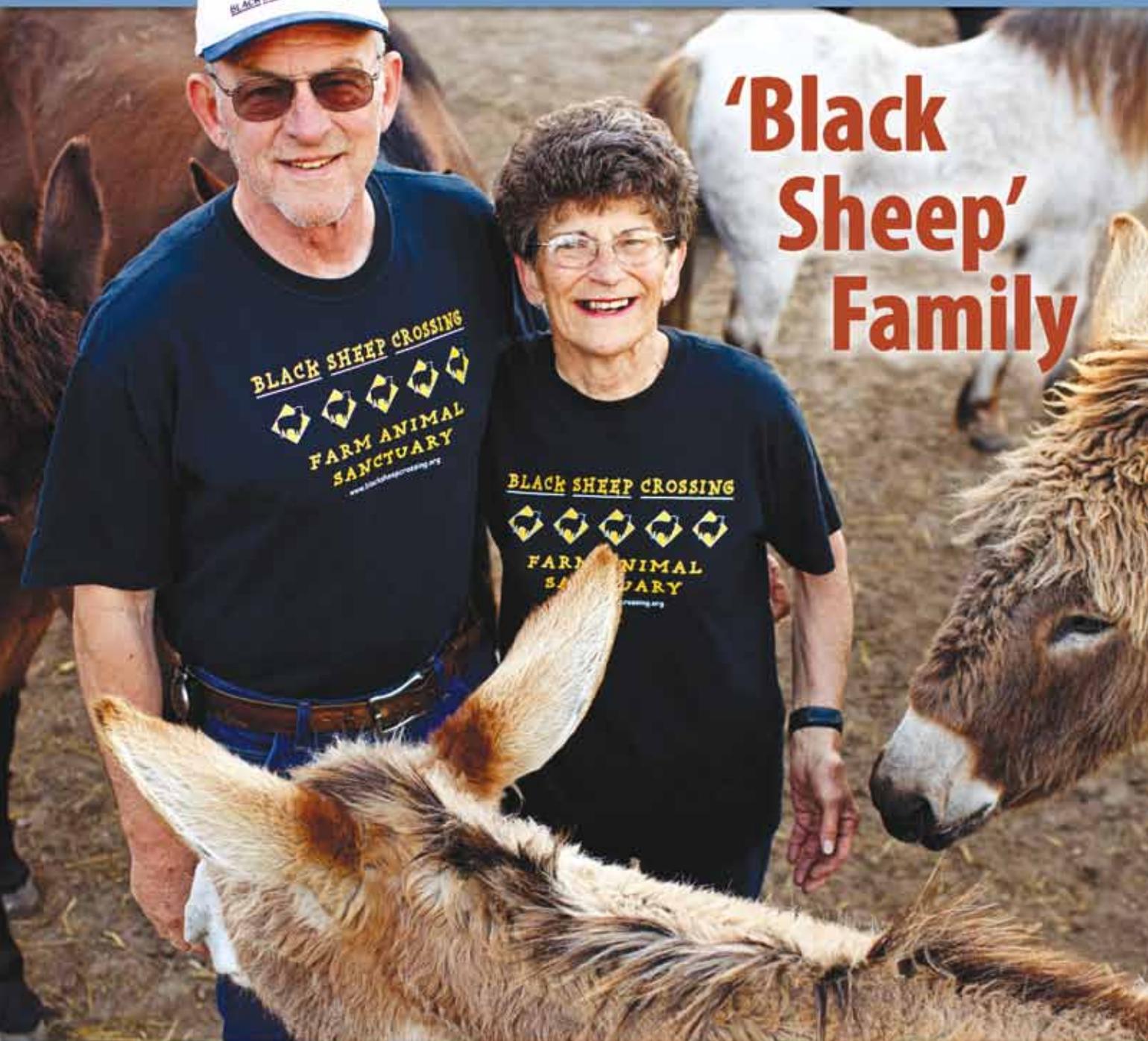


Michigan

COUNTRY LINES



'Black Sheep' Family



FURNACE ENVY

Today's fossil fuel furnaces and air conditioners simply can't "measure up" to a 7 Series geothermal comfort system from WaterFurnace. The 7 Series 700A11 is the **first variable capacity geothermal system available to homeowners and sets a new standard for performance, surpassing both the 41 EER and 5.3 COP efficiency barriers.** A WaterFurnace system taps into the **free, renewable supply of energy** found in your own backyard to provide superior heating and cooling comfort and **savings up to 70% in energy costs.** With added benefits like safe, clean, quiet, reliable operation, it's plain to see that a 7 Series makes **ordinary units seem small by comparison.** For more information, contact your local WaterFurnace dealer today. Also, ask about an equipment upgrade with the 7 Series Performance Monitoring Package, with future Wi-Fi communication connection.

YOUR LOCAL WATERFURNACE DEALERS

Bad Axe
B & D Htg
(989) 269-5280

Berrien Springs
WaterFurnace Michiana
(269) 473-5667

Big Rapids
Stratz Htg & Clg
(231) 796-3717

Caro
AllTemp Comfort, Inc.
(866) 844-HEAT (4328)

Carsonville
Certified Temperature
Innovations
(810) 300-7748

Charlotte
Applegate Home
Comfort
(517) 541-8013

Clifford
Orton Refrig & Htg
(989) 761-7691

DeWitt
S & J Htg & Clg
(517) 669-3705

Elk Rapids
K & K Htg & Clg
(231) 264-8323

Gaylord
Family Htg & Clg
(989) 732-8099

Grand Rapids
Montgomery Htg & Clg
(616) 459-0261

Grand Rapids
Total Comfort
Resource, LLC
(616) 406-3182

Hart/Ludington
Adams Htg & Clg
(231) 873-2665

Ionia
Home Experts
(800) 457-4554

Jackson
Comfort 1 Htg/
Lenawee Htg
(517) 764-1500

Kalkaska
Kalkaska Plmb & Htg
(231) 258-3588

Lapeer
Porter & Heckman
(800) 445-4328

Manistigue
Hoholik Enterprises
(906) 341-5065

Marquette
Swick Plmb & Htg
(906) 228-3400

Mount Pleasant
Walton's Htg & Clg
(989) 772-4822

Muskegon
Adams Htg & Clg
(231) 873-2665

Onaway
Standard Htg
(989) 733-8309

Palms
Lakeshore
Improvements
(989) 864-3833

**Sault Ste Marie/
Kinross**
Great Lakes Services Inc.
(906) 632-5543

Traverse City
Geofurnace Htg & Clg
(231) 943-1000

Traverse City
D&W Mechanical
(231) 941-1215

Webberville
Applegate Home
Comfort
(800) 377-2272



visit us at waterfurnace.com



Editor
Gail Knudtson

Associate Editor
Doug Snitgen

Design Editor
Cindy Zuker

Publisher
**Michigan Electric
Cooperative
Association**



12



15



16

Photo - Barn Theatre Publicity/Augusta, MI

Photo - 831 Creative

DEPARTMENTS

4 Readers' Pages
Letters, Michigan Heritage Quilt, don't steal copper, college planning, and more!

16 Home Cooking
It's the berries!
Christin McKamey & Our readers

22 Safety
How to plant the right trees, shrubs

COLUMNS

12 Outdoors
Marathon paddler: "Amazing Al"
Howard Meyerson

14 Family
Decisions, decisions—Michigan's expanding public school choices
Linda Wacyk

21 House & Home
Lower humidity, lower electric bill
James Dulle

24 Ramblings
Memories
Mike Buda

FEATURES

8 Cover Story
'Black Sheep' family has a sanctuary for animals
Nick Edson

10 Our Energy
New hope for nuclear in small modular reactors
Angela Perez

11 Driveway revolution—
electric car choices are growing
Angela Perez & Brian Sloboda

20 New thermostats,
energy killers and fresh air

13 Michigan-Made
Fox Barn Winery
Kath Usitalo

15 Barn again—summer
stock theatre
Kath Usitalo

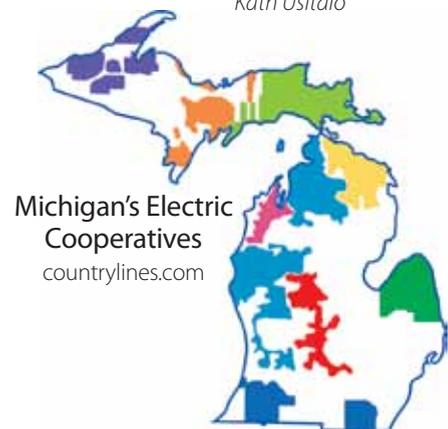
YOUR CO-OP

Pages specific to your electric cooperative:
Cover, 2-3, 6-7, 18-19,
22-23, back

On the Cover

Marty and Cherry Scott, owners of Black Sheep Crossing Farm Animal Sanctuary, are shown getting some affection from friends. In the Sanctuary's 15-year history, the Scotts have helped 159 animals.

Photo - Elizabeth Price/pricelessphotography.com



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

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

POSTMASTER: SEND ALL UAA TO CFS.

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.

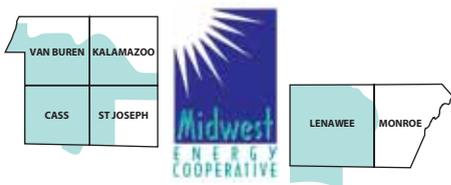
Association officers are **Ken Swope**, Midwest, chairman; **Robert Schallip**, Cloverland, 1st vice chairman; **Jon Zickert**, Cherryland, 2nd vice chairman; **Eric Baker**, Wolverine Power, secretary-treasurer; and **Tony Anderson**, Cherryland, past chairman. **Craig Borr** is president and CEO.

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

The appearance of advertising does not constitute an endorsement of the products or services advertised.

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





PRESIDENT & CEO
Robert Hance

CASSOPOLIS OFFICE
P.O. Box 127 (901 E. State Street)
Cassopolis, MI 49031-0127
M-F, 8 a.m.– 5 p.m.
Drive-up window: M-F, 8 a.m.–5 p.m.

TELEPHONE
269-445-1000 or 800-492-5989
Fax: 269-445-3792

PAW PAW OFFICE
59825 S. LaGrave
Paw Paw, MI 49079
M-F, 8 a.m.–1 p.m. and 1:30–4:30 p.m.

ADRIAN OFFICE
1610 E. Maumee St.
Adrian, MI 49221
M-F, 8 a.m.–5 p.m.

TELEPHONE
517-263-1808 or 800-492-5989

INTERNET TeamMidwest.com



E-MAIL info@teammidwest.com

EDITOR
Patty Nowlin

BOARD OF DIRECTORS

Clarence (Topper) Barth *Chairman*
Three Rivers

Kenneth Swope *Vice Chairman*
Adrian

Colyne Sorsby *Secretary*
Cassopolis

John Green *Treasurer*
Dowagiac

Ron Armstrong, Lawton

Jerry Campbell, Decatur

James W. Dickerson, Bloomingdale

Harry Gentz, Blissfield

Ben Russell, Constantine

Investing In Our Future

I remember turning 50 and becoming increasingly aware of the reality of retirement and the importance of paying more attention to how I was investing for my post-career life. As 60 looms, the conversation is becoming more real and regular for my wife and me.

As important as it is to provide for your family's financial future, I believe it is also critically important to invest in our community. We all do that in many ways by giving our time, talents and resources to efforts we believe in. Your cooperative also does that, acting on behalf of our members to strengthen and support the communities in which we all live and work through active volunteer efforts, community education, sponsorships and various forms of other support.

One of the areas we're especially passionate about is education. As members of this greater community, we have an obligation and responsibility to invest in today's students as we look to them to be tomorrow's leaders. We are all impacted by the collective successes and failures of our public school systems, and our time, talents and resources are well spent when we actively invest in these institutions.

We've done it for many years here at your cooperative, providing support to academic and extracurricular initiatives, mentoring students through community- and school-based programs, facilitating career education and experience, and actively engaging as classroom and school volunteers. Every time we invest in the life of a student in a meaningful and intentional way, we create opportunities for better and brighter futures for all.

I'm particularly honored to share two recent initiatives and how we used your cooperative's resources to engage in positive partnerships and affect meaningful change. In April, members of our community relations and operations teams worked together to conduct our annual Electrical Safety Month contest. We partnered with

seven school systems across the service territory and educated nearly 700 fourth grade students about electrical safety using our interactive hotline demo. After our visit, students created posters depicting something about the program, and winning designs were printed onto t-shirts and provided to students. It's a fun and interactive way to engage and educate, and will ultimately create safer kids, families and communities.

In another effort, we celebrated the work of public schools by presenting "Strengthening Schools" grants totaling \$30,018. The program was developed this year through a partnership with Touchstone Energy® to support public school academic initiatives. We were overwhelmed by the response as regional teachers and administrators submitted over 70 applications representing requests in excess of \$130,000. A subcommittee of co-op members, acting on behalf of the entire



Robert Hance
President/CEO

As members of this greater community, we have an obligation and responsibility to invest in today's students as we look to them to be tomorrow's leaders.

membership, selected 22 projects and presented awards in May. The requests were many and varied, all representing the creative ways educators are working to meet increasingly stringent requirements as they tackle the diverse needs and challenges of today's students and families. Another worthy investment.

We're more than poles and wires. We are innovation, passion, integrity and community. We deliver a value that is critical to daily life, while also investing in communities (see pg. 6 for more examples) to create a better and brighter future for today's members and those in generations to follow. Your ownership in this cooperative is at work for you, your family and your community.



2012 Annual Report

Independent Auditor's Report

We have audited the accompanying balance sheets of Midwest Energy Cooperative as of December 31, 2012 and 2011, and the related statements of revenue, patronage capital, and cash flows for the years then ended. These financial statements are the responsibility of Midwest Energy Cooperative's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Midwest Energy Cooperative and subsidiary as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

*Harris Group
March 23, 2013*

Director's Compensation Disclosure

Elected directors of Midwest Energy Cooperative are provided with an annual retainer of \$1,200 and a \$500 per diem for meetings attended on behalf of the cooperative. The chairman receives an annual retainer of \$2,200 and \$550 for meetings.

STATEMENTS OF REVENUES

Years ending December 31, 2012 and 2011 (Dollars in 000)

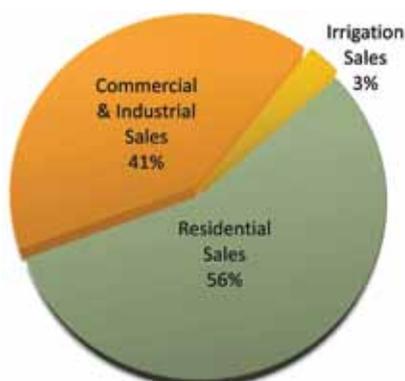
	2012	2011
Operating Revenues	\$ 72,203	\$ 68,022
Operation & Maintenance Expense	62,367	58,019
Depreciation, Taxes, Interest, Etc.	<u>10,022</u>	<u>9,778</u>
Operating Margin	<186>	225
Capital Credits	2,140	1,658
Other non-operating income (exp)	<u>706</u>	<u>823</u>
Net Margins (Loss)	<u>\$ 2,660</u>	<u>\$ 2,706</u>

BALANCE SHEETS

Years ending December 31, 2012 and 2011 (Dollars in 000)

ASSETS		
Utility plant in service, net	\$ 103,728	\$ 100,168
Other assets and investments	19,975	17,739
Current assets	8,877	7,166
Deferred charges	<u>1,629</u>	<u>2,610</u>
Total Assets	<u>\$ 134,209</u>	<u>\$ 127,683</u>
EQUITIES AND LIABILITIES		
Equities	\$ 35,330	\$ 33,093
Long-term debt	80,567	76,272
Accumulated operating provisions	7,011	6,982
Current liabilities	10,637	10,702
Deferred credits	<u>664</u>	<u>634</u>
Total Equity and Liabilities	<u>\$ 134,209</u>	<u>\$ 127,683</u>

Where Our Sales Come From



Where Your Dollar Goes



Letters & More

Reader letters, Michigan Heritage Quilt, stealing copper, energy tip and more. It's all here on your Reader's Pages.



Wood Furniture & Dogs

I know this is probably a very unusual request, but in the May issue of *Michigan Country Lines* there is an article on page 24 (Ramblings/ Mike Buda/ "For the Love of Wood"). [It's about the beauty of handcrafted furniture.]

I have on a few different occasions run into people that have a dog just as is pictured in the top right of the article. I like the looks as well as the behavior of the breed. What is the breed of the dog in the picture? Do you know the owner of the dog and might they tell me a little about the breed? I know this is a highly unusual request...but if you have the time it would be appreciated.

— Jerry O'Kenka
Perrysburg, Ohio

The dog is mine—an Australian shepard named Bandit, and

I wrote about him just after I adopted him 2½ years ago. Aussies are not really Australian, but were developed by Australians who were brought to the American West in the 1800s to herd sheep. They probably descend from border collies and regular collies. They are very smart and good family pets, although they bond to one person. They make good house pets, but would rather work, so walking is a good substitute. Bandit gets me out walking most days, or he follows me around the yard when I'm outside. I think they are wonderful dogs.

— Mike Buda

Saskatoon Berries

Country Lines has numerous requests for more information on Neil Moran's May story on Saskatoon berries ("The Saskatoons Are Here," at countrylines.com). Some are calling this blueberry copycat a new "superfruit" because of it's health benefits and ability to withstand both drought and harsh winters.

Two sources for buying the plants are: Michigan Saskatoon Farm & Nursery, 7924 Saylor Road, Williamsburg, MI 49690; call 231-360-0311 (see saskatoonmichigan.com); or call Gurneys Seed and Nursery, 513-354-1492.

See facebook.com/SaskatoonBerryInstituteOfNorthAmerica to blog with people who like to grow them.

— Gail Knudtson, Ed.



Quilt Needs a Permanent Home

Dear Readers,

Do you remember the Michigan Heritage Quilt? It was created from 36 winning squares in a *Country Lines* contest held in 2002. Entrants were asked to use "Our Michigan Heritage" as the theme for their quilt square, and what resulted were personal memories, images and traditions from throughout our state sewn together into a beautiful quilt.

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. It is now time to find it a permanent home.

The *Country Lines* staff wishes to see it displayed in a public place (i.e., museum, library, airport, municipal building, school, etc.) so that people can continue to see and admire it. 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.

— Cindy Zuker, Design Editor

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

Contact your electric co-op—they maintain the mailing list. See page 2 for your co-op's contact information.



Energy Efficiency

Tip of the Month

Lighting accounts for about 13 percent of the average household's electric bill—cut costs by choosing new lightbulbs that have increased output and longevity. Some cost more up front, but prices are dropping as technology advances. Options include color, brightness, and even dimming and multi-way functions. Combining lights with automatic sensors can cut costs further.

Source: Cooperative Research Network

Stealing Copper is a Crime and It's Very Dangerous!

Soaring metal prices have been blamed for an increase in thefts of copper and aluminum, primary components of electric distribution lines. Michigan electric co-ops have also been subject to this crime, which can lead to power outages, additional maintenance and expenses, diminished system reliability, and even serious injury or death.

Copper in wire is appealing to thieves who seek to sell the metal for scrap. Burglars will often climb power poles, scale fences and break into buildings to steal the precious metal. The soaring metal prices have prompted thieves to become bolder and more inventive.

"Stealing copper may seem like a quick way to make a buck, but it's illegal, costly and life threatening," says Mike Roush, vice president of operations at Midwest Energy Cooperative, which has been directly affected. "Working with metal and electricity is a dangerous combination, even for trained employees using proper equipment."

Thieves may not understand that they are risking their lives by taking copper from substations, where high transmission voltage is stepped down to a lower current for distribution lines. All the lines have a potentially deadly charge.

As a co-op member-owner, your local electric co-op urges you to help stop this crime by using the following guidelines to guard against electrical dangers and prevent copper theft.

▶ Never enter or touch equipment inside a substation; stay away from power lines and anything touching a power line.



Attempts to steal copper wire can cause serious injury or death.

▶ If you notice anything unusual with electric facilities, such as an open substation gate, open equipment or hanging wire, contact us immediately.

▶ If you see anyone around electric substations or electric facilities other than utility personnel or contractors, call the police.

▶ Install motion-sensor lights on the outside of your house and business to deter possible thieves.

▶ Store tools and wire cutters in a secure location, and never leave them out while you are away.

▶ If you work in construction, do not leave any wires unattended or leave loose wire at the job site, especially overnight.

▶ Help spread the word about the deadly consequences that can result from trying to steal copper or aluminum.

▶ If you have any information regarding stolen co-op property or equipment, please contact the police and your electric co-op immediately.

Kids and Finances Reap the benefits of college planning today.

While you may be unable to avoid the "Mom, can I borrow \$20 for gas?" questions that eat into your budget as your kids grow up, there's one thing you can do to help you (and them) get ready for tomorrow's financial demands: Prepare for college expenses now.

Two-thirds of 2011 college graduates had an average of \$26,600 in student loan debt, according to the Institute for College Access & Success. No matter how young or old your kids are, consider these five options to prepare for future expenses.

● **Start a regular savings account that's earmarked for college.** Both you and your kids can contribute to this account, and your relatives can give you or your kids money to deposit, as well. It's easy and convenient: You can set up an account anywhere—at your local bank, credit union, or through an online bank. Even setting aside small amounts regularly can add up to a lot of money over time. For example, Bankrate.com's Simple Savings calculator shows that \$100 monthly saved over 15 years could add up to \$20,972.66,

assuming a 2 percent yield on your savings, compounded monthly.

● **Start a Section 529 Plan.** This is an education savings plan operated by a state or educational institution designed to help families set aside money for college. The money is controlled by the account owner, not the child. Anyone can contribute to these plans on the child's behalf, and contributions may be tax exempt.

● **Open a Coverdell education savings account.** This is a custodial account that can be used to save for elementary and secondary school, and college-related expenses. Income maximums apply, so not everyone will qualify for this account type. The money deposited grows tax-deferred until it is used for educational expenses. Withdrawals from the account may be tax free if used for tuition, fees, books, and other expenses. Any money not used for education must eventually be distributed to your child.

● **Open a Uniform Gift to Minors Account or a Uniform Transfer to Minors Account** (UGMA or UTMA; the title differs by state).

Under this, a parent or grandparent typically will gift money to the account. The money is owned by the child but controlled by the custodian until the child reaches the age of majority, which is set by state law. At that point, your child assumes control of the account. You can't restrict how the money is used, and the account cannot be transferred to another beneficiary.

● **Buy U.S. savings bonds.** Certain savings bonds can be purchased to pay for college tuition and fees without having to pay federal income tax on some or all of the interest during the year the bonds are redeemed. Certain restrictions apply—visit TreasuryDirect.gov to learn more.

College costs will undoubtedly continue to rise. By starting a savings program today, you and your child can better handle those expenses. For more planning help—including how financial tools noted in this article should be titled, and the tax ramifications of certain options—ask a financial or tax professional.

—Doreen Friel

Midwest in the Community

Giving back to our communities is one of the core values of Midwest Energy. We believe in doing what we can, individually and as a family of employees, to strengthen and support the communities in which we live, work and serve. Following are some of the ways we impacted our communities over the last few months.

Five Star

As the 2012-13 school year wraps, officials at Dowagiac Middle School are celebrating the successful addition of the Five Star program to its extracurricular offerings. Team Midwest helped bring the program, which challenges students to live by the core values of respect, responsibility, integrity, sacrifice and courage by connecting them with volunteer coaches/mentors who exemplify those values in their own personal and professional lives.

Five Star officials report that Dowagiac had the largest program launch of any school in the program's history. Matt Severin, school principal, says 144 students, over one-third of the school's population, participated on 19 teams with 25 coaches/mentors during the winter season, and 55 percent of those participants maintained or improved their grade point average during that period. Students also had fewer missing assignments and missed days of school.

"There's just so much to say about Five-Star," Severin says. "In a nut shell, I am really pleased with the program and I am very excited to continue with them next year. I'm thankful to Midwest for introducing this to DMS!"

Becca (photo 1), a volunteer coach with Five Star, helps Dowagiac Middle School student Matthew with his homework during a recent afterschool session. Five Star gives middle school students who may not be part of other extracurricular activities like sports or band an opportunity to connect with other students and volunteer adult mentors. This helps students hone their leadership skills and become stronger community members.



Cass Soccer Scoreboard

The Cassopolis High School girls' soccer team (photo 2) celebrates the installation of the new soccer field scoreboard, supported by Midwest Energy Cooperative in partnership with Touchstone Energy.

Pet Refuge

A volunteer crew of Team Midwest employees recently rolled up their sleeves to help do some outside clean up work at Pet Refuge's new facility. Pet Refuge is a nonprofit "no kill" animal shelter that strives to place unwanted and abandoned pets into responsible permanent homes.

The team removed a fence and surrounding vegetation so the shelter can expand the available outdoor space for its animals. Volunteers Billy Meggs (photo 3, left) and Kurt Schantz worked together to tackle one of the tough problem areas.

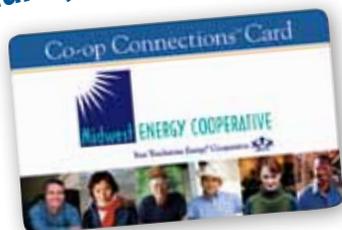


Scan this with your QR reader to visit our online photo album and see more photos from these and other "Midwest in the Community" events.

Midwest Energy Cooperative offices will be CLOSED for the INDEPENDENCE DAY holiday on Thursday, July 4.
Payments may be made at the drop box and will be posted on the next open business day.
Have a happy and safe Independence Day!

Scholarship Winners Announced

Healthy Savings Discounts!



Simply show your Co-op Connections® Card at a participating provider and you will receive a discount. The card can be used by you, your spouse and your legal dependents. It's easy and free!

Locating Program Providers: For benefit details, how-to-use information, FAQs and to locate providers that participate in the Healthy Savings program, call 800-800-7616 or visit healthysavings.coop. Be sure to have your Co-op Connections Card handy.



Prescriptions – Use your Co-op Connections® Card and receive a 10% to 85% discount on prescription drugs at over 60,000 national and regional pharmacy chain stores including CVS, Walgreens, Walmart, Target and more.



Dental Care – Save 20% to 40% on most dental services including orthodontics, periodontics and endodontics.



Vision – Get 20% to 60% savings on eyewear.



Hearing Aids – Discount of 35% off hearing aid prices at 2,000+ Newport Audiology Center locations.



Lab Work & Imaging – Savings of 10% to 60% off usual charges for MRI, CT and other lab procedures.



Chiropractic – Take advantage of 30% to 50% savings on diagnostic services and treatments.

Co-op Connections cards are also available by calling us at 800-492-5989.



Allison Keffer



Kelsey Richmond



Abbey Schroeder



Kristyn Turner

Midwest Energy Cooperative recently awarded \$1,000 college scholarships to four 2013 high school graduates. Applications were judged based on academic achievements, school and community activities, honors and awards, and an essay.

Any high school senior whose parents or guardians receive service from Midwest Energy and whose primary residence is in Midwest's service territory were eligible to apply.

"All of our award winners have demonstrated an excellent balance of academics and other involvement during their high school careers," says Bob Hance, Midwest president/CEO. "We're proud to use this scholarship program to help support today's student leaders on the path to becoming tomorrow's business and community leaders."

The 2013 scholarship winners are:

Allison Keffer, daughter of Kenneth and

Jennifer Keffer of Tecumseh. Allison is graduating from Tecumseh High School and will begin studies this fall at Columbia College, Chicago. This award was funded by Midwest and presented through the Lenawee County Education Foundation.

Kelsey Richmond, daughter of Steve and Julie Richmond of Marcellus. Kelsey is graduating from Marcellus High School and will begin studies this fall at Southwestern Michigan College.

Abbey Schroeder, daughter of Charlie and Rena Schroeder of Wauseon, Ohio. Abbey is graduating from Wauseon High School and will begin studies this fall at Kent State University in Ohio.

Kristyn Turner, daughter of Bob and Becky Turner of Dowagiac. Kristyn is graduating from Dowagiac Union High School and will begin studies this fall at Central Michigan University.

Whole House Generator Load Control Program

A whole-house generator can provide peace of mind and helpful backup during a major storm, and also help you save on energy costs when incorporated into your cooperative's load control program.

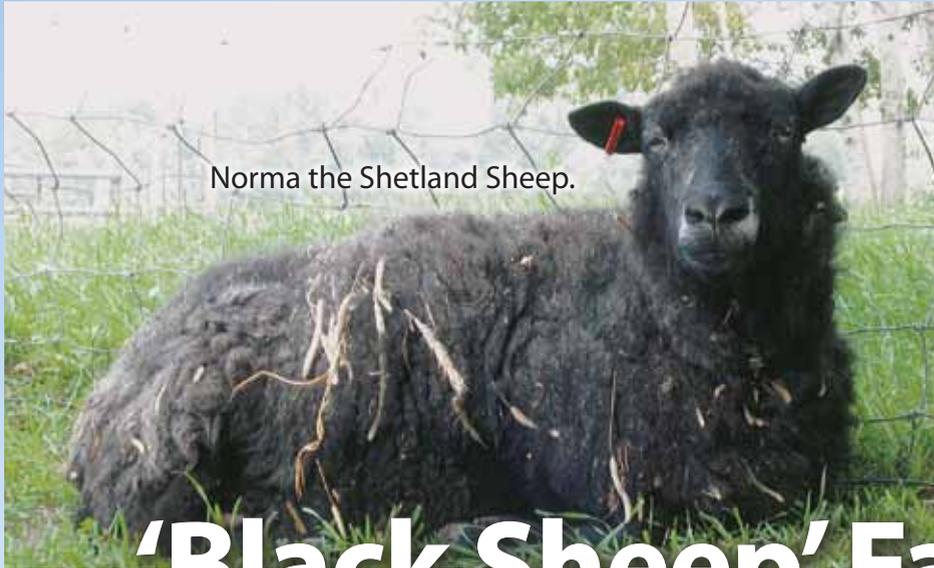
Midwest Energy's Whole House Generator Load Control Program is available to all residential members who have a whole-house generator with a transfer switch. A remote device, installed by qualified co-op personnel at no additional charge to you, allows us to transfer your electric load from the grid to your backup generator during times of peak system demand or system emergencies. In exchange for the ability to control the load, you pay a lower Distribution Charge (\$.027107 compared to \$.031015/kwh) and a lower Energy Charge (\$.059220 compared to \$.076260/kwh) for all of your consumption on the meter. Load control is limited to



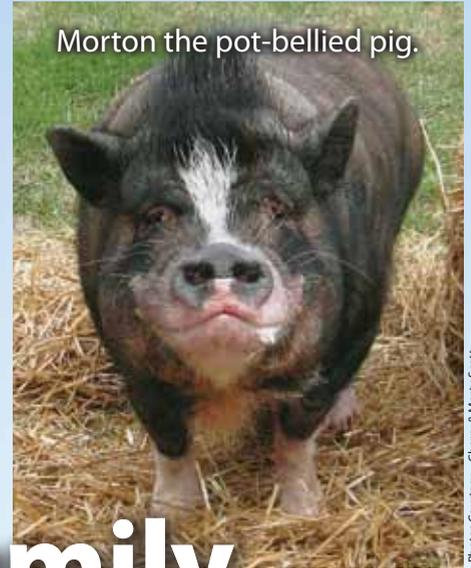
eight hours per day with a maximum of 400 hours per year, and occurs predominantly between 3 and 9 p.m., when the system is at its peak.

Besides the one-time cost for the generator and transfer switch, you should also evaluate the cost of fuel to operate the generator when considering this program.

For more information about the whole-house control rate, please contact the customer care department at 800-492-5989.



Norma the Shetland Sheep.



Morton the pot-bellied pig.

Photos Courtesy - Cherry & Marty Scott

'Black Sheep' Family

Cherry Scott gazes out at her Lee-lanau County "Field of Dreams." Gazing, in itself, is something of a miracle because she was going blind before a new medical procedure helped stabilize her eyesight.

What she and her husband Marty see now is a farm they own called Black Sheep Crossing—a no-kill animal sanctuary they have had since 1998—15 years of giving a second-chance to animals.

"After we raised our family, we were looking for something else to do with our lives," explains Cherry, whose family owned a gas station in downtown Northport for years. "One day we found this farm, fell in love with it, and started this sanctuary. I never pictured myself as living on a farm. But what we found here—well, Marty and I call this place 'the end of our rainbow.' We have learned so much from these animals."

There are 74 animals of all kinds, shapes and sizes on the 100-acre sanctuary. They range from seven friendly donkeys to two Scottish Highland steers (Sir Patrick and Sir

A 100-acre animal sanctuary in Northport.

Edward), to pot belly pigs, dogs, birds and cats. And they all get an annual physical.

"We have names for all 74 of them," Cherry says with a smile. "They are our family, so they all need names."

In the 15 years since they started Black Sheep Crossing, Marty and Cherry have helped 159 animals. Where do they go once they get here?

"They spend the rest of their days here," she says. "We have a cemetery where we bury them at the end of life. Each animal has a little headstone. And we have a small memorial service when they pass. It's amazing how the animals seem to understand those moments. We've had services surrounded by donkeys and dogs. They are very respectful, like they know what's going on."

And, in many ways, Cherry and Marty are convinced they do understand.

"These animals have done more for us

than we've ever done for them," adds Marty. "We've learned so much about things like patience and compassion from them."

Cherry agrees.

"We give tours several times a week at 9 a.m., because that's the best time for these animals. We work on animal time, not people time," she says. "And we ask our visitors to be respectful because this is their home. And you wouldn't believe what people come away with when they visit here."

"They tell us it feels different here, there's an aura they say you don't experience very often."

Cherry and Marty say that "aura of goodness" emanates from the barnyard. But those who know the Scott family say it starts with them. And that's hard to argue when you watch them interact with the animals, calling out their names and even using nicknames for each animal.

"We're not taking any more animals, that's something we've agreed on," Cherry adds. "This is the family we'll see through."

The Scotts get the electricity to run their farm from Cherryland Electric Coopera-

Rosie (L-R) and 29-year-old Norman are horses living at the sanctuary, and in front is the only mule, Frances, who is also Rosie's mother.

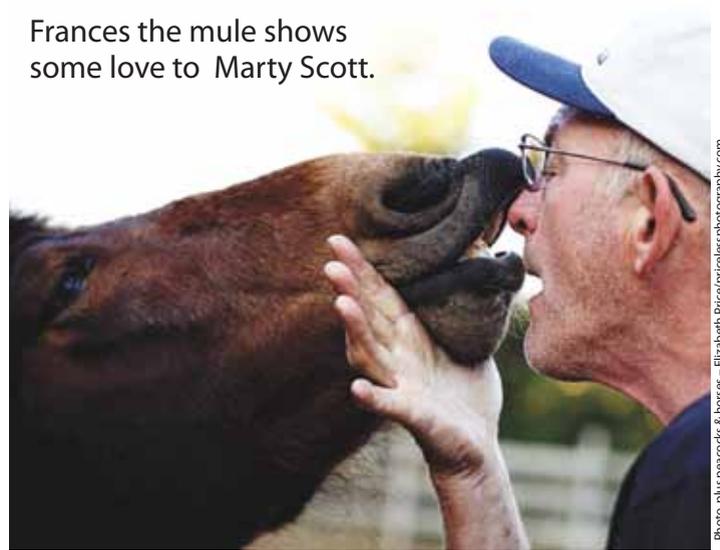


To learn more about this farm, visit blacksheepcrossing.org or call 231-386-7234.



Sir Patrick and Sir Edward, Scottish Highland Steers.

Frances the mule shows some love to Marty Scott.



Photo, plus peacocks & horses - Elizabeth Price/pricelessphotography.com

tive. They get some of the money to operate their nonprofit sanctuary from contributors around the state and country—stretching from Kalamazoo to Engadine and from people in 15 different states.

“Once people get here, they seem to like what they see and observe,” Cherry says. “Our tours take up to two hours, but we don’t do it for entertainment. This isn’t a petting zoo, this is a sanctuary. People like to see these animals in their environment.”

Marty admits that owning and maintaining a sanctuary like Black Sheep Crossing isn’t for everyone.

“I think we’re three-quarters crazy,” he says with a laugh.

But Cherry wouldn’t change a thing.

“What we’ve experienced in these 15 years has been amazing,” she says. “You see the bonding that takes place between animals... the trust, the caring, the love. And you learn from it.”



Koeze the peacock struts his stuff.

Skydiving Event is Farm Fundraiser

- *Are you 50 or older?*
- *Is skydiving on your “bucket list”?*
- *Would you like to help animals in need?*

If you answered “yes” to these questions, you can help the nonprofit Black Sheep Crossing fundraising opportunity on Saturday, Aug. 3, in Northport. If you would like to skydive and do your best to raise \$1,000, call Lynne or Bill Watson at 231-946-0495 to register.

Last year’s event raised \$23,000 for animals sheltering at this farm.



Standard donkeys (L–R), Axle, Virginia, Sigwalda, Mary-Pete and Silvia.

New Hope for Nuclear in Small Modular Reactors

This article is second in a series on how electricity is generated. The first, in January, was about clean-coal technology. Watch future issues for stories about renewables and other fuel sources.

There's new excitement about nuclear power in the energy business, due to the advent of small modular reactors (SMRs).

This evolution has been spurred by the U.S. Department of Energy (DOE), which has awarded a dollar-for-dollar match to the Generation mPower LLC consortium to deploy up to five 180-megawatt (MW) SMRs at the Tennessee Valley Authority's (TVA) abandoned Clinch River Breeder Reactor site in Oak Ridge, Tenn. The consortium of utilities and industry contractors includes TVA and 13 generation and transmission (G&T) cooperatives. Wolverine Power Cooperative, Michigan's only G&T electric cooperative, is a participant.

Generation mPower LLC says its SMRs, housed in an underground containment structure, will include significant safety features built into the design, such as the ability to shut down "passively" (with help from gravity) if a malfunction occurs. The advanced integral pressurized water reactors can also be air-cooled (big reactors require millions of gallons of water daily) and the plants

will be able to store high-level nuclear waste on-site for their 60-year expected life.

The SMR units, generally smaller than a rail car, cost much less than a full-size commercial nuclear power plant: \$750 million compared to \$5 billion to \$10 billion for a 1,110-MW to 1,700-MW facility constructed from the ground up. Industry leaders are particularly enamored with the technology's modularity—pre-fabricated units can be added as needed, avoiding the risk associated with locking up billions of dollars in a generating station during uncertain economic times.

"The mPower reactor will reduce risks connected with deploying nuclear power and become a flexible, cost-effective solution to meet U.S. energy needs while lowering greenhouse gas emissions," Babcock & Wilcox, a nuclear equipment developer and manufacturer, touts on babcock.com. "Each mPower reactor that is brought on-line will contribute to the reduction of about 57 million metric tons of carbon dioxide emissions over the life of the reactor."

Commercial operation of the consortium's SMRs could begin as early as 2020, and the reactors—at 83 ft. tall and 13 ft. in diameter—will be about one-third the size of traditional nuclear plants.

"With the ability to add more modules, you can adjust your energy output to closely match your demand needs," says Art Thayer, energy efficiency programs director for the Michigan Electric Cooperative Association. "If proven successful by the Tennessee project, this power source could lead to



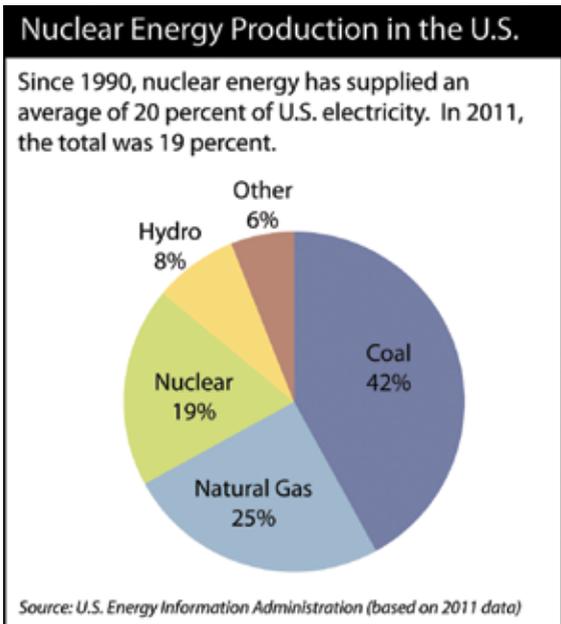
Conceptual drawing of an underground containment structure housing two Babcock & Wilcox mPower reactor modules.

improvements in energy production and efficiency, air quality, energy security, international competitiveness, quality of life, and a reduction of carbon emissions and other pollutants."

Nuclear power accounts for about 19 percent of the nation's electricity supply, according to the U.S. Energy Information Administration (EIA), and about 10 percent of the electricity produced by G&Ts. And currently, eight G&Ts have minority shares in 12 different nuclear units owned and operated by large investor-owned utilities. One co-op G&T maintains a majority interest: Raleigh-based North Carolina Electric Membership Corporation owns 61.5 percent (694 megawatts) of a nuclear station unit. Overall, co-op investment in nuclear energy totals 2,710 MW.

In Michigan, while Wolverine does not have nuclear power in its generating fleet, it's an important part of the co-op's overall portfolio, supplying 23 percent of its members' needs in 2012. The nuclear power used by non-Wolverine co-ops averaged between 15 percent and 25 percent in 2012. Find percentages for each co-op's mix of all fuels used to generate power annually in *Country Lines* (March and September issues). At countrylines.com, click on "My Co-op"/co-op name/March issue.

Besides Wolverine Power Cooperative and Babcock and Wilcox, Bechtel Corp. (engineering/construction), and FirstEnergy Corp. (parent of 10 investor-owned utilities in Maryland, New Jersey, Ohio, Pennsylvania and West Virginia), are also part of the Generation mPower consortium.



Driveway Revolution

When it comes to all-electric vehicles, choices are growing and include well-known manufacturers such as Chevrolet, Nissan and Toyota, along with a growing number of specialty manufacturers or retrofit kits. Plug-in electric vehicle (PEV) sales are also growing, boosted by government incentives and consumer interest in environmentally-friendly products.

Despite media attention and apparent consumer interest, however, PEV sales remain a disappointment for manufacturers, with 17,500 units sold in 2011 and about 53,000 in 2012, with Chevy Volt leading the pack last year at 23,461.

Comparing Cars

Not all electric cars are made the same. The 2013 Nissan Leaf boasts a driving range of about 75 miles. Once its lithium-ion batteries are drained, however, you better be near a 110-volt power outlet for recharging or have the phone number for roadside assistance handy.

The 2013 Chevy Volt and Toyota Prius Plug-in both offer a gasoline safety net for their pack of batteries. The Volt will run on a charge for 38 miles, and the Prius has an 11-mile range. Once the batteries are drained, a gas-powered generator produces electricity to keep the car rolling. The 2013 Ford Focus Electric, which sold only 685 units last year, has a 76-mile range.

The Volt can recharge by plugging into a traditional 120-volt outlet. This differs from traditional gas/electric hybrids like the original Toyota Prius, for which batteries are recharged only by the gas engine and a regenerative braking system. (In hybrids, batteries essentially supplement the gas motor.)

All-electric vehicles carry higher price tags than comparable conventional gas-fueled versions—typically \$10,000 to \$15,000 more, even after including federal tax incentives ranging from \$2,500 to \$7,500 (depending on battery capacity). Tax credits will phase out as manufacturers produce more vehicles (learn about electric vehicle tax breaks at tinyurl.com/bd93j5n or speak to a qualified tax advisor). Over time, batteries should

become cheaper to build, thereby lowering electric vehicle costs.

As a quick comparison, the Cooperative Research Network—the research and development arm of the National Rural Electric Cooperative Association—examined the 2013 Chevy Volt, with a suggested retail price of \$39,145 (not including the federal tax credit) to the 2013 Ford Focus, which has a starting price of \$16,200.

According to the U.S. Department of Transportation, the average American drives 13,476 miles per year. Chevrolet estimates the average Volt driver will spend \$1.50 daily for electricity (based on 12 cents per kilowatt-hour) and a small amount of gas. Meanwhile, the average Ford Focus owner will spend almost \$5.16 daily for gas.



The 2013 Nissan Leaf has a driving range of 75 miles.

Photo - © Nissan

At \$4 per gallon for gas, the average Volt driver would save \$1,335 annually but would need to rack up that amount for almost 10 years to equal the difference in sticker price. Of course, actual savings depends on the number of miles driven and car options. It should be noted that using electric accessories such as air conditioning, heat, and a defroster affect mileage and drain electric car batteries faster.

Charge!

Electric cars can be recharged using a traditional 120-volt outlet with a dedicated 15-amp circuit found in most homes. Called Level 1 charging, this takes up to 10 hours to charge a Volt and over 20 hours for a Leaf. The Prius, with its smaller battery, can be charged in three hours.

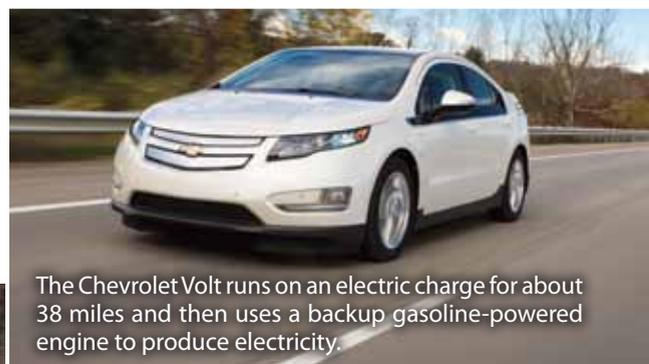
Consumers may decide to buy a Level 2 charging station to speed things along. These devices recharge through a dedicated 240-volt circuit, similar to that used for electric clothes

dryers. According to “Edmunds Car Buying Guide” (edmunds.com), Level 2 charging for the all-electric and the Volt can be done in as little as four hours.

The Volt’s Level 1 charging at 1.4 kilowatts roughly equals running a toaster running for eight hours straight; its Level 2 charging, estimated at 3.5 kilowatts, is similar to a heating and air-conditioning system running continuously for three to four hours.

Chevy estimates that installing a charging station usually runs \$1,200 to \$1,500. But the tab can go much higher, especially if a household’s electric system needs upgrading to handle the increased load.

All this extra load on the electrical system



The Chevrolet Volt runs on an electric charge for about 38 miles and then uses a backup gasoline-powered engine to produce electricity.

Photo - © General Motors

from PEVs will still reduce the overall emissions of various air pollutants—even when accounting for emissions from power plants needed to produce the energy for recharging, according to studies by the Electric Power Research Institute (Palo Alto, Calif.), a nonprofit research consortium of electric co-ops and other electric utilities. In fact, plugging cars in at night when power costs and demand are at their lowest can actually help an electric system run more efficiently. However, the electrical characteristics of even a smaller number of PEVs could test utilities by lowering the life expectancy of distribution transformers and cables because of increased heating.

Is an EV right for you?

Whether a plug-in electric vehicle fits your lifestyle depends on how many miles you drive daily, whether you can afford the cost difference between an electric and gas-burning car, and how many amenities you want your vehicle to have.

Only time will tell if the peace and quiet ignition of an electric car will replace the traditional engine’s roar.

Sources: Cooperative Research Network, Green Car Reports, Ford



Marathon Paddler:

Al Widing and Hailey McMahon as they near the finish of the 2012 Spike Challenge race.

Photo - Mark Sloan

'Amazing Al' is Ready to Go the Distance

There is little to compare with the spectacle at the start of the annual AuSable River Canoe Marathon. Thousands of cheering fans line the river's banks in downtown Grayling. Their collective din reaches a crescendo when the start gun goes off as racers run to the river's edge carrying their canoes, primed for the 120-mile paddling adventure that finishes well after sunrise in Oscoda.

Al Widing has been among the toned, young athletes for 40 years, so he's the oldest paddler in pack. And when the 2013 AuSable River Canoe marathon begins July 27, the 88-year old Mio resident plans to be there again.

"I am looking forward to it. I'd just love to finish," says Widing in typical, understated fashion, conveying little sense of having become a legend in competitive paddling circles.

Widing's first AuSable marathon was in 1955, and he holds the record for being the oldest paddler to finish. His fastest race was in 1999 when at 74, along with Robert Bradford, of Lapeer, he set the senior division record finishing in 15 hours, 21 minutes and 22 seconds.

Widing and Oscoda paddler, Bob Gillings, also won back-to-back first-place finishes in the 1964 and 1965 Texas Water Safari, a punishing 260-mile marathon billed as "The World's Toughest Canoe Race."

"He's definitely a humble guy," says Ryan

Matthews, of Oscoda, the marathon statistician. "We call him 'Amazing Al', but he hasn't embraced the nickname. He always said he is just an average guy who likes to paddle. But, there is no denying that what he does at this age is amazing."

Widing likes the challenge. The race requires extreme endurance, the ability to sit for hours paddling at a rapid pace, trying to edge out over 70 teams of top professional paddlers from around North America.

The course winds downstream for 120 miles. The race goes on no matter what weather. Paddlers in the money keep a grueling pace of 60 to 75 paddle strokes per minute. They have to navigate in the dark and negotiate the river's natural obstructions along with portaging around dams.

"The toughest part of the race is when I have quit because (my paddling partner) is hurt," Widing says while sitting in the comfort of his den in the home he built along the AuSable River. Widing lives there with his wife, Dorothy, his 12th grade sweetheart and mother of their six children.

Strangely, Widing doesn't consider himself tough. He smiles and says: "Tough' is meat you can't chew. I do it because I like the challenge."

But Hailey McMahon knows another Al Widing. She is the 21-year-old nursing student from Grayling who teamed up with

him for the 2012 AuSable Canoe Marathon.

"Anyone who paddles with Al will tell you he is hard to train with. He pounds out every mile on six-hour training paddles," McMahon explains. "He is an amazing guy and super nice. He has a hard exterior, but if you can get him to laugh, he melts."

A lifelong vegetarian who grew up on a Holly farm and later became a carpenter, Widing remembers his first canoe. It was a beat-up wooden vessel that cost \$25. He and his brother Roy entered the 1955 AuSable Marathon with it, a pair of homemade paddles, and a pocketful of hopes. But their aspirations were dampened just 14 miles downstream.

"We didn't finish," Widing says softly. "We had put a good hole in the bottom. There was water all around our feet."

"It's always fun and funny racing with Al," says Lynne Witte, of Mt. Clemens. Witte is president of the Michigan Canoe Racing Association (MCRA), an organization founded in 1956 and built by Widing and others. "He's headstrong but not hard to get along with. I've paddled in the bow with him.

"Michigan has always been a huge canoe-racing state, and Al brought more than I could ever say to MCRA and the sport of professional paddling. None of us made any real money in canoe racing, but he's won the Texas Safari and that was a big deal."

See ausablecanoeamarathon.org or call 989-348-4425 for details about the canoe marathon.

Asparagus Wine Is 'One of a Kind'

As a girl, Kellie Chase had her fill of picking asparagus on the family's West Michigan farm. Making wine from the vegetable—making any kind of wine—was as far-removed from her thinking as the big city excitement she longed for. “I was one of those kids who thought I'd move to the city, never to return.” But after sampling life elsewhere she longed for the country and came home. “I just really missed the laid-back atmosphere,” she explains.

In 1991 Kellie married Todd Fox, whose great-grandparents had launched the family farm business in 1947, and she learned to appreciate her own roots, which span five generations of farmers. “I've embraced it. I love family history and learning how my parents and grandparents evolved in farming.” In 2005, she started a market selling fruit and produce from the farm, based in Shelby, near Silver Lake Sand Dunes and Lake Michigan.

A trip to Traverse City wineries inspired Kellie and Todd to try winemaking, and she

attended Michigan grape and wine conferences and workshops. “I started buying books and learning as I went,” taking online classes that required working several days at an Iowa winery. In 2008, she began making fruit wines and two years later planted her first grapes.

Although most of the 1,700-acre farm is dedicated to fruit, Oceana County is prime asparagus territory—it's the home of the National Asparagus Festival—and the veggie is among the Fox crops. Kellie says Todd challenged her to turn the green spears into something drinkable and, skeptically, she added water, sugar and yeast to mashed asparagus. The result was a sweet wine that is not the color of the main ingredient. “This is kind of neat,” she recalls thinking of her experiment. She labeled it “Odd Fox” and quickly sold out of the first wine of its kind. “People love the novelty of it,” she says. The next year she quadrupled the batch, and it was gone in two weeks.



Kellie Fox makes wine from traditional sources like fruit and grapes, but she's also the creator of a popular wine made from asparagus (right).

Now in her third year of marketing Odd Fox, she is bottling 400 to 500 of the 375 ml bottles, which she sells for \$16 at The Fox Barn Agricultural Marketplace and Winery. She recommends serving the wine with appetizers like cheese and crackers, but has one customer who buys eight or 10 bottles each year for a dinner party featuring asparagus in every course, from hors d'oeuvres through dessert.

Kellie, with some help, now also makes wine from sweet and tart cherries, apples, peaches, plums, pears, blueberries, raspberries, grapes and asparagus. Most samples are complimentary at the tasting bar (due to limited quantities, a \$2 fee applies to Odd Fox and the raspberry wine), and

there's a short menu of appetizers to enjoy with a glass on a patio behind the barn.

The handsome, century-old, 2,000-square foot Fox Barn is a seasonal home for the farm's fresh fruit, Michigan-made foodstuffs including jams, maple syrup, salsa and honey, and culinary-related products. Kellie sees it as an agricultural tourism destination with many more possibilities, and it appears the next generation shares her enthusiasm: son Noah is a freshman at Michigan State University studying agricultural business management, and daughter Emelie is a high school senior that's interested in the farm market, winery, and working with customers. Kellie is thrilled that their Barn “provides a great opportunity for people to interact, and for people who are so far removed from the farm...to see how (farming) is done.”

The Fox Barn, with its classic 1946 Diamond T pick-up truck parked out front, is open Saturdays and Sundays in May and October, and seven days from June through September. It's a short drive from Hart, which hosts the 39th National Asparagus Festival (see below).

Festival Salutes One of Michigan's Top Crops

Join the “Age of Asparagus” during the National Asparagus Festival June 7-9, 2013, in Hart, near the Silver Lake Sand Dunes and Lake Michigan. The 39th annual event celebrates the green spear that grows profusely throughout the sandy, well-drained soil of Oceana County; the area between South Haven and Benton Harbor also contributes to Michigan's asparagus crop of about 25 million pounds annually. Our state is the third largest asparagus producer in the U.S. (California and Washington grow more).

Most Asparagus Festival events are free and happen on Saturday, including a Spear-it 5K Walk/Run, Royale Parade and a food show featuring tastes of asparagus dishes (admission fee). Don't miss Saturday's tours to a local asparagus farm where growers talk about the crop, planting and harvesting, and the industry. There's also entertainment and an Arts & Crafts Fair on Friday and Saturday.

Visit nationalasparagusfestival.org, email nationalasparagusfestival@yahoo.com or call 231-259-0170 for more info.

For asparagus recipes, facts and tips, check out the Michigan Asparagus Advisory Board website: asparagus.org.

The Fox Barn Agricultural Marketplace and Winery

500 S. 18th Ave. (B-15)
Shelby, MI 49455
foxbarnwinery.com
231-861-8050
(Email through website)



► **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.



Decisions, Decisions

Michigan's expanding public school choices.

Researchers estimate the average adult makes about 35,000 decisions a day. If that's true, I'd guess that parenting decisions add a couple thousand a day extra to the mix.

Perhaps no parenting decision is more important than choosing the right schools. Today's parents can enroll their children in one of Michigan's 550 public school districts. They can also choose from among about 1,000 private and parochial schools that operate here.

Beyond these traditional choices, however, families now have the option to attend a free public school in the next town, the next county, or even via cyberspace.

Public Schools of Choice

Sections 105 and 105c of Public Act 300 of 1996 permit school districts to enroll students who live in neighboring districts without needing permission from their home district. There are some limits, however. The chosen district must participate in schools of choice, and must have openings in the grades your children will attend. Districts are required to notify the public about their schools of choice status no later than mid-August. Most, however, make that announcement earlier in the year to allow the district (and families) to better plan.

Timelines and rules related to Schools of Choice are available from the Michigan Department of Education, at michigan.gov/mde (type "schools of choice" into the search bar) or call 517-373-3324.

Public School Academies (Charter Schools)

A Public School Academy (also known as a charter school) is a state-supported public school operating under a charter contract issued by a public authorizing body. Charter schools may include grades K–12 or any combination of those grades. They may not charge tuition nor screen out students based on race, religion, gender, or test scores. If more students apply than the school can

accept, the school must hold a lottery to decide which students to accept.

Like teachers in traditional public schools, charter teachers must be certified and "highly qualified." Charter school students participate in state standardized tests such as the Michigan Education Assessment Program (MEAP). Charter schools cannot be religiously affiliated.

Michigan recently raised the cap on the number of charter schools allowed to operate in Michigan, so expect to see new charters opening in the coming years. Look for a "Charter School FAQ" at michigan.gov/mde or visit charterschools.org/for-parents (517-374-9167).

Cyber Schools

Michigan students have increasing options when it comes to online learning. Two large programs offer "blended" learning options in which students enroll in one or more online courses while still working with teachers in their home districts. Michigan Virtual University (MVU) operates the oldest and

Is an online school a good option for your child?

Jay Bennett, instructor and course coordinator for Michigan Virtual University, suggests that before enrolling in a cyber school of any kind, parents ask:

- Is my child motivated?
- Is he or she a self-directed learner?
- Will he have the discipline to complete work and log-in to the courses on a regular basis?

The answers to these questions could predict success in an online program. He says MVU's highest performing students are generally those that are highly motivated and have the best supports in place.

"Online learning needs to be a collaborative effort and must include support from parents, the school providing credit and the school providing the course/instructor," Bennett says.

largest of these programs, with students enrolled in more than 15,000 courses. GenNET, a consortium operated by the Genesee Intermediate School District, has over 500 participating districts.

Public Act 205 of 2009 allowed the formation of full-time online schools for the first time in fall 2010. Consequently, two statewide virtual charter schools—K12 Inc. and Connections Academy—accepted more than 4,000 students from across Michigan in 2011-12. Some local districts and ISDs also offer online programs. For example, in rural Eaton County, southwest of Lansing, the ISD operates the Relevant Academy, a dropout recovery program for students ages 16-19. Parents can check to see what's available in their area.

Homeschooling

Michigan parents have the right to homeschool their children, and the numbers of families exercising that right increase every year. Plus, a growing number of homeschool networks support parents in their efforts. The actual number of Michigan homeschooling families is unknown, since homeschools are not required to register with the state unless the student has special needs and is requesting special education services from the local public school or intermediate school district.

You can learn more at michigan.gov/documents/home_schools_122555_7.pdf.

Still more choice to come?

Parents face a dizzying array of choices, to be sure—one that will not shrink any time soon. Gov. Snyder, in his 2011 "Special Message on Education Reform" proposed a new "Any Time, Any Place, Any Way, Any Pace" public school learning model he believes would help expand dual enrollment, blended learning, online education and early college attendance.

"Education opportunities should be available 24 hours a day, 365 days a year," Snyder said in the address.

Still, the vast majority of Michigan's 1.5 million school children attend their local neighborhood schools, which also offer families more choices within each district. Educators are learning that one size does not fit all when it comes to teaching and learning.

Linda Wacyk is a regular Country Lines freelance writer, educator, grandmother and content empty-nester.





Photo Courtesy - Barn Theatre Publicity/Augusta, MI

The Barn Theatre of Augusta sits proudly in between Kalamazoo and Battle Creek.



Photo - Susan K. Park

Delilah de Wylde plays famous country western singer Patsy Cline in a summer theatre production at the Red Barn Playhouse in Saugatuck.



Photo Courtesy - Barn Theatre Publicity/Augusta, MI

A shot from The Barn Theatre (Augusta) production of the musical comedy "SPAMALOT" in 2012. It's a parody of the King Arthur legend.

Summer Stock Theatre: Barn Again in Michigan

With today's many entertainment options, it's surprising that the "let's put on a show!" spirit of 1930s-era movies lives on in barn theatres across the country. The summer stock theatre tradition actually dates to 1919 when shows—mostly lighter musicals, comedies and mysteries—were performed by touring troupes or resident companies that launched careers on stages outdoors, under tents and in barns.

Michigan is home to three barn theatres, including one of the country's few remaining Actors Equity (union) summer stock houses. As the Barn Theatre of Augusta launches its 67th season, producer/director Brendan Ragotzy relates how his parents founded the original Village Players in neighboring Richland in 1946, but three years later were forced to move.

Director Jack Ragotzy and actress Betty Ebert Ragotzy searched in vain for a new theatre home until, just two weeks before their 1949 season opened, they found a never-used dairy barn. "It was a grey day when they turned onto the farm's dirt driveway," tells Brendan. "When they saw the barn, the clouds opened up, the sun beamed down...Kismet!" The handsome structure, its soaring ceiling made of curved beams with no cross-bracing, had a single lightbulb and no running water. Yet, within two weeks the show went on and, with the exception of 2010 when it was dark due to the economy, this Barn Theatre has operated continuously. "It's a gorgeous gal," Brendan says of the 484-seat barn, which

is a Michigan Historic Site.

Its professional company draws on the talent of apprentices from the Barn Theatre School, which each season accepts about 24 students who have completed at least one year of college. "Barnies" learn and work behind the scenes and on-stage with the pros in an intense summer of honing their craft. Alumni include Johnathan Larson, who went on to create "Rent", and actors Jennifer Garner, Lauren Graham, Tom Wopat and Robert Newman. Following each of the six main-stage shows, apprentices and seasoned talent perform in a cabaret setting.

Despite increasing economic competition, Brendan, who worked on his first show at age 10, remains optimistic in carrying on his late parents' vision with his wife Penelope Alex, an actress who is also the School's dean. Whether or not their four kids follow the spotlight, "Lady Luck has been very fortunate for the Barn," says Brendan. "We've had great local support; that's been the key to our survival."

At The Red Barn Playhouse in Saugatuck, the Lakeshore Arts Alliance (LAA) is also working to keep the house lights on. Housed in a 1914 horse barn, it was converted to a theatre in 1948 and over the years, says LAA Board Chairman John Huyge, "It has been opened and closed a half-dozen times." Now leased by the LAA as a home for arts education and performance, volunteers have remodeled the 250-seat theatre into a year-round venue that includes films and concerts.

The LAA, whose executive director is John's

Check their 2013 schedules:

The Barn Theatre

barntheatre.com
13351 West M-96, Augusta
269-731-4545

Red Barn Playhouse

redbarnsaugatuck.com
3657 63rd St. at Blue Star Highway,
Saugatuck, 269-857-5300
lakeshorearts@comcast.net

The Barn Theatre

barntheatre.net
242 S. Ridge St., Port Sanilac
810-622-9114

wife Pat Huyge, is working to buy The Red Barn property and open an academy for the performing arts similar to the intern program of its heyday. "This barn was an important part of the entertainment in the community," says John. "It reflects back to a time in history when things were less complicated."

Keeping things simple in a 150-year old venue, the community theatre group at The Barn Theatre in Port Sanilac has entertained summer audiences "on a shoestring budget" since 1980. Andy Fabian, village council president and owner/chef at The Van Camp House restaurant says, "People come from miles around to have dinner and go to a show. It's really a great little happening." The Thumb area venue is in a casual, rustic setting for about six performances between June and September, and he assures, "It's the most genuinely cool place to be."

Kath Usitalo writes about destinations and the Great Lakes State. Her blog is greatlakesgazette.wordpress.com.

French Raspberry/
Blueberry Josephines



It's the berries!

Fresh picked or purchased at the market, berries can be used in so many different ways. Enjoy these tasty berry recipes and fulfill your craving for summer.

French Raspberry/Blueberry Josephines

- 1/2 c. butter, softened
- 1 8-oz. package cream cheese
- 1 1/2 c. flour
- 1/2 t. baking powder
- 1 c. fresh blueberries
- 1 c. fresh red raspberries
- granulated sugar
- 1/2 c. powdered sugar
- 1/2 t. vanilla
- 1/4 t. mace or nutmeg
- 2 t. grated orange rind
- 2 c. heavy cream for whipping

Cream butter until soft and fluffy. Add cheese and mix until smooth and well-blended. Stir in flour and baking powder. Shape into a ball; wrap in plastic wrap and chill for one hour. Roll out to 1/4-inch thickness, cut into 12 3 1/2-inch rounds. Place on a lightly greased cookie sheet and prick well with a fork. Bake at 400° for 10 minutes, or until lightly browned; cool. Gently combine berries sprinkled lightly with granulated sugar; set aside. Combine remaining ingredients; beat until stiff. Arrange pastry rounds on platter

or individual plates; top each with a generous spoon of whipped cream and some of the berries. Top with a second pastry round, more whipped cream and berries. Serve!

Janice L. Thompson, Martin

Red Berry Mousse

- 1 envelope unflavored gelatin
- 2 T. cold water
- juice of 1 lemon
- grated zest of 1 lemon
- 1 pint raspberries
- 1 pint strawberries, quartered
- 2 T. creme de cassis liqueur
- 2 egg yolks
- 1/2 c. sugar
- 2 c. whipping cream

Combine gelatin and water in a small sauce pan and set aside to soak for 5 minutes. Stir the lemon juice into the softened gelatin. Add the zest, raspberries, strawberries, and creme di cassis. Bring gently to a boil, stirring frequently, and then set to cool to room temperature. Combine egg yolks and sugar in small bowl and beat until pale yellow. Transfer to double boiler and cook over sim-



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

mering water, whisking until hot and slightly thickened, 10 to 15 minutes; set aside to cool. Fold the berry mixture into the cooled custard. Whip cream with mixer until it forms soft peaks, and gently fold into the mixture. Scoop the mousse into a glass bowl or wine goblets and refrigerate until set. Garnish with raspberries or sprigs of mint. Enjoy!

Betty Hahn, Cornell

Sweet Berry Pizza

- 1 pizza dough
- 1 egg
- 1 c. farmer's cheese
- 1/2 c. sugar
- 1 T. vanilla
- 1 c. fresh, tart fruit (red currents, cut-up apples, prune-plums, strawberries)

Combine egg, sugar, and vanilla; whip until smooth. Mix in farmer's cheese; stir in fruit. Make sure mixture is spreadable but not runny, then spread over pizza dough. Bake at 425° for 10-12 minutes. Makes one medium pizza. Enjoy as a meal or as a dessert.

Lea Wojciechowski and her mother Anna, Troy

Fresh Berry Grilled Chicken

4 boneless, skinless chicken breast halves

Marinade:

2/3 c. apple juice

1/3 c. pomegranate juice

1/8 c. apple cider vinegar

1/2 t. coarse salt

1/8 t. ground white pepper

1/8 t. ground ginger

Fresh Berry Sauce:

1 c. apple juice

1/4 c. blackberry jam

generous pinch of allspice

3/4 c. red raspberries, halved if large

3/4 c. dark sweet cherries, pitted, halved

1/2 c. blueberries

Place chicken breasts in a zip-lock freezer bag. Whisk together marinade ingredients and pour over chicken. Press air out of bag and seal. Turn to coat evenly; refrigerate for 1 to 2 hours. Remove chicken from marinade; discard marinade.

Prepare grill for direct cooking over medium heat. Place chicken on grill and cook, covered with grill lid, for 8 to 10 minutes or until juices run clear, turning once.

In a saucepan, heat apple juice, jam and allspice over low heat, stirring until jam melts and mixture is fairly hot. Stir in the fruit; cook 1 minute. Remove from heat. Serve sauce over chicken breasts. Serves 4.

Marilyn Partington Frame, Traverse City

Blueberry Bread Pudding with Caramel Sauce

8 slices white bread, cubed

1 c. fresh or frozen blueberries

2 c. skim milk

1 c. Egg Beaters®, real egg substitute

2/3 c. sugar

1 t. vanilla

1/4 t. ground cinnamon

Caramel Sauce:

1/4 c. skim milk

14 vanilla caramels

Place bread crumbs on bottom of lightly greased 8-inch square baking pan. Sprinkle with blueberries and set aside. In large bowl, combine milk, Egg Beaters, sugar, vanilla, and cinnamon; pour over bread mixture. Set pan in larger pan filled with 1-inch deep hot water. Bake at 350° for 1 hour or until knife inserted in center comes out clean. In small saucepan over low heat, heat milk and caramels until caramels are melted, stirring frequently. Serve bread pudding with caramel sauce. Makes 9 servings.

Lorraine Green, South Boardman

Photography by: 831 Creative

Berry Delicious Lemonade

3 c. chopped strawberries

1 c. lemon juice

1 package lemonade drink mix

2 c. sugar

8 c. cold water

Combine all ingredients except water in blender until smooth. Pour into pitcher; add water. Serve with ice cubes. Makes 1 gallon.

Maria Yoder, Scottville

Three-Berry Lemon Trifle

1 14-oz. can fat free sweetened condensed milk

1 8-oz. carton fat free reduced sugar lemon yogurt

1/3 c. lemon juice

2 T. grated lemon peel

1 8-oz. reduced fat whipped cream topping, thawed, divided

1 16-oz. prepared angel food cake, cut in 1-inch cubes

1 c. sliced fresh strawberries

1 c. fresh blueberries

1 c. fresh raspberries

2 T. slivered almonds, toasted

In a large bowl, combine condensed milk, yogurt, lemon juice and peel. Fold in 2 cups whipped topping. In a 3-quart trifle bowl or deep glass salad bowl, layer 1/3 of the cake, 1/3 of the lemon mixture and all

of the strawberries. Repeat cake and lemon mixture layers; top with all the blueberries. Repeat with remaining cake pieces and lemon mixture; top with all the raspberries. Spread remaining whipped topping over raspberries; sprinkle with almonds. Cover and refrigerate for at least 8 hours.

Paula Brousseau, Bellaire

Raspberry Graham Dessert

18 graham crackers, rolled into crumbs

1 quart raspberries

1/2 c. butter, softened

3 T. granulated sugar

2 eggs

1 c. heavy cream, whipped

1 t. vanilla

1/2 c. chopped walnuts

1 1/2 c. powdered sugar

Press half of crumbs in bottom of 8-inch square pan. Cream butter, powdered sugar and vanilla with mixer; add eggs, one at a time, beating well after each. Continue beating at high speed until light and fluffy. Coat raspberries with granulated sugar. Fold berries and nuts into whipped cream. Spread creamed mixture evenly over crumbs, and top with berry mixture; top with remaining crumbs. Chill overnight. This is my absolutely all-time favorite dessert. Makes 8 servings.

Janice Harvey, Charlevoix



Red Berry Mousse

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 **"Diabetic Favorites"** by **July 10** and **"Holiday Desserts"** by **Aug. 10**.

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

Smart Solutions

Receive a free online energy audit for your home.

You can do everything online these days—check bank statements, watch TV shows, and catch up with old classmates on Facebook. It turns out that you can also map your home's energy use at the tip of your fingers.

Use Midwest Energy's Home Energy Optimizer, a free online home energy assessment tool, to learn about your energy use and how to save more energy and money. You'll be asked important questions about your home—everything from square footage to your typical thermostat settings. Enter as much or as little information as you like. The more detail you provide, the more customized your results will be. Either way, you'll be saving energy in no time. Completing the online interactive survey takes just 15-30 minutes.

Click "Calculate" and the Energy Optimizer will automatically estimate your energy use and projected heating, cooling, hot water,

appliance, and lighting costs. It also calculates your energy savings cost potential in each category to help you see where you can get the highest payback for efficiency improvements. The "Upgrade" tab provides a list of "Recommended Upgrades" with simple ways to lower your energy use.

Benefits

- ▲ FREE and useful
- ▲ Convenient—ability to save and edit responses or finish later
- ▲ Customized for your city and climate
- ▲ Do-it-yourself, affordable, energy-saving actions
- ▲ Completion entitles you to a free energy saving kit

You have nothing to lose by giving the Energy Optimizer tool a try. After all, it's *free*, and

it will help you understand where you're spending the most on energy. You'll walk away with free products and solid ideas on how to improve your home, enhance your comfort, and fight off mold and drafts.

Next Steps

Here's how to get started today:

- ▲ Click on "Home Audit" at michigan-energy.org/Midwest
- ▲ Write down your session number.
- ▲ Answer questions as best you can. (It's okay to skip questions if you have to.)
- ▲ Finish the audit to receive your *free* energy-saving kit. Each kit is a \$25 value and includes 5 CFLs, 2 faucet water savers and 1 new shower head.
- ▲ Install all kit items. Keep other Energy Optimization programs and rebates in mind for future purchases.

So Simple, So Smart.



Test your home...online

Computer on? Clicker finger ready? Find out where your home is wasting energy at michigan-energy.org/midwesthomeaudit. In as little as 15 minutes, your free Energy Optimizer online energy assessment gives you personalized, do-it-yourself tips to fix your home's energy problems.

ENERGY TIP: A home that wastes energy, wastes money. Get your free home energy assessment today!

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.

Grants Help Schools Stay Strong

Midwest Energy Cooperative recently supported the work of 22 public schools across our service territory, awarding \$30,000 in grants to support academic initiatives and students. The inaugural “Strengthening Schools” grant program is a collaboration between Midwest Energy and Touchstone Energy Cooperative.

In total, 72 grants were submitted, totaling over \$130,000 in requests. A committee comprised of four Midwest member-owners evaluated applications and determined the awards. All applications were evaluated and awarded without knowledge of the school, district or community.

“Our partnership with Touchstone Energy allowed us to introduce something really positive and important. There was so much passion and enthusiasm in the process, both from the teachers who took time to submit grants and from the committee who ultimately determined the awards,” explains Patty Nowlin, Midwest’s community relations director. “It’s our own membership taking an active role to make a tremendous difference in our communities.”

The Strengthening Schools program was introduced by Midwest to make grants available to public schools for academic/classroom needs and special projects, technology, or specific support for academic clubs and organizations. Any teacher, administrator or school official in a public elementary, middle or high school serving children in Midwest’s service area could apply. Each district is limited to two grant awards per calendar year.

Awards were presented to the following:

Southwest Michigan Service Territory

- Coloma High School, \$2,500 towards the purchase of SolidWorks Parametric Design Software for the School of Engineering;
- Coloma Middle School, \$1,300 for



Coloma Middle School teacher Natalie Macerata (holding balloons) has been raising money to start a hands-on composting program for the science curriculum. Team Midwest, represented by Sara Hartsell (holding check) made a surprise visit on a recent Monday morning to inform Macerata and her class that her Strengthening Schools grant request was funded! The class is joined by school principal Scott Pauley.

supplies to introduce an interactive compost project into the science curriculum;

- Constantine High School, \$400 to purchase Idea Paint to create a more interactive classroom and enhance the student learning environment;

- Edwardsburg High School, \$2,000 to buy technology for science students to collect and analyze nuclear radiation;

- Hartford Middle School, \$1,700 for mobile tablets to support classroom learning;

- Kincheloe Elementary School, \$1,799 for a Leveled Literacy Intervention program and \$200 to buy new electrical circuit kits for science classes;

- Lawrence Elementary School, \$835 to introduce and support an art program;

- Lawton Elementary School, \$1,300 to provide educational materials and curriculum for the school garden program to connect the project with math, reading, science and history standards;

- Marcellus Elementary School, \$2,500 to enhance the school’s Sensory Lab;

- Mattawan Middle School, \$720 to buy a classroom set of balance balls for students with sensory processing disorders, ADD/ADHD and other special needs;

- Paw Paw Later Elementary School, \$1,700 for mobile tablets to support classroom learning;

- Paw Paw Middle School, \$1,700 to purchase mobile tablets to support classroom learning;

- Ruth Hoppin Elementary (Three Rivers), \$1,500 to purchase books for the creation of a leveled reading book room;

- Sunset Lake Elementary (Vicksburg), \$329 for software to create a classroom mobile interactive whiteboard;

- Woodside Elementary School (Hartford), \$2,000 to support an extended-day science education trip to the Museum of Science and Industry in Chicago.

Southeast Michigan Service Territory

- Blissfield Community Schools, \$1,500 to enhance the district Environmental Life Lab;

- Clinton Middle School, \$1,700 for mobile tablets to support classroom learning;

- Hudson Middle School, \$1,500 to enhance the school library to better meet Common Core State Standards;

- Morenci Elementary School, \$550 for a projector to support classroom learning;

- Ruth McGregor Elementary School (Sand Creek), \$1,810 for books to expand the literacy intervention leveled reader library and \$475 to purchase technology to facilitate individual, small group and classroom learning.

New Thermostat Programs Itself

A programmable thermostat is one of the easiest energy savers you can buy. Unfortunately, most people don't follow through and program it to automatically adjust the temperature when their home is empty or full.

But this problem may have been solved by a cool, although relatively expensive, new energy gadget called the Nest Learning Thermostat™. This "smart" thermostat learns from your behaviors, preferences and surroundings to create a custom heating and cooling schedule, keeping you comfortable when you're home and conserving energy when you're away.

"It was unacceptable to me that the device controlling 10 percent of all energy consumed in the U.S. hadn't kept up with advancements in technology and design," says Tony Fadell, cofounder/CEO of Nest Labs. So, his team set out to reinvent the thermostat using the advanced technologies, high-quality manu-



Photo - Nest Labs

facturing and thoughtful design the iPhone generation expects, he adds. "We hope it will not only save money and energy, but teach and inspire people to think more about how they can reduce home-energy consumption."

The U.S. Department of Energy and Lawrence Berkeley National Lab report that the annual energy bill for a typical single-family home is about \$2,200, with heating and cooling accounting for about one-half. The programmable thermostat, developed in the '70s, promised to help people conserve energy, but 89 percent of owners rarely or

The new Nest Learning Thermostat was created by Tony Fadell, Nest co-founder/CEO. The self-programming thermostat is part of a wave of home automation that is creating new smart appliances and monitoring technology that will help homeowners reduce energy costs and improve comfort and convenience.

never set a program.

The Nest thermostat (nest.com) addresses this programming problem through a combination of sensors, algorithms, machine learning and cloud computing. It programs itself based on the temperatures you set, then learns your personal schedule in a week and starts automatically turning down heating or cooling when you're away. You can even connect it to your home's Wi-Fi to control it from your laptop, smartphone or tablet. Change the temperature, adjust your schedule, and check your energy use.

Note: For today's models, there is caution against using this thermostat with geothermal heating/cooling systems, which are not programmed correctly for this type of use and actually increase energy consumption as it switches to the auxiliary electric strip heat way too soon.

Slaying Silent Energy Killers

Brian Sloboda, a vampire slayer, hunts for energy killers that feed on electricity when nobody's looking.

"We need to kill what I call the 'energy vampires,'" the senior program manager for the National Rural Electric Cooperative Association (NRECA) says. "Look around your house for any plug with what we call a 'wall wart'—those larger black boxes that are actually transformers. Those are energy killers."

Found on the cords of devices such as cell phone chargers and video game systems, these big plugs eat energy all day and night.

"They consume electricity whenever they

are plugged in, whether turned on or off," says Sloboda. "It's a tiny amount of electricity, but the power's drained for nothing."

In some cases, he adds, the consumption is more than just a little.

"Some video game systems from before 2010, even when they're turned off, use practically as much energy as when they're turned on," Sloboda explains, noting the same is true for some cable boxes and digital video recorder units.

To combat energy vampires, he has two recommendations: look for electronic devices with the Energy Star® logo (equipment that's



certified as energy-efficient); and use smart power strips.

"These power strips can sense a change of voltage running through them that will stop the flow of energy to that item or to other related items," he says. For example, a smart power strip can sense when a computer is turned off or in sleep mode and will automatically stop the flow of power to monitors, printers and speakers.

Adding a Breath of Fresh Air

Energy conservation and air quality go hand-in-hand, but it's often an inverse relationship.

"As we tighten the building envelope, problems that have been around before now become prevalent—air quality issues, humidity, carbon monoxide, mildew and mold," explains Art Thayer, energy efficiency programs director for the Michigan Electric Cooperative Association. "In today's no-leak construction, there's no place for these

culprits to escape, so we have to make sure we get proper air exchanges in addition to controlling energy leaks."

Specialized units called energy recovery ventilators are now available and can handle the task perfectly. "It can be done with passive air management—basically opening a window—but usually some mechanical intervention is needed to take care of moisture and air quality issues," Thayer adds.

Air quality is a major concern, especially

when there have been previous leaks. Controlling moisture at the source in basement and crawl spaces makes a big difference in mold and mildew issues. Proper bathroom ventilation can help improve air quality and health. While it may not be a top consideration during a bathroom or kitchen remodel, it is a critical improvement you'll want installed correctly.

"Electric co-ops work to help educate homeowners about the advantages of properly insulating and addressing air infiltration, ventilation, and heat loss issues," Thayer says, "to help ensure health and safety."

Lower Humidity, Lower Electric Bill

Q: *Our old central air conditioner still works, but our house often seems too humid indoors. We set the thermostat lower, but it does not help a lot. How can we reduce the humidity and improve comfort?*

A: Damp, cool, indoor air creates a muggy atmosphere that often feels much worse than warmer humid air from open windows. This is particularly true for allergy sufferers because many allergens thrive in damp conditions.

Excessive humidity also increases air-conditioning costs because each degree that you lower the thermostat to compensate for the discomfort increases your electric bill. But there are things you can do to improve the situation.

First, try to reduce the humidity you're already producing. The kitchen and bathrooms are the greatest contributors to high humidity. Make sure your stove's exhaust hood is ducted outside, not into the attic (recirculating stove hoods are ineffective at controlling odor and moisture), and run the fan when cooking, especially while boiling water. In the summer you can also consider using small countertop cooking appliances outdoors on a patio or deck.

As in the kitchen, run the bathroom vent fan whenever showering or bathing and let it run a little while after you are done because there is much residual moisture in the air. Some of the new, quiet bathroom vent fans have humidity level sensors that run long enough to exhaust the moisture, but not too long to waste electricity and conditioned indoor air. You can also try installing a simple countdown timer as the wall switch—set it for 30 minutes, and the fan turns itself off.

If you can get the humidity level low enough, it is often possible to get by with a much higher thermostat setting and using ceiling fans.

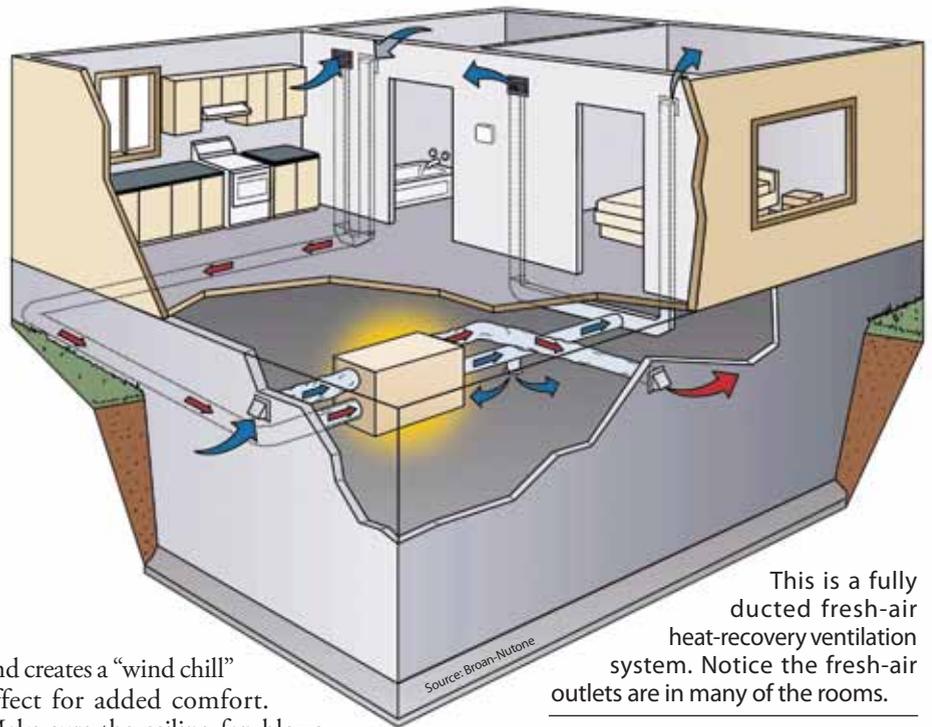
The air from a fan increases evaporation

and creates a "wind chill" effect for added comfort. Make sure the ceiling fan blows the air downward during summer and upward on low speed during winter.

Proper sizing of a central air-conditioning system is also critical for low humidity and comfortably cool indoor air. An HVAC contractor generally sizes the cooling system properly for a new house, but over the years, you may have made home energy efficiency improvements such as more insulation and new windows or doors. With such improvements, the home's cooling requirements may have dropped from, for example, 3.5 tons (12,000 Btuh/ton) to 3.0 tons. A unit that's too large for the space will operate inefficiently and may even cause mold problems because of the excess humidity. A licensed professional should size your central air-conditioning system using a mathematical code or automatic computer program.

If you plan to install a new high-efficiency air conditioner or heat pump and humidity is an issue, consider a two-stage or variable-output model with a variable-speed blower motor. With the matching smart thermostat, these models are designed for efficiency and humidity control. You can set both the desired temperature and humidity settings, and the air conditioner will run as normal to cool the air to the desired temperature. Once that temperature is met, the blower speed slows down to provide more dehumidification and less cooling.

Installing a whole-house ERV (energy recovering ventilation) system is an efficient way to exhaust stale, humid indoor air and



This is a fully ducted fresh-air heat-recovery ventilation system. Notice the fresh-air outlets are in many of the rooms.

bring in fresh outdoor air. Both heat and humidity are exchanged in this system to minimize energy loss, and are often controlled by a humidity sensor.

If you don't want to upgrade to a new unit, a contractor may be able to change some settings to slow the blower motor on your current one. This will dehumidify more, but will likely reduce its efficiency somewhat. If the lower humidity level allows you to set the thermostat higher and still be comfortable, you should save electricity overall.

There may be certain rooms where you find the humidity to be more uncomfortable than others due to the activity level. A portable air conditioner, which can be moved from room to room and vents outdoors through a window, can provide spot cooling and dehumidification.

Further, don't forget to fix leaky gutters and downspouts. If rainwater leaks out and saturates the ground around your house, some of that moisture will eventually migrate indoors.

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.



How to Plant the Right Trees, Shrubs

Whether you're planting trees to provide a wind break, reduce carbon in the environment or beautify your landscape, it's important to plant them away from power lines.

Besides causing power outages, trees that grow too close to electric lines can create shock and fire hazards. Trees (and wood in general) conduct electricity, and power outages or short interruptions can occur when branches contact with overhead lines, and electrical sparking from a wire to a nearby branch can cause fires. This is why children should be taught never to climb trees near power lines, and adults should never trim trees that are close to power lines (leave it to professionals). Accidental contact of electric wires with a tree limb while playing or trimming around a tree can be fatal.

"Trees provide many aesthetic, environmental and economic benefits, including energy-efficient shade and cooling during hot summer months, or natural windbreaks against winter winds," says Molly Hall, executive director of Safe Electricity (safeelectricity.org). For example, trees reduce pollution by absorbing and removing carbon dioxide from the air and storing it in the wood and ground. "But everyone needs to be aware of the dangers and risks created when trees grow into power lines, and the importance

of calling the utility or utility locator service before beginning any landscaping project," Hall continues. "Landowners also need to understand utility line clearance practices and why they are important to safe and reliable electric service."

Research which trees and bushes offer shade, color and screening, but won't grow to interfere with your electric service. Local tree nurseries can help in designing a beautiful, shade-filled yard with trees appropriate for each section. You can also find planting help

at arborfoundation.org or call the National Arbor Day Foundation at 1-888-448-7337.

If you have existing trees that appear to be growing into the power lines, call your electric co-op, and *never try to prune them yourself*. Utilities have or can recommend professionals trained to safely prune and trim trees for electric line clearance.

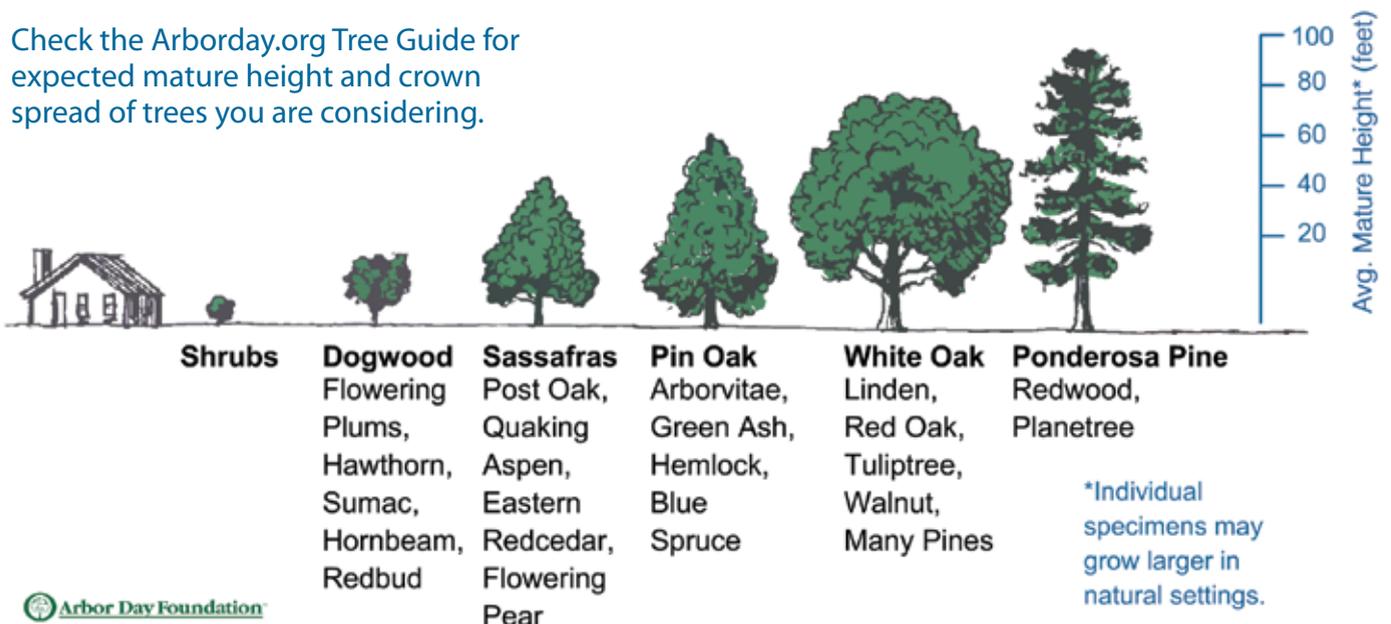
There are many beautiful varieties of low-growing trees and shrubs, Hall says, "Consider planting the types of trees that co-exist well with power lines and the environment."

Please don't plant close to power lines!

For your safety, follow these planting tips:

- 1) Before digging, dial 811** to ask the utility locator service to mark the location of underground utilities so that accidental contact, damage and injuries can be avoided.
- 2) Never plant a tree that could grow to 25 feet or more near a power line.** Tall-growing trees should be planted a minimum of 20 feet away from power lines, and 50 feet away to avoid future pruning. A mature height of less than 15 feet is recommended for trees planted near power lines.
- 3) Do not plant near underground utility services.** Tree roots can grow to interfere with underground pipes, cables and wires. Future repairs to these facilities could also damage the health and beauty of nearby plants and trees.
- 4) Keep areas around electric meters, transformers or other electrical equipment free of any vegetation** that could limit utility service access.

Check the Arborday.org Tree Guide for expected mature height and crown spread of trees you are considering.



Elevating Their Future

Four Midwest Energy Cooperative students embarked on a three-day adventure in late April as our representatives at the 2013 Youth Leadership Summit at SpringHill Camp in Evart. They joined about 30 others from around the state for the annual event, sponsored by Michigan's electric co-ops.

Youth Leadership Summit is a unique, high-energy experience to help teens develop leadership habits while enjoying interactive activities, good food, relaxation and fun with teens from all over the state. The students challenged their minds, bodies and spirits during the event, participating in activities including pole climbing and high- and low-ropes individual and team-building exercises, career exploration, and a variety of classroom learning sessions.



Mackenzie Ruff, a junior at Dowagiac Union High School and daughter of Tim and Jessica Ruff of Dowagiac, said, "This was the most terrifying experience in my life. I loved it! I'm glad this opportunity is available in our community and I'm glad I took a leap of faith and attended YLS."

Ruff's peers in the Midwest group included Halie Stewart, a sophomore at Elkhart Central High School and daughter of Jeremy Stewart of Middlebury, IN; Abbigale Guyott, a sophomore at Niles Senior High School and daughter of Tom and Lisa Guyott of Dowagiac; and Lukas Hoffman, a sophomore at Brandywine K12 virtual Academy and son of David and Joanna Hoffman of Edwardsburg.

Seventeen high school sophomores and juniors across Midwest Energy's service territory applied, and selection was based on school and community activities, honors and awards, and a short essay about leadership characteristics.

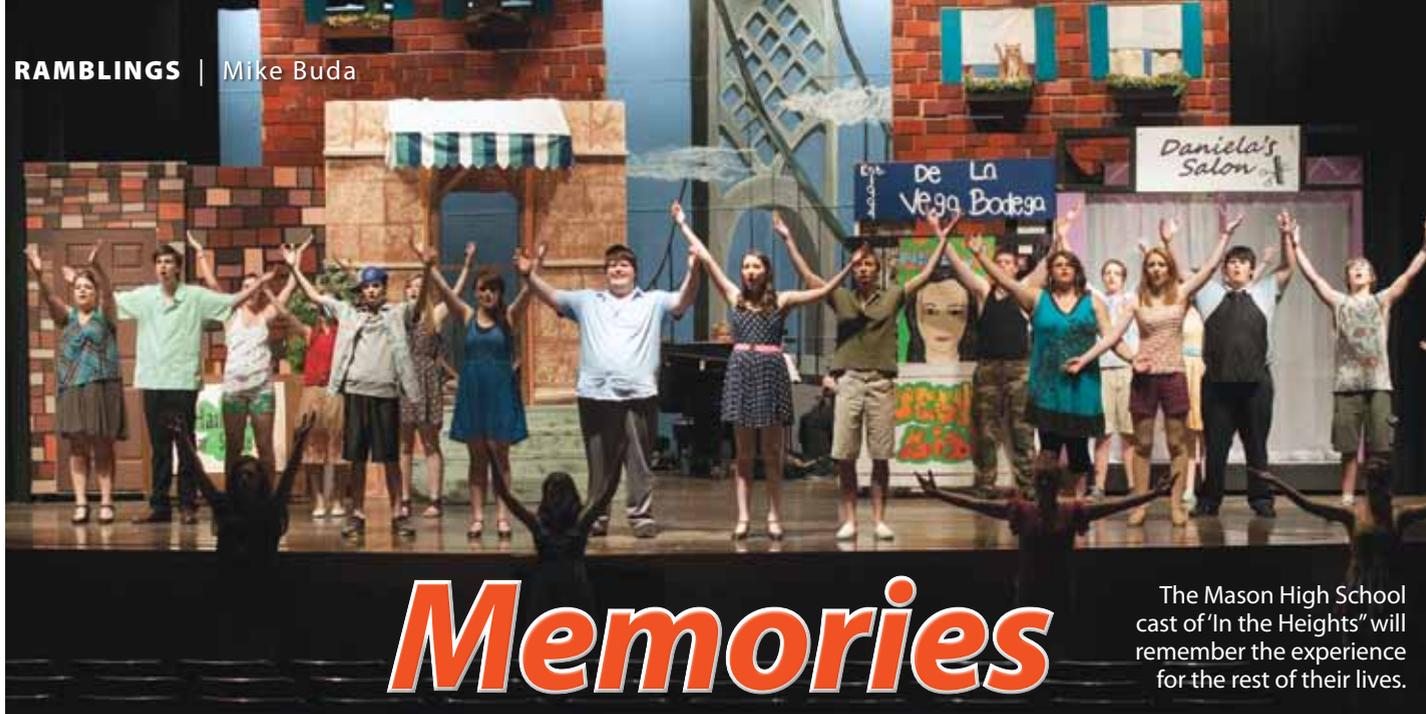
The four students will continue their time together as co-op representatives at the 2013 summer Rural Electric Youth Tour, an all-expenses paid tour of Washington, D.C., with hundreds of other teens from around the country. Watch for a summary and photos in your July/August issue.



Lukas Hoffman, Halie Stewart, Abbi Guyott and Mackenzie Ruff pose for a group shot at the rock-climbing wall.



Mackenzie Ruff pauses to look down while climbing a pole. Once the harnessed students reached the top, they stood upright and jumped off to a waiting trapeze.



Memories

The Mason High School cast of 'In the Heights' will remember the experience for the rest of their lives.

Photo - Jen Bauer

Barbara dragged me to a high school musical a few weeks ago. I'm glad she did.

She wanted to go because the play involved students she taught in middle school and are among the last she taught before retiring. I didn't know anyone in the production or anything about the musical, "In the Heights," which is about cultural and economic changes in a New York City Puerto Rican neighborhood. It's not "West Side Story," but it's not unlike it, either. It won a handful of Tony Awards in 2008. The music is more rap and rock than Bernstein and Sondheim.

The Mason High School production of "In the Heights" was dazzling, not because of the acting, singing or stage production—these are amateurs, after all, though some could have a future on-stage—but because of the heart and energy of the actors, musicians, artists and stagehands. Their commitment to excellence, with only a couple of months to prepare, was evident.

No doubt, their directors, Helen Hansens and Sharon Garner, had much to do with their success. (Who doesn't need good teachers?) The school also seems to be solidly committed to theater, with a class even offered in Set Design and Construction.

The dedication and teamwork we saw that night occurs in hundreds of high schools all over Michigan in spring. The students who participate learn things at least as valuable as those learned by the athletes we tend to over-glorify: the value of hard work and teamwork, the camaraderie

forged by common purpose, the creativity in each of us.

The standing ovation the students received at the final curtain was sincerely delivered and well-deserved. It was a moment they will forever remember and cherish.

At about this same time, sports news was focused on the handful of athletes who were about to decide where they would go to college or who would draft them for the pros and multi-million-dollar contracts. This loud, greedy, degrading process seems to go on forever. We like our athletes. We cheer their successes. We tolerate their excesses. We love that they win—for us. (Is it any surprise that the highest paid public official in 29 states is the football or basketball coach of a state-supported university?)

Not many of us, athletes or not, end up in the future we envision—if we even bothered to envision it at all. We can make plans, but as we pursue them—in sports, the arts, or wherever—we are more likely to adapt to our life's changing conditions, because isn't that what life is, a series of adaptations? Aren't those adaptations what memories are made of?

It's too bad we channel kids into one or the other before they know what it's all about. Athletes would be better off understanding art, and artists would be healthier with sport in their background. Some schools make students choose one or the other. In Mason, an effort is made to bend schedules to fit the student.

No matter what else happens in their lives, the students in that musical will never forget it. For those who make a career in theater (and some will), it will be

remembered as a stepping stone. For the others, it will become fonder as the years pass. (Much as the lone, officially-recorded basket in my high school basketball career, in a game in the tiny Trout Creek gym, has achieved mythic status in my own mind.)

During a recent trip to Columbus, Ohio, to visit Barbara's Aunt Jeanette, we shared a home-cooked meal in her apartment, along with a tasty bottle of wine. Jeanette and I split the bottle. With the wine flowing, so did the memories, of Jeanette growing up in Ironwood, going through medical technology training in Minneapolis, moving to Columbus for a job before Pearl Harbor, the war years, the jobs after, the apartments she lived in.

Jeanette has an incredible memory and it was a joy to hear her stories, about her father, the former Ironwood Fire Chief, who in his youth raced Olympic gold medalist and world 100-meter record-holder Archie Hahn to a standstill, about the people they fed in their home during the Great Depression, and about her life in Columbus.

I have a lot of memories, too. I just can't remember them. I have the worst memory of anyone I know. Where did it go? Do women have better memories than men? Would I have benefitted from memorizing lines for plays? Will more wine help?

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





Designer METAL ROOFING!

Never Deal with Another Roofer Again! The Last Roof for Your Home!

SHOWCASE HOMES Wanted!

Place your home here!

*We would like to use your home to showcase a beautiful American Metal Roof. Qualified homes can earn big discounts off the price of an American. Call today to see if your home qualifies. Call Jenn at:

1-888-221-1869

Note: Not all homes will qualify.

Installing Statewide

Rustic in Forest Green

WIN A METAL ROOF FOR YOUR HOME!

SIGN UP FOR THE SWEEPSTAKES ONLINE AT AMERICANMETALROOFS.COM

SENIOR and VETERAN Discounts Available
See a Gallery of Home We Installed in MI at

www.AmericanMetalRoofs.com

Visit the American Metal Roofs Showrooms at

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



888-221-1869

Find us on Facebook
[/AMRmichigan](https://www.facebook.com/AMRmichigan)

Country Manor Shake in Mustang Brown

Oxford in Shake Grey

Rustic in Deep Charcoal

AMR: Specialty Roofs Designed for Rural Buildings



Toughness and low maintenance requirements make metal roofing perfect for the demanding needs of agricultural applications. Each roof is hand crafted and finished with custom made trims and accessories by installers with a minimum of 300 hours of training. Available in a variety of colors.



Midwest ENERGY COOPERATIVE

Your Touchstone Energy® Cooperative



TeamMidwest.com

CONNECT WITH MIDWEST



Social Media

Midwest Energy has launched a new website, making connecting easier than ever! Follow us on Facebook, Twitter, YouTube, LinkedIn and Flickr to stay up to date with the latest happenings at Midwest Energy.

Live Chat

Have a question for Midwest Energy? Our new site allows for instant communication using Live Chat. All your questions, needs or concerns can be answered online by chatting with one of our representatives during scheduled hours.

Upcoming Events

Find out what's going on in the community and at Midwest with our new event calendar. Submit an event or search our calendar for specific activities to take part in.

TeamMidwest.com