access in non-rural areas.

Rural schools are also less likely to have full-time tech-savvy leaders, with only 36 percent of rural districts reporting they had such staff members compared to 79 percent of city districts, according to a 2008 U.S. Department of Education report. Twentythree percent of rural districts didn't have any sort of technology leader.

There is hope on the horizon. Connect

Michigan (connectmi.org) has partnered with the Michigan Public Service Commission to engage in a comprehensive broadband planning and technology initiative as part of a national effort to map and expand access to high-speed mobile broadband service across rural Michigan. They have a champion in President Barack Obama, who has set a national goal of ensuring 98 percent of Americans have broadband internet access within the next five years.

And a handful of technology-related partnerships are developing between rural districts and universities, such as Vanderbilt University's Aspirnaut program, which includes a "one-room school on wheels" where students use laptops to work on STEM (science/technology/engineering/mathematics) content during lengthy bus commutes.

Which brings me back to that road trip. Once my little back-seat buddy nodded off, I slipped out my "sleeping" iPad to help pass the time. I'd no sooner flung my first angry bird when I heard a sleepy, "Hey, what you doin,' grandma?"

I was so busted.

Start early, start smart

It's up to adults to keep children safe online, and select software and settings that fit the way young children develop and learn.

KEEP IT SOCIAL – Allow children to work together at computers, they'll gain social and communication skills.

KEEP IT IN BALANCE – Limit screen time; allow for plenty of active play.

SET THE STAGE - Technology should be included in the main learning area, rather than in a separate room, so it can be monitored, and adults can comment on what's happening. Hide wires and keep the screen free of glare.

MAKE LEARNING KEY – Researchers agree, software for young children should: Encourage exploration, imagination and problem solving • Reflect and build on what children already know • Involve many senses and include sound, music and voice • Be open-ended, with the child in control.

Resources ·

- ♦ netc.org/earlyconnections Tips for using computers in learning at all ages.
- childrenandcomputers.com Software and websites appropriate for young children.
- ◆ **connsensebulletin.com** Includes tips for children with special needs.
- pbslearningmedia.org Thousands of classroom-ready, digital resources, even in-depth lesson plans. PBS LearningMedia™ is free for educators.





The deadly parasitic Varroa mite on the back of this honey bee is one of many pests the U.S. Department of Agriculture is trying to combat without harming the bee.

Guarding the Honey

oney bees have existed for millions of years and supplied honey for the human race since the Stone Age, but there is great concern that their benefits to the world will be diminished, if not lost. However, with a little help from homeowners and other concerned citizens there is hope for their future—and ours.

These amazing and almost mythic creatures have a highly developed social structure that has helped sustain humankind and human society.

Once thought to be native to South Asia and the South East Asia subregion, recent studies indicate honey bees may also be native to Africa and probably all continents except North America. Cave drawings also indicate that early humans recognized the value of honey.

As humans learned to domesticate honey bees the art of beekeeping grew, and today they also provide us with beeswax, propolis (a bee glue used in cosmetics and health supplements) and pollination services.

Though several species exist, only two have been domesticated (the Egyptians were among the first to do so), and only one (Apis mellifera) is used extensively for domestic honey production and pollination.

An average well-managed domestic hive will hold 50,000 bees (sometimes as high as 80,000) in mid-summer. Bees from one hive can gather up to 80 pounds of pollen, and produce well over 100 pounds of honey annually.

Honey bees generally visit flowers to collect pollen, their source of protein, and in the process are responsible for about 80 percent of all insect pollination. This service is valued in the billions of dollars, and without it many commercial and home-grown food crops would be greatly reduced.

In 2007, honey bees made the news

because a disturbing number (30 to 70 percent) of North American European hives collapsed. This sudden, unprecedented decline was named colony collapse disorder (CCD). Researchers have not found a specific cause, but many scientists suspect a combination of factors rather than a single pathogen or poison. This may include loss of habitat, changes in agricultural practices, new viruses and pathogens, extreme weather during the past decade which resulted in impaired protein (pollen) production, and the possible synergistic effects of any combination of these factors.

A decline in beekeeping is another contributing factor to the population decline that has been taking place since the 1950s, notes Tim Tucker, a member of the American Beekeeping Federation's Membership and Marketing Committee and editor of ABF's E-Buzz newsletter.

"For many years the cause of decline was economic in nature and tied to the availability of other sweeteners on the market," he explains. Access to inexpensive sugar and high fructose corn sugar (HFCS) has caused many people to stop using honey as a home sweetener.

"With relatively cheap sweetener prices, we no longer consume much honey on a perperson basis—less than 2 pounds per year," he said. "On the other hand, we consume more than 100 pounds of refined sugars and HFCS per person and some estimates are much higher than that.

"This caused honey prices for many years to stay so low as to make it difficult to make a living and many commercial beekeepers gave up their operations," he adds.

Compounding that problem are the health issues of honey bees. "In the last 20 years we have had two new parasitic mites come into the country, and the varroa mite vectors as many as 17 to 20 different viruses that affect honey bee health," he continues. This has increased the cost of keeping bees alive, resulting in additional beekeepers giving up this important work for jobs in other fields.

"Without a corresponding rise in pollinating fees over the past 15 years or so, many of the larger beekeepers that are still in existence would likely have gone out of business as well," Tucker says.

Though research indicates that the use of chemicals in home gardens and landscapes has not contributed to CCD, Tucker says homeowners can still help protect these amazing and economically important creatures.

'The main thing homeowners can do is provide plantings of beneficial flowers that bloom during the full season to provide nectar for honey bees and all native pollinators."

"The second thing is to educate the public to accept a lower level of perfection in their yards and gardens and use less herbicides and pesticides that can affect pollinators," he continues. "It is not a good thing to treat our lawns to remove clovers and even dandelions that provide nectar to bees. While it makes for a less perfect looking lawn, it is more natural and beneficial to the bees."

According to Tucker, white clovers and native wild flowers, trees and shrubs that provide lots of pollen and nectar are wonderful additions to yards and landscapes. Shrubs such as spirea, currents, blackberries, blueberries and even honeysuckle are great choices. Beneficial trees include all fruit-producing and ornamental varieties such as Bradford pears and black locusts.

Homeowners certainly can take up beekeeping themselves. Courses are available in every state, often through local beekeeping associations and Cooperative Extension units. If beekeeping is not feasible, homeowners can still help by providing locations for beekeepers to place bees—especially on the outskirts of towns and suburban environments, but also in the countryside, Tucker says.

So, what's the course of action if a swarm of honey bees show up on its own? Because they can pose a threat to people and animals, and because the swarm may be the more aggressive strain of Africanized honey bees, Tucker suggests calling a local beekeeper to have them removed.

To learn more about honey bees and beekeeping, visit the ABF site at abfnet.org or contact a county or regional Cooperative Extension office for sources of local information and help.

- Tim Tucker

Meatless Meals

You don't always need meat to create a tasty dish. These meatless recipes are flavor-filled and sure to fill you up. They're so delicious even meat-eaters won't miss a thing. Visit **countrylines.com** for hundreds more reader recipes.

Margherita Pizza

1 T. olive oil

2 T. pizza sauce

1 pre-made whole wheat or white pizza crust 3/4 of 12-oz. jar diced tomatoes, drained

2 T. sliced yellow (mild) peppers

2 T. chopped fresh basil leaves

8 ozs. shredded mozzarella cheese

Preheat oven to 450° (or directions on crust package). Mix olive oil with pizza sauce and spread evenly onto crust. Add tomatoes, peppers, basil and cheese, making sure all ingredients are evenly distributed around crust. Bake for 12-15 min or until desired crispness.

Christin Russman

Photography by: 831 Creative

Teriyaki Turnovers

16 oz. pkg. frozen Athens Fillo Dough, thawed

1 T. olive oil

1 stalk celery, finely chopped

1 sm. head broccoli, finely chopped or 10-oz. pkg. frozen, chopped

5-oz can water chestnuts, finely chopped

6 T. teriyaki marinade or sauce

1 bunch chopped green onion (save 2 stalks, also chopped, 1 for dipping sauce and 1 for

3 ozs. roasted cashews (2 ozs. chopped and 1 oz. finely minced for garnish) 1/2 c. butter

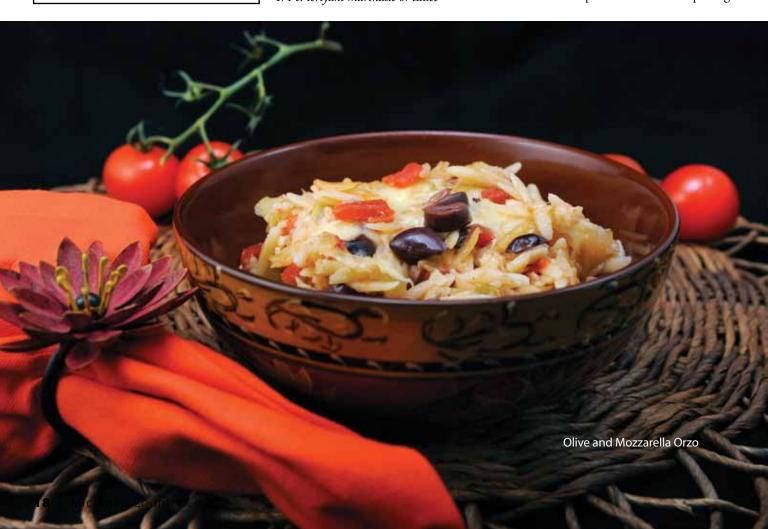
Dipping Sauce:

1/4 c. Swanson vegetable broth 1/4 c. teriyaki marinade or sauce 1 T. chopped green onion

2 T. Asian (Lee Kum Kee) Chili Garlic Sauce Set oven to 375°. Sauté celery in olive oil until slightly soft. Add broccoli and water chestnuts and sauté for 3 more minutes; drizzle with 4 to 6 tablespoons teriyaki sauce. Mix in 2/3 of raw green onion and 2 ounces cashews. Set aside.

Heat 1/2 cup butter in a small microwaveable bowl until melted (approx. 20 sec). Brush very thin layer onto 1 sheet of dough, repeat adding a second layer, and third if desired. (You must keep dough you're not using from drying out by placing a wet and wrung paper towel on top until ready for next sheet. Work quickly so dough doesn't dry out and crumble.)

Add 1/4 cup of broccoli mixture placing in





the bottom corner of dough. Fold the empty side over then continue folding into a large triangle. Place on cookie sheet lined with parchment paper and repeat process until broccoli mixture is all used. Makes about 6 turnovers. Bake for 15 min and serve with dipping sauce.

Mary Gorshe, Suttons Bay

Grilled Tuscan Salad on a Stick

Place any combination of the following on a

colored bell peppers, cut in pieces cherry tomatoes zucchini, cut in rounds

summer squash, cut in rounds

mushrooms artichoke hearts

onions, cut in chunks

Grill the vegetables and place on a bed of greens, such as Romaine or baby leaf lettuce.

Tuscan Salad Dressing:

3 T. mayonnaise

1/3 c. red wine vinegar

1/2 c. water

2 t. lemon juice

2 T. parmesan cheese

3 T. olive oil

1 sm. clove garlic, minced

1/4 t. dried oregano

1/4 t. dried basil

1/4 t. thyme

1/8 t. black pepper

Combine ingredients in a blender and drizzle over the salad.

Julie Dennison, Roscommon

Olive and Mozzarella Orzo

1 lb. orzo pasta

1 1/2 c. chopped onion

2 T. olive oil

2 T. butter

2 c. chopped celery

2 T. flour

1 t. chicken bouillon

1 28-oz. can tomatoes, drained and chopped

1 t. basil

1 t. oregano

1/4 t. cayenne

1/2 lb. pitted Kalamata olives, chopped 3/4 lb. mozzarella cheese, cut into 1/4" pieces Cook orzo till almost done, drain and place in large bowl. Cook onion in oil and butter over medium-low heat, stirring until soft. Add celery and cook; stir for 5 min. Stir in flour and cook 3 min. Stir in water, boullion, tomatoes, basil, oregano and cayenne. Simmer 5 min. Stir into orzo with olives, 1/2 lb. mozzarella and salt to taste. Transfer to 2-qt. casserole. Cut remaining cheese into strips and arrange decoratively on top. Bake at 400° for 30 min, or until heated through.

Vicky Hueter, Lovells

Galuski

fry until brown.

1 med. head cabbage 1/4 c. butter salt to taste pepper to taste generous dash paprika 1 8-oz. pkg. Kluski noodles Shred cabbage finely. Melt butter in large skillet; add cabbage with salt, pepper and paprika. Cook noodles in boiling salted water

until tender; drain. Mix with cabbage and

Janice Harvey, Charlevoix

Mock Tuna Salad

2 15-oz. cans garbanzo beans 1 red bell pepper, finely chopped 2 carrots, peeled and finely chopped 2 celery stalks, finely chopped 1 med. onion, finely chopped 2 T. finely chopped fresh cilantro 1 c. chopped walnuts 1 T. dijon mustard

3/4-1 c. mayonnaise salt and pepper to taste

Drain garbanzo beans. Mix in food processor until flaky. Combine all chopped vegetables with beans by hand. Mix mustard, mayonnaise, and salt and pepper together and add to bean/veggie mixture. Serve as sandwiches.

Geralyn Guild, Grand Ledge



Squash Bisque

(Pictured above)

1/2 c. chopped onion 2 T. grated fresh ginger

1 T. olive oil

3 c. cooked, peeled butternut squash

3 c. vegetable broth

1 c. evaporated skim milk

1/8 t. nutmeg

salt and pepper to taste

Sauté onion and ginger in olive oil, then stir in squash and broth. Cook 5 minutes, and then puree in blender. Return to saucepan and add remaining ingredients, heat until hot. Serve with hearty bread and a good salad.

Jill Justin

SUBMIT YOUR RECIPE! Contributors whose recipes we print in 2012 will be entered in a drawing. We'll draw one winner in December and pay their January 2013 electric bill (up to \$200) as a prize.

Thanks to all who sent in recipes! Upcoming: Please send in your **CREPE** recipes by March 10, RECIPES FOR KIDS by April 10 and FRESH FROM THE GARDEN recipes by May 10. Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.

Doing What Needs To Be Done

weak economy can sometimes hit small, rural areas the hardest—leaving some people struggling to get by on their own. With the help of a \$3,000 Great Lakes Energy People Fund grant, one nonprofit organization is working to make a difference in the Newaygo area.

Luther Bible Chapel members volunteered to start a food bank about 10 years ago to help other congregation members. The poor economy in recent years kicked that volunteer effort into high gear.

Frank and Darlene Wright, early project volunteers, assumed operation of the program three years ago. The initial effort became an outreach ministry that welcomes anyone in the area who struggles to put food on their table.

"The economy was a factor," Frank acknowledges. "But this area just has a lot of people on fixed incomes. We have a big senior population."

When the couple agreed to coordinate the food pantry efforts, they and other volunteers served 100 to 150 people a month. During a recent food distribution day, 268 people gratefully accepted free provisions. And no one anticipates a downturn in the number of local people who need help anytime soon.

Luther Bible Chapel, supported by donations from their small congregation, tries to foot the bill for

food pantry groceries and supplies. However, with the increasing number of people served by the pantry, the food expense is growing. Supplying food for all who show up on distribution day now amounts to about \$1,000 a month, which exceeds the church's budget.

The Wrights saw an article about the People Fund in a local newspaper and decided to apply for a grant. As long-time Great Lakes Energy members, they had contributed to the People Fund themselves for many years, so they were appreciative when the grant was awarded.

About 30 church members volunteer regularly to help inventory and store provisions on shelves and in refrigerators and freezers inside the 40 x 100-foot pole building erected near the church in October 2010. Some volunteers also show up on distribution day to set out food for pickup, pack it into boxes, and carry it out for some people.

Pantry volunteers rely on word of mouth



Frank Wright helps distribute food at the Luther Bible Chapel Food Bank in Newaygo.

to spread the news about food distributions, which take place the last Wednesday of each month. While identification is required to obtain provisions, they have no income requirements, preferring to trust that those taking food have a real need for it.

Volunteers also offer food to people they hear of who are in dire need, such as fire victims.

The church also has to provide shelving, tables, refrigerators, freezers and portable heaters to supplement the partially-heated building during cold weather. Donations of such items in good condition, as well as food and cleaning products (no clothes) are welcome, Frank says.

The Wrights show diligence and dedication with their volunteer efforts. Frank will buy sturdy tables and other pantry necessities at auctions or sales when he finds a good deal. He transports them in his personal vehicle—a van the couple purchased mainly to use for the food pantry. They haul food for each distribution day, most of which the pantry buys in bulk from Feeding America, a nonprofit organization in Comstock Park. They even pay for gas to haul food and supplies.

The couple quickly points out, however, that food pantry volunteers operate as a team, logging altogether an average of over 215 hours a month.

"We're all doing this because people need it and it's an outreach from the church we belong to," Frank explains.

"It's just something that needs to be done." To donate cash, time or supplies to Luther Bible Chapel Food Bank, please call 231-856-0562. - Linda Kotzian

Receive Country Lines While You're Away

ou can continue to receive your *Michigan* Country Lines magazine even if you're away from home for an extended time.

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Contact us by dialing 888-GT-LAKES (485-2537), ext. 1817, or by visiting the member services section of gtlakes.com, found under "Your Home" and by clicking on "Change of Address."

Visit Us at the Home Shows

ark your calendar and plan to visit the Great Lakes Energy booth at the home show nearest you.

Stop by to see our Marathon® electric water heaters, and Convectair® electric space heaters that can be used as a whole-house heating option, and our Energy Bike. Our representatives will also be on hand to answer your questions about new Energy Optimization programs that can save you energy, and all our other products and services!

Northern Michigan Regional Home Show • March 9-10 North Central Michigan College, Petoskey

Newaygo Home & Garden Show April 14 • Newaygo Middle School

West Michigan Home & Garden Show April 27-29 • Mason County Fairgrounds, Ludington

Win with the People Fund

everal Great Lakes Energy members who support the cooperative's People Fund received \$100 billing credits in our most recent drawing.

The four members pictured here are among those who were randomly selected to win this electric billing credit. Other winners were Linda Brown Hoort of Grand Rapids and Matt VanAvery of Levering.

People Fund contributors allow their cooperative to round up their electric bills to the nearest dollar each month. The rounded-up amounts, which averaged 39 cents monthly in 2011, are used to award grants to food pantries, senior citizen centers, youth programs and other local charities and community groups.

Great Lakes Energy relies solely on your voluntary contributions to support the People Fund. In 2011, People Fund directors awarded over \$176,000 in grants to more than 80 charitable and community organizations throughout our 26-county service area.

To thank its People Fund donors, GLE selects six winners twice a year from the co-op's three major service areas. Current People Fund supporters and anyone who enrolls in the permanent billing round-up program before the next drawing in June are eligible to win.

Prizes were provided by Great Lakes Energy and did not involve the use of any People Fund round-up money.



Randall Schmidlin, Gaylord



Joe Schrotenboer, Hamilton



Ellen Shoup, Custer



Jacquelyn Tyler, Hesperia

"I would encourage every Great Lakes Energy member to utilize the People Fund. It is just pennies a month but provides a great deal of assistance to our neighbors who need a helping hand." – Randall Schmidlin

"It's an awesome program! Definitely worthwhile for all the help it provides, even aside from the possibility of winning \$100 for participating."

– Joe Schrotenboer

"This is the easiest way to help others." – Ellen Shoup

"I think it's nice to be part of the People Fund because just that (average donation of) 50 cents a month helps a lot of people who really need the help." Jacquelyn Tyler

Don't miss your chance to be the next winner!! Call our office or visit gtlakes.com to sign up today.



POWER SUPPLY UPDATE

Focus Shifts for WCEV

olverine Power Cooperative plans to continue development of the Wolverine Clean Energy Venture (WCEV) near Rogers City in 2012, although work on the project is expected to be limited.

"New emission rules passed by the U.S. Environmental Protection Agency (EPA) in December 2011 make construction of a new power plant extremely difficult for any utility in the country," says Brian Warner, director of environmental services for Wolverine. "Equipment vendors we have talked with agree.'

Wolverine received an air quality permit for the WCEV project from the Michigan Department of Environment Quality (MDEQ) in June 2011. Under state and federal law, the co-op has 18 months from the permit issue date to commence construction.

Prior to the new EPA rules, Wolverine was in the process of preparing formal bid



A rendering of the Wolverine Clean Energy Venture power plant.

packages for key components of the project, including boilers, turbines and foundations. The cooperative expected to seek bids from potential vendors in early 2012.

"We have suspended the bid process for now and shifted our focus to legal defense of our air permit and monitoring of regulatory and political developments," Warner says. "We continue to believe the Rogers City site is a world-class location for electric generation."

The WCEV, proposed by Wolverine in May 2006, would consist of two generating units, each capable of producing 300 megawatts of baseload electricity. Baseload units are typically operated 24 hours a day, seven days a week.

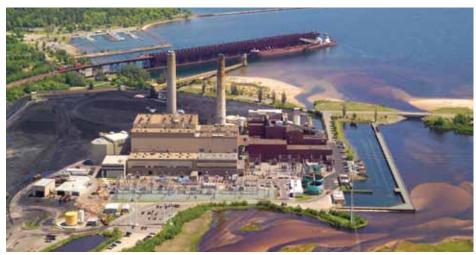
Baseload Opportunity in Marquette

olverine signed a letter of intent with We Energies in January 2012 to evaluate formation of a joint venture that could lead to environmental improvements at the We Energies power plant in Marquette and shared ownership of the facility.

The Marquette power plant has five units, each capable of generating approximately 85 megawatts of baseload electricity. The plant was built between 1974 and 1979 and is currently staffed with 170 full-time employees.

Wolverine and We Energies have started evaluating the technical, economic and regulatory feasibility of installing state-of-the-art emission controls on the units to meet environmental regulations.

"We expect our due diligence efforts at the plant to take about six months, during which time Wolverine and We Energies will also negotiate definitive agreements for the potential joint venture," says Dan DeCoeur, vice president of power supply for Wolverine. "A decision on whether to proceed is expected



We Energies' Marquette power plant.

by summer 2012."

If the joint venture moves forward, Wolverine could own up to 60 percent of the Marquette plant's output. Wolverine is considering a joint venture with We Energies as part of its continuing efforts to secure reliable

baseload power supply at a competitive price for its members.

We Energies serves more than 1.1 million electric customers in Wisconsin and the Upper Peninsula, and over 1 million natural gas customers in Wisconsin.



Creating a Sunny Spot

I have an old picture window I want to replace with a bow or bay window. My budget is tight. Which type is best and most efficient? Should I buy an entire unit or assemble one from individual windows?

Bow and bay windows are an attractive and affordable way to create a sunny spot for plants, pets or people. While today's models are much more efficient than the large, single-pane picture windows common in older homes, there are several factors to consider when choosing one for your home.

Bow vs. Bay

A bow or bay window is sometimes called the "poor man's sunroom," because it can provide some sunroom benefits at a lower cost. But what's the difference between bow and bay windows?

A bow window is made of four or more

NEXT STEPS:

Ready to add a sunny spot to your home? Here are some companies that manufacture bay and bow windows:

Champion Windows:

800-875-5575 • championwindow.com

Peachtree:

800-732-2499 • peachtreedoor.com

Thermal Industries:

800-245-1540 • thermalindustries.com

Weathershield Windows:

800-222-2995 • weathershield.com

(five is most common) narrow window panels, often of the same width. Using more window panels creates a circular appearance, which many people find attractive. Often, only the two end windows can be opened, but you can order them so they all open.

By comparison, a bay window is made from just three window panels. The fixed center window is similar to a smaller picture window, with an unobstructed view of the outdoors. A bay window can provide more of a mini-sunroom feel because it extends further from the house wall, providing more space for plants or a bench seat.

Efficiency and Payback

Replacing an old picture window will increase efficiency and reduce utility bills, but don't make the decision based on efficiency alone. It will take many years of energy bill savings to pay back the entire cost.

In terms of energy efficiency and durability, there is not a significant difference between

James Dulley is a nationally recognized mechanical engineer writing about home energy issues for the National Rural Electric Cooperative Association.



The seat sections for bay or bow windows can have a layer of foam insulation to reduce heat loss and improve comfort for people and plants.

bow and bay windows. As with any replacement window style, the glass is the heart of the window. Select the most energy-efficient glass your budget will allow, even if it forces you to cut back on styling or trim options. At the very minimum, select double-pane glass with a low-emissivity coating and inert gas in the gap between the panes.

Unless you are very handy with tools, it is better to buy an entire unit designed as a bow or bay window. This costs a little more than assembling one from individual windows, but it will likely be stronger and more airtight.

Whichever model you choose, you will enjoy the comfort and energy efficiency of your new "sunny spot" for years to come.

If you have a question for Jim, please email jdulley@countrylines.com, or mail to James Dulley, Michigan Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Be sure to let us know which electric co-op you receive service from.

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Just like trees, geothermal heating and cooling systems produce energy from the sun and the earth. Learn how you can cut heating bills by up to 70%, and generate a discount coupon worth up to \$500, at earthcomfort.com. This is on top of a 30% federal tax credit. Find a dealer and invest in lower heating bills now.

earthcomfort.com

Michigan Geothermal Energy Association

Schedule a Power Line Safety Show



he Great Lakes Energy power line safety demonstration is a traveling program that shows how we look out for our members by bringing our electrical safety message to them.

Witness the power and potential danger of electricity when kite string, branches, fishing poles and other common objects are placed on a 7,200-volt power line mounted to a portable display trailer. Viewers also learn that electricity at much lower voltage can be dangerous, too, if not used wisely in the home.

You may also get a chance to pedal the cooperative's Energy Bike.

Demonstrations take place outdoors if weather permits or inside if facilities are available.

To find out if your group qualifies for a free GLE safety demonstration, email safety@glenergy.com or call 888-485-2537, ext. 8174.

Plan Ahead to Cut **Costs of Big Items**

udgets are tight, and like most people you're probably counting every penny. But by planning ahead, you likely can afford what you want to buy.

How? By setting aside a certain amount of money regularly, you can save what you'll need and cut your cost.

See How Easy It Can Be

The longer you have to save for a big purchase, the easier it is. Let's say it's January and you know that by the *following* January you'd like to buy a big flat-screen TV to watch the Super Bowl. That means you've got 12 months to save. You also know you'd like to budget \$1,000 for your TV, plus \$60 to pay the sales tax. By setting aside a specific amount in a separate savings account, you can have the cash to shop with when your purchase date arrives.

Check the Math!

For our sample 12-month period, saving just \$88.33 per month (or \$20.39 per week, if you prefer) would mean you could have the \$1,060 you'll need by the following January $($88.33 \times 12 = $1.060)$. Note that earned interest isn't reflected in these calculations.

Ready to do the math for your next big buy? Choose a time frame to see how many months or weeks you have to work with, then use any internet search engine



Consider the real cost of using a credit card, and try to save money for big purchases instead.

(Google.com, Bing.com) to search for "Date Duration Calculator" for help in figuring your costs.

Planning Ahead Makes "Cents"

Using credit cards may be convenient, but it's always smarter to save in advance for a major buy rather than charging items and paying interest for months or years to come. How much could a credit card purchase of your TV cost you? More than you may think!

Suppose you have a credit card with an annual interest rate of 15.24 percent. You'd have to pay \$95.79 per month to pay off your TV, assuming you didn't charge anything else on the card. Instead of costing \$1,060, your TV will cost \$1,149.48—if you pay off your credit card in one year.

But there's more: The price of some items, such as flat-screen TVs, often drop over time. So if the TV price falls while you are saving, you'll pocket the amount of the price reduction, since the purchase will cost less.

- Doreen Friel

Fuel Mix Report

The environmental characteristics of Great Lakes Energy Cooperative as required by Public Act 141 of 2000 for the 12-month period ended 12/31/11.

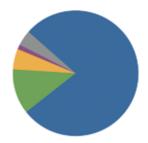
COMPARISON OF FUEL SOURCES USED

Regional average fuel mix used Your co-op's fuel mix

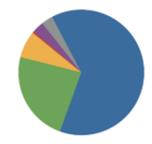
Tour co-op's fuer fills		
FUEL SOURCE		
Coal	77.9%	64.7%
Nuclear	11.6%	24.0%
Gas	5.3%	7.1%
Oil	0.1%	0.4%
Hydroelectric	1.1%	3.1%
Renewable Fuels	4.0%	3.1%
Biomass	0.1%	0.4%
Biofuel	0.0%	0.1%
Solid Waste Incineration	0.1%	0.4%
Wind	3.7%	1.7%
Wood	0.1%	0.4%
Solar	0.0%	0.0%

NOTE: (1) Biomass above excludes wood; solid waste incineration includes landfill gas, and (2) inclusion of long-term renewable (wind) purchase power contract in Wolverine's mix.

Your Co-op's Fuel Mix



Regional Avg. Fuel Mix



EMISSIONS AND WASTE COMPARISON

TYPE OF EMISSIONS/WASTE	lbs/MWh	
	Your	Regional
	Co-op	Average*
Sulfur Dioxide	5.9	8.2
Carbon Dioxide	1,804	2,186
Oxides of Nitrogen	2.0	2.0
High-level nuclear waste	0.0042	0.0083

'Regional average fuel mix data was compiled from Michigan, Illinois, Indiana, Ohio and Wisconsin.

Great Lakes Energy purchases 100% of its electricity from Wolverine Power Cooperative, which provided this fuel mix and environmental data

Staying Safe With Portable Generators

CARBON MONOXIDE HAZARDS:

- Always use generators outdoors. **Never** use them in homes, garages, basements, or enclosed areas, even with ventilation.
- Install battery-operated or plug-in (with battery backup) carbon monoxide (CO) alarms in your home, and follow manufacturer instructions. Test alarms often and replace batteries when needed.

ELECTRICAL HAZARDS:

- Plug appliances directly into generator or use a heavy-duty outdoor-rated extension cord.
- Never plug a generator into a wall outlet or connect it to your home's wiring. If whole-house use is required, have a licensed electrician install the equipment to safely connect emergency generators.

Contact Great Lakes Energy at 888-485-2537 with any questions about using your generator safely!

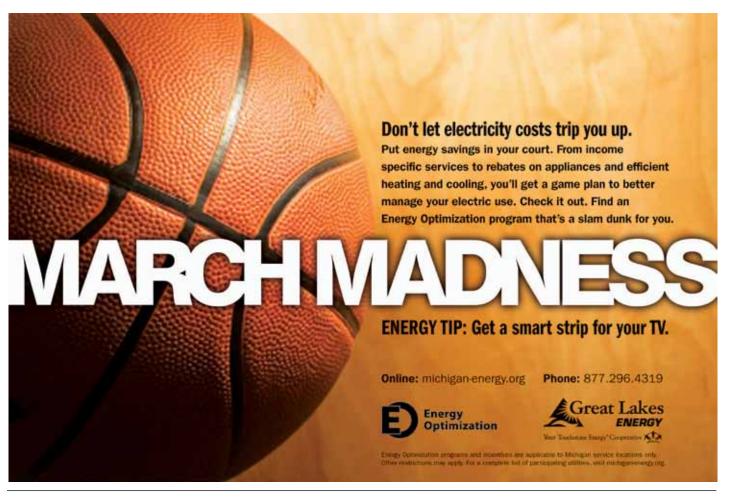
Don't Mess With Power Lines



Downed power lines carry a current strong enough to cause serious injury or death. If you see a downed line, follow these safety tips:

- Move away from the downed line, and anything touching it, by shuffling with small steps, keeping your feet together and on the ground at all times. This minimizes the potential for an electric shock. Electricity wants to move from a high voltage zone to a low voltage one—and it can do that through your body.
- Do not touch anyone who is in direct or indirect contact with a downed lineyou could become the next victim. Call 911 instead.
- Do not try to move a downed line or anything contacting it by using another object, such as a stick. Even normally nonconductive materials like wood or cloth,

- if slightly wet, can conduct electricity and electrocute you.
- ▶ Be careful not to put your feet near water where a downed power line is located.
- Do not drive over downed lines.
- If you are in a vehicle that is touching a downed line, stay in the vehicle. Honk your horn for help and tell others to stay away.
- If you must leave the vehicle because it's on fire, jump out with both feet together and avoid touching the energized vehicle and the ground at the same time. This way you avoid being the path of electricity from the vehicle to the earth.



The **Old Man** and The Ski

Ed Harjala turns 90 years old this month, but that isn't keeping him from entering his 20th cross-country ski race.

hat would life be like without a hero? I don't know because I've had a few. I met one of my heroes over a decade ago. I watched this unimposing cross-country skier munching on a Pasty in Calumet, MI, after the Great Bear Chase Ski Race. I knew I had to meet him and worked up the courage to go to his table. We are friends now and he is still my hero.

Ed Harjala was 75 years old in 1998 when he lined up for the American Berkibeiner Ski Race, a thirty-one mile venture through the torturous hills of Northwest Wisconsin. By mid-race he was averaging over ten miles an hour and on pace to break three hours for the marathon. That's three hours at age 75.

As fate would have it, Ed collided with a fallen skier and subsequently, a tree. His arm splintered in several places and he has a permanent plate of steel in the region as a reminder. He didn't get his sub-3-hour Berkie. He didn't stop skiing either. A few days later, he was back on the skating tracks at the SwedeTown Trails in Calumet, near his hometown of Copper City in Michigan's Upper Peninsula. He adjusted by using one pole and letting his wounded arm hang at his side. His wife, Dots, (Dorothy), drove him to the trails.

Ed is 89 years old now. He's slowed down some but, after all, he's not 75 anymore. At 75, he would ski 25 kilometers daily. He was still doing that a handful of winters ago. Now he deals with heart issues and a foot that doesn't serve him the way it once did. But he's still a master of enthusiasm and artful skiing. He's "The Old Man and the Ski." Sorry,



Hemingway, this guy has earned the title.

"When I was young, in my 70s, I would roller-ski 2,000 miles each summer," Ed says. "Two years ago I was still roller skiing 700 miles a summer. Anyway, roller skiing is too easy."

Ed was also doing two hour workouts rowing his wooden pram near his cottage on Lake Superior. He would row along shore one way for an hour (1,600 strokes). Then he would turn back and head for home.

At age 87, Ed was out on one of his morning roller-ski workouts when he spotted a patch on the highway ahead of him that looked to be new cement. As he got closer he realized that it was a slick from spilled cooking oil, (UP bear bait). Ed couldn't stop, slid onto the slick, and fell on his shoulder, wrenching it badly. "Just lucky I had a leather elbow patch on my shirt, to repair a tear, or my elbow would have been skinned up pretty good too."

Twenty years earlier, at the age of 67, Ed was still in wave 1 at the Berkie. "At (age 85), I was in Wave 3," Ed says. "Now I'm in Wave 9. I'm just moving now." Just moving now? Tell that to the other 89 year-olds on the planet.

Ed's last long Berkie was in 2006. His lungs don't quite give him the lift they once did. He also strides now instead of skating because, "Striding feels easier."

He has entered the Kortolopet these past years, the Berkie's 23 kilometer event. He missed last year's event.

Ed has completed 19 Berkies and needs one more to qualify for the commemorative 'Birch Leggings' bib given to those who finish 20 full Berkies. He told Berkie officials that his body just wouldn't allow him to complete that 20th race. In appreciation for the enthusiasm he has brought to the sport of cross-country skiing, officials sent him the 20-year commemorative bib anyway.

There have also been times, not that long ago, that Ed, thirsting for more competition, asked to be placed in a younger wave bracket at the Berkie. Up to recently, the last competitive age group category has been 80 years and over. In honor of Ed's contribution to the sport, they now have an 85 year old category.

Ed and Dots volunteer at the chalet at Swedetown Trails every Thursday afternoon, serving skiers items like coffee, hot chocolate, and U.P. pasties. They have been the poster couple for the local 'Ski for Hearts' fundraiser. When visiting the chalet, be sure to look up on the wall at Ed's 20-year commemorative Berkie bib, a tribute to a man who, in his way, has made the art of putting on skis a little easier for all of us. You'll also see at least one of his state-of-the-art collapsible wooden waxing stations in the complex. Ed is still in full stride, making them for anyone who needs one. Ed is also an accomplished mason, electrician, fisherman, and still makes his own firewood.

Ed, the oldest skier at Swedetown Trails, would like to compete in the shorter version of the track's Great Bear Chase, this March. The race is 26 kilometers in length. He'll be careful of the mass of skis and poles at the start. He'll pace himself so he doesn't tire early. He'll sense the old mining shafts and other remnants of a past Upper Michigan mining era as he skis with the enthusiasm of a child. Then he'll hear his name called and see people clapping at the finish. The giant digital clock will tell him that he is well within the reach of his goal. Then, with one last push of his poles, he'll cross the finish line, thrilled that he can still challenge himself at the age of 90. The public address announcer might even say something like, "Now finishing is Ed Harjala, a work in progress, The Old Man and the Ski."

My life was just beginning when Ed was overseas during World War II. I never even met him until he was in his late 70s. We have known each other on a limited basis since then. I think of him every time I wax my skis on the ski station he made me. I think of how he taught me to give life its best shot and enjoy every minute of it.

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Horse Expo 2012 @ MSU Livestock Pavilion, E. Lansing 2012 Home Show, Lifestyle & Leisure @ Indoor Athletic Complex, E. Campus Dr., Mt. Pleasant

March 15-18

Lansing Home & Garden Show @ MSU Pavilion, E. Lansing March 23-25

Cottage & Lakefront Living Show @ Devos Place, G. Rapids 2012 Home & Lifestyle Show @ SVSU, Saginaw (24-25th only)









Showcase Homes Savel *10 homes wanted*

We need your home to showcase our beautiful American Metal Roof. Homes selected will earn **drastic savings** off the investment of your Metal Roof in exchange for the use of your home for advertising purposes.

Call Jenn for details to qualify

888-221-1869

See our Photo Gallery and Watch the Snow Sliding Video at

Visit the American Metal Roofs Showrooms at

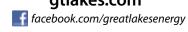
6140 Taylor Dr, Flint, MI 48507 and 1875 Lansing Rd, Charlotte, MI 48813



888-221-1869









sophomore or junior who will be 16 or 17 by June 2012, and your family receives electric service from Great Lakes Energy, you may be eligible to attend the free co-op-sponsored Youth Leadership Summit.

The fun takes place April 18-20 at the 4-H Kettunen Center near Cadillac. You'll join students from other Michigan electric co-ops for a unique, high-energy experience to help you develop leadership skills and explore career opportunities in the electric industry. Plus, you'll get a chance to learn more about your electric co-op, and even try climbing a utility pole in full lineworker gear. Students chosen to attend the YLS will automatically be considered for a free trip to Washington, D.C., June 16-21, as part of the Rural Electric Youth Tour.

Learn more about these high-energy, co-op sponsored youth events at miYLS.com and youthtour.coop. **Applications are due March 16**. Apply online at miYLS.com, or contact Linda Kotzian: 888-485-2537, ext. 8174; teentrips@glenergy.com.

