A fresh approach to storytelling in Manistee and Mason counties...and a bit beyond.

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Planting seeds of hope at Z&N Farm

By NIKKI SCHNEIDER

I was born in suburban Chicago and spent most of my life as a city girl. Growing up, I knew we had a farmers market on Saturdays but my mom would say, "I can get it cheaper at the grocery store." We didn't have a lot of money, so it made sense at the time. Her words stayed with me until last year when I moved to Bear Lake.

discovered Z&N Farm on Facebook and fell in love with the farm's **L** inspiring posts, pictures and story. I took a beautiful drive out to the family's tidy, inviting farmstand southeast of Bear Lake and found the most amazing fresh produce. You can shop the stand or preorder. Instead of a CSA (community supported agriculture), in which you pay



"I want summer now," said Freshwater Reporter contributor Nikki Schneider, when asked what to name her story. We think it's the best description of this farmers market stand photo, taken by co-owner Nicole Mezeske of Z&N Farm.

you go, and pick up your selections from the farmstand ... radishes, bok choy and

upfront to get a "surprise" box of produce, other greens in spring; heirloom tomatoes, Z&N provides an online order form. You corn, watermelons and veggies in summer; choose exactly what you want, pay as pumpkins, potatoes, squash and more greens in fall.

continued on page 4

Wallace Humphrey: Last of the **Glovers Lake Fire Spotters**

By MILTON F. WHITMORE

Northern Lower Michigan and the Upper Peninsula, wooded as they have always been, except following the timber era in the state, have been under the threat of forest fires for decades. The prevention and the spotting of such fires has been a priority for the Michigan Department of Natural Resources (formerly the Michigan Conservation Department) since its inception 100 years ago. Fire lookout towers dotted the north country hills and Manistee County was no exception.



Wallace Humphrey using the Osborne Fire Finder device while manning the Glovers Lake Fire Tower, about 1950. Courtesy photo.

Towers were located within sight of each other from their "cabins" atop the steel structures that lifted them high into the air. The Honor area in Benzie County, Glovers Lake in Northern Manistee County and Udell Hills and Red Bridge, also in Manistee County, sported towers within sight of the watchers who manned them. Of these, only the Udell Hills tower remains. The rest were dismantled in the

I remember the Glovers Lake Tower, located east of U.S. Highway 31, on a hill to the immediate northeast of the small lake off Glovers Lake Road. Its last fire spotter was Wallace Humphrey, and I had the pleasure of meeting him and his wife last fall at their home set in the same hills as the tower. This area is near what used to be Humphrey, a stop on the Arcadia and

continued on page 6

EARTH DAY EVENTS & MORE ON PAGE 2

Life on the Moon

By BROOKE EDWARDS

If you had told me a year ago that life would take me to Big Island, Hawai'i, where I would find myself living 8,000-plus feet above sea level for two weeks, I probably would not believe it possible. Last month this is exactly what happened, earning myself the title of Analog Astronaut.

The title is fitting, as the experience is one of the closest possible simulations to visiting another world while still on Earth. There is practically no plant or animal life on the side of the Mauna Loa volcano, where we were stationed, and the ground consists of hardened remnants of lava flow. The analog astronauts' first impression is that they are on Mars.



Brooke Edwards conducts an experiment using human hair as fertilizer during her two-week stav in the HI-SEAS habitat. Photo courtesy of HI-SEAS.

Analog space missions take part around the world in remote locations, to disconnect participants from most Earthly features. These missions play an important role in the future of human space exploration. Plans are being made to send humans back to the moon with NASA's Artemis program (by 2024) and eventually to Mars. When humans arrive, they will need to know what works in these harsh environments and what does not. For this reason, many choose to participate in "analogs" in preparation for applying to become reallife astronauts.

My mission, named Selene III, was with HI-SEAS (Hawaii Space Exploration Analog Simulation), which is operated by International MoonBase Alliance. Once we arrived and entered the habitat, which is an approximately 1,200 square-foot dome, the "airlock"

continued on page 6



Onekama to mark 150th with months of special events

MANISTEE COUNTY - Quietly tucked along Portage Lake and Lake Michigan, the village of Onekama is the first stop (or last stop) on scenic route M-22.

"Often times we're missed as folks zoom past, eager to begin their journey north or tiredly head for home afterwards," said Onekama business owner Nikki Schneider.

The name "Onekama" is derived from "Onaga-maa," an Anishinaabe word for "singing water."

"And this town has a lot to sing about this year as we prepare to celebrate our sesquicentennial," added Schneider, who is also an event coordinator.

The celebration kicks off May 14 with the Onekama Lions Community Dinner Presentation, "Settlers & Shorelines."

Many lectures, walking tours and open houses are in the works.

"2021 marks the 150th anniversary of two major Onekama moments: the opening of the channel from Portage Lake to Lake Michigan and the creation of Onekama's post office and Village," explained Rosalind Jaffe, Event Facilitator. "We call this anniversary ONEKAMA OneFifty and a slew of local organizations and businesses have come together to present special events to celebrate."

The story of the hand-digging of the channel, which made Onekama "the two lake town," is a fascinating one that will be celebrated in local author John Wemlinger's gripping historical novel "The Cut" to be published in May.

The celebration takes to the water with a sailboat regatta, Sunfish invitational and a paddle parade.

The Manistee County Fair also celebrates its 150th anniversary with special events in August.

The town's Block Party, begun in 2019, and Onekama Days events are scheduled with an emphasis this year on the celebration.

"Now that life has us slowing down, people are rediscovering small towns," Jaffe said. "We invite everyone to celebrate our milestone year with us. We have many wonderful stories to share and beautiful places to be discovered."

For more information, visit the community website at Onekama.info or email organizers at Onekama150th@gmail.com. For the latest details, follow Portage Lake Association and 1.Onekama on Facebook.

Community Events Calendar

Some events may change or be canceled due to weather, schedules and COVID-19. Always call ahead.

Email your May/June calendar events or press releases for our printed publication by May 9 to:
editor@freshwater-reporter.com or snail mail them to: Freshwater Reporter, P.O. Box 188, Manistee, MI 49660.

Send releases at any time for our online calendar.

April

Now Walking Through: Art exhibit Thru featuring Steve Cattin,

Apr Stewart Allison McFerran, and Nick Walsh

Free, Elizabeth Lane Oliver Center for the Arts, 132 Coast Guard Rd., Frankfort Sculptures and 2-D works by 3 local artists.

Now Soul Sisters: An All Woman Art Thru Show presented by The Art Divas

Apr Ramsdell Regional Center for the Arts,

16 101 Maple St., Manistee

Now **Expressing the Inexpressible:**Thru **An Abstract Exhibit**

Apr Tuesdays - Fridays, 11am-4pm, free,

30 Ludington Area Center for the Arts, 107 S. Harrison St., Ludington. Over 100 pieces of art from nearly 4 dozen artists. Also featuring Abstract Portraits: art works by Pentwater Public Schools 2nd and 3rd grade students. Opening reception April 9, 5-8pm.

8 Going Out Green: Exploring Natural Burial Options

1-2:30pm, free, Zoom presentation featuring Lee Webster of the Green Burial Council and Conservation Burial Alliance will discuss how it works, why it's important, and will answer questions. Presented by AFFEW, A Few Friends for the Environment of the World of Ludington For info, go to: www.affew.org

Cabin Fever Conversations:

Live Zoom Webinar. 12:30pm, free, connect with other gardeners and featured speakers discussing conscious stewardship in the garden and increasing inclusion and access to growing food Register at: events.anr.msu.edu/cabin_fever_conversations_2021/

9 Windy City Line Up: Toronzo Cannon

7:30pm, free, live recording of the Chicago bluesman, streaming on the Dennos Museum Center Youtube channel. A live Zoom session with the artist will stream before the concert at 7pm. Presented by the Dennos Museum Center and the Ramsdell Center for the Performing Arts.

For info, go to: dennosmuseum.org or ramsdelltheatre.org.

10 Native Plant Preorders

Thru AFFEW of Ludington is taking preorders

May for Garden & Single Species Flats.
Preorders can be picked up at their
Native Plant Sale on June 12.

For info, go to: www.affew.org

11 Cheese & Mead!

12-3pm, \$15, St. Ambrose Cellars, 841 S. Pioneer Rd., Beulah. Tina the Cheese Lady from Traverse City will be pairing 5 cheeses with 4 meads.

13 Invasive Plant Removal

10am-12pm, free, Ludington Central Bark Park, Slagle Ave., Ludington at the end of Rath Ave. Help AFFEW treat and remove a variety of invasive species from the park. Wear long sleeves, long pants, and closedtoed shoes. Bring gloves and water. For info, go to: www.affew.org

13 AFFEW Presentation Series: Let's Talk About Recycling in Mason County

7-8pm, Zoom presentation of recycling options available to Mason County residents, with Q & A and discussion following. For info, go to www.affew.org

16 Annual Regional Student Art Thru Exhibition

May Free, Oliver Art Center, 132 Coast Rd.,
Frankfort

17 Crystal Classic Golf Tournament

Noon, \$65/person, registration deadline 5pm Apr. 15. Four-person scramble includes 18 holes of golf with cart, 2 beverage tickets and food. Prizes awarded in Men's, Women's, and Mixed divisions. Crystal Mountain Resort, 12500 Crystal Mountain Dr., Thompsonville. For more info, call the pro shop at 888-968-7686 ext. 4000.

20 AFFEW Presentation Series: Solar 101

7-8pm, free, Zoom presentation by Greg Oliver of Agathon Solar discusses the benefits of and options for solar power for homeowners, including different types of installations, Net metering and the many incentives currently available.

For info, go to: www.affew.org

23 ComeOnComeOnComeOn – Thru featuring local abstract artist May Jef Bourgeau

21 Fridays 4-6pm, Saturdays 12-3pm, free. Ramsdell Regional Center for the Arts, 101 Maple St., Manistee.

To register, go to: ramsdelltheatre.org

24 AFFEW Hikes: Exploring Nature Close to Home

1pm & 2:30pm, free, limited to 10 people/ hike, registration required. Hiking trails behind Ludington United Methodist Church. Two hikes led by local author, botanist, and bird expert Dave Dister will point out and inform about unique birds, trees, plants and animals in the area.

For info and registration, go to: www.affew.org

24 Girls Rock

Free, live-streamed concert featuring local female musicians, singers and artists of all ages. Sponsored by the Ludington Area Center for the Arts, Ludrock, and the Zonta Club of Ludington.

For more info, go to: www.ludingtonartscenter.org

27 AFFEW Presentation Series: Mr. Natural's Organic Gardening for the Homeowner

7-8pm, free, Zoom presentation by Alan Haslam, Certified Master Gardener, on the benefits of and easy ways of composting for the home gardener.

For info, go to: www.affew.org

May

1 Small Boat Big Fish Tournament

7am-12pm, \$50/boat, open to all fishermen and women. Boats must be between 14-22 feet in length, and at least one person on each boat must be a member of the Manistee County Sport Fishing Association. For rules, registration, prizes, rain date, and all other info, contact Michael Linke 231-233-8191, Phil Sedelmaier 231-510-1424, or Cheyanne Bartynski 231-510-0790

1 AFFEW Hikes: Ludington State Park Hikes

1pm & 2:30pm, free, limited to 25 people/ hike, registration required. Ludington State Park Interpreter Alan Wernette will lead two hikes. The 1pm hike is Forest and Wildlife Health & Management and will focus on plant diseases, invasive pests and deer herd issues. The 2:30pm hike is Water Levels of the Great Lakes and will focus on changing weather patterns that impact Water levels and the endangered Piping Plover.

4 AFFEW Presentation Series: Benefits of Native Plant Gardening 7-8pm, free, Zoom presentation by Garrett

Noyes of Birdsfoot Native Nursery.

For info, go to: www.affew.org

14 Art Exhibit: Ron Gianola,

Thru Cara O'Brien, Diane Zoellmer June Free, Oliver Art Center, 132 Coast Guard

18 Rd., Frankfort

14 Lions Community Dinner featuring "Settlers & Shorelines Celebration"

Onekama Village Park, 5:30pm, Free. Kickoff the 2021 ONEKAMA OneFifty celebrations of 150 years of Onekama history with a community dinner presented by the Onekama Lions Club, featuring historical presentations on early settlers to the Onekama area. Details at Onekama.info or email Onekama150th@gmail.com

16 Blessing of the Bikes

1pm, \$5/bike, Baldwin Airport, Baldwin. Annual event began in 1972, between 5-10 thousand motorcycles attend. Local vendors sell leather and other items, with tattoo artists on-site.



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Up one day, Down the next

Story and photos by STEWART A. MCFERRAN

Pinus strobus grows tall and straight and covered the region at one time. The forests of old would have been something to behold having grown for tens of thousands of years, following the glaciers as they receded to the north. Michigan's state tree, the eastern white pine, is still cut for lumber. Crews of lumberjacks and teams of sawyers once toiled in the state's forests, but like pinus strobus they are less common now.

hemachines venturing into the woods these days bring to mind the movie "Transformers". The articulated apparatus at the end of a hydraulic crane grapples the tree trunk, cuts it and lays it down. Then, powerful steel rollers pull the tree trunk through, removing the branches. As the "roundwood" is laid down on what used to be a forest floor, it is measured.

The operator is enclosed in a cage with controls at the fingertips. Another vehicle trundles up and over the downed wood, grapples the trunks and loads them onto a bunk in the back. It is then carried to a staging area where it is stacked and ready for transport to the mill.

Materials Science operates at the intersection of Chemistry, Physics and Engineering, knowledge that guides the wood products' industry today. There is a big place for the fibers of Michigan trees.

Arauco, a Chilean lumber company, recently built a \$400 million plant in Grayling. It is a single line press to produce particle board, moldings and a range of other products in many colors. They are up and running and buying round wood, wood chips and sawdust from mills and log crews in the Lower Peninsula of Michigan.

Northern Logger reported that four of the largest buyers of softwood in the state went out of business a decade ago: Menasha Paper, Georgia Pacific, Sappi Paper Mill and St. Mary's Paper. In their absence Arauco is now buying up large amounts of wood fibers in the forested areas of Michigan. The company has a wide range of products available at Home Depot.

There are a few (small) mills in the region. Small, that is, compared to the giant operations of companies such as Arauco.

Housler Lumber in Mesick founded a sawmill in 1942 and is still family owned. The lumber is harvested within a 100mile radius. The third-generation loggers use responsible forestry practices. They offer kiln-dried hardwoods for flooring and custom trim at the retail location in

In Benzie County, Lake Ann Hardwoods produces over one million board feet of lumber a year for furniture, construction and shipping.

John Gussler operates a mill in Oscoda County, in the shadow of Arauco, His Fairview mill is surrounded by the Huron National Forest. He bought Tiger equipment to harvest the trees he needs to keep the blades spinning at his mill.

Closer to home, some Lake County mills include Jerome Miller Lumber Company of Baldwin, which saws hardwoods and poplar, and Wheelers Wolf Lake Sawmill, located north of Baldwin.

Mason County's McCormick Sawmill, in Fountain, produced about six million board feet of lumber each year before the facility burned down. J.W. McCormick said the McCormick family sold the mill to Kamps Hardwoods, owned by Buskirk Sawmill, prior to the fire.

"He (Paul Kamp) owns pallet operations, lumber drying facilities and the Freeport (Buskirk) sawmill," McCormick said. "... I still work for the McCormick Mill, but the location is vacant right now, waiting for the decision if it is going to get rebuilt."



Logs cut and ready for transport in the Pere Marquette State Forest.

Twenty people lost their jobs when the mill went up in flames.

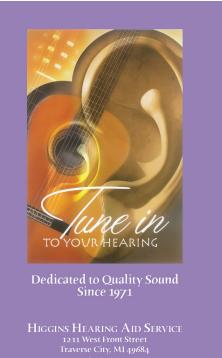
McCormick said when his family owned the mill, he "did a little bit of everything." Now his duties include buying timber from private landowners and using log crews to get the wood to the sawmill.

"All of our logs come in (and) they get sorted by quality," he explained. "You've got your veneer, you've got grade and then you've got your crane mat or pallet material. Bark goes to landscaping companies."

McCormick even sold its sawdust to Mycopia, a Scottville company that grows specialty mushrooms. The sterilized sawdust is used as a growing medium.

"Well over 90% of our volume comes from private" land and the standing timber is "mainly hard maple and red oak around here," according to McCormick, whereas Arauco buys softwood from stands of timber growing on state and national forest lands.

Teams of horses and oxen once delivered white pine logs to mills powered by falling continued on page 5



Small sawyers cut their lumber costs

Story and photo by STEWART A. MCFERRAN



Dan Higgins holds his pevy that he uses to move the logs onto his bandsaw mill.

BENZIE COUNTY - When Dan Higgins bought wooded acreage off Burnt Mill Road in Almira Township, he hired a portable sawmill to make lumber from trees cleared for his new house. Seeing the forest for the trees, he bought his own "Hud-Son" bandsaw mill and now he mills his own lumber.

The Michigan landscape was once dotted with small mills and sawyers producing planks of all sizes. Lumberjack was a forestry practices were not followed, for decking at his home. He saved a pile and fires swept the state. Mills burned of cash while making use of trees that along with many other structures in rural otherwise would not have been used.

As forests have recovered, sawyers have returned to the Michigan woods. Higgins is just one of many who have purchased small mills that can be set up anywhere and easily moved. They are powered by small gasoline engines slightly larger than a lawnmower engine. The thin blades are very sharp and make quick work of large logs. Higgins can cut a 28-inch log that is 14 feet long.

He loves "opening up a log" to see the grain. Birch is his favorite wood to saw. He showed me a burl he had cut, with a grain that swirled. While there are still large mills such as Lake Ann Hardwoods producing lumber on a commercial scale, small sawyers like Higgins outnumber them.

Anyone with a building project has noticed that lumber prices are way up. At one big box store, a six-inch-wide, eightfoot-long plank for a deck costs \$8.89. This adds up quickly. Dan Higgin's son Calvin

common occupation. But sustainable used planks sawed by their Hud-Son mill

The companies listed below sell a variety of sawmills; these mills can saw especially large logs. All are the bandsaw type mill. Options include a range of power (7-14 h.p.), gas or electric, and automatic blade lube. Some are truly portable and come with a trailer hitch. There are various options that help move the logs, including winches and hydraulic lifters.

Michigan Sawmill Sales, 8392 Argentine Rd Linden, MI, 48451. (810) 354-8027, info@misawmills.com

Wood-Mizer, 8180 West 10th St., Indianapolis, IN, 46214. (317) 271-1542, woodmizer.com

Hud-Son, P.O. Box 345, 8201 State Rte. 12, Barneveld, NY, 13304. (315) 896-7297, hud-son.com

Woodland Mills, 171 North Port Rd, Port Perry, ON, Canada, L9L 1B2. (855) 476-6455, sales@woodlandmills.com



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Top. Lettuces (foreground) and other greens are grown for fall harvest at Z&N Farm of Bear Lake. Photo by Nicole Mezeske. Above. Heirloom tomatoes are among the fresh-grown produce offered for sale. Photo by Nicole Mezeske.



Zac, Nicole and Willow Mezeske pause outside their hoophouse during last summer's busy growing season. Photo by Jonathan Sievert.

Seeds of Hope

continued from page 1

This farm has changed the way I think about buying produce, farming and our Earth.

A little background ... The "Z" in Z&N Farm is for Zachary "Zac" Mezeske, born and raised in Bear Lake. Both his grandfathers were well-known local farmers. The 6-acre farm is on the site of his Grandpa Bowling's former cherry orchard. Zac prefers natural, organic Z&N: We are not certified organic (yet), in central Maine. She has fond memories of her grandmother's homemade maple the farm's chickens and horses. Through more so since the birth of their daughter does not use genetically altered seeds.) We Elberta Farmers Market

Farm. In the farm's logo, the ampersand between "Z" and "N" resembles an "E," spelling ZEN. In addition to the Japanese offshoot of Buddhism, zen (with a small "z") is defined by Merriam-Webster as "a state of calm attentiveness in which one's actions are guided by intuition rather than conscious effort."

I contacted Nicole in February to get answers to my most pressing questions.

FR: What is your favorite part of farming? The least favorite?

Z&N: There is so much to love about farming. We love to be outside, and we love to eat good produce. Zac loves the way a homegrown tomato tastes; he has a high standard for quality and hopes it shows in the produce we grow. We love being able to teach our daughter about how and where her food grows, and what it takes to bring it to the table. We love

our family, friends and community. The grow. hardest part about farming is also part of what we love about it, the connection and commitment to the plants. The plants need us even when we are hot/ or tired. It is physically demanding and can be emotionally taxing, yet we continue to feel the rewards outweigh the difficult aspects of the work.

FR: You aren't organic but sound pretty close. Please explain.

growing methods he learned during his but we do follow organic practices. All many years of raising crops. The "N" is for of our inputs on the farm are OMRI Nicole, whose grandparents live on a farm listed, and we source non-GMO seeds. (Editor's note: OMRI is the Organic Materials Review Institute, a nonprofit syrup and jams and spending time among that establishes a list of products qualified to be labeled "organic" under the USDA her education (social work/political National Organic Program. GMO is science) and early work experience, she has an acronym for "genetically-modified developed a passion for community service organisms" whose DNA is changed and a desire to create a better world. Even through genetic engineering. The farm earthworm castings, cover crops, Z&N Farm is also known online as Zen rotations, and daily cultivation/weed removal. Following organic growing practices is more expensive — sourcing non-GMO seeds, (using) organic fertilizers - and also labor intensive (shoveling compost/lots of hand hoeing), but we believe that not only is organic produce safer for us to consume, it is safer for the land and all the creatures that live here.

FR: I know you supply produce for Yellow Dog Café in Onekama. Any other businesses?

Z&N: We have been so lucky to work with Yellow Dog Café from our very first year growing produce; we feel so fortunate to have the support of local businesses. In 2020, we started working with Iron Fish Distillery and the Bear Lake Food Pantry. Building these community partnerships and relationships has been such an honor. There is nothing more rewarding than knowing that people in the community are

the way growing food connects us to eating (and enjoying) the produce that we the end of summer 2020 will make that

FR: Do you see a trend of younger families getting into farming?

Z&N: We absolutely see a growing trend of young farmers. I hope that we can be a part of redefining what it means to be a farmer. You do not have to own thousands of acres or have dozens of employees to be able to feed people within your community. You do have to be willing to work hard and long fresh out of the field, sliced and salted. hours. You have to be creative, committed, dedicated, and always willing to learn. I think there are many young people who are searching for purpose, wanting life to have more meaning, and we are finding that, by digging our hands in the dirt and planting seeds of hope for the future.

FR: Gardening has become extremely popular during Covid, what advice would you give to a new gardener?

Z&N: We have always been strong believers in growing your own garden. Especially now when there is so much uncertainty Willow. Nicole is the manager of the 2021 utilize organic composts and amendments, in our food systems. For new gardeners, really recommend following other farmers and gardeners on social media and Youtube — research, watch, learn — take advantage of the free resources available to you. There's not ONE right way to do this; take the pieces that work for you and your situation. Be realistic about your growing space. If you get limited sun in your yard, then you might want to stick to shade-tolerant veggies and just buy your tomatoes from Z&N Farm. Utilize local planting guides/ farmer almanacs to learn about the best time of year to start your seeds and transplants. Don't be afraid to fail. Every year ... there will be techniques that don't work out, harvests that fall short, bugs/weeds that take over and these are all learning lessons for the next season.

FR: What are your future goals, for instance, to introduce a new crop to the area, learn new techniques, etc.?

Z&N: We want to grow year-round produce. The greenhouse that we built at

goal possible. Growing year 'round in our climate takes careful planning, planting and discipline, but can you imagine: harvesting (and eating) fresh greens when there is two feet of snow on the ground and it's zero degrees outside!?

FR: What is your favorite vegetable? Favorite way to prepare it?

Z&N: Z&N Farm Heirloom Tomatoes,

We have a long wait for those tomatoes, but there will be other goodness available in April. Visit the farm at 9740 Chief Road, Bear Lake. Find them at the Manistee Farmers Market (Saturdays, May 29-Oct. 2, 9 a.m.-12 p.m.) and at the Elberta Farmers Market (Thursdays, May 27-Oct. 7, 8 a.m.-12 p.m.; After Labor Day, 9 a.m.-12 p.m.). Find them online at: www. zenfarmllc.com and on Facebook and Instagram. Contact them at: zenfarmllc@ gmail.com or (707) 672-5118.

Nikki Schneider is co-owner of Patina, a 'found, flawed, fabulous" resale gallery at 4850 Main St., Onekama, opening for the season on May 1. Follow Patina on Facebook for the latest events.

The Senior Nutrition Program is looking for meal delivery volunteer drivers. We need weekly, substitute, and on call drivers. Thanks to the hard work and dedication of our wonderful volunteers the Senior Nutrition Program is able to provide hot nutritious meals to homebound seniors in Manistee County.



For more information call Bonnie at (231)723-6477

Manistee County Council on Aging Senior Nutrition Program

Muskrats in the Lake and in Your Boat

By ALISHA DAVIDSON, Research & Development Coordinator (2016), Michigan Lakes and Streams Association (MLSA)

Reprinted (with minor edits) by permission of MLSA.

Muskrats are semi-aquatic mammals commonly spotted by riparians (waterfront owners), particularly in the evening. They prefer locations with four to six feet of water and are found in ponds, lakes and swamps. Muskrats make a valuable contribution to aquatic communities. By harvesting plants for food and den sites, they create open water for ducks, geese, shorebirds and other wildlife. In addition, a variety of animals — including snakes, turtles, frogs, ducks, and geese — use muskrat lodges and platforms to rest and nest in. Finally, muskrats and their young are a valuable food source (for) predators such as foxes and eagles.

While a native part of Michigan's lakes animals can become a severe nuisance. and streams, they can be a nuisance to many riparians.

They reproduce quickly (2-3 litters of 6-8 young in a season) and large numbers can overwhelm shoreline areas. Muskrats use burrows and nests that they build for shelter, and their burrowing activity can cause shoreline erosion and destabilization. In addition, muskrats are among the few animals that regularly defecate in water, and their droppings can cause a flu-like infection, which old-time trappers referred to as "beaver fever." Finally, more than one riparian has come down to their dock on an evening, expecting to go for a sunset cruise, only to find the boat won't start. Upon inspection it turns out the various parts of the wiring have been chewed through, even on boats that are on a hoist and completely out of the water. Muskrats have even been responsible for sinking boats after chewing through the exhaust. One riparian summarized the potential damage well: "The damage was devastating. Large sections of the carpeting were chewed up and nearly every wire he could get at was chewed on. The trolling motor is ruined and both transducer cables were chewed through. This all happened in one week as I was there the week prior."

How to prevent muskrat damage? Michigan Lakes and Streams Association never condones violence toward aquatic animals, but it does recognize some is a problem in your area.

There are several options that will prevent damage while leaving the muskrats unharmed. As many of their natural predators (coyotes, fox, eagles) have disappeared due to human development, their populations are often unnaturally high. One action that can at least reduce population pressure is to keep burrows away from your dock and boat. Muskrats are wary animals and will try to escape when threatened. When new burrows are discovered early on, the entry holes can be stuffed with rocks, balled-up window screen, and/or rags sprinkled with predator urine (mink, coyote, or bobcat available from trapper supply outlets and over the Internet) or ammonia. Exposing their tunnels from above may also work. The success of this type of control depends on persistence from riparians and thus is often short-lived.

Another option is to install a muskrat guard on your boat. (It installs) in the exhaust and (has) threaded bars that can be adjusted to hold it firmly in place. At \$245 to over \$400, depending on the size of your exhaust, they're pricey but a lot cheaper than replacing your boat. Note: many insurance policies typically exclude damage caused by "vermin," which includes muskrats — riparians should check their coverage and consider working to getting muskrat damage covered if there



More About Muskrats

By JOSH SHIELDS, Ph.D., Wildlife Biologist

I cover two-and-a-half counties and meet with more than 100 landowners a year, so my ability to spend time in certain geographic areas focusing on a single species, like a muskrat, is limited.

When I meet with landowners, I record any direct observations (sight or sounds such as bird songs and calls and sounds made by mammals and amphibians), as well as signs (e.g., tracks, scat, nesting cavities, dens, etc.) of wildlife. I also try to help landowners understand the benefits of native wildlife, as well as the negative impacts of certain wildlife (e.g., non-native invasive wildlife) and the importance of ecological balance (e.g., the importance of proper densities of white-tailed deer in terms of the negative impacts that overabundant deer populations can have on the regeneration of seedlings in forest ecosystems).

During my site visits, I do not typically see areas where I would call muskrats an ecological problem. On occasion, muskrat densities can reach such a high number that they cause what some refer to as "eat-outs," whereby their feeding of vegetation causes numerous areas of bare soil that are slow to be re-colonized by vegetation, sometimes resulting

in erosion and sedimentation issues. However, one way to preemptively plan for this as a landowner or manager is to manage wetlands in a way whereby there is a high diversity and high percent cover of native wetland plants, making sure that there are lengthy buffers of native wetland vegetation (mainly herbaceous vegetation and shrubs in the types of marshes inhabited by muskrats) adjacent to open water, with the buffer being at least 100 feet.

If negative impacts are observed by muskrat feeding, even in wetlands dominated by a high-diversity plant community, then some harvesting of the muskrats may be merited but this should not be interpreted as eradicating them, as they are a beneficial native mammal of Michigan.

In my experience, the term "problem" with muskrats typically comes up as it pertains to nuisance issues (nuisance to humans), such as those described in the MLSA article, or the ability of muskrats to harbor disease that can impact humans.

Josh Shields is a forester and wildlife biologist for Manistee and Mason-Lake conservation districts and a certified wildlife biologist with The Wildlife Society.

Up one day

water. Tom Schneider writes about his great-grandfather's mill on Chief Creek in "The Wellspring," a project of Onekama Middle School students published by the Manistee County Historical Society. Casper Schneider determined that the creek could produce 6 h.p. but, if water were stored in the dam, he could produce 18 h.p. for eight hours while releasing pent-up water. Many such mills dotted the landscape of Manistee County and beyond. However, it was found these "muley" saws that moved up and down just didn't have the power needed to increase production. The joke was that saws of the muley make "moved up one day and down the next."

I can understand how Casper felt there was an unlimited supply of pinus strobus while operating his waterwheel mill, whereas the CEO of the Arauco mill may have a different view.

Stewart A. McFerran illuminates current environmentalissues in a historical context. He hopes readers will gain understanding and insight into ways people interact with their environment. He is our Freshwater Reporter Ambassador-At-Large



Operator of a logging machine in Pere Marquette State Forest.

The working end of the logging machine.





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Humphrey

continued from page 1

Betsie River Railroad.

Wallace Humphrey is spry, interesting, and humorous. He manned the Glovers Lake Tower from the 1930s until its closure in the mid-1960s. His watch was interrupted when Wallace served in the U.S. Army in WWII and was wounded fighting in Sicily with Gen. George Patton's 3rd Army.

It was an easy drive or walk from Humphrey's home to the tower, which he manned during daylight hours from spring's thaw-out into November's first snows. The job was to sit in the tower's



Glovers Lake Fire Tower, about 1950. Courtesy photo.

cabin and be on the lookout for smoke that might indicate the beginning of a forest conflagration.

When smoke was spotted, Wallace would use an Osborne Fire Finder to determine the location of the fire source. The Osborne system was/is composed of a topographic map of the area oriented and centered on a horizontal table with a circular rim graduated in degrees (and fractions). Two sighting apertures were mounted above the map on opposite sides of the ring and slid around the arc.

The device was used by moving the sights until Wallace could peek through the nearer sighting hole and view the crosshairs in the further sight aligned with the fire. He would then note the degrees on the graduated ring beneath the sight. A rough calculation of the elevation was made, and the information would be called into a central and local information center, usually an MCD/MDNR office.

The Glovers Lake tower has been gone for many years, but Wallace Humphrey is still with us and remains a valuable link to Manistee County's history. He and his wife tend their home and property with neat detail and still carefully and tenderly nurture their old apple orchard. If you get a hankering next fall for an old-fashioned apple such as a Wagoner, a great eating and baking apple, give Wallace a visit. You'll enjoy the experience.

Milton F. Whitmore and his family moved many years ago to the Arcadia/Onekama area, where he taught middle school science and math until his retirement. He is active with the Arcadia Lions Club and Arcadia Area Historical Society.



Wallace Humphrey at his home near Humphrey, Mich., Oct. 2020. He still has a twinkle in his eye. Photo by M.F. Whitmore.



An analog astronaut looks toward the habitat on Mauna Loa, Hawai'i, where each mission's team members spend two weeks simulating life on the Moon or Mars. Photo courtesy of HI-SEAS.

Life on the Moon

continued from page 1

was shut behind us. Thus, began our twoeek lunar expedition.

Although we had perfect Earth gravity — not the moon's 1/6 gravity of Earth — all aspects of the experience were made to be as realistic as possible. Even though it was possible to breathe outside the habitat, we could not exit without wearing spacesuits. When "on the moon" you must make do with what resources you bring on the mission. Food consists of non-perishable items: dehydrated meats, fruits, vegetables, beans and pasta. Water is rationed, which makes cleaning and bathing a challenge. Throughout the analog mission, we mostly used moist disposable wipes and cleaned dishes with a three-bucket system.

Communication with the outside world was limited, just as it would be on the Moon or Mars. Our smartphone SIM (subscriber identification module) cards were collected and our access to the outside world consisted of back-and-forth emails with a 20-second delay.

My five crew members and I had to work

together to make the mission successful, as our goals and lives depended on teamwork. This was especially true when venturing outside and into the fields of solidified lava, which can be dangerous to explore. I found the loose, gravel-like landscape very tricky to walk on as it's easy to slip. Hiking is not the easiest, especially in EVA gear, success of human missions into deeper (spacesuits astronauts wear when outside their spacecraft). Artemis astronauts will experience these same challenges, and there is no room for error on the Moon (or Mars).

In addition to tending daily to science experiments, each crew member had a role. Mine was to write posts for HI-SEAS social media accounts as the mission's Science Communications Officer. Since access to social media was not allowed, I sent messages by email and someone from Mission Support on Earth uploaded the posts for me.

It is strange and lonely to not be able to see or hear your friends, family, significant other or any people on the "outside." Once on the Moon, you and your crew are truly alone. Mental strength and amazing fellow space travelers make it much less emotionally tolling. Of course, it never hurts to have fun along the way! These



Brooke Edwards, in her EVA gear, stands in front of the door to the simulated airlock. Note the famous Magritte image on the right. Photo courtesy of HI-SEAS.

factors will be extremely important to the reaches of the solar system.

Overall, my analog mission at HI-SEAS was an unforgettable experience. My hope is that I was able to make an impact on future space exploration by contributing to research into human factors of solar system exploration, or even inspiring future scientists and explorers. I will never forget my time on "the Moon" as well as the great friends I made along the way.

For more information about the analog astronaut program, visit https://www.hiseas.org/ and follow them on Facebook at highseas.org.

BrookeEdwards is a NASA/JPL Solar System Ambassador. She lives in Manistee and has traveled around the area giving presentations and hosting seasonal stargazing parties on the beach. Follow her group page on Facebook: @ Brooke Edwards Solar System Ambassador



Rubble left by hardened lava flows creates hazardous hiking conditions for analog astronauts outside their Mauna Loa habitat. Photo courtesy of HI-SEAS.



Bruised Spirits

James Bond ruined martinis. There, I said it. An entire generation of bartenders has now grown up shaking martinis, and you know what that gets you? It gets you bruised spirits. Believe it or not, that actually is a semi-scientific term.

Bruising liquor is something that happens when ice is violently introduced to it (by shaking it, 007). Shaking spirits introduces ice chips and breaks down the "top notes" in them, eliminating the point of truly enjoying your cocktail and reducing it to a pursuit of a changed state of mind versus an enjoyment of the liquor itself.

Take gin, for example. It's quite possibly the least popular of spirits, with most people discounting it from either bad experiences or not wanting to drink what they perceive to be the equivalent of a pine tree. The beauty of it though is its versatility and herbaceous-ness, and if it's handled properly, it's possible to convert the most avid anti-gin drinker. If you shake it, though? You lose all the beauty of those top notes: the juniper, the coriander, the earthy balance it brings to sweetness in certain cocktails. It becomes cloudy, flat, in short ... uninteresting and wasted. But more on gin later. It's my favorite misunderstood form of alcohol, so I wax poetic about it.

The first time I heard about bruising spirits was on a Facebook group page for bartenders. The common controversy of shaking versus stirring came up and someone rather indignantly started lecturing about bruised spirits. Recently, I found a parallel there, as I so often do when it comes to alcohol management and life.

When I first learned about bruising spirits, especially as it refers to my beloved gin, I was conflicted. "What about a French 75?" I muttered to myself as I feverishly started googling the term. "You shake that." But then I started researching and learning and realized something: You can only bruise a spirit if you shake it alone. In a French 75, you take gin, lemon juice and simple syrup, shake it all up, and top it with bubbly and a twist. They all work together. They protect each other. If you just shake the spirit alone, you damage it. Give that spirit friends and you have a classic cocktail that withstands the test of time. I can't help but think that this is a valuable lesson for all of us to learn: find your friends and don't be afraid to let them be shaken with you.

simple syrup), and those who gave me a

French 75

This is a truly classic cocktail, named for a 75-millimeter gun used by the French during World War I, and a favorite of mine for brunch. It's bright, balanced and refreshing, and looks lovely in a champagne flute, if you happen to have one lying around. If not, pour it in whatever; I promise I won't judge. Ingredients:

- 1 ounce gin (I'd stick to a classic style of ain to keep it balanced. Hendrick's is perfectly acceptable, although Hove Northern Latitudes in Leelanau County for cocktails like this.)
- ½ ounce simple syrup (Remember: equal parts sugar and water, boil until dissolved, bingo!)
- ½ ounce lemon juice

Shakethesethreefriendsvigorously with ice until they're chilled and strain them into a glass. Top with three ounces of Champagne or another dry sparkling wine and a lemon twist. (Don't forget that while the twist is fancy, it also adds a subtle aroma and finishes the flavor, so it's best not to skip this part). Enjoy it responsibly and with people who appreciate good drinks and company.

kick in the pants (the citrus: remember the balance talk we had a couple of months ago?). And once I made it through that violent shaking and got strained, I was topped with a sparkling new self: stronger, more interesting, and decidedly refreshing.

The beauty of adding complementary ingredients to cocktails and our lives is that they not only protect the main ingredient but elevate it. They temper the overwhelming flavor of the spirit and illustrate the beautiful, subtle notes that may otherwise stay hidden. They keep us from bruising the main attraction. Without them, we end up like that martini Bond drank: seemingly new and exciting, but missing depth.

Chelsea grew up working in her parents' If I look at my life in bartending terms, former restaurant on Beaver Island. She's I've been shaken a lot. I've been lucky to been behind the bar on and off since she only have come out of the tin a poorly made was 20 and is passionate about all things martini a few times, though. Most of the alcohol. When she's not "behind the pine" time, I had my ingredients rattling around or on the beach, you can find her navigating in the ice with me. I had friends, old and homeschooling with her daughters, new, who gave me love and support (the dabbling in writing or experimenting with new cocktails at home.



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Courtesy photo by Lauren Berg.

Goin' Up Around the Bend

By GORDON BERG

Editor's note: This is part two of the writer's travels to lesser known roadside attractions.

Sometimes the road itself is the destination

One fall we found ourselves spending the because American Legion Post #263 graveyard of lost Americana. was hosting its annual Schnitzel Fest world. Sitting on the buckboard reading ask. It was persistent. a law book was Abraham Lincoln, even taller than the real deal.

66 runs through here.

legendary reference alone stirs something road. The urge for goin'. The way to find Somewhere Else, USA.

After dinner and fighting off our schnitzel-induced comas, we went in But, I shook her hand instead. search of Route 66. We had visions of a bed of your pickup.

Sigh. Somehow along the way Route 66 night in Lincoln, Illinois. It was difficult had joined Stuckey's and Howard Johnson to get to the hotel around dinner time restaurants on the dead-end road to the

Waking up the next morning, we passed fundraiser, and there was a line of cars on the complimentary hotel breakfast. It between us and our place for the night. would be days before the schnitzel made The hotel itself was easy enough to find any room in our digestive systems. We had because it boasted being next to the park packed up the car and paid our hotel bill with the largest covered wagon in the when something told me to ask. Simply

I went back to the hotel's registration desk and asked the young lady if the real Still harder to miss in this town than Route 66 still existed somewhere around the Paul Bunyon-sized Abe were the ever- there. She smiled knowingly and leaned in present signs alerting travelers that Route a bit toward me as if she were going to share a little-known local secret. "Yes," Route 66. The Mother Road. Written she confided quietly. "Take the road next about, sung about, filmed about ... this to the hotel. Follow it about a quarter mile. Turn right at the white house and deep in our DNA. The call of the open left again at the next road. The road that goes past the old cemetery ... that's the original Route 66."

My eyes welled up. I coulda kissed her.

Finding it was like finding an old friend ribbon of two-lane asphalt with vintage I hadn't seen in ages. It was a deserted cars and trucks whizzing by in both road now. Only about 100 yards long. directions. But, everywhere we drove, it Grass was growing up between the cracks. seemed like Route 66 had been swallowed Dried leaves and scrub growth were up by some other interstate freeway that encroaching on the edges. Its two lanes obligingly added "Route 66" to it, like an were narrow by today's standards. They unwelcome hitchhiker you let ride in the were just wide enough for two Model Ts

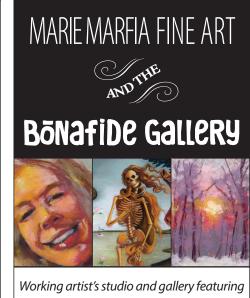


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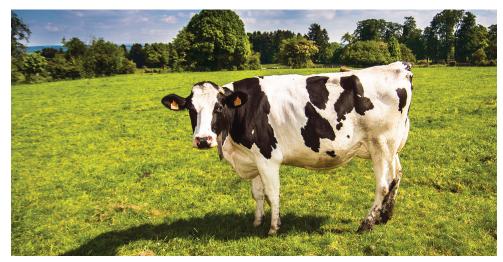


Photo courtesy of Arnaud Liégeois, Pixabay

Make your day: Hug a cow

By RON SCHMIDT

Daisy, Betsy and Buttercup are three cow friends I have known. In the past year many of us have missed the good feeling and warmth we get from giving and getting hugs from friends and family as we have tried to keep each other safe from the coronavirus.

Still, I was surprised to hear on the morning news that more than a few folks are paying \$75 an hour to hug a willing cow. Farms in several states have started the service for people who crave the pleasant feeling that comes from hugging a big, warm, friendly bovine. I would guess most radio listeners who tuned into the station on this morning were laughing and acknowledging the truth that a fool and his money are soon parted.

As a former owner of three pet Holstein dairy cows I hugged countless times, I know how good it feels. There's nothing better on a -20 degree morning than to warm your face by pressing it into the side of a cow as you hand-milk 8 gallons into a pail. That is what I did mornings before heading to work and again each evening after returning home from the chair factory in Hermansville, a small town west of Escanaba in Michigan's Upper Peninsula. Loud mooing let me know there was milking work to do before supper.

Daisy was my cow's name. I raised her from a three-day-old calf on my family's dairy farm near Springport, Michigan. When she was nearly 2 years old my wife Bonnie and son Nate and I moved to a small farm in the Upper Peninsula, and we hired a young couple with a horse trailer to move Daisy. Nate was excited each morning to watch for the milkman, who picked up a full can of milk and left an empty one for the next two milkings.

very friendly cow, luckily. She was lonely and craved companionship. She managed to escape periodically and run to my neighbor's Children's author Ron Schmidt enjoys long much happier when she had a calf of her and folk music.

own. Betsy was as friendly and lovable as her mom, and when she was 2-1/2 years old she had her first calf.

We moved back to the Lower Peninsula, near Parma, only a few miles from my family's dairy farm where Daisy was born. I raised dairy calves for my family's large herd and fed them the milk I hand squeezed mornings and nights. We also sold milk by the gallon to neighbors who wanted fresh farm milk rather than the processed kind from grocery stores. By then we had a second child named Gretchen. Both she and Nate loved our cows' milk, given to them at least twice daily as a treat with a homemade cookie or two.

One day my brother asked me if I would milk another cow. He wanted a home for young Buttercup. She joined Daisy and Betsy at our place. Buttercup was born blind and no one knew why or even noticed it, because she was part of a big herd of young cows. She learned how to get around the pasture and the food troughs just fine, but as she got older it was harder for her to get along in a large herd of pushy young cows. My brother Karl asked me if I might like to keep her since she, Daisy and Betsy got along well together and she would have a more gentle and happier life. I was glad to have her on the farm and after her first calf was born, I had three cows to milk by hand. Needless to say, after milking three cows mornings and nights, averaging 24 gallons per day, I developed even stronger hands. Daisy, Betsy and Buttercup were all very friendly and definitely huggable.

Few people will ever have an opportunity to hug a cow. If you get a chance to do this with a friendly cow who likes hugs, you must try it. Take the time to enjoy the Daisy weighed 1,500 pounds and was a experience. It sure makes those of us who relish hugs and hugging feel great.

farm to visit his small dairy herd. I always walks in the north woods with his Leader knew where to find her, though. Daisy was Dog Lila and listening to songbirds, owls

The Magic of the Last Saturday in April

By MILTON F. WHITMORE

It's only a day on the calendar. It varies from year to year. No clue is offered as to any wizardry or magical properties. yet The Last Saturday in April conjures up a feast of telling tales, of an almost mystical aura that belies its status as merely the sixth day of the last week of a spring month.

In Michigan, this date marks the Opening before the first light of day. Day of the state's upland trout season. of the steelhead (migratory rainbow trout) spawn, which takes the fish to the upper reaches of certain rivers.

I am speaking of smaller, upland creeks and rivers closed to the pursuit of brown, rainbow and brook trout until almost the end of the fourth month of the year.

Looking back at some of my Opening Day Journal Reports, I found this one from 2004: "Opening morning found me, once again, parking my truck in the ebony black of pre-dawn at my familiar spot along a well-worn 2-track, leading to my favorite trout stream. In ritual-like fashion I donned my waders, trout vest, Day, I was on a trout stream listening to net, bait box and hat. Every trout angler of note has a "hat," well-worn and seasoned their nocturnal rest. I perked my ear by many years of use on a stream.

on the magical Last Saturday in April. The Bird" wafted into the air greeting a new process has become almost ceremonial, akin to entering Holy Orders. I do it in a quiet reverence, for I understand that I am about to enter the verdant waters of an outdoor cathedral.

Following the strong beam of a minimag flashlight, I carefully make my way

hat property does The Last in the blackness, through aspen-adorned Saturday in April possess that uplands, down into the cedar swamp and makes it rise to a pantheon level? tag alders, finally arriving at my hole well

I usually fish the tail end of the hole in Only dedicated, devoted trout anglers can the early hours. The hole is formed by the understand what this means. Of course, river's narrowing, squeezed by the remains some streams are open for trout angling of a long washed-out bridge or dam, no all year. Some open in early April as part doubt from the days of timber drives on the river. The current tumbles in a rush through the gap and spills out below, the curls of twin eddies lapping either bank.

> The water spills from the depths of the hole at a half bend, and it is at this spot that I wade along, keeping quiet, until I find a comfortable spot to sit, feet in the water, against the steep, 3-foot-tall grassy bank that makes a comfortable backrest. It is from this spot that I've taken untold numbers of trout, mainly browns, over the 10 years that I've been fishing the hole.

In the pre-dawn darkness of an Opening the calls of geese waking themselves from swamp-ward as the haunting "tee-dee" For years I've gone through this ritual of a bird I've always called "The Lonely

> I love trout fishing because I love the places where trout live.

> Milton Whitmore writes from Arcadia, where he lives with his wife and their four-legged companion.

The author fishing his favorite Double Eddy Hole. Courtesy photo.



The road itself

continued from page 7

to pass each other. And there ... there on the pavement was everything I had hoped from this long pandemic hibernation, to find -- a fading US Highway Shield with the number 66 inside. I actually laid in the middle of the road and imagined all the stories passing by over me. Yeah. It was amazing.

We've been hooked on finding these kinds of treasures ever since. And, they are literally everywhere. The good news is you don't have to travel far and wide in search of the obscure and wonderful. woods. Just Google "Atlas Obscura" for yourself. It lists 216 such wonders a curious mind to find them. You never www.HarryandtheHurricane.com know what you might discover.

So as we slowly and carefully emerge maybe it's time to listen to the wisdom of Wally Byam, Maybe it's time to dream again. Explore again. Something wonderfully unimaginable may be right up around the bend. It might be just what the doctor ordered.

Gordon Berg is a descendent of Manistee's Bergs, Swansons and Martinsons. His debut book "Harry and Some are right here in our neck of the the Hurricane" is about his father's life as a young boy and how he survived The Great Miami Hurricane of 1926. Ask for right here in Michigan. You only need it in your local bookstore or go online to



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