

A Service of **Thumb Electric Cooperative**

July/August 2013

Michigan

COUNTRY LINES

A full-page underwater photograph serves as the background for the middle section. It depicts a diver in a blue wetsuit and mask, holding a camera, swimming over a large, rusted metal structure of a shipwreck. The structure is heavily encrusted with brown seaweed. The water is clear blue.

Visit Michigan's Underwater Shipwrecks

(For divers & landlubbers, too!)

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Highlights

18 Ways To Reduce
Cooling Costs

22 Prevent Deadly Shocks—
Check Your Boats & Docks!

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Letters to the editor should be sent to Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Phone 517-913-3531. Email: gknudtson@meca.coop.

Association officers are **Ken Swope**, Midwest Energy, chairman; **Robert Schallip**, Cloverland, 1st vice chairman; **Jon Zickert**, Cherryland, 2nd vice chairman; **Eric Baker**, Wolverine Power, secretary-treasurer; and **Tony Anderson**, Cherryland, past chairman. **Craig Borr** is president and CEO.

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

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Change of Address: Please notify your electric cooperative. See page 2 for contact information.



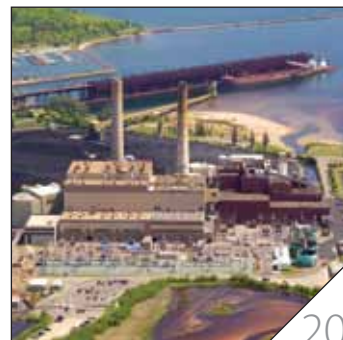
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On the Cover

The West Michigan Underwater Preserve is our state's newest shipwreck preserve, and one of 14 on lakes Michigan, Huron and Superior. These underwater museums offer opportunities for both divers and nondivers to view them, and they can be part of a fun family vacation destination to local communities.

Photo – Paul Chase

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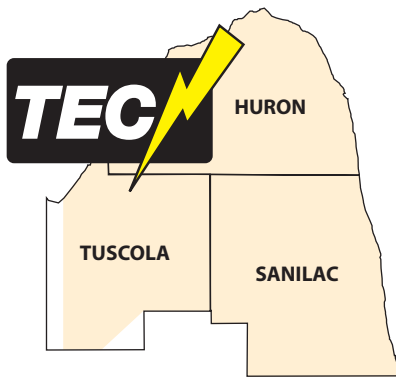
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Michigan's Electric
Cooperatives
countrylines.com



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Caro – Northstar Bank
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Millington – Mayville State Bank

Visit Thumb Electric's website:
www.tecmi.coop

Thumb Electric Co-op's 76th Annual Meeting

Louis Wenzlaff, President of the Board of Directors, opened the 76th Annual Meeting of Thumb Electric Cooperative (TEC) members held on June 8 at the Cass City Recreational Park. An estimated 750 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 Lawrence Iseler, Huron County, and Keith Wood, Tuscola County.

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

General Manager Dallas Braun presented the 2012 financial statement which showed operating revenues of \$17,857,482 and expenses of \$16,680,807 resulting in an operating margin of \$1,176,675. The Cooperative also earned \$232,931 in interest on short-term investments, rental income, subsidiary income, and patronage capital from other Cooperative organizations. Total margins for the year 2012 were \$1,409,606. Members' patronage capital accounts were allocated over 8 cents on each dollar paid by TEC members in 2012. The 2012 general patronage retirement of \$488,117 for the years 1979, 1980, 1981, and 2012 appeared as a credit on a separate line-item on members' electric bills received in May 2013. The Cooperative remains financially strong.

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

- Since patronage capital retirements began, TEC has refunded over \$6 million to its members.

- In 2012 TEC employees designed and constructed \$2.1 million of new utility plant, bringing TEC's total investment in



Thumb Electric Cooperative's general manager, Dallas Braun, addresses a crowd of nearly 750 members.

the three-county service area to \$78 million serving 12,259 member accounts in the three County areas of Huron, Sanilac, and Tuscola.

- The Cooperative paid \$700,795 in property taxes to schools and other governmental bodies in Huron, Sanilac, and Tuscola Counties in 2012.

- The Cooperative continues to work with its Statewide and National Organizations to ensure that any issues that may affect the availability, reliability and affordability of electricity to its membership are heard by our elected officials in Lansing and Washington, D.C.

- The Cooperative continues to make capital investments in the electrical system. \$4.6 million of upgrades are planned and under construction for 2013. TEC employees and outside line-construction contractors will be performing the work.

- Reported that over 3,000 members have utilized the new E-Bill option that allows for the convenience of paying bills, entering meter readings, and monitoring energy consumption. Also, over 400 members have started to utilize TEC's paperless billing option through E-Bill.

- Recognized TEC's employees for continuing to work safely and thanked the employees for their continued dedication and hard work during the past year.

Thumb Electric Cooperative's General Manager, Dallas Braun, highlighted the Cooperative's financial status, rates, member services,

Continued on page 6

Annual Meeting Highlights

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



EARLY BIRD PRIZE DRAWING WINNERS

1. TEC WATER HEATER - Donald Trigger, Sandusky
2. LARGE ELECTRIC GRILL - Mary Alice Gretz, Decker
3. GAS GIFT CERTIFICATE - Robert Sutton, Ubly
4. ENERGY EFFICIENCY GIFT CERTIFICATE - Kenneth Platt, Millington
5. FOOD GIFT CERTIFICATE - Carl Schultheis, Caro
6. GAS GIFT CERTIFICATE - Joe Rudy, Bad Axe
7. ENERGY EFFICIENCY GIFT CERTIFICATE - Raymond Briggs, Vassar
8. FOOD GIFT CERTIFICATE - Bronlow Miller, Mayville
9. GAS GIFT CERTIFICATE - Luelle Decker, Crosswell
10. ENERGY EFFICIENCY GIFT CERTIFICATE - Duane Reed, Cass City
11. FOOD GIFT CERTIFICATE - Pete Cody, Caro
12. SMART STRIP SURGE PROTECTOR - Jacqueline Hunt, Ubly
13. SMART STRIP SURGE PROTECTOR - Tom Bills, Cass City
14. SMART STRIP SURGE PROTECTOR - David Preston, Caro

FINAL PRIZE DRAWING WINNERS

1. LARGE ELECTRIC GRILL - Ed Guza Jr., Harbor Beach
2. SMALL ELECTRIC TABLETOP GRILL - Gerald L. Moffat, Unionville
3. GAS GIFT CERTIFICATE - Ernest Goretski, Port Austin
4. ENERGY EFFICIENCY GIFT CERTIFICATE - Jan Spitz, Cass City
5. FOOD GIFT CERTIFICATE - Gene Booms, Harbor Beach
6. GAS GIFT CERTIFICATE - Arnold Schmitter, Millington
7. ENERGY EFFICIENCY GIFT CERTIFICATE - Jason Kappen, Cass City
8. FOOD GIFT CERTIFICATE - Andrew Capton, Crosswell
9. GAS GIFT CERTIFICATE - Brenda Kirk, Caro
10. ENERGY EFFICIENCY GIFT CERTIFICATE - Alene McCracken, Bad Axe
11. FOOD GIFT CERTIFICATE - Mike Weber, Ubly
12. SMART STRIP SURGE PROTECTOR - Jeff Hanby, Cass City
13. SMART STRIP SURGE PROTECTOR - Anthony Wilcox, Mayville
14. SMART STRIP SURGE PROTECTOR - Raymond Depcinski, Bad Axe

CHILDRENS' PRIZE DRAWING WINNERS

1. BIKE (BOYS) - Logan Hunter
2. BIKE (GIRLS) - Ashley Sweeney, Bad Axe
3. PORTABLE RADIO/CD PLAYER - Jonathan Goretski, Port Austin
4. PORTABLE RADIO/CD PLAYER - Ninah Risdon, Caro
5. DIGITAL CAMERA - David Kurtansky, Caro
6. DIGITAL CAMERA - Kyle Sweeney, Bad Axe

PRIZE DONATED BY BARTNIK PROPANE

GAS GRILL - Charles A Rath Jr., Mayville

PRIZE DONATED BY KAPPEN TREE SERVICE

LARGE LOAD OF MULCH (DELIVERED) - Steve Tabaczynski, Ubly

Letters & More

Reader letters, Mystery Photo, free app, youth programs and more. It's all here on your Readers' Pages.



Dessert & Raw Eggs

I felt I should write and tell you that we are told not to eat uncooked eggs anymore... the recipe "Raspberry Graham Dessert" (June) sounds great, but the eggs in it are not cooked...a "no-no" in this day, I believe.

Thanks for your attention. If I am wrong please let me know, as the recipe looks great.

— Majeane Sparks,
Cherryland Electric Co-op

Recipe Editor's Note: Thank-you for writing. The recipe is indeed correct as written, using raw eggs. After some research, I found there is risk of salmonella from eating raw or undercooked eggs, but it is much lower than once thought. A 2002 study by the U.S. Department of Agriculture found that the risk of egg-borne salmonella was 1 in

30,000 eggs. Still, if you don't feel comfortable eating raw eggs, I wouldn't recommend it.

— Christin McKamey

Energy Story Idea

Why don't you write about a family that uses lots of electricity that is not a typical family? Examples: I grew up on a dairy farm and our bill was very high due to milking cows. You could write about a small farmer. Or, right now, my family has lots of medical equipment so we use lots of electricity and have high bills due to using BiPaps, pulseoxes, electric beds, monitors, nebulizers, chest vests, air conditioning, lifts, suction equipment, etc.

— Donna Miller,
Cherryland Electric Co-op

Editor's Note: Thanks for the idea. Our editorial calendar is planned one year ahead, so we'll consider it for 2014.

Sharing 'Memories' & Rescuing Animals

I really enjoyed the "Ramblings" piece in *Country Lines* (June), entitled 'Memories.' Thanks for bringing the Arts alive for one and all. I also enjoyed the cover feature on "Black Sheep Family" animal sanctuary—I find it inspiring.

I'm also wondering if your magazine prints local artists' and poets' works, and short stories/cartoons? I am a previously published poet/writer and would love to link up with other writers, poets and artists in West Central Michigan.

Also, I am living on Justice

Free Nature Preserve App

Since the Little Traverse Conservancy, a nonprofit land trust in Harbor Springs, covers five counties served by Michigan electric cooperatives, the group wanted to share the following with *Country Lines* readers:

"Last winter, one of our staff developed a nature preserve app that gives smart phone users easy access to a host of information about nature preserves located throughout the service area. For example, from where they are standing, they can see what preserves are close by, exactly how to get there, what activities are recommended at each preserve, how long the trail is, etc.

We are trying to get the word out about this free app simply as an educational, informational tool that encourages people to get outside and appreciate northern Michigan land.

For information and links to the free downloads, visit landtrust.org (or call 231-347-0991). Thank you.

— Anne Fleming, Communications Coordinator
Little Traverse Conservancy, 3264 Powell Road
Harbor Springs, MI 49740

Rescue Ranch, owned by Jamie Piotrowski-Avilla of Morley, MI. The farm rescues horses, dogs and other wayward creatures, and could really use a hand by putting us in the public eye. We would love to be in your magazine. Also, any links/contacts that you feel may be valuable (readers—any ideas to share?). We are in the heart of Amish-

land, and I believe tourists will love to visit us here.

Thank-you in advance for any help in this endeavor... reporters and photographers welcome! Please visit us!

— Julian St. John
DekalbPoet@yahoo.com

Editor's Note: Story ideas (700 words or less) may be submitted to the address below.

HOW TO SEND A LETTER Readers are encouraged to submit thoughtful, courteously-worded letters, and we print as many as possible in the space and time allowed.

Country Lines reserves the right to print letters at the publisher's discretion, based on length, space and content, and to edit slightly for space and facts. Please limit comments to 240 words or less. Submit by posting online at countrylines.com, email gknudtson@meca.coop, or mail to: Editor, *Country Lines*, 2859 W. Jolly Rd., Okemos, MI 48864.

HOW TO CHANGE YOUR MAILING ADDRESS

Please call or mail information to your electric co-op, as they maintain the mailing list. See page 2 for your co-op's contact information.



◀ DO YOU KNOW WHERE THIS IS?

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

We do not accept Mystery Photo guesses by phone! Email mysteryphoto@countrylines.com; enter your guess at 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 September 2013 issue.

The May contest winner is Melisa Porterfield of Lansing, who correctly identified the photo from Impression 5 Museum, Lansing.



May photo

Experience of a Lifetime

Michigan co-op students tour D.C.

Twenty-two high school students representing six Michigan electric co-ops recently joined more than 1,600 other youth from across the country at the National Rural Electric Youth Tour to Washington, D.C.

The experience is an extension of the Michigan Youth Leadership Summit held in April, and is designed to give students a behind-the-scenes leadership experience.

The Michigan students visited memorials, museums and monuments, including guided tours through Arlington National Cemetery and the U.S. Capitol, stops at the WWII, Vietnam and Korean War Veterans' memorials, several Smithsonian museums, a performance at the Kennedy Center, and a riverboat cruise on the Potomac.

The group observed members of Congress debate and vote on important bills from the House of Representatives gallery inside the U.S. Capitol, then had personal visits with Sen. Debbie Stabenow and U.S. Reps. Justin Amash, Bill Huizenga and Dan Benishek.

Brianna Fitzpatrick, a junior



PARTICIPANTS – Cherryland Electric: Austin Bluemel, Kris Konstanzer. **Cloverland Electric:** Jameson Pigeau. **Great Lakes Energy:** Callie Berish, Danielle Johnne, Rachael Miller, Caleb Miller, Ryan O'Neill-Haugh, Sabrina Timmer. **HomeWorks Tri-County:** Jill McVeigh, Alora Rayburn, Ethan Simmer. **Midwest Energy:** Abbi Guyott, Lukas Hoffman, Mackenzie Ruff, Halie Stewart. **PIE&G:** Brianna Fitzpatrick, Ashley Ostman, Tony Rasmussen. **Wolverine Power Cooperative:** Hunter Christensen, Erin Millen, Shanna Strowenjans.

from Onaway, earned the support of her peers to serve on the National Rural Electric Cooperative Association's Youth Leadership Council. She will return to D.C. in July to attend a youth conference that strengthens leadership and public speaking skills.

Youth Tour participants are chosen by their co-op, who sponsors them on the trip. Learn more about co-op-sponsored youth programs at miYLS.com, and find more Youth Tour photos on facebook.com/youthleadershipsummit.

Quilt Needs a Permanent Home

Remember the Michigan Heritage Quilt? It was created from 36 winning squares in a *Country Lines* contest held in 2002. For several years the quilt traveled around to craft shows, museums, festivals and gatherings as a way of commemorating our state's rich heritage and to promote its sponsors, Michigan's electric cooperatives.

The *Country Lines* staff now wishes to see it displayed per-

manently in a public place (i.e., museum, library, airport, municipal building, school, etc.). Preference will be given to a facility served by an electric co-op. The quilt measures about 90 inches square.

Please email your suggestions and ideas to czuker@meca.coop (put "Quilt" in the subject line) or mail to: Country Lines Quilt, 2859 W. Jolly Rd., Okemos, MI 48864.

The Adventure Began at YLS



The **Youth Leadership Summit** (YLS) is designed to grow leaders through team-building skills, including hands-on classroom exercises and a high-ropes challenge (over 30 feet in the air!). Sponsored by their electric cooperative, students from across Michigan gathered at SpringHill Camp near Evart this spring and tested their decision-making skills, learned how to respond in emergency situations and received valuable career information. Participants were then considered to attend the Rural Electric Youth Tour to Washington, D.C. (above). Learn more about both programs at miYLS.com.

Thumb's 76th Annual Meeting

Continued from page 2

marketing activities, patronage capital retirement, and power supply activities. The report included the following:

- The Cooperative maintained a strong financial position despite flat sales growth in kilowatt-hour sales in 2012 compared to the prior year. The Cooperative was able to continue to meet all of its financial and credit requirements. The Cooperative will continue to balance needed infrastructure improvements and their impact on electric rates.

- The Cooperative continues to offer Energy Optimization Programs to its members to encourage them to use energy more efficiently and thus allow them to save money. 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 the construction of new power plants.

- The Cooperative continues to offer other money saving programs to its members. Members were thanked for their participation in TEC's energy management programs. Over 6,000 members are participating in TEC's managed water heating and dual-fueled heating and air-conditioning programs. TEC's high efficiency, free electric water heater program continues to flourish with over 5,000 high efficiency water heaters being placed in members' homes and businesses saving members money over other energy sources. TEC's Energy Management

Programs combine high efficiency money-saving systems along with conservation during periods of peak demands.

- Through its subsidiary, Thumb Energy Services, the Cooperative continues to offer propane service to over 1,000 members and non-members alike. The most popular program is the metered program, where the consumer does not pay for the propane until after they use it.

- The Cooperative continues to meet the State-mandated Renewable Portfolio Standard (RPS), which requires that all Michigan utilities purchase a certain percentage of electricity from Michigan renewable resources growing to a maximum of 10% by 2015. The Cooperative is complying by purchasing qualified renewable energy credits (RECs) from the open market at a much lower cost compared to constructing its own renewable generation source.

- TEC continues to take a proactive business approach in the energy environment to assure low cost yet reliable power supply sources for its members. In 2012, TEC renegotiated its current wholesale contract and entered into an agreement to meet TEC's power supply needs through the end of 2016. The new contract will save members an estimated \$8 million dollars in power supply costs during this time period. Members of the Cooperative continue to realize this savings as a separate line item credit on their monthly electric bills.

- TEC continues its system maintenance program, including right-of-way-clearing, vegetation spraying, pole testing, and system

improvement programs.

- Introduced and recognized Alyssa Tyrrell, a senior from the Ubly area, who was the 2012 Youth Tour Representative in Washington, D.C., sponsored by the Cooperative.

- U.S. Congresswoman Candice Miller's representative Ed Smith and State Representative Terry Brown were introduced and briefly spoke to the membership. They 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, to stay engaged, and thanked them for their support.

After the business meeting, a lunch was served which was followed by entertainment featuring the "Dueling Piano" act of RUSCH entertainment along with bucket truck rides, pony rides, face painting, and other family activities.

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



Attention:

DAIRY FARMERS

Thumb Electric Cooperative 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 **800-327-0166**

We also offer FREE farm energy audits!

Pardon Our Mess

Please bear with us as Thumb Electric's Ubly office will be undergoing renovation for several months, beginning mid-June. All member business at the office will still be accommodated. This much-needed change will allow us to serve you better.

Thank You!



Green Thumb Home Heating

Geothermal is a simple technology that uses the earth's renewable energy to provide high-efficiency heating and cooling. In winter, the system draws heat from the ground and transfers it to your home. In summer, it extracts heat from your home and transfers it to the ground. **Contact the energy experts at Thumb Electric Cooperative at 800-327-0166** for honest answers on your energy choices, or call any of the trained and certified installers listed here.

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ES Sheetmetal, Gene Root
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1115 4th St., Port Huron, MI 48060
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7641 Pigeon Rd., Pigeon, MI 48755
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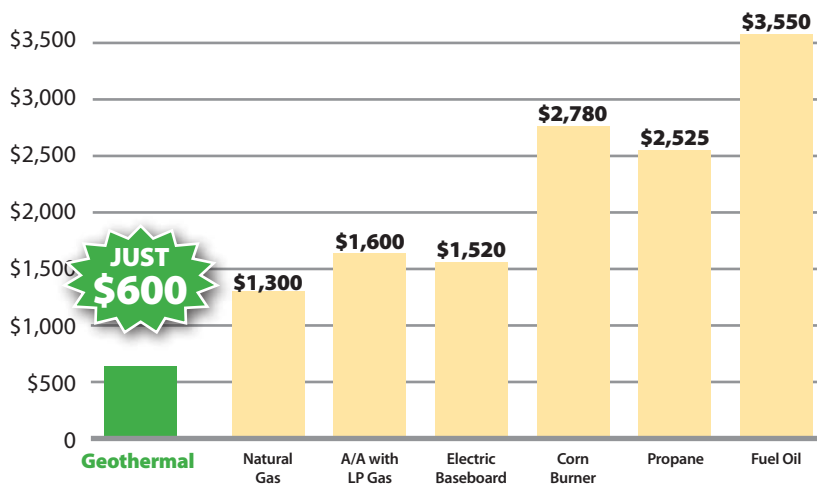
Superior, Inc.
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989-872-3305

Thumb Cooling & Heating
5599 Pochert Rd., Port Hope, MI 48468
989-428-4948
And: 837 South State, Caro, MI 48723
989-672-4948



Annual Operating Costs

For an Average 1,800 Sq. Ft. Home
(45,000 BTU heating load, 20,000 BTU cooling load)



Factors Used: **Electric Baseboard**, **Air-Source Heat Pump** and **Geothermal**—based on TEC's 6.05¢/kWh dual-fuel rate. **LP gas**—based on \$2/gal. and 90% efficient furnace. **Fuel Oil**—based on \$3.50/gal. and 80% efficient furnace. **Natural Gas**—based on \$1.08/therm., 90% efficient furnace including \$9/mo. service charge. **Corn**—based on \$8/bushel. (Electric baseboard and corn operating costs do not include air conditioning.)

Visit State's Newest Shipwreck Museum: West Michigan Underwater Preserve

In the calm waters of Lake Michigan, north of White Lake, John Hanson emerged from the depths, his form taking shape in the bubbles that preceded him.

Hanson broke the surface and reached for a ladder rung. Then the 59-year-old scuba diver from Montague climbed up on deck and announced his find: the *Interlaken*, a 170-foot wooden schooner. It had foundered and sunk in a fierce Lake Michigan storm in 1934.

"I've never seen it like that," Hanson said excitedly. "Much more is exposed than five or six years ago. I went down the entire length of it. It was really cool."

The *Interlaken* hull lies in 15 feet of water, much of it under sand. It was once a handsome three-masted cargo ship, built in 1839

by the Abram Smith and Sons shipyard, of Algonac, on the St. Clair River.

Today it is one of a dozen charted shipwrecks in the 400-square-mile West Michigan Underwater Preserve (WMUP), our state's newest underwater museum. The Preserve was dedicated in 2012 and is open to the public. Hanson, an experienced wreck diver, is chairman of the Preserve's board of directors.

The Preserve is one of 14 found on lakes Michigan, Huron and Superior. All are part of Michigan's Underwater Preserve System. The state program was created in 1980 by legislation with support from Michigan sport divers who were concerned about protecting maritime antiquities.

State officials estimate as many as 6,000

vessels have gone to the bottom of Lake Michigan and other Great Lakes. Approximately 2,000 are located in Michigan waters. It is illegal to remove artifacts from the sunken ships. Information about the shipwreck sites is available at michiganpreserves.org.

DIVING THIS DAY proved a bit of a challenge, as visibility was not at its best. Recent storms had made the nearshore Lake Michigan waters cloudy. Hanson knew the *Interlaken*'s GPS coordinates, but he didn't drop anchor until he saw the wreck's image outlined on the electronic side-scan sonar he uses on his boat.

Even then it was up to Mark Gleason to find it using a portable remote sub called an ROV, or remotely operated vehicle. Gleason, a Hospitality, Tourism and Management professor at Grand Valley State University, is a professional ROV pilot who has used them to explore for Great Lakes shipwrecks and offshore oil wells in the Middle East. His device is equipped with a video camera that transmits images to a portable monitor in the boat cabin, where Gleason controls its movements with a joystick.

"There's the bottom," Gleason called out cheerfully after Hanson launched the ROV from the front deck. "And there's the wreck," he added a few minutes later, prompting Hanson to suit-up and go over the side.

The group, which included Paul Chase, an underwater photographer, had planned to dive on the *State of Michigan*, a 165-foot steamship built in 1873. It sunk in 1901 after a mechanical failure just 4 miles from the port of Whitehall on White Lake. But Gleason's ROV showed the divers that visibility on the bottom was practically zero at the *State of Michigan*, so they motored 5 miles north hoping for clearer water at the *Interlaken*.

THE WEST MICHIGAN PRESERVE stretches from Port Sheldon to north of Ludington. It is the resting place for ships like the *Anna C. Minch*, a 380-foot freighter that sunk in a 1940 storm, and the 320-foot *Henry Cort*, a bulk-cargo ship that sunk off Muskegon in 1917, among others.

Hanson said there are more to find. "There

You don't have to be a diver to enjoy some of Michigan's 14 underwater shipwreck preserves. They can offer a great vacation for families—divers and non-divers—including dive charters and glass-bottom boat tours. Read on for more details.

The *State of Michigan* shipwreck, and diver John Hanson.



Photo - Paul Chase



Divers John Achterhoff and John Hanson.

Learn more about the shipwreck preserves at michiganpreserves.org and the West Michigan Preserve at wmup.org

are 64 ships listed as unaccounted for within the preserve boundaries,” he said. “Some are over 120 feet long.”

Hanson began diving in high school, inspired by the 1950s and ‘60s era “Sea Hunt” TV series, starring Lloyd Bridges as the rugged, ex-Navy frogman, Mike Nelson. Shipwreck diving came later.

He made his first wreck dive nine years ago on the 253-foot long *Salvor*, a steamer built in England that sunk in 1930 between Muskegon and Whitehall.

“There wasn’t much to see, but it was exciting. I was diving on a piece of history,” Hanson said. “That triggered my interest in wrecks and finding out more about others. I started diving wrecks and found it fascinating. These are underwater museums.”

THE MYSTIQUE OF SHIPS going to a watery grave on the Great Lakes, and the harrowing stories of lives lost or forever changed, is part of the appeal for divers and tourists who visit the preserves, explains Debbie Chase, a Great Lake Energy Cooperative member from Walkerville and president of the Michigan Underwater Preserve Council. She is also vice-chair for the West Michigan Preserve.

“I read about shipwrecks in my 20s and thought they would be very scary to dive

upon. But they are fascinating,” said Chase, who began diving in 2004 with her husband, Paul Chase, the underwater photographer.

“I think the coolest dive I’ve made is on the *William Young* in the Straits of Mackinac Shipwreck Preserve. It was a sailing vessel and still has coal on it,” Chase said.

The *William Young* sits upright in 120 feet of water. The 139-foot wooden schooner was built in 1863 in Marine City, MI, and its home port was Detroit. It sank with a load of coal in 1891 and is one of 13 shipwrecks in that preserve.

Michigan’s underwater preserves provide a great opportunity for tourism in Michigan, Chase notes, and can be a family vacation destination. All are located near one or another shoreline community, she adds, where family members that don’t dive can enjoy themselves at local beaches and shops.

Glass-bottom boat shipwreck tours:

- Munising – shipwrecktours.com or 906-387-4477
- Alpena – alpenashipwrecktours.com or 888-469-4696

Dive charters:

- Straits of Mackinac to Alpena – greatlakesdivecharters.net
- Lake Huron – rectedivedivecharters.com and blueheavenscuba.com
- More dive info at michiganpreserves.org



Photo – Howard Meyerson

Above: John Hanson prepares to lower the remotely operated vehicle (ROV) to check visibility on the lake bottom before diving.

Below: Preserved shipwrecks like the *Pizzazz*, (diver is Paul Chase) are underwater museums.



Photo – Debbie Chase

Wind Talkers

The pros and cons of wind power.

This is third in a series on how electricity is generated. The first (January) was about clean-coal technology, and the second about new nuclear options (June). Watch future issues for stories about other fuel sources.

For many, answers to our nation's energy and climate change challenges lie in the wind. From commercial wind farms to backyard setups, the sky scraping structures with massive rotating blades have become synonymous with "going green."

At the end of 2012, wind generated about 60,000 megawatts of electricity in the United States—enough to serve over 15 million homes. Wind power production is booming, with output increasing leaps and bounds over the past several years.

Costs are dropping for wind power projects, although federal subsidies are still necessary for wind to compete with traditional sources of electricity generation. A January 2012 study from the U.S. Department of Energy's Lawrence Berkeley National Laboratory reports it costs between 24 percent and 39 percent less to produce wind energy on a per-kilowatt-hour basis today than it did a decade ago.

As of early 2013, 50 electric co-ops either own wind turbines or buy output from wind farms, amounting to 4.3 gigawatts (GW), or about 9 percent of the U.S. wind generating capacity, according to the American Wind Energy Association.

Like any resource, wind has pluses and minuses when it comes to making electricity. Here's a look at how wind power stacks up.

Intermittency Issues

Wind power development opportunities vary greatly throughout the country. It's viable in many states, ranging from the Great Plains and Midwest as well as the Atlantic Coast, but is limited in the Southeast and Southwest.

Yet even in locations with strong wind resources, an active wind turbine typically only generates 30 to 40 percent of its "capacity factor"—the total electricity it could generate operating around-the-clock. A 2010 National Renewable Energy Laboratory survey found less than 1 percent of land in states like Alabama, Kentucky and Georgia was windy enough to achieve at least 30 percent capacity factor.

Wind is also an "intermittent" fuel source. The wind doesn't blow all the time, so electricity generation is not reliable or constant. Energy from wind usually peaks in the early morning, when most people are still sleeping and not using electricity. Intermittency means coal and natural gas-fired power plants must act as backups so electricity continues to flow as needed when the wind isn't blowing. Backup power sources increase the total cost of wind generation.

Energy Storage

As of now, technology to store power from renewable energy—so it can be used later—is still immature and expensive. Wind and other renewables could become more valuable as advancements in energy storage systems are tested. First developed in the 1970s, energy storage is becoming more economical on a large scale thanks to recent

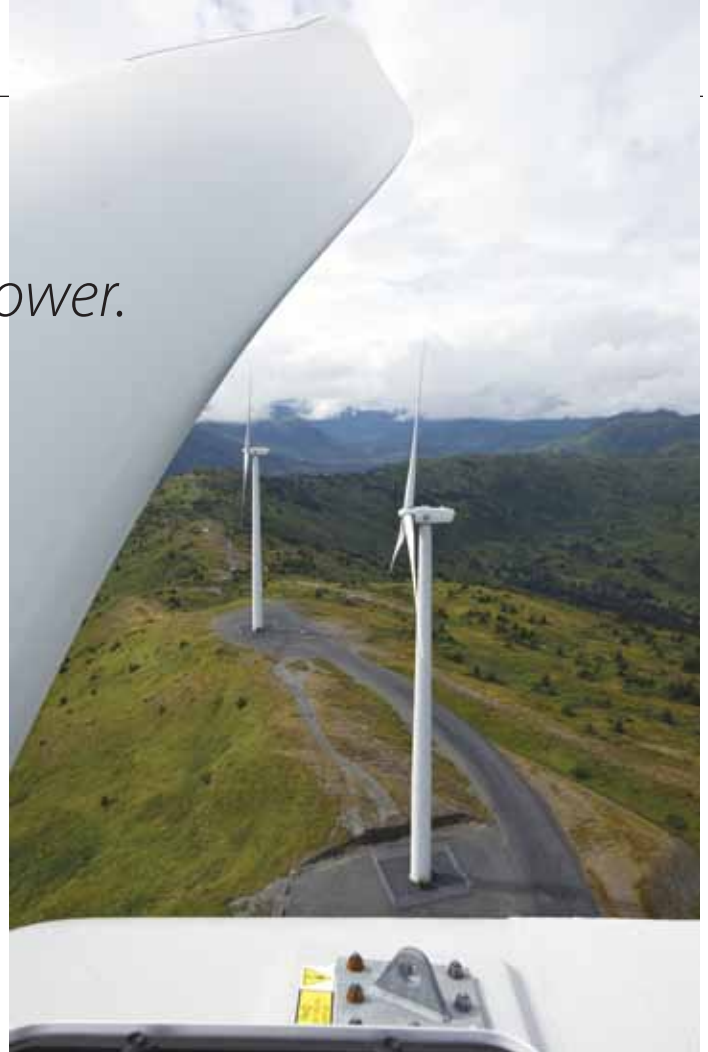


Photo - NRECA

manufacturing breakthroughs that increase the longevity while lowering the cost of batteries. With energy storage, the electricity produced by wind can be used during times of peak demand—the electric utility industry's version of rush-hour traffic, when power use skyrockets—to avoid buying expensive backup power.

"Energy storage would also reduce the intermittency of wind, which allows for more efficient use of backup generators, among other benefits," says Doug Danley, technical liaison on renewable and distributed energy for the Cooperative Research Network. "CRN is continuing to study energy storage systems so that electric co-ops can best use these technologies to the advantage of their consumer-members."

Environment & Transmission

Before turbines go up, studies must be done to judge the wind's variability in a given area. And although the sight of a tall, white wind tower may not be as intrusive as other types of power plants, environmental and economic impacts must be assessed. Will the turbine kill songbirds and bats, or disrupt their migratory patterns? Will shipping routes be affected by an offshore wind farm?

Once the electricity is produced, moving it from a wind farm to homes can be difficult. Transmission infrastructure may not be available in areas where the wind blows best, and building new transmission lines takes time, money, and a lengthy regulatory approval process.

Investing in Local Communities

The clear advantage to wind power is its "renewable" status, but there can be economic benefits, too. Fifty-three remote communities served by Alaska Village Electric Cooperative, based in Anchorage,

are able to harness wind and reduce their dependence on pricey diesel fuel that led to retail electricity rates of 51 cents per kilowatt-hour, almost five times the national average.

Some rural communities are developing wind power to revitalize their economies. In Missouri, Atchison-Holt Electric Cooperative was losing businesses and young people until it discovered growth through renewable energy. Building several wind projects spurred an economic renaissance that included biodiesel plants and new small businesses.

In a similar boon of local investment in 2010, the South Dakota Wind Partners venture garnered \$16.6 million from over 600 investors to build the Wessington Springs Wind Farm near White Lake. As required by law, all investors were South Dakotans, but most were also associated with one or more of the farm's organizers: East River Electric Power Cooperative, a generation and transmission co-op in Madison; South Dakota Farm Bureau Federation; South Dakota Farmers Union; and the South Dakota Corn Utilization Council.

South Dakota Wind Partners was possible after the passage of the federal stimulus bill, which created the 1603 grant-in-lieu of tax credits program providing a cash payment (tax grant) of up to 30 percent of qualifying project costs. This provision expired in 2011.

"Were it not for 1603 tax grants, the Wessington Springs Wind Farm would not have happened," notes Jeff Nelson, East River Electric Power general manager. "It opened the door for small investors to come together to create a unique, locally-owned community wind project."

Electric Co-ops Working for You

While great strides have been made to include renewable energies like wind power into America's electricity generation portfolio, making wind work as a reliable, affordable energy source will take time. Electric co-ops, including Michigan's, have long been on the forefront of new technologies.

For example, Wolverine Power Cooperative, in Cadillac, MI, has purchased the total output of the Harvest Wind Farm, the state's first commercial-scale wind project, to serve its member co-ops since the farm began generating electricity in December 2007.

All Michigan electric co-ops will continue to evaluate and implement renewable energy opportunities that work for their member-owners. To find fuel mix percentages for your co-op, go to countrylines.com and click on "My Co-op"/co-op name/March issue.

Geothermal: Energy from the Ground Up

Geothermal energy—created from Earth's natural heat—has been used for thousands of years to cook and bathe. But modern technology has unlocked new ways to harness geothermal's energy potential by using the hot water and steam locked below the Earth's surface to produce electricity and heat and cool buildings.

America leads the world in geothermal power production. Nine states (Western states produce the most) generate nearly 3,200 megawatts (MW) of capacity, and over 100 new projects are developing in 14 states, reports the Geothermal Energy Association, the national trade association for geothermal companies. For comparison, 1 MW can power 750 to 1,000 average homes.

How It Works

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

Geothermal power stations cut out the middle man by piping naturally-heated water (changed into steam) or naturally occurring steam into a plant to spin turbines. Three types of geothermal generation exist; the choice depends on the state of the steam or water and its temperature.

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

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

Binary cycle: These plants use moderate- to low-temperature groundwater or steam. In this type of system, hot water is pumped from a well and passes through a heat exchanger, where it warms a secondary fluid with a lower boiling point than water. This causes the secondary fluid to flash to vapor, which then drives a turbine. The secondary fluid then condenses and returns to the loop system, and the water gets pumped back into the well.

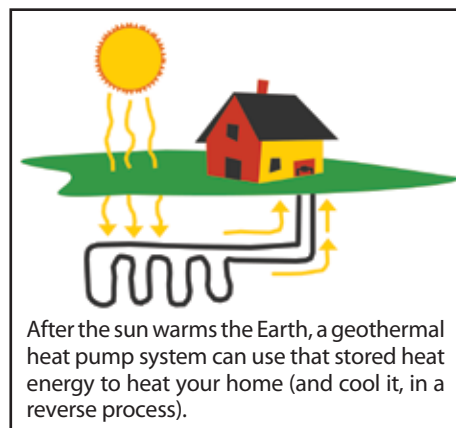
Other Uses

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

The top 10 feet of earth stays a mostly constant 50 to 60 degrees F year-round. Geothermal heat pumps rely on the ground's energy to move heat into and out of a building, providing heating and cooling. Also called ground-source heat pumps, these come in two types: a groundwater (open-loop) unit uses well water; an earth-coupled (closed-loop) model moves a water and antifreeze solution through underground pipes to disperse heat.

While geothermal heat pumps generally operate more efficiently than their air-source cousins, they are more expensive to purchase up-front, and a heat pump may not always be the best option for every situation. However, a federal tax credit equal to 30 percent of the cost for materials and installation, with no limit on total project expenses, applies to geothermal heat pumps through Dec. 31, 2016.

To decide if a geothermal heat pump is



right for you, find requirements and product lists at energystar.gov/taxcredits. More information, including a list of contractors and tips for finding one, is available from the Michigan Geothermal Energy Association at earthcomfort.com (248-396-8231). To check for other rebates, see the Database of State Incentives for Renewables and Efficiency (dsireusa.org).

Sources: U.S. Department of Energy, National Renewable Energy Laboratory, Geothermal Energy Association, International Ground Source Heat Pump Association

To Buy (Geothermal) Or Not To Buy?

After many years, my geothermal system developed a freon leak in May of this year. The leak was in the worst of all places, and fixing it would cost about \$2,000. We had already been debating when to replace our geothermal system for the past three years. Should we replace it while the system is still working to take advantage of the 30 percent tax credit, or do we wait until the system breaks down and take the chance the credit may be gone? As the executive director of the Michigan Geothermal Energy Association (MGEA) it would be really embarrassing to replace it with a gas or propane system. The question was not what kind of system to buy, but when.

Over the past 14 years, the average heating and cooling bill for our 2,700-square-foot house (with a 1,200-square-foot basement) has been less than \$60 a month. I know many of you have heard that a geothermal home must be kept at 60 degrees in the winter and 88 degrees in summer, but that is an Urban Legend (*Country Lines* told me I had to include the

word “urban” in every article). I prefer to keep the house at 71 degrees in the winter, but my wife prefers 72, so we keep our house at 72 degrees (every husband needs to reread this line). We keep our house at 73 degrees in the summer. Even at those settings, we have paid for our geothermal system many times over, and my bills are about \$1,000 a year less than my neighbors—who keep their homes at 68 degrees.

The real question was timing. Currently, there is a 30 percent federal tax rebate on geothermal through 2016, and it is unlimited. About three years ago, we got a 2.4-kilowatt solar panel array on our roof and got a 30 percent tax credit (about a \$7,500 credit) for that. Now we will get another tax credit, but we all know how government programs work—funding can run out (cash for clunkers) and the program can end prematurely. It is equally likely that the 30 percent tax credit could be extended. Who knows? If anyone thinks they can predict government, I have a bridge in Brooklyn to sell you.

Check out the MGEA website:
earthcomfort.com
or call 248-396-8231



Installing the new geothermal unit in the Kaufman home in May 2013.

So, the question is: Do you buy a new geothermal system now before the tax credit runs out or do you wait till the unit dies and replace it without the tax credit? Here is how I looked at it: We intend to stay in our house for at least 10 more years. The current geothermal system will probably not last another 10 years. Therefore, we are going to have to replace it anyway in the next 10 years. Therefore, it makes more sense to do it with a 30 percent tax credit. My new unit should last 20 years, so this will be the last heating and cooling system I buy.

When my existing unit needed repair, it expedited the decision. Either that or it was incredibly brilliant planning on my part to replace the unit in May when we didn't need heating or air conditioning that week.

Of course, my new unit will be more efficient and quieter. Between my solar panels and geothermal unit my summer bills are

quite low—52 cents last July. June was less—where the utility actually paid me. I mention this even though I know I get absolutely no sympathy from anyone (maybe my accountant).

If you're thinking about a geothermal heating and cooling system, check out the MGEA website at earthcomfort.com to find a dealer near you. I would also urge you to take advantage of that 30 percent credit before it is gone. Getting money back from the government really feels good. Almost as good as a 52-cent electric bill in July.

Larry Kaufman is executive director of the Michigan Geothermal Energy Association. MGEA is a 20-year trade organization that promotes high-quality geothermal energy systems that meet the comfort, efficiency and environmental needs of customers.



Everything at The Mitten Bar, from the dozen beers on tap to hard cider, is made in Michigan.



Mitten Bar Fits Her Like a Glove

When is a beer not just a beer? When it's the ideology behind a gathering place for those who enjoy the camaraderie shared over a handcrafted adult beverage. That's the thinking that launched The Mitten Bar, a Ludington hangout that serves only Michigan-made beer, wine, spirits and hard cider.

The concept came to owner Megan Payment and Brian Josefowicz, her fiancé and business partner, as they sampled their way across the state's wine and beer trails. "The beer was great," says Payment about their tasting tour of brewpubs, microbreweries and breweries. "But that was almost secondary. It was how people treated each other, how everyone could get along," that she says impressed the couple and inspired them to open their business in July 2011.

Payment, 27, who graduated from Aquinas College with a dual major in business administration and communications, is no stranger to the food and beverage industry. Her parents, Mike and Julie Payment, own the Sportsman's Restaurant and Irish Pub, a Ludington landmark since 1955. But she wasn't planning on it as a career. "I wanted nothing to do with my parents' place," she says. "I have a lot of great childhood memories, but it's just not me. This (The Mitten Bar) really fits who I am."

Named for the Lower Peninsula's shape,

The Mitten occupies a 1900s building with exposed brick walls and vintage wood flooring. The cozy tavern serves no food (guests can carry-in, and Sportsman's is next door), just a changing menu of 40 Michigan bottled beers and a selection on-tap, plus about two dozen spirits and a small selection of wines. But here, Payment says, "It's not just about drinking, by any means. It's a 'third place'—not home, not work—we've developed a community place. Our regulars have become family. It's more about the interaction." She and Josefowicz, 31, who studied business and photography at Grand Valley State University, post short, "wonderfully awkward" videos on Facebook with updates on beverage releases, weekly band appearances, and progress reports on their new venture, Barley & Rye.

Housed near The Mitten, Barley & Rye offers craft beer and whiskey from around the world and a short menu of "fast, casual foods," like charcuterie (cooked, cold meats) and pulled pork, specialties of foodie Josefowicz. The hop vines growing in the outdoor beer garden make it an especially good setting for sipping a refreshing brew.

The Mitten Bar: A Michigan Ideology
Ludington, MI
mittenbar.com • 231-843-7616
megan@mittenbar.com



Cheers to Michigan Beers

July is Michigan Craft Beer Month for the state's more than 100 commercial craft brewers and their growing economic impact on agriculture and tourism. Michigan ranks fifth among states in number of breweries, microbreweries and brewpubs, and its 20 percent growth last year outpaced the nation. The hopping beer scene is so vibrant that the Pure Michigan advertising campaign is airing a radio spot about it, and carries information on beer trails and brewery tours at michigan.org/breweries.

Larry Bell is the founder of the state's modern craft beer movement; he made his first beer in a 15-gallon soup kettle in 1985. Today, Bell's Brewery is one of the top craft brewers in the country and is still located in its hometown of Kalamazoo. That city placed second in the 2013 Beer City USA poll, just behind winner Grand Rapids and ahead of fourth-place Ann Arbor.

The strong Michigan showing in the annual survey adds credence to the "Great Beer State" promotional slogan of the Michigan Brewers Guild (MBG) (michiganbrewersguild.org). The Guild produces a free, glossy guide to beer destinations here, and hosts four popular events: the Summer Beer Festival in Ypsilanti, July 26-27; U.P. Fall Beer Festival, Sept. 7, in Marquette; Detroit Fall Beer Festival, Oct. 25-26; and the Winter Beer Festival, Feb. 22, 2014, in Comstock Park. Even the February event at the West Michigan Whitecaps baseball stadium attracts a sell-out crowd of 6,000 craft beer drinkers—many, no doubt, wearing mittens.



Short's Brewing Company, Bellaire

Photo - Kath Usitalo

► **Tell us about your favorite Michigan-Made product!** Please send a few short paragraphs describing the product and why you like it, along with your email and phone number to gknudtson@meca.coop or call 517-913-3531.

Park, Picnic & Play

Family friendly places to enjoy the outdoors.



Nothing embodies summer more than a casual picnic. Mention it to your kids and they instantly smile. There's just something magical about eating food outside on a picnic table or on the green grass. Pack your own picnic or stop at a roadside market along the way to add to the adventure. Here's five suggestions that will make any picnic a memorable experience.

1 SILVER BEACH 101 Broad St, St. Joseph

Located at the mouth of the St. Joseph River, this park provides river and beach activities. It boasts three playground structures with soft surfaces; two are age specific. One is for children ages 2-5. The other is designed for children 5-12. Kids will imagine life on the high seas with the red and blue "boat" structure. Nautical talking-and-listening tubes will give the captain and the crew hours of fun. Enjoy your picnic and playtime in the park then take a 5-minute stroll on the boardwalk from the beach to the Silver Beach Carousel, Curious Kids' Museum and the free interactive Whirlpool Compass Fountain for more hours of family fun.

Fees: \$6/vehicle for Berrien County residents, \$8 for non-residents (carousel and museum have additional fees)

Website: berriencounty.org

2 HAWK ISLAND 1601 E. Cavanaugh Rd., Lansing

Work up an appetite first by renting a row-boat or pedal boat for a small fee. Picnic spots abound at various locations around the beach. Paved accessible walkways for walking or bike riding (1.5 miles), fishing docks, horseshoes, playgrounds and the popular Splash Pad® beckons young and old alike. A concession stand is also available if you didn't pack enough treats in your picnic basket.

Fees: \$3 annual fee per vehicle for Ingham County residents or \$5 for non-residents

Website: pk.ingham.org

3 EAST PARK Little Traverse Wheelway, Petoskey

This \$13 million renovation project has been touted the "crown jewel of the north" in downtown Petoskey. You'll have plenty of green space to picnic, or choose from one

◀Janet TenHove and sons Cody and Jesse take a break from watching muskrats at Hawk Island.

of the many picnic tables along the park's paved walkway. Take in the beautiful boats and yachts docked in the marina during your stroll. You may never get the kids away from the Charlevoix Fountain of Youth, a state-of-the-art interactive kids' fountain. The water is heated and there are multiple water nozzles and choreographed LED lighting and music.

Don't forget to check out the East Park Trout Habitat while you're there. This fully functioning trout ecosystem replicates the conditions found in a northern Michigan trout system.

Fees: free

Website: charlevoix.org

4 DUCK PARK & ISLAND PARK Corner of U.S.-31 and Long Rapids Road, Alpena

Picnic in Duck Park along the 1,200 feet of Thunder Bay frontage and stroll across the walking bridge into Island Park, a 17-acre island in the middle of the Thunder Bay river. Pack your binoculars to zoom in on the various bird species, including the mallard duck, great blue heron, or mute swan. These parks boast a 500-acre wildlife sanctuary with varied ecosystems including sand dunes, meadows, woodlands and marshes with viewing platforms so you're bound to see all kinds of wildlife, including the amusing antics of beavers. Fish from wooden platforms or take a self-guided 3/4-mile nature walk.

Fees: free

Website: alpena.mi.us

5 HORSESHOE FALLS Munising

An abundance of photo ops await at this privately owned attraction. One million gallons of pristine water fall over the top of Horseshoe Falls, which is fed by the underwater springs of Lake Superior. Bring your picnic basket, but save room for ice cream at the gift shop. Walk the well-maintained gardens and follow the gentle stream. Feed the rainbow trout and ducks at the trout pond. Scavenger hunts will keep the kids entertained by looking for a variety of items, including the whimsical Laafs (pronounced laughs) figurines. Adults can enjoy the many points of interest, such as the sundial, totem pole, water wheel and Indian 10 Commandments.

Fees: \$6/adults, \$5 and under for children depending on age, or family ticket, \$19

Website: uppermichiganwaterfalls.com

For a listing of Michigan state parks, nature preserves, refuges, gardens, arboretums and other "hot spots" across the state, visit michigan.org/nature-parks or call (888) 784-7328.

Create Tasty Centerpieces

...with veggies from your own garden.

When most people think of centerpieces they think of flowers, but not Tim Latimer, a certified florist and floral design instructor at Michigan State University (MSU). “Vegetables are every bit as colorful as flowers,” Latimer notes. His own bountiful centerpieces are proof, with artful clusters of vegetables catching the eye with pleasing textures and a rainbow of colors.

It all started in the mid-1990s when Roger Swain of the PBS “Victory Garden” TV show came to speak at an MSU Garden Days event. “I thought it would be neat to try something different,” Latimer recalls. “Given Roger’s affiliation with the Victory Garden, vegetables seemed a natural for a centerpiece for his hotel room.” Latimer’s centerpiece was a big hit, and he’s been designing with vegetables ever since. “When you think of it, many vegetables ARE flowers – cauliflower, broccoli heads, asparagus tips,” he explains.

Firm vegetables work best in these arrangements, since they have to be inserted in floral foam (ripe tomatoes wouldn’t work well!) in order to use them in a centerpiece, Latimer says. First, cut the foam to the container size, then soak the foam in water. Hide the foam with dried moss that has been wetted down, or bark also works, and both can be found at craft stores. If you are going to eat the centerpiece afterwards, use sturdy natural toothpicks instead of painted floral picks. With a round vegetable, like Brussels sprouts or radishes, insert the pick into its base and then insert the pick into the foam. With long vegetables, such as asparagus or carrots, trim the end to a point so it can be easily inserted into the foam, or use wire to attach it to a floral pick. For the most impact, Latimer recommends using groups of three or more instead of scattering a single vegetable.

Herbs, kale or sturdy leafy vegetables make a great filler. Latimer especially likes rosemary, dill and fennel, which add both texture and aroma. Latimer also plants his garden with vegetables that he knows work well in his arrangements: squash, pumpkin, eggplant, green tomatoes, corn, potatoes,



CLASS OFFERED:

Floral designer Tim Latimer will offer a class entitled “Designing from the Garden,” for both home gardeners and professional designers, on Aug. 17, noon to 4 p.m., at the Michigan Floral Association in Haslett (near East Lansing). Find more information about it and other classes at michiganfloral.org.

onions and green beans. “The important thing is to use a variety of textures, height, shapes and sizes when selecting your vegetables, and I like to use vegetables that are in season,” he adds.

Vegetable centerpieces can work for any occasion except more formal events. Keep in mind the size of your container when choosing vegetables. For large containers, Latimer has even used whole cabbage heads and large eggplants. For smaller arrangements, choose vegetables that will not overwhelm the container.



1) Tim Latimer often adds flowers to his vegetable centerpiece designs to give them more texture and color.

2) Learn to design an alluring vegetable centerpiece like this one by Tim Latimer. It contains edibles such as radishes, kale, Brussels sprouts, carrots, asparagus and cucumbers, accented by flowers of blue veronica, pink Astilbe, and bright white daisies. Sprigs of natural branches add height and the finishing touch.

3) The asparagus end is cut at an angle to fit easily into the foam, and floral picks are inserted into round vegetables like the Brussels sprout to hold them in place.

For even more texture and color, he suggests adding more natural-looking flowers, since vegetable arrangements are more informal. Other ideas include adding natural branches, dried lamb’s ear, thistle or ornamental grasses to finish your centerpiece.

Rita C. Henehan is an author, freelance writer and photographer. For more on vegetable centerpieces, visit her website, miegardenerscompanion.com.





Smoked Salmon Dip

Under the Sea

Seafood recipes are some of the most popular with *Country Lines* readers. Low in calories, cholesterol and sodium, seafood is a healthy (and delicious!) addition to your diet.

Crab Cakes with Lime Sauce

- 1 medium lime
- 1 c. Hellman's® mayonnaise, divided
- 1 envelope Good Seasons® Italian Salad Dressing mix
- 2 T. dijon mustard
- 2 6-oz. cans crab meat, drained, flaked and small shells removed
- 25 Ritz® crackers, finely crushed, divided
- 2 T. chopped green onions
- 1/4 c. sour cream

Grate the peel and squeeze the juice from the lime. Mix half of lime juice, 1/2 cup mayonnaise, salad dressing mix, and mustard in medium bowl until well-blended. Add crabmeat, 1/2 cup cracker crumbs and onion. Mix lightly. Shape into 16 (1/2-inch thick) patties; coat with remaining cracker crumbs. In large nonstick skillet on medium heat, cook patties in batches for 2 minutes on each side or until browned on both sides and heated through. Meanwhile, mix remaining mayonnaise and lime juice, lime peel and sour cream until well blended. Serve sauce with crab cakes.

Paula Brousseau, Bellaire

Photography by: 831 Creative

Smoked Salmon Dip

- 8 ozs. cream cheese, at room temperature
 - 1/2 c. sour cream
 - 1 T. lemon juice
 - 1 T. fresh dill, minced
 - 1 t. prepared horseradish, drained
 - 1/2 t. salt
 - 1/4 t. black pepper
 - 1/4 lb. (4-oz.) smoked salmon, minced
- Cream together cream cheese, sour cream, lemon juice, dill, horseradish, salt and pepper. Mix well. Add the smoked salmon and mix again. Chill and serve with crackers.

Bonnie Gauld, Fife Lake

Coconut Mahi Mahi Over Rice

- 4 mahi mahi fillets
- 1 small can sweetened condensed milk
- instant white rice
- small can coconut milk
- flaked coconut, unsweetened
- 1 T. parsley
- 4 T. sliced almonds (optional)

Preheat oven to 350°. Place Mahi Mahi fillets on a baking sheet and bake for 10 minutes. While fish is baking, prepare instant rice according to package directions except decrease the water by half and replace with

coconut milk. After fish has baked for 10 minutes, generously coat the fish with the condensed milk. Bake for additional 5-7 minutes or until condensed milk begins to thicken. When rice is done cooking, pour onto serving plate. Sprinkle with flaked coconut, parsley and sliced almonds. Place fish atop the rice and serve.

Debbie Buck, Cassopolis

Shrimp With Gnocchi

- 1 lb. fresh or frozen shrimp, peeled, deveined and tails removed
- 2 lb. gnocchi (frozen or dried)
- 1/2 c. butter
- 4 T. olive oil
- 1/2 c. white wine
- 1 t. garlic powder
- 1/4 t. salt
- 1/4 t. ground pepper
- 1/4 t. lemon pepper
- 1/4 t. Italian seasoning (optional)

Boil 4 quarts of water. Add gnocchi and cook for 3 to 4 minutes, until done. Drain. Meanwhile, melt butter and oil in large skillet. Add shrimp and cook until pink. Mix in wine and spices and simmer for about 5 minutes. Mix shrimp with gnocchi and serve warm.

Jennifer Sylvester, Sand Lake

Fish Tacos

- 1/2 c. sour cream
- 1/2 c. mayonnaise
- 1/4 c. fresh cilantro, chopped
- 1 package taco seasoning mix, divided
- 1 lb. cod or whitefish fillet, cut in 1-inch pieces
- 2 T. vegetable oil
- 2 T. lemon juice
- 1 (12 count) package taco shells or flour tortillas, warmed

Toppings:

- shredded cabbage
- chopped tomato
- lime juice
- taco sauce

Combine sour cream, mayonnaise, cilantro, and 2 tablespoons seasoning mix in small bowl. Combine fish, oil, lemon juice and remaining seasoning mix in medium bowl; pour into large skillet. Cook, stirring constantly over medium heat for 4 or 5 minutes, or until cod flakes easily with fork. Fill taco shells with fish mixtures. Top with toppings. Serves 6.

Myrna Smith, Walkerville



Visit recipe editor Christin McKamey's new website, **veggiechick.com**, for healthy, vegetarian recipes and info!

Parmesan Baked Salmon

1/4 c. salad dressing
1/8 t. red pepper flakes
1/2 t. salt

4 1-lb. salmon fillets
2 T. parmesan cheese
2 t. lemon juice
1/2 c. Ritz® cracker crumbs

Mix all ingredients except salmon and cracker crumbs. Place salmon in baking dish. Spread cheese mixture over salmon. Sprinkle with cracker crumbs. Bake at 400° for 12 to 15 minutes, or until salmon flakes easily.

Arlene Yoder, Scottville

Seafood Lasagna

1 garlic clove, minced
1/2 lb. crab, cooked, shred as bite-size pieces
10 ozs. shrimp, cooked (if large shrimp are used, cut into bite-size pieces)

3 T. butter
3 T. flour
1 t. Italian seasoning
1/8 t. pepper
1 c. milk

1 c. chicken broth
1 c. ricotta cheese
2 t. lemon peel
1 T. lemon juice
5 lasagna noodles

3/4 c. shredded parmesan cheese, divided
Heat oven to 375°. Lightly butter the bottom and sides of an 8- or 9-inch baking dish. Set aside. Cook garlic in butter over medium heat, until soft, approximately 1 minute; stir while cooking. Remove from heat and stir in flour, Italian seasoning and pepper, until sauce is smooth. Gradually stir in milk and broth until smooth; heat to boil over medium heat, stirring frequently. Boil and stir 1 minute; remove from heat.

Gently fold cooked shrimp and crab into the sauce. Divide the sauce into fourths; set aside. In a separate bowl, combine ricotta and lemon juice; set aside. Cook noodles per directions on the box; drain and cut each noodle in half.

Spread one-fourth of the cooked sauce in bottom of greased baking dish. Lay three noodle pieces over the sauce and top with 1/2 cup of the ricotta mix, one fourth of the seafood sauce, and 1/4 cup parmesan cheese. Repeat, covering noodles with ricotta mixture, sauce and cheese. Top with another 3 noodle pieces and remaining seafood sauce. Cover with foil and bake for 30 minutes. Uncover and top the lasagna with the remaining 1/4 cup parmesan cheese. Bake 10 minutes more to melt cheese. Remove the baked lasagna from the oven, or place it under

the broiler, briefly, until lightly brown. Let it rest a few minutes before serving.

Debbie Coombs, Wayland

Easy Clam Chowder

3 slices of bacon, diced
1 c. diced onion
3 c. diced potatoes
1 8-oz. bottle clam juice
1 t. salt
1/4 t. pepper
2 bay leaves
2 dashes hot sauce
2 7-oz. cans minced clams
3 T. flour

1 1/2 c. half and half
1 1/2 c. whole milk

In a Dutch oven, cook bacon until crisp. Remove with a slotted spoon and drain on paper towels. Add the onion to the bacon drippings and sauté until softened. Add potatoes, clam juice, salt, pepper, bay leaves and hot sauce. Cover and simmer for about 15 minutes, or until potatoes are tender; remove from heat and add clams (with their liquid). Whisk the flour into the milk and add to the chowder, then add the half and half. Cook over medium heat, stirring constantly, until chowder thickens and bubbles. Remove the

bay leaves prior to serving. Garnish with a dollop of sour cream and chopped fresh chives (if desired). Serves 4.

Leanne Walling, Munising

Fool-Proof Shrimp Creole

2 T. olive oil
1/2 c. onion
1/2 c. green pepper
1/2 c. celery
1 t. chili powder
1 14-oz. can diced tomatoes
1 8-oz. can tomato sauce
1 T. tabasco sauce
1 T. Worcestershire® sauce
1 t. white sugar
salt and pepper to taste

1 1/2 lbs. raw shrimp, peeled and deveined
cooked rice

chopped green onions
Heat olive oil in skillet. Add onion, green pepper and celery; cook until softened. Add chili powder. Transfer all to slow cooker and add tomatoes, tomato sauce, tabasco, Worcestershire, sugar, salt and pepper. Cook on high 3 hours. Add shrimp and cook 3 minutes. Serve over rice and garnish with chopped green onions.

Tommie Schmidt, Union

Crab Cakes with
Lime Sauce



Submit your recipe! Contributors whose recipes we print in 2013 will be entered in a drawing to win a prize: *Country Lines* will pay their January 2014 electric bill (up to \$200)! The 2013 winner will be announced in the Jan. 2014 issue.

Thanks to all who send in recipes! Please send in **"Holiday Desserts"** by **Aug. 10** and **"Shakes & Smoothies"** by **Oct. 10**.

Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.

4 Easy Ways To Reduce Your Cooling Costs

If you're a business owner, you have a lot on your plate, and the commercial refrigerators at your facility are probably the last things on your mind. However, an old refrigerator—or one that isn't equipped with modern controls or technologies—could be using up to 35 percent more energy than necessary. This is money that could be invested elsewhere.

It is also important to understand the basics of energy-efficient commercial refrigeration. Read below to find out how your business can start saving more energy!

1 Anti-sweat heater controls

Reach-in freezer and cooler cases usually include electric heaters that prevent frost and condensation from forming on the glass. The problem is that anti-sweat heaters run all the time. The reality is that these heaters only need to kick on when it's extremely humid. Otherwise, you're just wasting energy.

THE FIX? Anti-sweat heater controls. They automatically sense humidity levels and

selectively run the heaters as needed. Energy Optimization rebate: \$80 per door.

2 LED cooler case lighting

Ironically, older coolers contain fluorescent lights that waste most of their energy generating heat instead of light. In turn, the refrigeration system has to work harder to remove the excess heat.

THE FIX? New light-emitting diode (LED) technology literally provides cooler light. LED case lights use significantly less electricity and produce 50 percent less heat. Energy Optimization rebate: \$25 per door.

3 Occupancy sensors

We tell kids (and maybe even employees) to turn off the lights when they're not using them. Yet, reach-in coolers leave the lights on indefinitely.

THE FIX? LED occupancy sensors. LEDs aren't affected when turned on and off in a cold environment. With instant-on capabilities, they light up when a shopper approaches

the cooler, or they can be programmed to stay on for a set amount of time and then shut off. Energy Optimization rebate: \$10 per door.

4 ECM motor

Did you know commercial refrigeration systems use fans to circulate cold air inside reach-in or walk-in coolers or freezers? Like the old electric heaters mentioned in our first tip, these fans run non-stop, wasting energy and putting extra wear and tear on the equipment.

THE FIX? Electronically commutated motors (ECMs). Through the magic of modern technology, ECMs are designed to use electricity sparingly and therefore reduce the load on your refrigerator. In many cases, you can swap out the existing motor for an ECM motor and get a full return on your investment in less than a year! Energy Optimization rebate: \$30-70 per motor.

Interested in more ways to save energy? Thumb Electric Cooperative offers numerous rebates and resources to reward businesses and residents for saving energy. Check out the latest incentives at michigan-energy.org or call 877-296-4319 for more information.



Reduce energy costs.

"Close the refrigerator!" Remember hearing that as a kid? No one likes wasting energy. The same principle goes for commercial refrigeration. Earn **thousands of dollars in Energy Optimization rebates for your business** when you implement anti-sweat controls, in-case LED lighting, efficient cooler fan motors and more.

ENERGY TIP: Energy-efficient commercial refrigerators can use up to 35% less energy per year.

ONLINE: michigan-energy.org PHONE: 877.296.4319



Energy Optimization programs and incentives are applicable to Michigan service locations only. Other restrictions may apply. For a complete list of participating utilities, visit 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 \$15,000 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:

- ▲ Gas furnaces/boilers
- ▲ Geothermal systems
- ▲ Air-source heat pumps
- ▲ Wall, ceiling and floor insulation
- ▲ Duct, pipe, water heater insulation
- ▲ Ventilation fans
- ▲ Clock thermostats
- ▲ Thermal windows, storm windows, insulated doors and storm doors
- ▲ Controlled electric heat systems



A geothermal unit uses renewable energy from the earth and can heat, cool and also heat the water in your home.



Call **800-327-0166** or **989-658-8571** to schedule a home energy analysis. We will show you how much money you can save.



Update:

Presque Isle Power Plant Partnership

Wolverine Power Cooperative (Cadillac, MI) and We Energies (Milwaukee, WI) have received regulatory approvals from three agencies for their partnership at the Presque Isle Power Plant in Marquette, MI. The Michigan Public Service Commission, Public Service Commission of Wisconsin and Federal Energy Regulatory Commission have approved the partnership between the two companies.

Two additional approvals are needed before proceeding with the construction of an air quality control system (AQCS) at the power plant. Wolverine and We Energies are required to obtain approval from the Federal Trade Commission for the transaction. The Michigan Department of Environmental Quality (MDEQ) must also approve an air quality permit for the construction project.

“MDEQ staff members are currently reviewing the permit application,” reports Brian Warner, Wolverine’s vice president of environmental strategy. “We are working closely with them and anticipate a draft permit will be issued later this summer.”

Once a draft air permit for the AQCS is issued, the MDEQ will accept written comments from the public and schedule a hearing in Marquette to provide an oppor-

If all regulatory approvals are received, Wolverine will invest in construction of the air quality control system. In return, the cooperative will own approximately 30 percent of the plant’s output.

tunity for additional comments.

“After the hearing, all comments received will be reviewed by the MDEQ, and a decision to approve or deny the permit will be made before the end of the year,” Warner explains.

If all regulatory approvals are received, Wolverine will invest in construction of the AQCS. In return, the cooperative will own approximately 30 percent of the plant’s output. We Energies and its employees will operate both the plant and new AQCS.

The project is proceeding according to the timeline anticipated by Wolverine and We Energies. The companies expected regulatory approvals to take the majority of 2013. Construction of the AQCS is slated for 2014 and 2015, and operation of the

plant with the new controls is scheduled for 2016.

“The new controls will meet state and federal air quality requirements and ensure continued operation of an important source of electric generation in Michigan’s Upper Peninsula,” Warner says. “The Presque Isle Plant is key to electric reliability in northern Michigan.”

Michigan Gov. Rick Snyder voiced support for the project in November 2012 at a news conference held by Wolverine and We Energies in Marquette to announce the partnership.

“The partnership of We Energies and Wolverine Power Cooperative to keep the Presque Isle Power Plant open is good news for the current and future availability of a reliable electric supply for businesses and residents in the Upper Peninsula,” Snyder said. “The agreement will also be good for the economy with more than 100 workers remaining on the job, and for the environment with the plant’s new state-of-the-art emissions equipment.”

The Presque Isle Plant, located on the Lake Superior shore, consists of five coal-fueled units capable of generating approximately 344 megawatts as currently operated. The units were built between 1974 and 1979.

What Do You Need From Extra AC?

Ask yourself what you want from a supplemental air-conditioning unit before buying one—window units and mini-split heat pumps both have good qualities.

Q: *We added a room, but our central air conditioner doesn't cool it well. Our second-floor master bedroom also does not stay cool. Does it make more sense to install a window air conditioner or a mini-split system?*

A: This is a common problem, especially for second-floor rooms. Cool air is denser than warm air, so it can drop to the first floor through cracks, gaps and stairs. Second-floor ceilings are also exposed to the hot underside of the roof, and tend to stay warm well into the evening.

Whether you install a mini-split heat pump or a window air conditioner depends on what you need and want. Most people install a window air conditioner to provide extra cooling in a room at a low initial cost, and energy efficiency is not their primary concern. Mini-split heat pumps offer many bonus features (heating and cooling, quiet operation, flexible installation, control) and increased efficiency, but at a higher initial cost.

The main drawback for mini-split heat pumps is cost. A window unit generally sells for under \$300; mini-splits can run to \$1,000 or more, plus the installation cost. Also, unlike a window unit, mini-splits can't be moved once they are installed.

I have a two-story house with a central heat pump. I recently installed an LG Art Cool® mini-split system in the master bedroom. I selected the smaller output 9,000 Btu-per-hour model, which has a seasonal energy efficiency ratio (SEER) of 28 and inverter compressor technology—twice as efficient as the central heat pump. I chose the heat pump version so it can also heat efficiently during winter.

A window air conditioner has all its components—compressor, air circulation fan, condenser fan, etc.—in the cabinet mounted in the window. While it is insulated against heat flow and sound, it still is not ideal for energy efficiency. The newest ones are fairly

quiet, but may still be annoying in a bedroom. When it's not running, more outdoor road noise can also be heard.

A mini-split system is similar to a central air conditioner or heat pump, with the condenser fan, coils and compressor in an outdoor unit, which is flat and small. Mine is mounted high on the garage wall so I can walk under it on an existing walkway.

Some models allow the outdoor unit to be placed up to 100 feet from the room or group of rooms to be cooled or heated. This virtually eliminates indoor noise pollution from these components.

Instead of having the indoor cooling coil in an air-duct system, as with most central air conditioners, the coil is mounted in a fan unit on the wall or ceiling of the room. It's connected to the outdoor unit by refrigerant and electric lines. Only a 3-inch-diameter hole needs to be cut through the wall, and the condensate drain from the evaporator coils can go out through the same hole.

Mini-split systems can also be used to cool an entire house by installing indoor wall units in several rooms. The conditioned air will naturally circulate throughout the house. This is commonly used in homes with baseboard electric or hydronic heat, which lacks a duct system. Installing a duct system for central air-conditioning in an existing two-story house can be an expensive project.

In addition to the high SEER rating, installing a mini-split unit allows for zone cooling of your house, which can also lower your electric bill. In my case, there's no need to keep the downstairs cool all night when I'm in the upstairs bedroom. The mini-split system allows me to set the central heat pump thermostat higher at night so it runs very little. This provides substantial electric-ity savings.

Inverter compressor technology is the newest, most efficient trend in air conditioning. The compressor runs at variable speeds to provide for variable cooling output. Once the room cools down to the thermostat setting,



The indoor fan/coil unit is mounted high on the bedroom wall.

the inverter compressor speed slows to keep the room at that temperature.

The remote control has several modes of operation, including a dehumidification setting for summer, which slows the fan speed so the indoor air is dehumidified more than it is cooled. This is ideal for allergy sufferers who are sensitive to high humidity but don't want a cold room.

There's also a "jet" setting that switches either the heating or cooling mode output and fan speed to high for changing the temperature quickly. This conserves energy because you can turn it on only when you use a particular room instead of keeping the room hot or cold continuously.

To learn more, visit:

- energy.gov/energysaver/articles/ductless-mini-split-heat-pumps and
- energystar.gov > Products > Find ENERGY STAR Products > Ductless Heating and Cooling

Companies offering mini-split units:

- **Carrier**, 800-227-7437, carrier.com
- **Fujitsu General**, 888-888-3424, fujitsugeneral.com
- **LG**, 888-865-3026, lg-dfs.com
- **Mitsubishi Electric**, 800-433-4822, mehvac.com
- **Samsung**, 888-699-4351, quietside.com

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

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



Prevent Deadly Shocks —

Check Your Boats & Docks



Don't be the common ground between water and electricity!

Safe Electricity (SafeElectricity.org) urges boat owners to have dockside electrical systems installed by professional electricians guided by the National Electrical Code, and have them inspected regularly to avoid tragedy.

For a fun, safe season on the water, there are items you must legally have on-board your watercraft—life vests, a fire extinguisher, a throwable flotation device, and properly working lights. But the list should not end there when it comes to helping prevent a tragedy, so make sure the boat itself and the dock is safe, too!

July 2012 saw some horrific fatal accidents near boats and docks. A 26-year-old woman was swimming in Lake of the Ozarks and was electrocuted when she touched an energized dock ladder, and a 13-year-old girl and her 8-year-old brother received fatal shocks while swimming near a lighted dock with an improperly grounded circuit.

Two young Tennessee boys died from electric shock while swimming between house boats when current from an on-board generator entered the water through frayed wires under the boat.

In Michigan, a 20-year-old Port Huron man entered the water behind a moored boat and became disabled as he tried to climb onto the swim platform. Friends trying to pull him onboard reported getting shocks. He could not be resuscitated. An investigation confirmed voltage behind the boat, caused by an AC to DC fault in the battery charger that energized the underwater gear; and there was no AC to DC bonding connection.

To help prevent such tragedies, it's important to ensure proper installation and maintenance of electrical equipment and inspect all electrical systems on or near the water. Also, remember that ropes, string, masts and rigging can also conduct electricity.

✓ Check your dock and the neighbor's, too!

Safe Electricity (safeelectricity.org), in conjunction with the American Boat and Yacht

Council (ABYC) and the International Brotherhood of Electrical Workers/National Electrical Contractors Association, recommends these steps:

- At a minimum, all electrical installations should comply with the 2011 National Electrical Code (article 553-residential docks, and 555-commercial), which mandates a ground fault circuit interrupter (GFCI) on all dock receptacles. A GFCI measures the current in a circuit and senses any imbalance, such as a discharge into the water, that trips the GFCI and cuts off the power.

- The GFCI should be tested at least monthly, or per the manufacturer's specifications. Locate the GFCI somewhere along the ramp to the dock so it can be easily found and tested by local fire departments, as needed.

- Metal dock frames should have “bonding jumpers” that connect all metal parts to an on-shore grounding rod. This ensures that any part of the metal dock that becomes energized because of electrical malfunction will trip the GFCI or circuit breaker.

- Neighboring docks can also be a shock hazard to you. Talk to your neighbors about ensuring that their dockside electrical systems are Code compliant and inspected, too.

- All electrical installations should be performed by a professional electrical contractor.

- Docks are exposed to the elements so their electrical systems should be inspected at least once a year.

- Even if you are renting the dock, it is important to notify the owner of any safety violations so they can be fixed immediately.

If the owner will not make the corrections or properly maintain the dock, you might strongly consider moving your boat to another place.

✓ Check Your Boat

When it comes to a boat's electrical system, particularly those with onboard generators, use these tips:

- If you are unsure about how to install something, call an ABYC electrical certified technician.

- Household wire is not suitable for boats, as houses are motionless and generally dry. Even marine-rated wire that is not supported along its length will break with constant motion stress.

- Do *not* use wire nuts or splice connectors! (Wire nuts are for solid conductor wire, which should never be on a boat, and splice connectors can cut wire strands.)

- Fuses are rated to protect the wire, not the stereo. If a fuse blows continuously, it should not be replaced with a larger one just to keep it from blowing again—something else is wrong.

- Have your boat's electrical system checked at least once a year, and also when something is added or removed from it.

Most wet environments are dangerous when it comes to electricity, but related drownings can be prevented by regularly inspecting for ground-fault failure and strictly enforcing the National Electrical Code through frequent pool, dock and boat inspections.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

NOTICE OF HEARING FOR THE CUSTOMERS OF THUMB ELECTRIC COOPERATIVE CASE NO. U-16888-R

- Thumb Electric Cooperative requests Michigan Public Service Commission approval to reconcile its 2012 power supply cost recovery costs and revenues. Thumb is not seeking a rate increase through its Times Interest Earned Ratemaking Mechanism, but is requesting tariff changes which have been designed to be revenue neutral to member-consumers on an overall basis. Included in these tariffs is a new Transmission Standby Service tariff rate.
- 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: August 6, 2013, 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 Marc E. Cummins

LOCATION: Constitution Hall, 525 West Allegan, 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 23, 2013 application of Thumb Electric Cooperative (Thumb) to reconcile its 2012 power supply cost recovery (PSCR) costs and revenues. Thumb represented that it experienced a net PSCR underrecovery of \$54,058 during 2012, including prior years' balances. Thumb is not seeking a rate increase through its Times Interest Earned Ratemaking Mechanism, but is requesting tariff changes which have been designed to be revenue neutral to member-consumers on an overall basis. Included in these tariffs is a new Transmission Standby Service tariff rate.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscdockets. 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: mpscdockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 241-6180 or by email at: mpscdockets@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 30, 2013. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Thumb Electric's attorney, Albert Ernst, 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 Electric's request may be reviewed on the Commission's website at: michigan.gov/mpscdockets, and at the offices 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 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1982 PA 304, as amended, MCL 460.6h et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1999 AC, R 460.17101 et seq.

Independence



The boy stood on second base waiting for the next batter to get to the plate. He looked towards the outfield and saw a bunch of boys slow their bikes, watching the game from the sidewalk that circled the ball field. Then the chatter started. “Hey batter, batter, batter. Can’t hit, batter, batter, can’t hit, batter, batter.”

There were 14 boys on the field, each team playing without a shortstop and with only two outfielders. The boys, mainly 5th and 6th graders, played baseball every day, all summer long, from morning to night, in this neighborhood park within a few blocks of their homes.

This game was stretching into twilight, with the sun pushing long shadows from the stately elms and maples out past the pitcher’s mound and second base and into center field. There were no lights for the field and it was getting hard to see the ball, no longer white from all the dirt rubbed in it. This would probably be the last inning.

The boy edged off second and joined his teammates in calling for the batter to get a hit. “Watch the ball, watch the ball, get a hit, c’mon, get a hit.”

The volume picked up as both sides kept up the chatter. Then it dropped. Slowed. Stopped. The boy on second base turned around to see that the boys with the bikes were riding right through the outfield, toward the diamond and toward him.

These were the boys from Jesseville, older, bigger and tougher. They had a reputation. It wasn’t good. The boy didn’t move, while the rest of the players gathered in a clump around third base. “What are you guys up to?” asked the tallest interloper.

“What does it look like?” answered the boy.

“Oh, a smartass. Just how smart do you think you are?” asked the tough kid with his shirt collar up as he pushed into the boy’s chest, knocking him to the ground. He straddled the boy’s chest and pinned his arms with his knees, then grabbed a handful of dirt from the base path and rubbed it in his face. “That’ll teach you,” he said.

The boy heard his tormentor’s four friends chanting obscenities above him, but heard nothing from his friends, the other players.

When he was finally let up, the Jesseville boys, outnumbered but unchallenged, taunted the remaining players still huddled around third base and then found their bikes and rode off.

It was near dark. The players walked over to see if the boy was okay. He pushed through them and went to find his glove. The game was over and he wanted to go home. One of the players came to him.

“I tried to get the rest of them to help,” he said, “but couldn’t get them to.”

This wouldn’t have happened in daytime, the boy thought. His grandfather was filling out the last years of his work life as the park’s caretaker, so he quietly watched over the boy, who spent almost every waking moment of many summers in the park, where there were often city-

sponsored activities for kids. The boy was always aware of his grandfather (who never interfered with what the boy did) but didn’t pay much attention to him. He was known as “Parkman” to the kids who lived near close by (something the boy didn’t know until years later). He was a thin, kind man who took care of this block of green as if he were tending his own garden. (In the boy’s earliest memory he is kneeling in a strawberry patch, picking and eating the red fruit while the old man tilled with a hoe the large garden around him.)

In the evenings, though, he was on his own, left to fend for himself like all of the other kids always were.

He found his old Schwinn, hung his glove on the handle bar, and rode through the dark out of the park and then four blocks home.

Later, as he was lying on the living room floor playing a dice baseball game he had created with friends, his mother asked him what happened at the park.

“I got in a fight,” he said.

“Did you get hurt?” she asked.

“I’m okay,” he sobbed.

Then, life changed when Little League came to town. The summer days of care-free wandering, pickup games and learning the ways of the world on your own turned into structure, uniforms and adult supervision. We gave up the freedom to grow for the safety of organization.

Mike Buda is editor emeritus of Country Lines. Email him at mike.f.buda@gmail.com or comment on his columns at countrylines.com/ramblings





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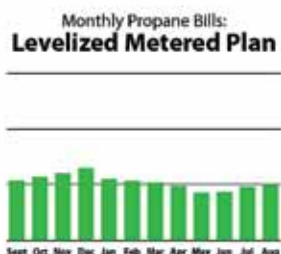
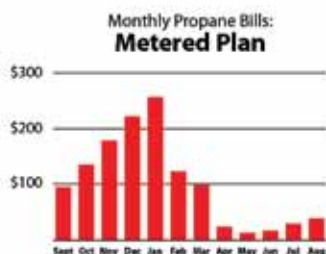


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