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July/August 2010

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

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

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

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

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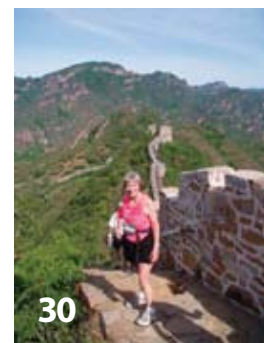
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MICHIGAN Country Lines



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MICHIGAN'S ELECTRIC
COOPERATIVES
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COVER *

A scene looking north to the Soo Locks, shot from the deck of the retired ice breaker *Mackinaw* during a summer festival. Building on the left is Cloverland Electric Cooperative's hydroelectric power plant. *Photo* – © *Shawn Malone/LakeSuperiorPhoto.com*



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tecmi.coop

THUMB ELECTRIC COOPERATIVE

Thumb Electric Cooperative Holds 73rd Annual Meeting

Louis Wenzlaff, President of the Board of Directors, opened the 73rd Annual Meeting of T.E.C. members held on June 12th at the Cass City Recreational Park. An estimated 1,000 people attended the meeting, which was highlighted by the election of three Directors, and numerous entertainment activities featured as a part of TEC's Member Appreciation Day/Annual Meeting.

Re-elected to three-year terms were Randall Dhyse, Huron County; Kim Nunn, Sanilac County; and Louis Wenzlaff, Tuscola County. Others nominated for a Director position were Robert Heck, Huron County; and Richard Zyrowski, Tuscola County.

In action taken after the annual meeting, the Board of Directors re-elected Louis Wenzlaff, President; Donald Wolschleger, Vice-President; Beth McDonald, Secretary; and Leonard Briolat, Treasurer.

President Wenzlaff introduced the members of the current T.E.C. Board of Directors, including Donald Wolschleger, Beth McDonald and Randall Dhyse, Huron County; Kim Nunn, Leonard Briolat and Duane Kursinsky, Sanilac County; and Martin Damm and Karl DeSimpelare, Tuscola County. Also introduced were Cooperative Attorney, James Woodworth, and General Manager, Dallas Braun.

General Manager Dallas Braun presented the 2009 financial statement which showed operating revenues of \$16,909,775 and expenses of \$15,766,007 resulting in an operating margin of \$1,143,768. Total margins were \$1,129,729 for 2009. The 2009 members' patronage capital accounts were allocated over 6.7 cents on each dollar paid by TEC members. The 2009 general patronage retirement appeared as a credit on electric bills received in May 2010. The cooperative remained financially strong despite the condition of the local and global economies.

TEC's Board President, Louis Wenzlaff, highlighted the following areas:

- In 2009, TEC employees designed and constructed nearly \$2 million in new utility plant, bringing TEC's total investment in the three-county service area to over \$72.5 million, while serving over 12,200 member



Thumb Electric Cooperative board president Louis Wenzlaff addresses the crowd of nearly 1,000 at this year's annual meeting.

accounts in the three-county area of Huron, Sanilac and Tuscola.

- Since patronage capital retirements began, TEC has refunded nearly \$4.75 million to its members.

- The Cooperative continues to work with its statewide and national organizations to ensure that any issues that may affect the availability, reliability and cost of electricity to its membership are heard by our elected officials in Lansing and Washington, DC. The cooperative continues to look at new opportunities in such areas as renewables, while assuring the cooperative's energy supplies are affordable and reliable.

- With the continued slowness in the economy, the cooperative employees are making all the improvements in the electrical system, with nearly \$2,700,000 in upgrades being planned and under construction in 2010.

- Recognized TEC's employees for completing one year of no lost time accidents and thanked the employees for their dedication and hard work during the past year.

- Recognized the recent retirements of long-time employees Mike Krause, John Wyrick, Tom Childs and Gary Walker.

TEC's General Manager, Dallas Braun, highlighted the Cooperative's financial status,

Continued, page 8

TEC's Annual Meeting Highlights

*Thanks to all who attended
and took part in the fun!*



Early Bird Prize Winners

1. TEC WATER HEATER, Nick Heilig, Port Austin
2. ENERGY EFFICIENCY KIT, Robert Mausolf, Harbor Beach
3. GAS GIFT CERTIFICATE, Randy McFarland, Cass City
4. ENERGY EFFICIENCY GIFT CERTIFICATE, Edward Kubacki, Kinde
5. FOOD GIFT CERTIFICATE, Edmund Guza, Jr., Harbor Beach
6. GAS GIFT CERTIFICATE, Laverne Shemka, Port Hope
7. ENERGY EFFICIENCY GIFT CERTIFICATE, Leo Emming, Ruth
8. FOOD GIFT CERTIFICATE, James Fifield, Decke r
9. GAS GIFT CERTIFICATE, Tom Bills, Cass City
10. ENERGY EFFICIENCY GIFT CERTIFICATE, Donald Brush, Marlette
11. FOOD GIFT CERTIFICATE, Stanley Zarembski, Bad Axe

Final Prize Winners

1. ELECTRIC GRILL, Howard Maurer, Millington
2. ENERGY EFFICIENCY KIT, Barb Salowitz, Ubyly
3. GAS GIFT CERTIFICATE, Ernest Goretski, Port Austin
4. FOOD GIFT CERTIFICATE, Floryan Urban, Cass City
5. GAS GIFT CERTIFICATE, James Laursen, Caseville
6. ENERGY EFFICIENCY GIFT CERTIFICATE, Raymond Twiss, Deckerville
7. FOOD GIFT CERTIFICATE, Pete Cody, Caro
8. GAS GIFT CERTIFICATE, Mary Reeves, Cass City
9. ENERGY EFFICIENCY GIFT CERTIFICATE, Mary Eileen Franzel, Bad Axe
10. FOOD GIFT CERTIFICATE, Allan Shaw, Marlette
11. GAS GIFT CERTIFICATE, Matthew Bosel, Mayville

Children's Prize Winners

1. BOY'S BIKE, Brady Hudek, Caro
2. GIRL'S BIKE, Ninah Belle Risdon, Caro
3. PORTABLE RADIO/CD PLAYER, Lily Parker, Kingston
4. PORTABLE RADIO/CD PLAYER, Justin Stepka, Ubyly
5. PERSONAL CD PLAYER, Jade Galinski, Cass City
6. PERSONAL CD PLAYER, Levi Groseth, Carsonville

Donated by Bartnik Propane

GAS GRILL, Robert Fritz, Mayville

Donated by Kappen Tree Service

FIVE YARDS OF COLORED MULCH (delivered), Barbara Hanby, Cass City

Internet Service Mapped in State

The Michigan Public Service Commission (MPSC) has completed broadband availability maps aimed at promoting development of high-speed internet access.

The maps, accessible online at connectmi.org, are a product of the Connect Michigan broadband initiative, a public-private partnership between the MPSC and Connected Nation, a national nonprofit focused on technology expansion in underserved areas.

"This is an important first step as the state seeks to target resources to those areas of the state without high-speed

internet service," said Orjiakor Isiogu, chairman of the MPSC.

The map details where broadband does and does not exist across Michigan by type of broadband service.

The initial maps include data from more than 86 state providers. The key findings show that 95.41 percent of Michigan households have access to broadband service of at least 768 kbps downstream (excluding mobile and satellite service); 4.59 percent of Michigan households are unserved, representing approximately 174,000 unserved households of which 165,128 are rural.

Consumers can search for high-speed internet service providers using their home address, service providers can make informed expansion decisions, and state and federal policymakers can target resources to unserved and underserved communities.

Those who do not currently have broadband access can add their name and address to a secure database of households that would like to subscribe, if given the opportunity.



Map of available DSL service on connectmi.com.

MYSTERY PHOTO

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

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

The **May** contest winner is **Karen Altman** of Gaylord, who correctly identified the row of "cottages" near the Grand Hotel on Mackinac Island.



May photo

Do you
know
where
this is?



National Electric Co-op Youth Tour Means Education, Fun

A group of 13 teens from across the state traveled to Washington, D.C., recently to participate in the Rural Electric Youth Tour. Sponsored by the National Rural Electric Cooperative Association (NRECA) and the Michigan Electric Cooperative Association, this annual event gives high school sophomores and juniors the opportunity to learn about electric co-ops, politics and current issues.

"I gained so much from this trip..." says Brittany Bonar of Charlevoix, "...new friends, more knowledge about our country, and I found the monuments, memorials and museums to be very intriguing. These are memories that will last forever."

Along with a tour guide and three chaperones, the group toured Arlington Cemetery, the Smithsonian museums, war memorials, Supreme Court and Capitol, and enjoyed a play at the Kennedy Center, a visit to the National Zoo, and a Potomac River boat cruise.

The students also met with Sen. Debbie Stabenow and U.S. Reps. Bart Stupak, Dave Camp, Vern Ehlers, Fred Upton and legislative staff to ask questions and discuss economic and energy-related issues.

And, joining 1,500 electric co-op-sponsored students from across the country, the group also convened for National Youth Day to learn from inspirational

speakers, including Mike Schlappi, a four-time paralympic medalist and two-time world champion in wheelchair basketball. Schlappi shared his inspiring message: "Just because you can't stand up, doesn't mean you can't stand out."

McKenna Wolf, a junior at Constantine High School, was chosen to represent Michigan on NRECA's Youth Leadership Council. She will return to D.C. in July to attend a youth conference designed to strengthen leadership and public speaking skills.

Participating co-ops included Cloverland Electric, Cherryland Electric, Great Lakes Energy, HomeWorks Tri-County Electric, Midwest Energy, and Presque Isle Electric & Gas Co-op. The students were chosen by their sponsoring co-op after attending Michigan Electric Cooperative Teen Days in April—a three-day camp to learn about electrical safety and energy efficiency, and how co-ops operate.

Learn more about these co-op-sponsored youth programs at countrylines.com; click on "Youth."



Mike Schlappi and McKenna Wolf

Top photo: (back row from left) Marcus Ruff, Jake Smith, Tyler Ashbaugh, Robert Myers, Kevin Bolz, Will Puerner and Luke Smith; (front row) Sen. Debbie Stabenow, Esther Hardies, Karol Chubb, Tabitha Lyon, McKenna Wolf, and Brittany Bonar.



© Stockphoto.com/Damian Gadal

Support Michigan

I am from the Detroit area, lived here for all of my almost 52 years. Most of my family and myself have worked for the auto industry and I have worked directly for Ford Motor Co. R&D for the last 17 years. I am also not embarrassed to say I am a Lions season ticket holder, but go to very few games in October or November. I spend most of those months in northern Michigan. There is nowhere else on earth that I'd rather be in the fall.

We own 20 acres in Manistee county where we just built a vacation home in late 2008. We've spent countless vacations in Da U.P., eh! My wife and I have seen over 100 waterfalls there and a large portion of the lighthouses. We purchased a plaque for my mother and stepdad in the Marquette Lighthouse tower that was to be used for restoration. We have gone out of our way to vacation and spend money in Michigan's north country.

With all the jobs lost in Michigan in the auto industry, it is no wonder tax revenues are down. My wife has been out of work for a year-and-a-half and my income is down over 30 percent, yet we still find a way to visit the north. When are the people of Michigan going to learn to buy products from Michigan/USA, which pay Michigan income taxes, property taxes and corporate taxes and quit buying from companies that send money back to Japan, China and Korea?

A teacher friend was complaining to me about the state's financial crisis and how his taxes are going up and [he's] losing benefits, yet he drives a

Honda. Why is it so hard to understand that even though the Honda was "assembled" in the USA the purchase supports Japan and not the Michigan workers who pay state taxes and spend their money in Michigan? While traveling through the state I see so many foreign cars, especially around Traverse City.

I could go on, but I'll make my point. With our income down around 40 percent and job prospects as bad as they are, if my wife loses her unemployment before finding a job, we could lose our vacation home. That will be one more family not spending their money in northern Michigan. When are the people of this state going to learn and stop sending our potential tax revenue to Japan, Korea and China?

Tony Burkel, Macomb Township

"Greener" Lawn

In his article, Brian Sloboda ("A Greener Way to a Greener Lawn," June 2010) failed to mention another alternative to mowing or trimming a lawn, reducing emissions, and using less oil.

There are new products at golehr.com that you might be interested in: a propane-powered lawn mower and gas trimmer. I have the trimmer myself. It is powered by a 4-cycle motor. Emissions are far less than with conventional fuels. The trimmer and lawn mower use a 16-ounce camping-style canister that lasts two hours. The canister is recyclable and in the future it may be possible to re-fill these containers.

The amazing thing is there is no mixing of oil and the canister can be removed and used anytime with no worry of it becoming "old." Octane ratings stay the same. The trimmer and lawn mower are a clear alternative to old methods while helping the environment. Cub Cadet makes

a propane-powered zero-turn lawn mower.

Propane is a clean-running fuel and it doesn't require burning fossil fuels to create the fuel to run it and it is in plentiful supply. I hope others will begin to use this equipment as I have to help reduce emissions that impact our planet.

I plant natural grasses and plants in my yard so that I have reduced my mowing to zero. I trim my yard, but I burn weeds with a propane "Weed Destroyer" so that I eliminate my use of chemical pesticides.

Jim Ege, Pentwater

Propane is a fossil fuel. Propane is cleaner burning than gasoline, but not as clean as natural gas or electricity when used to power equipment. In terms of emissions, from higher to lower, the order is gasoline, propane, natural gas, electricity. —ed.

About Coal & Nuclear

I'd like to respond to a letter in the May 2010 issue of *Country Lines*.

It appears [the writer] is suffering from severe selfishness, preferring to avoid any responsibility for encouraging profligate use of carbon-yielding fuels rather than working, in any way he could, to reduce the negative impact that today's use of those fuels probably have on his grandchildren—and mine. If he were to adopt an increased sense of altruism he might find that he can look at all children and know that he has done something for all, not just for his personal concepts of what is best for our world.

Look outside your window and you'll discover there is a world worth working to save.

Jon Wennerberg, Skandia

Physicians for Social Responsibility has information about energy sources people making decisions about those sources should be familiar with.

Gerald Drake, MD, Petoskey

Students Win Scholarships



Ben Schell



Brandon Kieft

Brandon Kieft, a member of Great Lakes Energy Cooperative, and Ben Schell, Cherryland Electric Co-op, have each won a \$1,000 scholarship from the Michigan Electric Cooperative Association (MECA).

Brandon is the son of Paul and Gina Kieft of Rothbury, and a graduate of Montague High School, where he was active in varsity basketball and soccer, and community service and leadership organizations. He plans a career in bio-medical engineering.

Ben is the son of Timothy and Linda Schell of Traverse City and a graduate of St. Francis High School, where he was active in community service and played varsity football, basketball and track. He will attend the University of Michigan and plans to pursue a career in medicine.

A total of 156 scholarship applications were received by MECA, which publishes *Michigan Country Lines* for the state's nine electric co-ops.

Recycled Paper

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

rates, member services, marketing activities and patronage capital retirement. The report included the following:

The Cooperative maintained a strong financial position despite a 3 percent drop in kilowatt-hour sales due to the cool summer weather and the economic environment. The Cooperative was able to continue to meet all its financial and credit needs despite all

became law in the fall of 2008. Energy Optimization is targeted at the elimination of electricity waste by encouraging the use of energy efficient devices, and its goal is to not only reduce emissions but delay the need for new power plants. The costs of these EO programs are funded by a separate EO surcharge. Some of the programs highlighted include the: 1) Energy Efficiency

Assistance Program, 2) Appliance Recycling Program, 3) On-Line and In-Home Energy Audit Program, 4) Residential and Small Business Energy Star Program, 5) Residential Heating, Ventilation, Air-Conditioning (HVAC) Program, and 6) Commercial and Industrial Program.

The Cooperative discussed plans to comply with the new state-mandated Renewable Portfolio Standard (RPS), which requires that by 2012 all Michigan utilities must begin to purchase electricity from renewable resources

growing to a maximum of 10 percent by 2015. The cost of this new RPS will be funded by a separate RPS surcharge not to exceed \$3 per month. The cooperative does not plan on implementing the RPS surcharge until 2012.

Members were thanked for their participation in TEC's "Green Thumb" energy efficiency programs. Totals of over 6,040 members, or close to 50 percent are partici-

pating in TEC's managed water heating and dual-fuel space conditioning programs. TEC's high-efficiency, free electric water heater program continues to flourish with nearly 5,400 high-efficiency water heaters being placed in members' homes and businesses and saving members money over other energy sources. Electricity prices have increased moderately compared to other energy sources. TEC's Green Thumb Energy Efficiency Program combines high efficiency systems along with conservation during periods of peak demand.

TEC continues to take a proactive business approach in the energy environment to assure low-cost, yet reliable power supply sources for its members. TEC's current supply agreement is through 2012.

In 2009, TEC paid \$658,983 in property taxes to schools and other governmental bodies in Huron, Sanilac and Tuscola counties, and another \$15,000 in state taxes.

TEC continued its maintenance program, including right-of-way-clearing and pole testing programs.

State Sen. Jim Barcia, and State Reps. Terry Brown and Jeff Mayes were recognized for their support of Thumb Electric Cooperative and the rural electric program.

In closing his report, General Manager Dallas Braun urged members to continue their strong interest in Thumb Electric Cooperative and thanked them for their support.

After the business meeting, a lunch was served, followed by entertainment featuring the award winning "CEYX" band, along with bucket truck rides, pony rides and other family activities.



Thumb Electric's general manager, Dallas Braun, reviews business matters with members who attended the meeting.

the issues with the global credit crisis. The Cooperative's service area is being hard-hit by unemployment and the economic downturn is affecting its service area. The cooperative will continue to balance needed infrastructure improvements and their impact on electric rates.

The Cooperative rolled out their new Energy Optimization programs in 2009 to comply with a new state mandate that

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Call Thumb Electric Cooperative and not 9-1-1 if there is no danger to buildings or the public. Thank you!

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Thumb Electric Co-op continues to provide trained personnel to help you solve your neutral-to-earth voltage problems. If you think you have neutral-to-earth voltage, please call us at

1-800-327-0166



Cooperative Principles Still Working After 75 Years

A few years ago I joined my son and his Boy Scout troop on a 10-day backpack trip at the Philmont Scout Ranch, the Boy Scouts' 214-square-mile-high adventure base located in the mountains of northern New Mexico. Since we were a "boy-led troop," our purpose as adult leaders was simply to follow the Scouts and only step in if it became a matter of safety. Each day the boys picked a different trail leader and that scout was responsible for setting the pace and navigating the trails. For the most part, the trails were fairly well marked and getting lost took some effort. However, in some of the more rocky regions there really is no trail and you had to use the compass and map to make sure you were heading in the right direction.

I recall one occasion where the scouts headed off down a path the adult leaders knew was incorrect. We were tired and really didn't want to wait too long to see how far they would go before figuring out we were "lost." In our minds, we were recalling a hike we took five years earlier where we walked 10 miles on a five-mile trail as we dutifully kept following behind a scout who was obviously lost. We didn't want to needlessly add to our trek, but we also didn't want to squash the enthusiasm of the leader. So instead of shouting out that he was wrong or lost, or taking over, we slowed the pace and gave him a chance to figure out we were not heading down the right trail. Fortu-

nately, it only took him about 10 minutes to figure it out. This led to a conversation about the need to stop every so often, look around, and reconfirm that you are on the right trail.

As cooperatives, we follow a more general road map: the seven cooperative principles. These principles have been around for hundreds of years and have guided all types of cooperatives. As we hit our 75th year, it makes sense for us to pause, take a look around, and reconfirm that we are still on the right trail.

Following are the principles that guide cooperatives:

1. Voluntary and Open Membership

Cooperatives are voluntary organizations, open to all persons able to use their ser-

vices and willing to accept the responsibilities of membership.

2. Democratic Member Control

Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions.

3. Members' Economic Participation

Members contribute equitably to, and democratically control, the capital of their cooperative.

4. Autonomy and Independence

Cooperatives are autonomous, self-help organizations controlled by their members.

5. Education, Training, and Information

Cooperatives provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their cooperatives.

6. Cooperation Among Cooperatives

Cooperatives serve their members most effectively and strengthen the cooperative movement by working together.

7. Concern for Community

While focusing on member needs, cooperatives work for the sustainable development of their communities.

I can think of numerous examples of cooperatives that have stayed true to these principles and are walking the right path.



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



See the Soo

Photos – Sault Convention & Visitors Bureau

The busy waters of the St. Mary's River ensure that Sault Ste. Marie never loses its undercurrent of excitement and possibility. **Linda Sirois**

An old French word, “sault” describes the turbulent rapids and waterfalls that have caused river traffic to pause and linger for hundreds of years in Sault Ste. Marie. Since its European settlement in 1668 by Jesuit priest Jacques Marquette, this area where lakes Superior and Huron are joined by the river has been a lively crossroads of trade, travel and activity. Even earlier, generations of Ojibwa people gathered at “the cascading rapids” to harvest the abundant resources of whitefish, maple sugar and fur.

“The river defines the town geographically and historically,” says area resident Will Fowler, who wears many hats as an employee of the local bookstore, member of the Chippewa County Theatre Guild, and employee of Sault Historic Sites. “So many groups have had influence on the area—each group has left its mark.”

A Crossroads and a Destination

Sault Ste. Marie, or “the Soo,” has a tradition of being a place to re-stock provisions and relax. This second largest U.P. city is also the oldest European settlement in the Midwest and combines small town friendliness with enough authentic attractions to please the whole family.

“It’s a very friendly city,” says Linda Hoath, lifelong Cloverland Electric Co-op member and director of the Sault Ste. Marie Convention and Visitors Bureau. The Sault area is an ideal home base for the numerous day trip destinations located just a short distance away. Traveling time is a few minutes by bicycle, foot or car within the compact downtown waterfront area, and a few minutes to a few hours to the natural beauty, history and fun

the eastern U.P. offers.

The International Bridge spans the St. Mary’s to join the U.S. and Canada, and offers easy access to the sister city of Sault Ste. Marie, Ontario (call U.S. Customs at 906-632-2631 for border-crossing rules).

History FUN!

Fun is never separate from history in Sault Ste. Marie. The Tower of History features an amazing panoramic view of 1,200 square miles, including the Canadian side of the river, for those who take the high speed elevator 210 feet up to the observation decks.

From the top of the Tower, the Museum Ship *Valley Camp* can be seen a short distance away. This retired Great Lakes freighter has 20,000 square feet of exhibits and re-creations of the ship’s heyday as an iron ore and taconite carrier. Visitors can wander the crew’s quarters and pilothouse, view recovered artifacts from the *Edmund Fitzgerald*, and sense the sheer volume of a Great Lakes ship, which is only about one-half the size of freighters cruising today.

The newly-opened River of History Museum beautifully displays information about the diverse cultures and development of the St. Mary’s River system and Sault area. In the same building is the Interpretive Center for the Sault Tribe of Chippewa, a free learning experience featuring native artwork, craft displays and a tribal library.

Money-saving combination tickets are available for the three venues above (visit sault-historicsites.com or call 888-744-7867).

A national historic site, the American Soo Locks (Visitor’s Center: 906-253-9101) should not be missed. This engineering marvel allows ships that are 1,000 feet long



to narrowly negotiate the 21 feet of difference in water levels between lakes Huron and Superior. The Soo Locks Boat Tour (906-632-6301) uses double-decker boats to take visitors along the St. Mary’s and through the Locks.

Rarely open to the public, the block-long former Edison-Sault Hydroelectric Power Plant—now owned by Cloverland Electric Cooperative—is a dazzling work of circa 1898 cut-stone architecture, with “hidden” lighthouse columns.

Other attractions include the Great Lakes



Photo - Soo Locks Boat Tours

Photos - Linda Sirols

Opposite: The International Bridge to Canada (top), with one of three train bridges behind it, and a freighter preparing to pass through the Soo Locks. The historical homes (bottom) of John Johnson, Bishop Baraga and Henry Schoolcraft flank Sault Ste. Marie's city marina, with the Tower of History museum and its observation decks spiraling in the background.

Above (clockwise, from top left): This eagle fountain on the corner of Portage and Ashmun represents the Soo area's history, according to Lee Brown, director of the Downtown Development Association, and marks the location of the Farmer's Market that sets up for business each Wednesday evening and Saturday morning during the warmer months. • A freighter follows a tour boat through the Soo Locks. • Genny Kaunisto, a Cloverland Electric Co-op member, serves up a smile and delicious drinks and Mexican fare at the colorful, historic Palace Restaurant and Saloon. • This humorous clock face is one of many quirky creations at Riverstone Gallery. The owners recycle outmoded electronics and camera parts into unique clocks and jewelry. • Eric and Kathy Demaray represent 55 local artists in their Sault Realism gallery on Portage Ave., as well as offering printing, mounting, and framing of artwork.

Shipwreck Historical Society, and St. Mary's, Michigan's first Catholic church. The current building is the fifth on this site and dates from 1881.

Local storyteller Jim Couling, also known as "Woodsmoke Jim," delights in leading his Twilight Walking Tours (twilightwalkingtours.com or 906-440-5910), which offer tales that combine history and mystery.

"Each story is a gem," Couling says, adding that he loves sharing his enthusiasm for "cool and creepy untold stories." Some of the untold stories focus on his "Strong Women

of the North" tales. "Their [the women's] stories are compelling," he says. With his wife Mary, who adds her vocal talents, they offer family-friendly evening strolls that depart appropriately across from the Haunted Depot on Portage Avenue.

Historic Sugar Island is just a hop away by ferry. Be sure to try the funky 1949 Clyde's Drive-In restaurant near the ferry landing.

Speaking of Food...

Even eating is more fun in the Soo. Try shipwatching at the riverfront while feasting on

fresh whitefish, fine dining at the Ramada Inn Ojibway (National Historic Landmark), or tasty Mexican specialties at the renovated 1903 Palace Restaurant and Saloon. Zorba's serves up Greek, and Cup of the Day boasts great coffee, specialty sandwiches and homemade soups. Owner Anthony Stackpoole keeps a bowl of fresh water just outside the door for passing four-legged friends.

Unforgettable family dining awaits at the award-winning Antler's Restaurant on Portage Avenue, where about 500 antler racks and animals—real and frankly fake—enliven the atmosphere from their perches on the walls and ceiling. Legend has it that among the names under which it has operated, the "Bucket of Blood Saloon and Ice Cream Parlor" is the most colorful. The Antlers offers homemade hamburger buns, twice-weekly fish fries, and delicious steaks. Their beer-of-the-month feature and traditional Paul Bunyan burgers are in demand by local Lake Superior State University students. (*Hint: the steak bites on garlic bread and s'more cheesecake are amazing.*)

A Lively Arts Scene

Shopping, theaters and art galleries are scattered throughout the Soo. Sault Realism, an art gallery run by Eric and Kathy Demaray, offers a mix of locally-created paintings, jewelry and photography. Some of the retro prints shown were taken by Eric's grandmother, nationally known photographer Marion Stahl Boyer.

Nearby is Riverstone Gallery, specializing in Michigan and Sault art. Owners Gregory and Donna Steele, and daughter Allyson Schwartz, shape one-of-a-kind jewelry and clocks from re-purposed materials.

The Alberta House Art Gallery has traveling exhibits and a gift shop. Mahdziwin, on Ashmun St., is owned by the Sault tribe and offers original Native American artworks. Kewadin Casino also has a large gallery and gift shop with Native creations.

A recent "Cool Cities" grant has allowed the local drama community to renovate and use the historic Stars Theatre (906-632-1930), on Ashmun St.

The river's special energy, collaboration among diverse cultures, and a strategic location make the Soo area an unforgettable destination with a charm found nowhere else.

"Sault Ste. Marie has found its own," explains Hoath. "We are not Mackinaw City, we are not Mackinac Island, we are not St. Ignace. We are Sault Ste. Marie."

To plan your trip to "The Place Where Michigan Was Born," see saultstemarie.com or call 800-647-2858.

Unique in the U.P.

Take a Michigan vacation this summer by visiting Keweenaw Bay in the western Upper Peninsula. *Kath Usitalo*



Bill and Nancy Leonard are the owners of the Einerlei Shop in Chassell. Much of the area is served by Ontonagon County REA.



Teresa Palosaari's Country Craft Cabin offers soaps, rag rugs and honey, among other things.

To know Bill and Nancy Leonard is to wander through their airy, two-story Einerlei Shop at the heart of Chassell in the Keweenaw Peninsula. Every artfully arranged item, from handcrafted jewelry to kitchen gadgets and gourmet foods, garden plants, pet

accessories and books, is a reflection of their interests. *Einerlei*, German for "one and the same," expresses their goal of combining work and play. It's a philosophy that has guided them to the 35th anniversary of their one-of-a-kind store, involvement in their adopted hometown, and 45 years of marriage.

The couple had vague plans to "do something on our own" when they left Indiana and their careers—his as an engineer, and hers as a special education teacher—in their VW camper in 1973. "We were kind of Hippie-ish," says Nancy, when they happened upon Houghton and stayed "to see what it was like to live with a lot of snow." An avid sailor, Bill says, "Big water attracted us." They also liked being close to Michigan Technological University.

"Let's sell something!"

Two years after arriving in the U.P., the couple launched Einerlei on a lark, "because we had store windows," says Nancy of the building that had housed a restaurant and barbershop. "Let's sell something!" they said, and opened shop with handcrafted items and furniture they refurbished.

Gradually, they added inventory to reflect their home and garden interests, renovating the building in phases to make room for the works of local artists and musicians, greeting cards, housewares and apparel. The variety appeals to their clientele, a mix of tourists, locals, and the Michigan Tech and Finlandia University communities. "When I buy for the new year, I try to redefine (the shop). We have to constantly change, and that's great because it keeps us interested," Nancy says. "I try to find companies that are doing good on their own," she adds, preferring those that donate to causes, deal in fair trade, and are conscientious about packaging.

Community Center

The couple is also active with local historical, business improvement and tourism committees, and Humane Society fundraising. Bill was township supervisor for 12 years, and Nancy's passion for vintage clothing inspired "Friends of Fashion," a volunteer group that preserves historic apparel and presents pageants depicting those who wore it.

The Leonards also serve as the unofficial Chamber of Commerce, readily sharing



The Einerlei Shop has an ever-changing collection of unique clothing.

tips on what to do in the area. In summer, mountain bikers and hikers hit the Chassell Classic cross-country ski trail, and paddlers enjoy Chassell Bay and the Keweenaw Water Trail. The Chassell General Store carries everything from instant toothache pain relief to extension cords, refurbished computers, Vollwerth's sausage, fishing lures and fresh fruit. Across the street, Treats and Eats offers ice cream and makes sandwiches for easy picnics at Centennial Park, with its playground, fishing pier and sandy beach on Chassell Bay.

A Berry Good Time

The waterfront was the site of a sawmill built in 1887, and lumbering reigned until the mill closed in 1928. Farmers realized the area was ideal for growing strawberries and Chassell became a major supplier. The story is told in the "Lumber Kings to Strawberry Kings" exhibit at Chassell's Heritage Center Museum. Housed in a handsome former school, the Center is a Heritage Site of the Keweenaw National Historical Park. It's open summer Tuesdays and Thursdays, with a variety of Thursday evening programs.

A handful of berry growers, some with U-Pick farms, remain in the area and Chassell celebrates with the annual Copper Country Strawberry Festival (July 9-10). It features parades, entertainment, an arts and crafts sale, whitefish "boil" and famous strawberry shortcake. Folks gather at the park pavilion to clean and



In L'Anse, Lynn Ketola built the Ivory Mansion Bed & Breakfast to offer unique lodging and keep her family's homestead.

prepare 1,200 quarts of strawberries for the signature treat.

Along U.S.-41

Roadside attractions near Chassell include the Bishop Baraga Shrine, a towering monument overlooking Keweenaw Bay, and birders flock to the Sturgeon River Sloughs, a designated wildlife viewing area. Teresa Palosaari's Country Craft Cabin is filled with soaps, rag rugs and honey, and a bright red sign signals North Entry Road. A giant bear trap at the Bear Trap Iron Works is a can't-miss photo stop.

Houghton offers a variety of lodging, but for a unique alternative, check into the Ivory Mansion Bed & Breakfast in L'Anse.



Stop at the Baraga Drive-In for a quick meal, ice cream and a friendly welcome.



The Chassell General Store has "a little bit of everything," from garden tools to canned tuna and firewood.

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The Next Water Heater

New heat pump water heaters may signal the rebirth of an energy-saving technology. **Alice Clamp**

Cold showers aren't a pleasant way to start the day, and hot water plays a hefty role in cooking and cleaning, too. As a result, water heating has become the second largest energy user in an average home, accounting for approximately 20 percent of residential energy use.

To save energy, consumers have wrapped water heaters in blankets or wrapped hot water pipes in insulation. While those practices should continue, a new type of water heating product is entering the market, promising to lower energy consumption and save consumers money.

Heat pump water heaters, while not a new technology, are experiencing a rebirth. A handful of small companies produced units in the 1980s and 1990s. But random failures and other issues (such as the need for utilities to install special electric service to power the devices) soured consumers on the technology.

In addition, many electric co-ops offered (and still offer) load management programs that depended on briefly shutting off standard electric resistance water heaters (which can store hot water for many hours) as a way to cut electric use during times of peak demand when power prices skyrocket. These programs, in turn, helped co-ops keep electric bills affordable. Heat pump water heaters, unfortunately, could not be used in these efforts.

Now, some major water heater manufacturers and other appliance companies have entered the market with a new and improved generation of heat pump water heaters. Many electric cooperatives are currently testing these products for possible deployment in their service territories—a critical step in determining whether they will really help consumers save energy and trim electric bills.

How They Work

Heat pump water heaters come in two types. The more expensive “integrated” model replaces an electric resistance water heater with one that combines a heat pump with a storage tank. The second version adds a heat pump unit to an existing electric tank.

In both versions, a heat pump circulates a refrigerant, which absorbs heat from surrounding air before it passes through a compressor to maximize heat output. Essentially, heat drawn from the air transfers to water in the tank.

While a heat pump water heater can produce most of the hot water a family requires, a backup electric resistance element in the tank takes over when outside air becomes too cold or consumers need extra hot water. In summer, cool exhaust air can be released into the vicinity where the heat pump water heater is located, assisting home cooling, or it can be returned outside through ducts.

Because a heat pump water heater uses electricity to move, rather than generate, heat, it consumes roughly half the electricity of a conventional electric resistance model. This



efficiency qualifies integrated heat pump water heaters for an Energy Star® rating, a first for electric water heaters.

But this added efficiency comes with a high price tag. Integrated units sell for \$1,400 to \$2,000—more than twice the cost of standard electric resistance water heaters. However, depending on your co-op's electric rate and the installed cost of a heat pump water heater, including any financial incentives, payback for the purchase can take as little as three years. In areas with low electric rates and limited financial incentives, though, the payback period can be much longer.

Heat pump water heaters are most efficient in warm and damp climates. Homes in those regions also benefit from the appliance's cooling and dehumidifying features.

A heat pump water heater needs space of at least 10 feet square to ensure adequate air exchange. An open basement, a utility room, or—in some areas—a garage, will work.

Noise becomes another consideration when deciding where to place a unit. While conventional electric resistance water heaters operate quietly, most heat pump water heaters boast noise levels similar to window air conditioners.

Heat pump water heaters are not a universal option. Residents in colder climates will see decreased performance during winter. In the Pacific Northwest, for instance, if the heat pump is designed to work at ambient air temperatures of 45° F or higher, the water heater's electric element will operate whenever air temperatures drop below that level, reducing energy savings.

To learn more, visit energystar.gov, and search for heat pump water heaters.

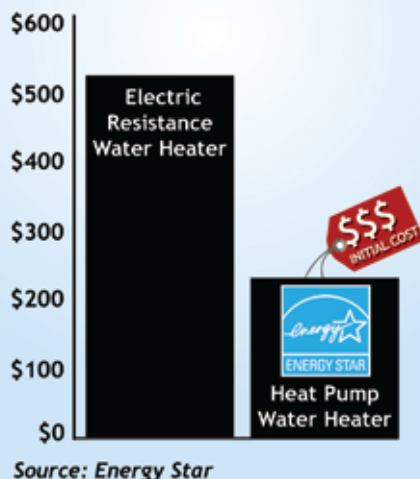
Alice Clamp is a technology writer for the Cooperative Research Network, a service of the National Rural Electric Cooperative Association.

Heat Pump Water Heaters Cost More Initially, But May Trim Electric Bills

Energy Star-qualified heat pump water heaters cost almost **twice as much** as standard electric resistance models, but may cut energy costs in half.

Annual Energy Costs (\$/Year)

Based on average household of 2.6 occupants, U.S. Census Bureau, 2006





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Do the Math! Kids Need It; You Can Help!

In the collective rhythm of our lives, summertime has become the mellow jazz of the year, especially for our kids. A growing number of students, however, are picking up the tempo by tackling some summer-time learning.

Adding motivation for high school students are the Michigan Merit Graduation Requirements. Starting with the class of 2011, these standards require *every* student to master rigorous subjects like Chemistry, Physics, and Algebra 2.

Since no subject seems to cause more anxiety than math—Algebra 2, to be exact—I asked math experts for some tips.

STARTING THIS SUMMER

Target your help – Discover where your teen's strengths and weaknesses were in last year's math classes. This will uncover areas where you could catch up or get a jump-start on next year.

"Ask for worksheets or assignments for students to work on over the summer," says Jamie Wernet, a math tutor and high school teacher. "Or explore websites that offer free math games, tutorials, worksheets, and more."

Plan and practice – All too often the summer can slip away, regardless of the best intentions. Schedule study sessions and follow it. Take advantage of summer schools if one is offered.

"Summer schools often offer smaller classes or a different approach to the material," says Wernet.

Study the standards – Review local and state standards, which explain what your child will be expected to learn each year (see sidebar).

"What does it mean to 'pass Algebra'? List the topics found in the standards and make sure your child is learning them," urges W. Michael Kelley, author of a series of math guides for people who don't "speak math."

AFTER SCHOOL STARTS

Be visible and accessible – Introduce yourself to teachers early on. Let them know

you're interested in your child's progress. Ask if there is a class website or other way to track when assignments are due.

"Send an email early so that the teacher has easy access to your email address," says Wernet.

Learn what to expect – Ask about the textbook or curriculum used. Does the teacher use a traditional approach, or one that emphasizes group work, problem solving, and investigations? What will a typical lesson look like? How much homework should you expect?

"Math instruction doesn't always look the same as when parents were in school, and that's okay!" Wernet says.

Keep students on track – Have a set time to work or study a little every day. Often, success hinges on just keeping up with daily assignments.

MOTIVATING RELUCTANT LEARNERS

Uncover the root – Is it boredom? Discouragement? Confusion? Then match the remedy to the cause.

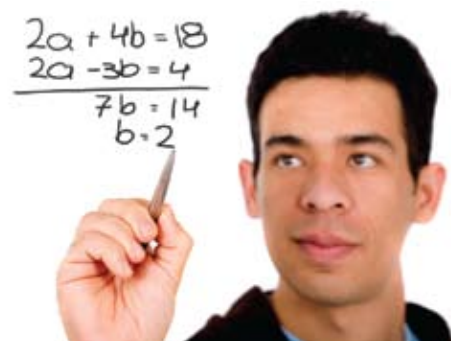
Create a can-do attitude – Kelley says some parents believe their children will fail math because they, themselves, failed the subject. *Never* give any child the idea that it's okay to give up on math.

"Avoid comments like 'I was never good at this stuff' or 'I never use this math,'" Wernet says. "If you need to, study the material yourself!"

Use positive peer pressure – Find a compatible study buddy who challenges your teen, and arrange regular homework sessions together. It gets students talking about math, and each might take different things from the lesson. "It's easier to do anything if you're not alone," says Kelley. Plus, a little healthy competition can motivate them to complete work well and on time.

TIME FOR A TUTOR?

Don't wait – Once a student falls behind—for any reason—or feels discouraged, both Kelley and Wernet urge families to seek help



©iStockphoto.com/Andres

right away—especially if you know your own math skills are rusty.

Look for quality and passion – Ideally, families should look for a certified math teacher, but there are other options: college students, retired or unemployed teachers, tutoring centers, or online tutoring. Look for one that fits your budget and your child's personality—and who is passionate about math.

Don't sell yourself short – According to Kelley, parents are willing to help out with just about everything *except* math and science, especially in higher grades. His series of "Humungous" guides (see sidebar) provide very detailed answers to math problems, showing you how to work out every problem, and they don't skip steps.

"A surprisingly large share of my readers are adults determined to master what they never understood in school," Kelley says. "Parents are using my books to learn the material so they can help their own children."

So enjoy the lazy, hazy days of summer, and allow kids time to dance to their own music. But do what it takes to start September on a strong note.

"There is no shame in asking for help," Kelley says. "Asking for help when you're already hopelessly lost is too late."

RESOURCES

The Humongous Book series of math study guides by W. Michael Kelley makes the intricacies of math perfectly clear. Look for *The Humongous Guide to Algebra*, and similar titles for Geometry, Statistics and Calculus.

Online math sites like aaamath.com and hotmath.com offer worksheets, games and more.

Michigan's High School Content Expectations (HSCE) describe what students need to master before they graduate. Review them for math and other subjects at Michigan.gov/mde (select "parents and family" at left).



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*For more soybean information visit
www.michigansoybean.org.*





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Chicken

Did you know? Hong Kong is the only place in the world where people consume more chicken per person than the United States. Find many more recipes from readers at **countrylines.com**.

Sour Cream-and-Dill Chicken

8-10 skinned chicken pieces
 1 10¾-oz. can cream of mushroom soup
 1 envelope dry onion soup mix
 8 oz. sour cream
 1 T. lemon juice
 1 T. freshly chopped dill or 1 t. dry dill weed
 1 4-oz. can sliced mushrooms, drained
 pepper to taste
 paprika
 wide egg noodles, cooked

Place raw chicken in a single layer in a 9x13-inch baking pan. Sprinkle with pepper. Combine mushroom soup, dry soup mix, sour cream, lemon juice, dill and mushrooms; pour over chicken. Sprinkle with paprika. Bake, uncovered at 350° for 1 hour or until chicken is tender. Meanwhile, prepare egg noodles according to package directions. Serve chicken over noodles.

Barbara Palzewicz, Daggett

Tuscan Chicken

1 lb. boneless chicken breasts, cut into cubes
 2 cloves garlic, minced
 2 T. olive oil
 4 c. cubed potatoes
 1 med. bell pepper, diced
 1 jar pasta sauce
 1 10-oz. pkg. frozen green beans
 salt and pepper to taste

Sauté chicken and garlic in olive oil until lightly browned. Add potatoes and peppers and cook 5 minutes; stirring occasionally. Add sauce, beans, salt and pepper; bring to a boil. Reduce heat, cover and simmer for 35 minutes until chicken is cooked and potatoes are tender.

Mary Waterbury, Fenton

Baked Taco Chicken

1 c. all-purpose flour
 2 envelopes taco seasoning
 1 t. salt
 2 eggs
 2 T. milk
 2 3-4 lb. broiler/fryer chickens, cut up

In a large re-sealable plastic bag, combine flour, taco seasoning and salt. In a bowl, beat eggs and milk. Dip chicken pieces in egg mixture, then place in bag and shake to coat. Place chicken pieces on a foil-lined 10x15-inch baking pan. Bake uncovered at 350° for 55-60 minutes or until juices run clear.

Naomi Yoder, Scottville

Cheese Nip Chicken

4-6 boneless chicken breasts
 4 c. crushed Cheez-It® Crackers
 1 c. crushed Cheez-It® Crackers
 8 oz. sour cream
 1 stick butter, melted

Place chicken in a baking dish, spread evenly with sour cream, then sprinkle with crushed crackers. Pour melted butter over crackers. Bake uncovered at 375° for 1 hour.

Helen Benner, Lansing

Wild Rice Casserole

1 c. wild rice
 1 lg. onion, diced
 2 c. diced celery
 1¼ c. diced green pepper, optional

1/2 c. sliced mushrooms
 1 can cream of mushroom soup
 1 can cream of chicken soup
 1 soup can cold water
 2-3 T. soy sauce
 2-3 lbs. cooked, skinless chicken breasts

Wash rice and cover with warm water; let set for 3 hours. Sauté onion, celery and green pepper; combine with soy sauce, soups and cold water. Add rice and mushrooms. Gently fold-in chicken. Place all in a buttered casserole dish. Bake at 325° for 1½ hours.

Mandy Rebore, Interlochen

Tarragon Chicken with White Wine

4 lbs. chicken cut into pieces
 2 T. butter or margarine
 2 T. oil
 1 lg. onion, chopped
 2 T. flour
 1 c. white wine, Inglenook® Chablis is best
 1 T. tarragon
 grated rind of 1 lemon
 chopped parsley for garnish

Brown chicken in combined oil and butter; set aside. Sauté onion in the same butter. Add flour and gradually add wine, stirring in browned pieces from bottom of pan. Add tarragon; cook until sauce has thickened. Return chicken to pan; cover and cook for 50 minutes or until done. Garnish with grated lemon and chopped parsley.

Duane Alword, Port Sanilac

Chicken Salad

2 c. whole seedless green grapes
 3+ c. cooked and cubed chicken breasts
 1 c. cashew halves
 1/8-1¼ c. sesame seeds
 1 T. butter at room temperature, or melted
 1 c. sour cream
 1/2 c. mayonnaise
 1 T. tarragon vinegar
 1 t. salt
 pepper to taste

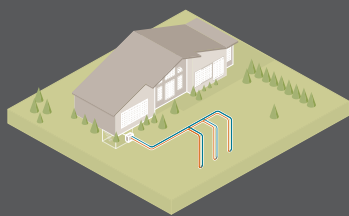
In a large bowl, combine chicken and butter. Add remaining ingredients; mix well. Chill before serving. Serve in a pita pocket, alongside a croissant, or on top of a tomato cut into eighths served on a bed of lettuce.

Jeanne Stewart, Lansing

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

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Co-op Member *Gardeners*

From the Ohio border to the U.P., gardening is a common interest throughout electric co-op territories in Michigan.

There is no shortage of gardeners among electric co-op members. From vegetable gardening to growing fruits, berries and flowers, co-op members do it all. This spring, while not tending my own garden, I talked to a few co-op folks who garden for fun and profit. They shared their stories and a few green thumb tips.

I'm always looking for an excuse to stop at Burdock Farm Greenhouse, in Dafer, to shop for plants and talk to Karen Bartunek, whom I've known for years. Now retired from the Sault Area Schools, this Cloverland Electric Co-op member runs a small business in a country setting. She sells plants

and gifts to area gardeners. Her business could be described as 'a passion for gardening that got out of hand.'

"It's something that evolved," explains Bartunek. "I grew plants for myself and pretty soon had too many and started selling them to neighbors. So I decided to try it on a bigger scale—this is big enough," she says with a chuckle.

Bartunek mostly enjoys starting plants from seed, though it isn't practical, even on a small scale, to start enough plants from seed to supply to area customers. Still, she manages to plant a number of things inside her house long before the snow melts. She germinates most of her seeds over heat tape and sometimes by placing germination trays on a cookie sheet over the pilots of a gas stove.

Assisting her in this endeavor is her 92 year-old mother, Belma. Karen's mother doesn't let a little arthritis keep her from her passion, which she obviously passed down to her daughter.

With the help of her daughters, who live on either side of her, Belma is able to continue doing something she loves. Each year she starts plants from seed in a spare bedroom, eventually hardening them off in a small greenhouse not far from her front door. With the help of a ramp and walker, Belma can mosey down to the greenhouse each day

At 92, Mrs. Hugo has been involved in growing things for 78 years. Her current garden includes broccoli, onions and garlic.



Karen Bartunek is the owner of Burdock Farm Greenhouse, in the eastern U.P., where she's turned her fondness for growing things into a small business by selling plants and gardening gifts.

to tend to her gardening chores. She uses a chair on wheels and a long-handled water wand to maneuver within reach of the plants in the greenhouse.

Eventually, some of the hundreds of plants Belma raises will be on the retail display racks at Burdock Farms, or they may just get potted up and placed where she can see them from her living room window.

"Oh, I just love it," said Belma, smiling as bright as the sun. "It keeps me going."

Bartunek's rustic garden center is large enough to offer a nice variety of plants, yet small enough for the personal service Karen offers her customers. She says helping her customers is what makes this endeavor worthwhile. "Most people come here in a good mood and leave in a good mood. You're making people happy."

My long-time friend and gardener, Brian Howard, of Blanchard, usually calls about the time asparagus is coming on in my garden. We compare notes on the weather and discuss what each of us is going to plant in the coming year. This year was no exception.

This summer, Brian and his wife, Priscilla, HomeWorks Tri-County Electric Co-op members, are busy adding to the 17 varieties of apple trees in their small orchard. "I grow a lot of apples for cider," Brian explains. "I also grow the Ida Reds for eating." They are also adding another 1,000 strawberry plants to the ones they were already growing for market, and they're planting another large



vegetable garden this year.

Brian understands strawberries—his family has grown them for years in the Remus area. He grows several different varieties, including Jewels, Early Glow, Sparkles (one of his favorites) and a variety that sets flowers a little later in the spring—Ovation—which increases the chances of escaping a late spring frost.

The Howards give away, sell or can what they can't eat fresh. They're always on the lookout for the least toxic controls for insects and disease, which he admits is difficult—but perhaps not impossible, even with apples.

Brian has always been involved in gardening and some type of agriculture. The former beekeeper grew up on a farm near Remus. His father sold farm equipment for Ford in the Mt. Pleasant area, and Brian spent summers helping his grandfather garden and eventually gardened with area 4-H kids. "A lot of my interest in gardening came from my grandfather," Brian says.

Mrs. Hugo (the only name I've known her by), is a new Cloverland Electric Co-op customer due to the Co-op's recent acquisition of Edison Sault Electric. She says she cultivated most of her love for gardening in Germany,

where she lived into her late teens.

Her first exposure to gardening was when she was about 14, and wanted to become a hair stylist. To enter this vocation, she was first required to work for a year, either in a home, doing domestic work, or on a farm. She chose a farm, and today is glad she did. On the farm she learned a lot about gardening.

"It was very fascinating to see a garden grow," she says of her first experience. She shuns the use of chemicals in her backyard garden, and has instead adapted some of the nonchemical insect control techniques of Jerry Baker (gardening author who coins himself 'America's Master Gardener') to grow her tomatoes, carrots and other veggies.

"There is a personal satisfaction when you see the vegetables grow," she says in her German accent. "There is so much pleasure."

Her words of advice? "Start out with a small garden and encourage your children to garden."

Neil Moran is the author of "North Country Gardening: Simple Secrets to Successful Northern Gardening," and "From Store to Garden: 101 Ways to Make the Most of Garden Store Purchases."



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Metal Roofs Are Cool

Metal roofs save energy by keeping homes cooler during summer. And they look good, too.

Many—but not all—metal roofs qualify for the federal energy conservation tax credit for 2010. Metal roofs save energy by keeping your house cooler in the summer, which can dramatically improve comfort and reduce electric bills if your home is air-conditioned. In winter, a metal roof has little impact on the energy efficiency of your house.

Generally, to qualify for the energy tax credit the roof must meet Energy Star® qualification standards. For roofing, this means the TSR (total solar reflectivity) must be greater than 25 percent when new and 15 percent after three years of aging. To be sure the roofing qualifies, ask for the specifications and a manufacturer's certification statement (MCS). It pays to be diligent these days: I recently got quotes on a roof installation, and several roofers told me their asphalt shingles qualified for the tax credit. In actuality, they did not qualify.

The amount of the tax credit is 30 percent of the roofing materials cost (not installation expenses), up to a maximum of \$1,500. Use IRS form 5695 to apply for the tax credit and save the payment receipt and MCS in case of a tax audit.

For my own home, I eventually selected an aluminum roof by Classic Metal Roofing Systems. It is made from 98 percent recycled aluminum, and the one-by-two-foot panels are formed to simulate cedar shakes. It's attractive and certainly unique: many neighbors were stumped trying to figure out exactly what it is.

To install the aluminum panel roof, a special film underlayment was nailed down with plastic clips and stainless steel fasteners over the existing shingles (which saved the expense of tearing off the old shingles). Each aluminum panel interlocks with the adjacent ones on all four sides. The top of each panel is held down by a stainless steel nail through a hole in the upper corner and an aluminum clip attached midway across the top. It is designed to withstand up to a 120-mph wind.

Although it is more expensive to install than an asphalt shingle roof, my new metal roof will never have to be replaced. From a lifetime cost comparison, it is cheaper than



The metal roofing panels are installed over the underlayment. Hidden stainless steel nails and aluminum clips are used to secure each panel.

installing an asphalt roof every 20 to 30 years. I also get a 3 percent reduction on my homeowner's insurance because of the reduced fire hazard.

Most metal roofs reflect more of the sun's heat than asphalt shingles, particularly black shingles. My Classic metal roof has a TRS of 0.43, whereas a black asphalt shingle roof has a TRS of only 0.05. This keeps the roofing materials cooler so less heat is radiated down through the ceilings to the living area. Also, the underside of the aluminum metal surface has lower "emissivity" (the ability to emit heat) than shingles, so even less heat radiates downward.

It was warm, sunny weather when my metal roof and ridge vent were installed, and the second floor was noticeably cooler than before.

The final energy advantage is that Classic's aluminum panels are relatively thin, with the contour of shakes formed into them. This contour creates an air gap between most of the roofing and the sheathing or shingles below it. This gap allows some outdoor air to naturally circulate up under the metal roof panels to keep them cooler. I sealed off my gable vents so outdoor air is now drawn in the soffit vents and exhausted out the ridge vent.

One minor drawback to the aluminum

shake panels is they can dent if you indiscriminately walk on the high points of the contour. This can be avoided by stepping on the lower nailed area of the panels. Contoured insulating foam pieces were placed under areas of the panels to provide walkways on the roof to clean my skylight and service the ridge vents.

Steel roofing is another option becoming more popular on homes. Painted standing seam or tile steel roofing is very durable. Instead of trying to simulate some type of standard roofing material, their bright colors and unique appearance are signatures of upscale homes. The finish coating on aluminum and steel often uses a Kynar®-based paint with heat reflecting additives in a multistep process.

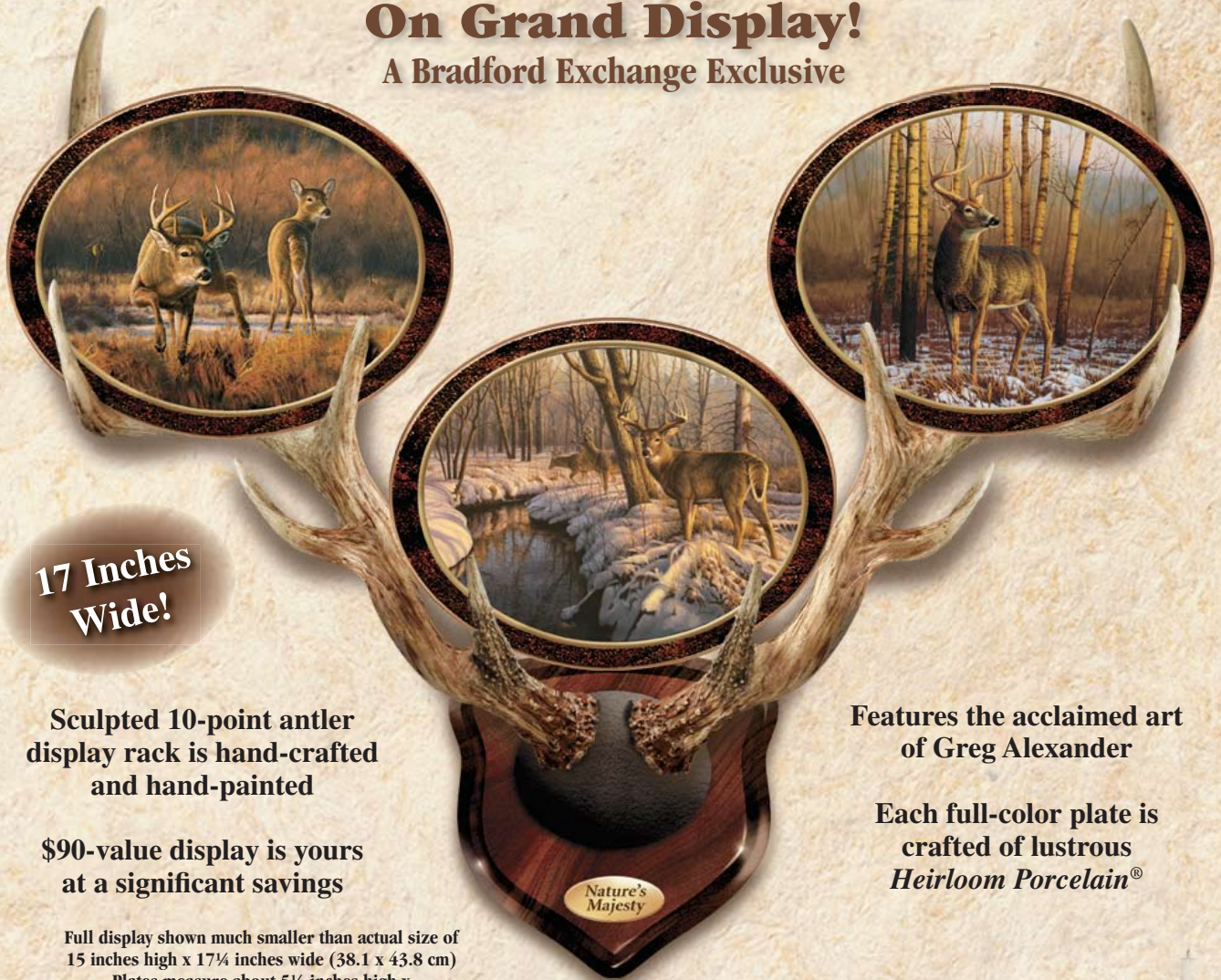
These companies offer metal roofs: American Metal Roofs, 888-221-1869, americanmetalroofs.com; Classic Metal Roofing, 800-543-8938, classicmetalroofingsystems.com; Conklin Metal, 800-282-7386, met-alshingle.com; Follansbee Steel, 800-624-6906, follansbeeroofing.com; and Met-Tile, 909-947-0311, met-tile.com.

Questions? Send inquiries to: James Dulley, Michigan Country Lines, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit dulley.com.

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Summer and Sunfish Go Together

True—the state fish is a trout. But as good as the fishing is for that species, the availability of waters to fish for them is scant compared to the amount of lakes and streams holding members of the sunfish family: sunfish, bluegill, crappie, rock bass and those big cousins that most call “black bass” (really just larger members of the same family).

From late April into early July, spawning time arrives for the sunfish clan. You’ll see round, dish-shaped redds (or nests) beginning to appear around the shoreline shallows; it signals a warm season of sunfish angling in the state’s lakes and warmer streams.

By mid-July, with spawning over, the fishing shifts to deeper water by day and back to the shallows in the early morning and evenings.

Most tackle handles sunfish, but the most fun can come by using ultra-light spinning tackle or a fly rod. Either are top choices.

Most who enjoy fly-fishing for panfish are real familiar with the “rubber-leg spider” or the “small popper”—tempting surface lures used with fly rods, and they are effective once fish are on the redds. Dark, fuzzy, wet flies, cast out and allowed to sink and then twitched back in a slow retrieve underwater, can get sunfish to hear dinner bells during or after the spawn.

On a fly rod’s limber action, a good-sized bluegill or sunfish is as frisky and feisty as a brown trout – given a sunfish’s instinct to turn its body right-angle to the line. This action adds the water’s resistance to its struggles, so a 7- to 8-inch bluegill can feel like a 10- or 12-inch rainbow or brown trout at the other end.

Ultra-light rods, with reels loaded with 2- to 4-pound test line, offer great light-line fishing fun. Like the fly rod, they are a suitable match with these smaller, sprightly gamefish. Cast small spinners, spinner baits, 1/32 or 1/16-ounce jigs with small grub tail worms or live bait, and you’ll be heading



© iStockphoto.com/Clint Buhs

for a fish fry.

Into July, after spawning is complete, sunfish go deeper as surface waters warm and they are hungry from their efforts, turning to larger food such as summer insects that fall to the water.

Not just insects, either. Small bait-fish, minnows and small fish of other species also respond to the warming summer waters. Even crayfish begin to get more active; all of these are natural foods that attract larger sunfish like rock bass and black bass. Lures that imitate these, or live bait such as minnows, become very good choices.

A favorite way of exploring for sunfish when they are off the beds is to fish with soft-hackle nymph flies on a fly rod and work them from shore or boat over the depths of 2 to 8 feet. I use dark, fur-bodied nymphs tied with soft hackle, which, when twitched, give the fly a lot of action. I let them sink after the cast, then retrieve slowly with rod-tip action to make the nymph’s

hackles flutter and the fly twitch enticingly. It usually gets a notice if the sunfish are in the shoreline shallows.

Some days sunfish just want meat, so grab a spinning rod and cast half a night crawler or red worms on a bait hook with a bobber. Just strike when the bobber goes under and keep the line tight as you retrieve it.

A feisty bulldog of a sunfish digging for freedom on the end of a fly line or bowing over an ultra-light rod tip is a fishing hoot.

I spend quite a few fishing days every summer seeking the black crappie, my favorite of the two crappie species that we have in our state.

The white crappie is common in Lake Erie and connected waters, and in larger, down-state impoundments. But in the cooler northern waters where I cast my lines, the black crappie is more commonly found. It is a handsome fish and where it has good habitat, food and clean waters it can grow to slab sizes.

Crappies love minnows, so live minnows fished under a slip bobber, or a small minnow-imitating lure are sure to get you into action.

Then there is the “goggle-eye” – the “every man’s fish.” Rock bass are delightfully predictable fish—give them a worm and they will take it, often with a bullish pull for their size.

Rock bass are well-distributed around the Great Lakes and these fish are aptly named because they love rocky areas, and so does that sunfish cousin, the smallmouth bass. It is quite common to find a rock bass on your line when fishing for smallmouth and a smallmouth there when fishing for rockies.

Don’t forget that all sunfish make for great eating. Carry a cooler and put your catch on ice as soon as you can to bring home the makings of a fish fry.

With summer at hand, it’s time to head for a sunfishing payoff in fun and food. Now *that’s* a pairing made in fishing heaven.



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Public Act 295: The Clean, Renewable and Energy Efficient Act

Annual Energy Optimization Report Thumb Electric Cooperative MPSC Case Number U 15821

Thumb Electric contracted with the Michigan Electric Cooperative Association (MECA) to administer an Energy Optimization (EO) plan in order to comply with P.A. 295. MECA filed a 2½-year Energy Optimization plan with the MPSC on Feb. 18, 2009, as required by P.A. 295. This EO plan was approved by the MPSC on May 12, 2009, and we began launching Energy Optimization programs in June 2009.

In August 2009, CLEAResult Consulting, Great Lakes LLC, was selected to implement the "Residential and Small Business Energy Star Program," the "Commercial and Industrial Prescriptive Program," and the EO website at michigan-energy.org. CLEAResult has subcontracted with Franklin Energy and JACO to assist with EO program delivery.

In 2009, Thumb Electric collected \$93,632 through the Energy Optimization Surcharge and spent \$43,997, resulting in an overcollection of \$49,635 that will be applied towards 2010 EO Program delivery expenses and goal achievement. Thumb Electric achieved 64.2 megawatt hours of energy savings in 2009.

The full report can be obtained in the Thumb Electric section of michigan-energy.org.

Thumb Electric Cooperative Energy Efficiency Loan Program



Thumb Electric Cooperative has expanded its Energy Efficiency Loan Program for existing homes. Qualified members of existing homes may borrow up to \$6,000 at 7 percent interest, payable over seven years for the following home improvements. Water heaters and central heating and air conditioning systems that reduce energy consumption, including:

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STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

NOTICE OF HEARING FOR THE CUSTOMERS OF THUMB ELECTRIC COOPERATIVE CASE NO. U-16338

- Thumb Electric Cooperative may reconcile its Energy Optimization plan costs for the period ended December 31, 2009, if the Michigan Public Service Commission approves its request.
- The information below describes how a person may participate in this case.
- You may call or write Thumb Electric Cooperative, 2231 Main Street, P.O. Box 157, Ubly, Michigan 48475-0157, (800) 327-0166 for a free copy of its application. Any person may review the application at the offices of Thumb Electric Cooperative.
- The first public hearing in this matter will be held:

DATE/TIME: July 28, 2010, at 9:00 a.m. This hearing will be a prehearing conference to set future hearing dates and decide other procedural matters.

BEFORE: Administrative Law Judge Barbara A. Stump

LOCATION: Michigan Public Service Commission, 6545 Mercantile Way, Suite 7, Lansing, Michigan

PARTICIPATION: Any interested person may attend and participate. The hearing site is accessible, including handicapped parking. Persons needing any accommodation to participate should contact the Commission's Executive Secretary at (517) 241-6160 in advance to request mobility, visual, hearing or other assistance.

The Michigan Public Service Commission (Commission) will hold a public hearing to consider the April 30, 2010 application of Thumb Electric Cooperative (Thumb) for authority to reconcile its Energy Optimization plan expenditures and revenues for the period ended December 31, 2009, and other relief. On May 12, 2010, Thumb filed revised testimony and exhibits to 2009 Energy Optimization Reconciliation filings.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 241-6180 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by July 21, 2010. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Thumb's attorney, Joseph J. Baumann, at Dykema Gossett PLLC, Capitol View, 201 Townsend Street, Suite 900, Lansing, Michigan 48933.

Any person wishing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of his or her wish to make a statement of position. All information submitted to the Commission in this matter will become public information: available on the Michigan Public Service Commission's website, and subject to disclosure.

Requests for adjournment must be made pursuant to the Commission's Rules of Practice and Procedure R 460.17315 and R 460.17335. Requests for further information on adjournment should be directed to (517) 241-6060.

A copy of Thumb's request may be reviewed on the Commission's website at: michigan.gov/mpscedockets, and at the office of Thumb Electric Cooperative, 2231 Main Street, Ubly, Michigan. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 241-6180.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; 2008 PA 295, MCL 460.1001 et seq., and the Commission's Rules of Practice and Procedure, as amended, 1999 AC, R 460.17101 et seq.

June 4, 2010

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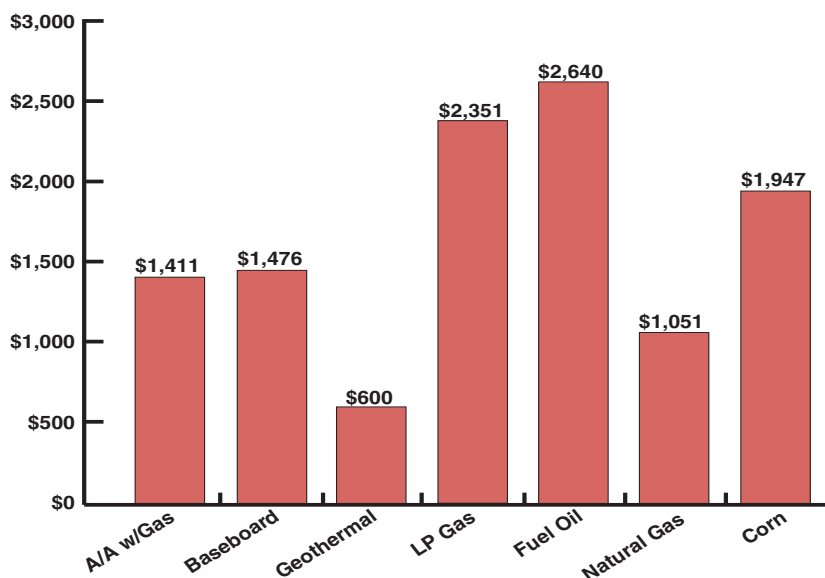
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Factors Used: **Electric Baseboard, Air-Source Heat Pump** and **Geothermal**—based on TEC's 6.05¢/kwh dual-fuel rate. **LP gas**—based on \$1.899/gal. and 90% efficient furnace. **Fuel Oil**—based on \$2.50/gal. and 80% efficient furnace. **Natural Gas**—based on \$1.08/therm., 90% efficient furnace including \$9/mo. service charge. **Corn**—based on \$5.60/bushel. (Electric baseboard and corn operating costs do not include air conditioning.)

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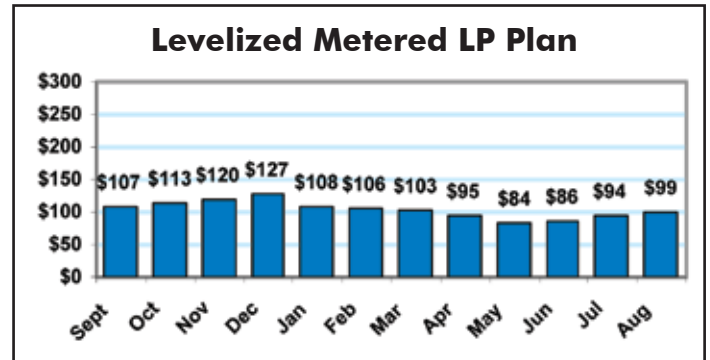
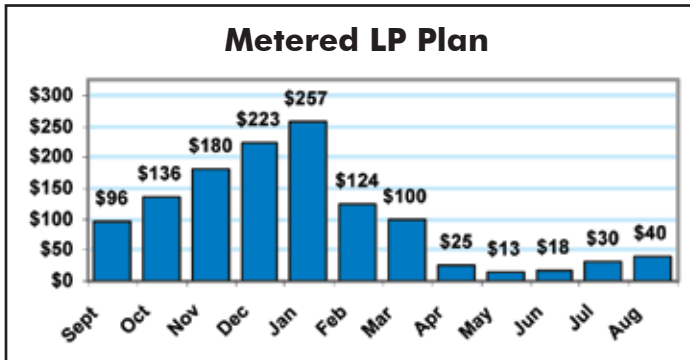
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** Based upon 650 gallons annual usage*

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- to be treated fairly

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