A Service of **HomeWorks Tri-County Electric Cooperative**

July/August 2013

Michigan COUNTRY LINES

Visit Michigan's Underwater Shipwrecks

(For divers & landlubbers, too!)

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YOUR CO-OP

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*Not in all editions

Michigan's Electric Cooperatives
countrylines.com

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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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.

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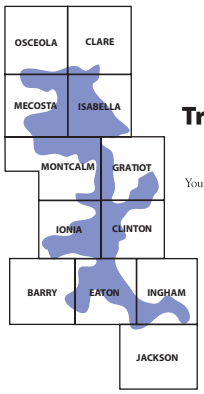

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homeworks.org

E-mail: tricoenergy@homeworks.org

facebook.com/HomeWorks.org

Editor: Jayne Graham, CCC

Why Do We Ask... ?

At your electric co-op, the offices and call center are designed to make it easy for you, our members, to ask questions and do business with us. We frequently train and cross-train and look for best practices to be efficient.

We also think it's important to eliminate as much paperwork as possible so we can take time with each of you when you need it.

We still end up asking *you* some questions, though. If you've ever wondered why we ask for phone numbers and passwords and other information, here's why:

Why do we ask you:

• ***if your phone number has changed?*** If you call to report an outage, particularly after regular hours, our outage management system can recognize your account if the number you're calling from matches the primary phone number listed on your account.

We also use your phone number to confirm your power has been restored, to notify you of a planned outage, or to contact you in case of some other service need.

• ***to set up an authorized user password on your account?*** To help maintain your privacy (and to meet federal and state consumer protection rules) we will only give out information to the member or joint member listed on the account.

If you would like someone else to have access to your information, whether they're just checking on energy use or want to make a payment on your behalf, they will need to give us the password that you set up beforehand.

• ***to pay your energy bills automatically through your bank?*** We accept payments in many different ways, from cash at the front counters at Blanchard and Portland, to checks in the mail, to credit/debit cards via computer.

However, one of the most cost-effective ways to receive and process your payment is by authorizing your bank to make your monthly payment from your account. With this service, when we send your bill to you we also send an electronic instruction to your bank with the amount and due date. In turn, they electronically transfer your payment to our bank on the due date.

Missy Robson
Customer Service Manager

You benefit because there's no chance of misplacing the bill, no need to write a check or find a stamp, and no worries about paying a late fee.

You also benefit because each member who uses Autopay helps control the cooperative's costs, keeping your rates stable.

• ***to stop getting a paper bill each month?*** We calculate it costs about $1 per month to print and mail a paper bill to you, since we do include a return envelope.

Now that SmartHub, our new online account access program, gives direct access to a pdf file of members' energy bills, many people are choosing to get their bill electronically instead.

You still have a file with an exact copy of the printed bill—you just don't have to deal with the stacks of paper or filing, and it helps your cooperative control costs. That's good for everyone!

We look forward to talking with you, whether you're one of the hundreds who stop by our offices each month, or one of the many thousands who call us. (We record over 20,000 calls every month.)

Each of those calls is an opportunity to assist a member-owner of HomeWorks Tri-County, no matter who's asking the questions.

Missy Robson

Join the conversation at facebook.com/HomeWorks.org

Blanchard-Area Centennial Farms Certified

Tucker Farm

Joseph and Eliza Ann Tucker purchased 80 acres in Rolland Township in 1881 and farmed it while bringing up their nine children. Joseph also served as postmaster at Blanchard, MI.

Their great-great-granddaughter Tracey Tucker purchased a large portion of that original farm in 2005. She raises sheep, horses, cattle, and chickens with help from her father Allan, a former Mt. Pleasant teacher, who owns the remaining acreage.

Photo: *Tracey Tucker and her father, Allan Tucker, display their new sign while border collie Kurt watches.*

Nielsen Farm

Carl and Mabel Peterson purchased 80 acres in Millbrook Township, Mecosta County, in 1912, moving from Greenville with two children. Two more daughters were born before Carl was killed in 1916 during a gravel pit cave-in accident. Mabel stayed on the farm with the help of a hired man.

Nancy Nielsen, daughter of the Petersons' youngest daughter Norma, and her husband R.J., bought the farm from Mabel's estate in 1972, and now produce corn, soybeans, oats, hay and cattle.

Photo: *Front row (L–R) – Raychel Nielsen, Josie Licari, and Kendall Bolton; center row – Brad and Kirsten Bolton, Lara Licari, and Andrew Nielsen; on porch – Jaiden Mayle, R.J. Nielsen, Nancy Nielsen, Ryan Nielsen, Cooper Bolton, and Lucas Licari.*

The Michigan Centennial Farm Association is dedicated to preserving the heritage of agriculture in Michigan. Over 6,000 centennial and sesquicentennial farms have been certified. Learn more at MichiganCentennialFarm.org.

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.

– Majean 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 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.*

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

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.

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 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.

PARTICIPANTS – Cherryland Electric: Austin Bluemel, Kris Konstanzer. **Cloverland Electric:** Jameson Pigeau. **Great Lakes Energy:** Callie Berish, Danielle Johne, 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.

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 permanently 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.

Robots in the South Pacific

Area students are using technology to help find missing WWII airmen.

Background: *The Advanced Underwater Robotics Team at Stockbridge High School needed a new laptop computer to process video from their robot as it worked. They received a Touchstone® Energy Classroom Technology Grant from HomeWorks Tri-County Electric Cooperative in March to purchase a Macbook, just in time for this year's expedition.*

By Chloe Hypes, Stockbridge High School

Our program started after the BentProp organization contacted us, needing an underwater ROV (remotely operated vehicle). Our school had gotten attention after we had earned first place at the MATE Center regional ROV competition.

Hearing about us through the local newspaper, one of the BentProp members contacted our school after learning about our successes. The BentProp organization travels to the Republic of Palau in search of World War II crewmembers still listed as missing in action (MIA) and needed a robot that could go 120 feet deep in the ocean to avoid dangerous scuba diving for their team.

This year's mission was very successful in that our ROV was functional at 140 feet deep and we successfully imaged multiple unknown shipwrecks and a Marine Corsair airplane.

To travel to Palau, we had to fundraise all year with a goal of $60,000, since we have to pay for our travel to Palau, lodging in Palau, and our entire ROV, including our cameras and the laptops we use to record video.

We do a lot of our own fundraising, along with grant writing. Our school does not help us with funding, and our computers are extremely outdated. However, we often don't have the money to afford the technology we need, so receiving grants like the one you gave us really helps our team.

Learn more…

- There will be a Discovery channel program in September on this project. Watch the team's Facebook page (facebook.com/StockbridgeRobotics) for more information and details of the DeWitt High School documentary as it becomes available.
- Lew Towler of Ann Arbor, who fought on Peleliu as a Seabee, joined the expedition for four days, and gave the team a guided tour of the battleground.
- The dives were taking place about seven miles off the coast of Palau, near a drop-off coral reef (about 140 feet deep on one side, 3,000 feet on the other). The team was headquartered in Koror, the capital city of Palau—a small town about the size of Mason, MI, according to robotics teacher Bob Richards.
- The team and robot will visit a shipwreck near Alpena the second week of school this September, to train new team members; the trip is sponsored by the Thunder Bay National Marine Sanctuary and the National Oceanic and Atmospheric Administration.

The 2013 team included eight Stockbridge High School students; two DeWitt High School students who joined the group to film a documentary about the project; and two teachers. Standing, from left, are Brad Grost (DeWitt), Jenny Spink, 4th grade teacher Josh Nichols, Jeremy Spink, Michael "Buck" Poszywak, Evan Upshur, Breanna Taylor, teacher Bob Richards, and Geoffry Croley (DeWitt). Front row, Alex Noffsinger, Chloe Hypes, and Karly Kruger.

Photos Courtesy – Stockbridge High School Advanced Underwater Robotics Team

Top: A typical view around Palau. **Bottom**: Chloe Hypes uses the laptop purchased with a Touchstone Energy Classroom Technology grant to compile video footage captured by the robot deep below the surface. **Center**: The nose of a lost U.S. Marine Corsair. **Right**: Michael "Buck" Poszywak does some fine-tuning on the robot between missions. Touchstone is a national brand/program for electric co-ops.

The Team's Work, So Far…

2012 – Joined the BentProp Project's 14th mission in Palau.

2013 – BentProp's 15th mission to Palau was joined by not only the Stockbridge team, but also the Scripps Institution of Oceanography. Tommy Remengesau Jr., president of Palau (and graduate of Grand Valley State University), visited the expedition and even dived to the Corsair wreckage.

The Stockbridge team also visited local schools, made presentations to the U.S. Embassy, and wrote three articles that were published in the local newspaper.

2014 – Chloe Hypes reports: "Next year, we plan on returning to the Republic of Palau with an improved ROV. Our main target for next year is the last missing B-24 bomber from WWII."

What is the Bent Prop Project?

During World War II, many American airmen lost their lives in the western Pacific, some in the western Caroline Islands, in what is presently known as The Republic of Palau. The ultimate fate of hundreds of these men remains a mystery today.

The ocean can bury an aircraft under sand and silt, or gradually envelop it in a shrine of coral. The jungle, similarly, reclaims a wreck over the years by letting it sink into the mud and be slowly covered by each year's bounty of leaves and vines.

(We are searching) the waters and jungles of the western Pacific, in what we hope are intelligent ways, for clues that may lead to the identification of wreck sites and the

the remains of men who gave their lives in defense of America.

Learn more at bentprop.org

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.

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

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.

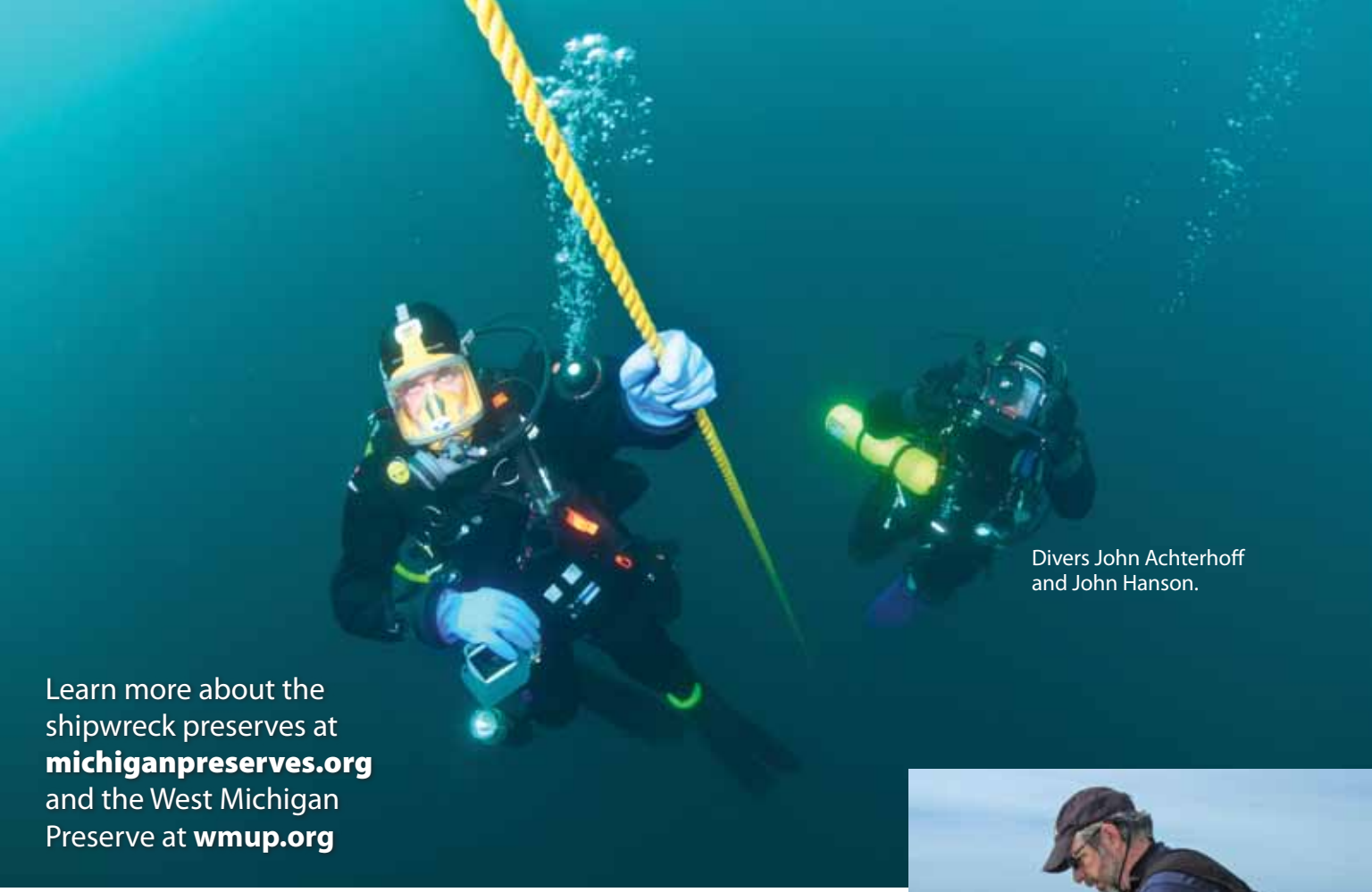
"There's the bottom," Gleason called out cheerfully after Hanson launched the ROV from the front deck. "And there's the wreck," he added a few minutes later, prompting Hanson to suit-up and go over the side.

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

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 – rectecdivecharters.com and blueheavenscuba.com
- More dive info at michiganpreserves.org

Photo – Howard Meyerson

Photo – Debbie Chase

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.

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.

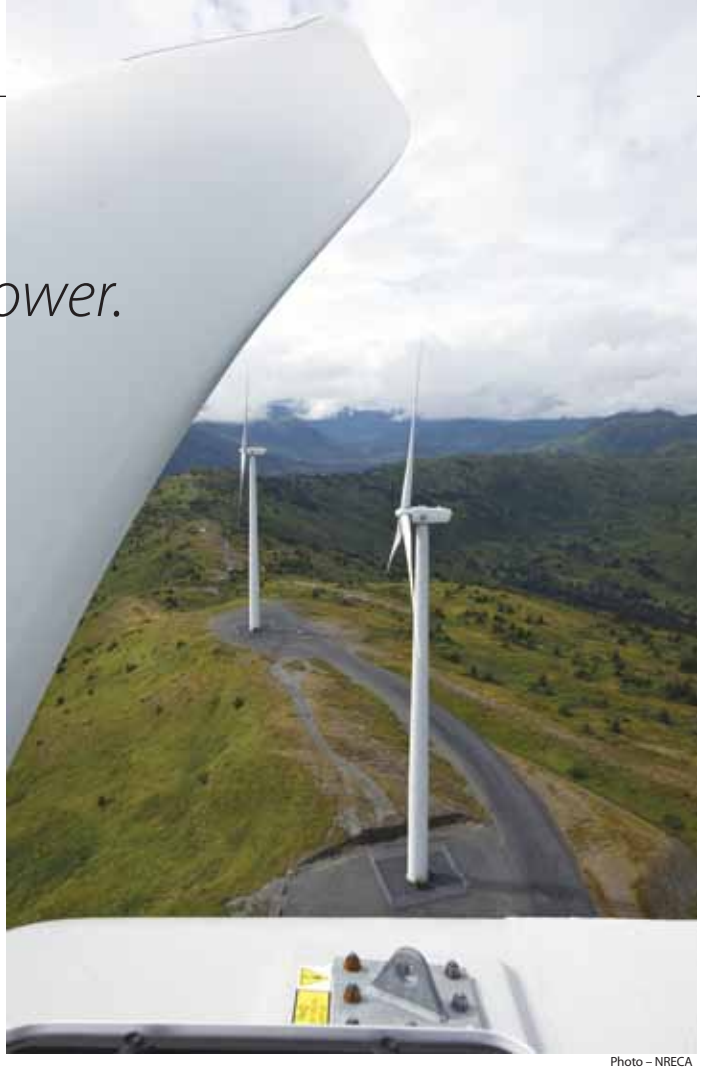


Photo – NRECA

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 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.

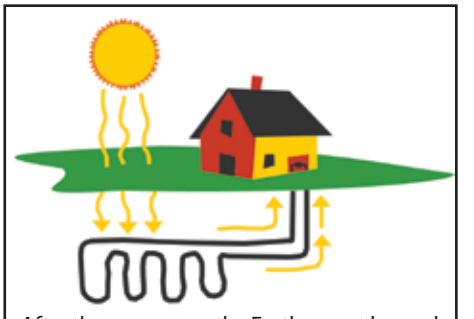
Other Uses

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).



After the sun warms the Earth, a geothermal heat pump system can use that stored heat energy to heat your home (and cool it, in a reverse process).

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.

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

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.

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.

Photos Courtesy – Megan Payment

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

▶ ***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.

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

Park, Picnic & Play

Family friendly places to enjoy the outdoors.

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

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 boosts 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. Kid's 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 rowboat 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 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, 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.

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.

1

2

3

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

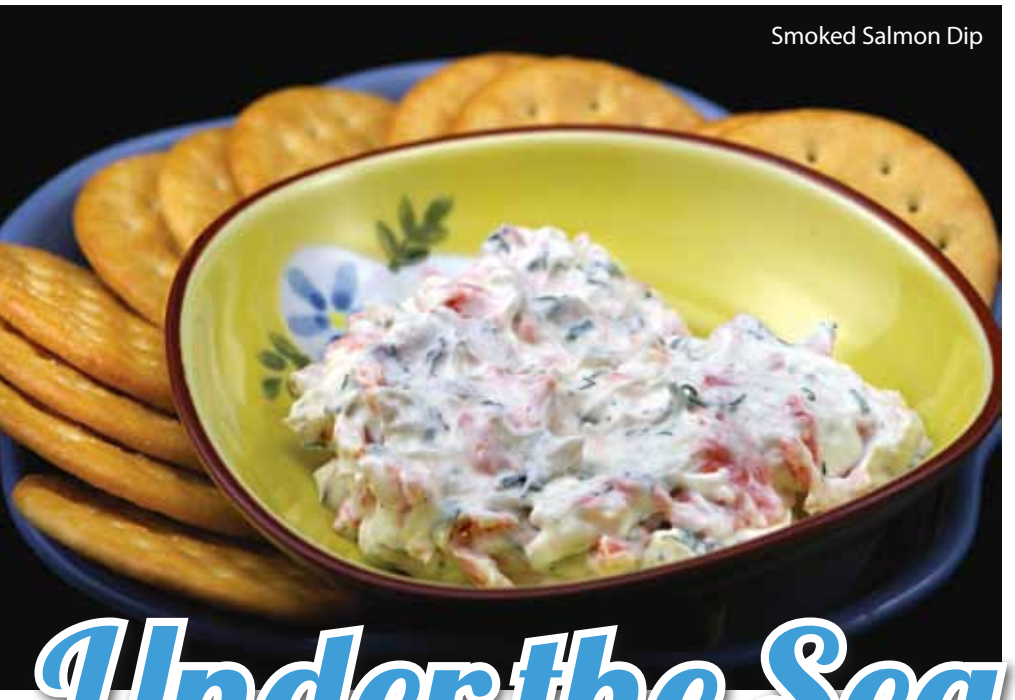
2) Learn to design an alluring vegetable centerpiece like this one by Tim Latimer. It contains edibles such as radishes, kale, Brussels sprouts, carrots, asparagus and cucumbers, accented by flowers of blue veronica, pink Astilbe, and bright white daisies. Sprigs of natural branches add height and the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

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.

Rita C. Henehan is an author, freelance writer and photographer. For more on vegetable centerpieces, visit her website, migardenerscompanion.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 minites, 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
1½ c. half and half
1½ 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
1½ 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 design 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? HomeWorks Tri-County 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.

Your Board In Action

Meeting at Portland May 20, your board of directors:

- Reviewed the first week of district membership meetings, including attendance, member questions, and the positive response to the appeal for food items to be donated to a local food pantry.
- Read and approved "Board Policy 107 – Director Attendance at Meetings" and "Board Policy 108 – Indemnification of Directors and Officers," as read.
- Approved a new, statistically valid batch meter testing methodology, which should cost less and cause fewer power interruptions for members.
- Performed the annual review of the cooperative's loan portfolio, including comparisons in interest costs with other cooperatives.
- Heard the cooperative will receive a retirement of $512,893.27 in patronage capital from 1998 and 2012 from Wolverine Power Cooperative.
- Learned there were 91 new members since February.
- Acknowledged the April safety reports, listing employee training as well as employee and public incidents.

Time Set Aside for Members to Comment Before Board Meetings

The first 15 minutes of every board meeting are available for members who wish to address the board of directors on any subject. The next board meetings will be held ***July 21 at St. Ives, Canadian Lakes, or Aug. 19 at Portland.*** Members who need directions to the office, or who wish to have items considered on the board agenda, should call 517-647-7554.

Find us on: facebook

facebook.com/HomeWorks.org

Learn more about HomeWorks by looking for our Facebook posts. For fastest response when reporting an outage, please use our toll-free number, 1-800-848-9333; if the outage is widespread, the line may ring busy, so please keep trying.

Tri-County Electric People Fund Aids Disabled Campers, Bowlers

You helped people with disabilities enjoy life a little more with your continuing donations to the Tri-County Electric People Fund, through rounding up your monthly energy bills.

Meeting May 22, the Tri-County Electric People Fund made eight grants totaling $12,959.06, including:

- $2,500 to Grand Ledge Emergency Assistance, to buy emergency needs items;
- $240 to the Adult Handicap Program, Charlotte, to assist the handicap bowling program;
- $2,500 to EightCap Camp Wah-Wah-Tay-See, Greenville, to help disabled campers with camp expenses;
- $2,134.96 to Faith United Methodist Church, Edmore, for emergency medical equipment;
- $1,682.10 to a Clinton County family for housing expenses;
- $1,590 to an Isabella County family to pay for hearing aids;
- $812 to a Mecosta County family to help with housing expenses; and
- $1,500 to an Ionia County family for housing expenses.

"Every month or so, when we review the grant applications from familiies and organizations in need, we are grateful to the members of Tri-County Electric for giving their spare change," says People Fund chairman Richard Palermo. "It all adds up to making a real difference for people, right here in our communities."

How To Apply For a Grant

Write to 7973 E. Grand River Avenue, Portland, MI 48875. We'll send you an application form, grant guidelines, and other helpful information. You'll also find details and application forms at homeworks.org.

Note: *Applications must be received by Aug. 5 for the Aug. 14 board meeting; and by Sept. 16 for the Sept. 25 board meeting.*

Making a Difference With Your Spare Change
Tri-County Electric People Fund

The Tri-County Electric People Fund is funded through Operation Round Up—members rounding their monthly energy bills up to the next dollar amount. **Rounding up averages about $6 per year per account.** The Round Up amount is always clearly marked on your electric bill, and your total annual contribution is listed on the bill in January since it is tax-deductible.

Yes! Please include my HomeWorks Tri-County Electric Cooperative and/or HomeWorks Tri-County Propane account(s) in Operation Round Up so we can help make a difference as part of the Tri-County Electric People Fund. I understand I can call and cancel my participation at any time.

Electric Account(s) # _____

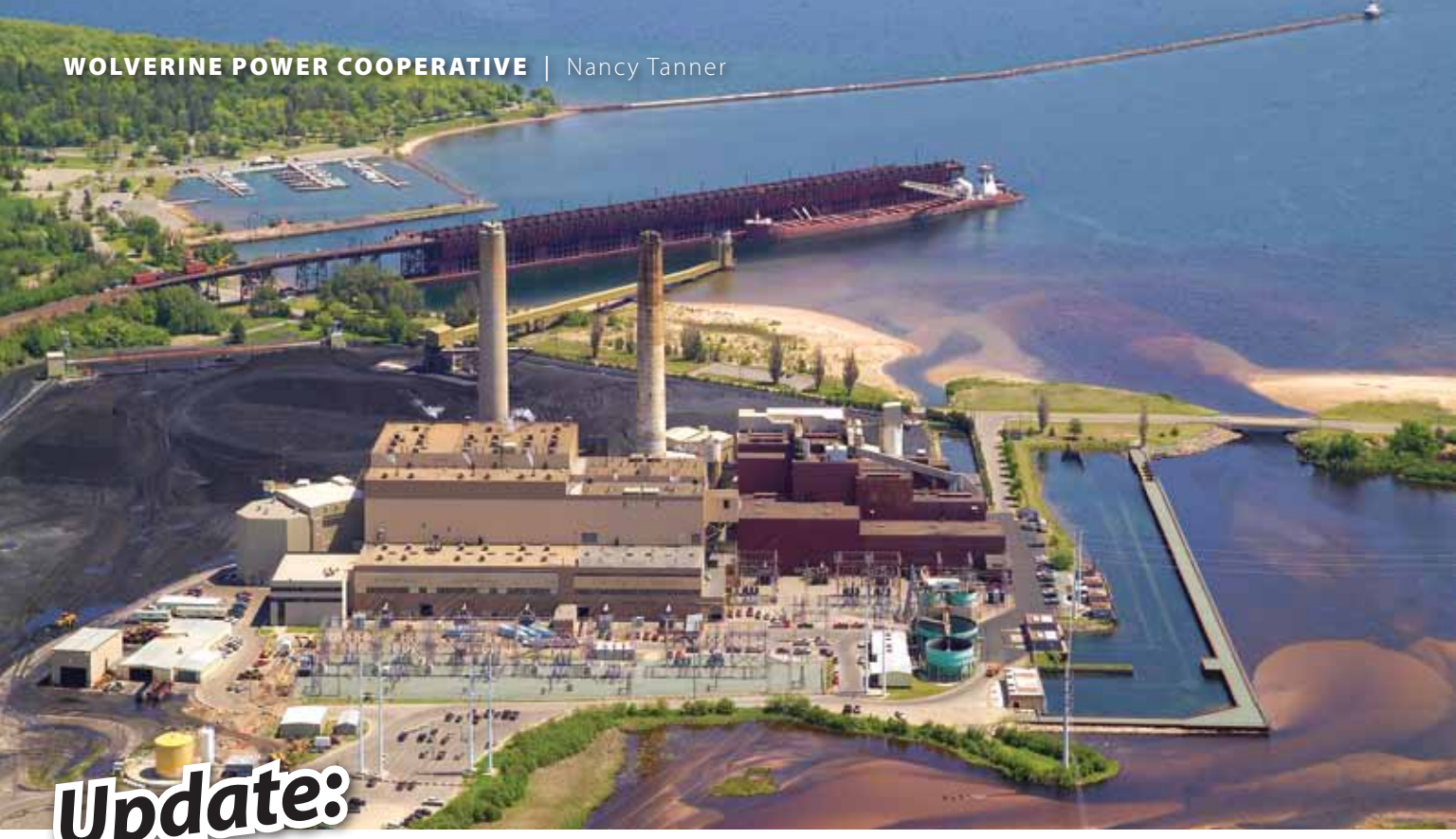
Propane Account(s) # _____

Name on account *(please print)* _____

Signature _____ Date _____

Note: if your energy bill comes to an even dollar amount each month, then you're probably already participating in the People Fund and you don't need to fill out this form. Thank you for supporting the People Fund's commitment to our communities!

Please complete this form and mail to: HomeWorks at 7973 E. Grand River Ave., Portland, MI 48875, or call 1-800-562-8232 and let us know you'd like to participate.



WOLVERINE POWER COOPERATIVE | Nancy Tanner

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 opportunity for additional comments.

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.

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

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

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 Cooperaive 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 floatation 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 (safelectricity.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.

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By Internet:

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- Select "Pay Now"
- Select your Payment Option
- Select "Make Payment"
- Key in Payment Information
- Select "Continue"
- Wait for Payment Confirmation
  (Make a note of your confirmation number)

▶ Average time to pay: 1 minute, 50 seconds

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Also at HomeWorks.org: Click on the **SmartHub** logo to log-in and view your energy use and account history.

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To sign up for recurring monthly payments from your financial institution, complete this form and return it to HomeWorks Tri-County, 7973 E. Grand River Ave., Portland, MI 48875. HomeWorks reserves the right to revoke an AutoPay subscription if bank approval is denied. Please continue to pay your bill until notified on your statement that AutoPay is active.

Yes! I authorize HomeWorks Tri-County Electric Cooperative and/or HomeWorks Tri-County Propane to charge my checking or savings account for any accrued balance on the account(s) listed:

Electric Account(s) #_____ Propane Account(s) #_____

❑ Checking Account *(attach a voided check)* ❑ Savings Account *(attach a voided deposit slip)*

Name on account: *(please print)* _____ Phone:_____

Signature: _____ Date: _____ Email:_____

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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 carefree 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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