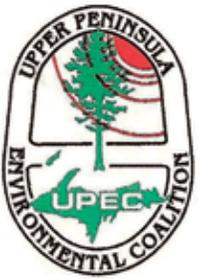


UP Environment



The Upper Peninsula Environmental Coalition's quarterly newsletter.

UPEC is the UP's oldest grassroots environmental organization.

Join us for UPEC's next Board meeting: Fri., March 13 at Marquette's Federated Women's Clubhouse, 1 to 4 p.m.



Spring 2015

Backyard maple sugaring a sweet family activity

By Bill Ziegler

Most of us love pure maple syrup, but it is expensive to buy. Many UP residents are fortunate to have maple trees around our residences or our camps. If you own or can "borrow" some maple trees, you can try your hand at making maple syrup. When you lack enough maple trees, I have found that many people will let you tap their trees for a share of the valuable finished maple syrup. However, definitely work out an agreement before tapping other property owner's trees. Some of the most productive maple trees (and earliest to have a sap run) are the maple trees with large tops (crown area) in house yards.

If you have never made maple syrup, you will find it is an excellent family activity. It is a great way to pass on some

traditional outdoor skills to your children and/or grandchildren.

All you need is about five to ten maple taps (drilled holes for sap spouts) and some basic equipment to get started. There is no limit, but if you have more than about 20 taps you may need more expensive equipment to boil it down.

Any maple tree will work, although sugar maples are the best maple species to use. The number of taps in a maple tree varies on its size (diameter). A few large diameter maple trees will easily meet the five to ten taps I previously referred to. U.S. Department of Agriculture (USDA) guidelines say you should only make one tap in a maple tree that is about ten inches diameter. The tap holes
Sugaring See Page 4



Youngsters tend maple sap in a homemade evaporator at the family sugar bush. Photo by Bill Ziegler

Corp. & Gov. processes threaten UP public lands Law suit aiming to revive CR 595

By Catherine Parker

As a sort of corollary to Murphy's Law, it seems that bad ideas don't die well. During the Jan. 19 meeting of the Marquette County Road Commission, the board disappeared into closed session with its attorneys and emerged with a resolution to sue the Environmental Protection Agency (EPA) over its refusal to lift final objections to the County Road 595 permit application.



One of the proposed crossings for the CR595 haul road would be this sensitive area around the Wildcat Creek headwaters. Photo by Chauncey Moran

Graymont's land swap questioned
By David Clanaugh, Editor
At the Feb. 12 Michigan Natural Resources Commission meeting in Lansing, DNR Director Keith Creagh approved Graymont's proposed exchange of 1,700 acres of subsurface mineral rights in the eastern UP. Creagh delayed action, however, on a larger exchange of both surface and subsurface ownership rights involving about 10,000 acres in Mackinac County.

Three weeks earlier, Road Commission Chair Dave Hall told the media that the road commission had not held any
CR 595 Lawsuit See Page 2

In association with these land exchanges, Graymont has been proposing a new limestone mining operation in Mackinac
Graymont Land Swap See Page 3

Privately funded lawsuit, yet public agency involved?

CR 595 Lawsuit From Page 1 discussions about suing EPA, leaving many people to wonder if the Open Meetings Act may have been violated.

The road commission made it clear that the lawsuit would be privately funded. On Feb. 2, it was revealed that a 501(c)(4) corporation called Stand UP would be collecting donations through its website—with donors able to remain anonymous.

Support from our legislators has been exuberant, to say the least, but votes from local boards have not been unanimous. Concerns center primarily around nondisclosure and lack of discussion regarding other transportation options.

Stand UP anticipates that it will take about six months for the U.S. District Court to determine whether or not the road commission has legal standing to bring the lawsuit, and that the remainder of the lawsuit could take up to a year to complete.

The suit itself is expected to cost around \$500,000, and permitting and construction could run as much as \$100 million if the road commission were to obtain approval. There is no solid information (as of this mid-February writing) as to where the latter funds would come from, but it is anticipated that there would be an attempt to pull together a public-private partnership.

Although they've accused the EPA of playing politics, it's apparently the road commission that has done so, lobbying state and federal legislators as well as local officials throughout the entire permitting process. EPA's refusal has been characterized as "arbitrary and capricious," yet EPA objections were very much in alignment with concerns expressed by the Army Corps of Engineers, U.S. Fish and Wildlife Service, and the Michigan DNR and DEQ staff. Approval from state agencies came late, and from political appointees at the top. DEQ Director Dan Wyant is quoted in the Oct. 16, 2012 *Marquette Mining Journal*, asking EPA to remove its objections, for the following reason: "The

(Gov. Rick) Snyder Administration supports this road."

Representatives for Lundin's Eagle Mine say they are not interested in funding either a lawsuit or construction of CR595. They are still working with an eight-year time frame for operations, which would be half over by the time CR 595 were built, and have already spent more than \$50 million on their current haul route (CRs AAA, 510, 550 and 492, Wright Street, and US-41). There has been no further talk of expanding, or of other mining companies seeking permits, but we are mindful of the possibilities. We have not yet heard from the DNR, for example, regarding a proposed metallic mineral lease submitted late last year by Eagle Mine LLC for state-owned minerals beneath a 40-acre parcel next to the Yellow Dog River.

None of this changes the facts that CR 595 should not be permitted, and that Marquette County does not need another back-country highway to maintain. What happened to regional and local transportation studies, and to other Marquette bypass discussions? The community would be better served if the road commission would get busy with these initiatives and focus time and financial resources on repairing existing infrastructure. These would be bigger job-creators and more beneficial to the economy than building a road we don't really need.

Don't forget those Econo Foods slips!

Thanks to you and Econo Foods, UPEC recently earned several hundred dollars from grocery receipts collected by UPEC members. That may not seem like a lot, but when you're a non-profit organization every little bit helps. Of course, that amount could be even higher if more of us save our slips and send them in! Either save receipts throughout the year and mail them to us, or give them to a UPEC board member—whichever is more convenient. It's one of the easier low-cost ways you can offer your support. Thanks!

About UPEC...

The Upper Peninsula Environmental Coalition has a five-decade track record of protecting and seeking to enhance the unique environmental qualities of the UP through public education and monitoring of industry and government. UPEC seeks common ground with diverse individuals and organizations in order to promote sound planning and management decisions for all the region's natural resources.

UP Environment is published four times a year and available online to share with family & friends. Send your comments or contributions to UPEC by standard mail at P.O. Box 673, Houghton, MI 49931, or e-mail us at upec@upenvironment.org. You can also visit us at www.upenvironment.org

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- Staff: David Clanaugh, Newsletter Editor & Business/Communications Manager

Proposed limestone mine poses numerous concerns

Graymont Land Swap From Page 1
inac County near the town of Rexton in a rare alvar landscape. The proposal has raised a wide range of land use, environmental, and economic concerns. These landscapes involve a unique biological environment based on shallow and exposed limestone bedrock. Graymont, based in Canada, is North America's second largest supplier of lime and lime-based products with a limestone quarry and kiln in Gulliver, Michigan.

At the Feb. 12 meeting, Creagh reiterated the need for public comments to help in the decision-making process regarding the 10,000 acres. To provide time for additional public comments and DNR staff to review a recently revised proposal from Graymont, Creagh will now decide on the larger proposed land transaction no sooner than the March 19 NRC meeting in Roscommon.

The exchange that Creagh approved involves swapping 1,700 acres of mineral rights in Chippewa County that are currently owned by the state and are beneath land owned by the U.S. Forest Service for mineral rights on 1,700 acres in Mackinac County currently owned by Graymont beneath state-owned land. The DNR said the exchange assists with the department's goal of unifying surface and mineral rights ownership on state-owned land. Creagh said that Graymont would have to work with the U.S. Forest Service before mining could occur on its proposed limestone operation.

A Jan. 13, 2015 letter to Creagh from six DNR division chiefs listed seven areas of concern with the original proposed land exchange of 10,000 acres. The five main concerns included: the inadequacy of the proposed royalty rate by Graymont; whether sufficient consideration had been given to timber, non-limestone, and the dolomite mineral value; questions about wetland protection and trail easements; uncertainty about the amount of jobs and economic development for local communities; and questions of who makes final decisions on land use and infrastructure management. As a result, the division chiefs' recommendation was to not approve Graymont's proposal. In addition to resolving the outstanding issues, the chiefs recommended an assessment of public input as well as consultation with sovereign tribal governments.

After the letter, Graymont submitted a revised application. It is unchanged in the total amount and location of public land under consideration. Changes Graymont proposes include creating a regional economic development fund to provide grants for local units of government, schools, and small businesses; paying timber consideration fees on a portion of the land transfer; more limited wetland impacts; and suggested routes for relocating recreation trails.

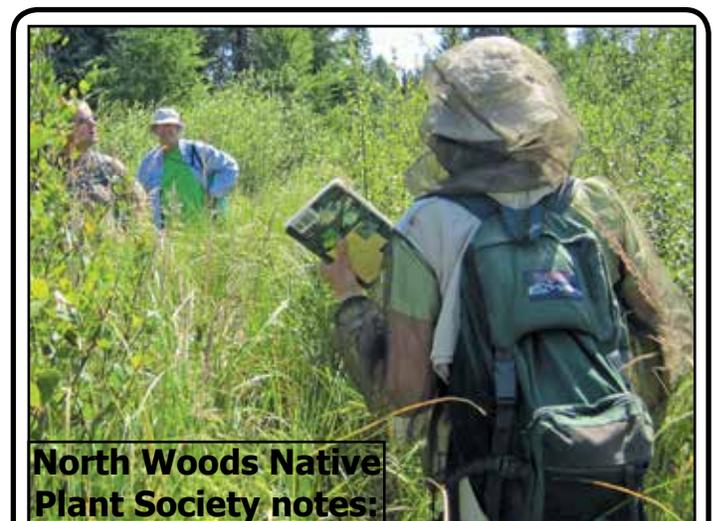
Graymont's revised application also proposes increasing the royalty payment to 30 cents for each ton of extracted limestone, up from 18.75 cents per ton. Those royalties would be deposited into the Michigan State Parks Endow-

ment Fund. Royalties western states receive for similar mining operations show they range from 150% to 200% more than Graymont's latest proposal. The entire revised proposal, along with maps of tracts under consideration, can be found at www.michigan.gov/graymontproposal.

"As you can see from Graymont raising its offer from 18.75 to 30 cents, we need to get the point across to the DNR that market-rate royalties need to be on the table as part of the consideration in reaching a decision," said Horst Schmidt. Schmidt, a board member for Friends of the Land of Keweenaw (FOLK), has been following, researching, and publicizing the Graymont proposal,

"We oppose the sale of the 10,000 acres of state land in Chippewa and Mackinac Counties to the Graymont mining concern for the purpose of limestone extraction," FOLK President Linda Rulison wrote to Creagh. "The mining of limestone on this proposed scale has too many potential negative environmental and economic impacts. Public need for open lands is in no way diminishing with current rates of population growth. . . . If allowed by you, Graymont's proposal will create in-holdings that will break up contiguous wildlife habitats, and create more disturbed edge affects."

There are multiple ways people can provide comments about Graymont's proposal, before and during the March 19 NRC meeting. The DNR maintains an email address for the public to comment at DNRGraymontProposalComments@michigan.gov. Mailed comments can be sent to the Roscommon Customer Service Center, ATTN: Kerry Wieber, 8717 N. Roscommon Road, Roscommon, MI 48653.



North Woods Native Plant Society notes:

Participants examine Divide Sands Wetland plants during a North Woods Native Plant Society field trip. Trips are free and open to anyone interested in the native plants and ecosystems of the western UP and northern Wisconsin. To learn about 2015 trips, send your email address to nwnpsociety@gmail.com. Botanists interested in leading trips are asked to email us at the same address.

Collecting backyard sugaring equipment a fun challenge

Sugaring From Page 1
are placed about two to four feet above the ground. The tap holes are drilled three inches deep so that you access the white “sap wood.” To give some perspective, a maple tree with a 25-inch diameter or greater, can be tapped in four spots. If you are tapping a tree that has been tapped before, you should drill the hole at least six inches away from last year’s tap hole scar (the hole heals up on its own).

Commercial maple syrup producers need a large amount of expensive equipment. It is possible to scale the equipment down and produce limited amounts of maple syrup on a budget. More local hardware stores are carrying basic syrup making supplies as this activity has seen a resurgence in popularity. At the minimum you need the following:

1. 1/2 or 7/16 inch wood drill bit.
2. Portable power drill (18 V) or hand drill.
3. Sap spiles (spouts) with hangers for each tap.
4. One bucket (two gallons) or special sap bag per tap. Bucket covers keep rain from diluting sap
5. Five gallon plastic buckets to gather the sap.
6. Plastic tank (I find these at some feed mills or agriculture supply stores) to gather the sap into and transport to your sap boiling spot.
7. Evaporator pan and or large pot to boil the sap.
8. Filter paper or clean felt “hat” to filter the finished syrup.
9. Large-scale thermometer or syrup hydrometer.
10. Pint and quart canning jars and lids.

Maple sap running season varies greatly depending on the year and the region of Michigan that you live in. The

Editor’s Notes:

Lots to celebrate, nurture & defend. . .let’s remember to celebrate

Indeed we have a lot to celebrate in the UP! We have rare alvar landscapes in the eastern part of this peninsula. We have remote and rugged areas in the Huron Mountains and Yellow Dog Plains. I suspect many of you -- like me -- never tire of the craggy outcrops that greet us when entering the western UP on Highway 2 from Wisconsin. And then there’s the seasonal bounty of our beloved maples: yellows and golds in the fall beckoning toward bitter winter winds whistling through bare branches soon to flow with sweet sap that makes liquid gold. What a symphony of the senses!

As the front page of this newsletter shows, this incredible landscape constantly faces threats from short-term extractive enterprises and public servants with too narrow an understanding of both the public and service. So let’s join together as passionate and tenacious defenders, protectors, and healers of this beautiful region the weekend of March 13-15 in Marquette for the seventh annual Celebrate the UP. Let’s celebrate, support, and regenerate each other and the love we share for and within this special place.

maple sap runs occur as winter breaks and transitions to spring. I have made maple syrup in southern Michigan, mid Michigan and the Upper Peninsula. I have found in Northern Michigan that you do not get a significant sap run until the snow melts away from the trunk of the maple trees. The snow “bowl” around the darker base of the tree melts before



the snow farther away from trees. In Michigan you need to watch the weather more than the calendar. Tap your trees to catch weather in March when it typically gets cold at night (below freezing or colder) and then relatively warm (best above 50° F) during the day. Under ideal conditions you can get about two gallons or more of maple sap in each 24 hour period. Sugar content varies at different times of the season, but the average is that it takes 40 gallons of maple sap to boil
Sugaring See Page 13

Let’s celebrate the wonderful young folks becoming the next generation of citizen scientists with help from UPEC’s Environmental Education Grants. Where government and corporate support is absent for basic scientific research, they will conduct research out of a desire to understand, respect, and love being alive and connected within this region. These are the future scientists who will disarm the current assault on science that has become so pervasive. For true science is not control and domination; it is respectful understanding and thoughtful action by members of and within this world. And let’s honor the memories of good folks like **Tom Church**, **Bonnie Miljour**, and many others who gave in myriad ways.

I would like to thank **Sheri Amsel** for sharing her maple syrup artwork that adorns the front and back pages of this newsletter. You can learn more about Sheri’s work at www.exploringnature.org And thanks from UPEC to the many, many folks who contributed to this newsletter, including **Kathleen Heideman** for the wonderful program graphic on Page 5 and in ads for **Celebrate the UP!** -- David Clanaugh

Celebrate the UP!

March 13 - 15

A weekend event at the Four Corners
(Front & Ridge Streets) in Marquette:

- The Landmark Inn
- Peter White Public Library
- Federated Women's Clubhouse
- First United Methodist Church

Celebrate what artists, tribal elders, linguistics professors, botanists, and northern lights watchers among others find so special about life in the UP!



Presentation Schedule & Summaries

Friday, March 13 Kick-off at the Federated Women's Clubhouse

1 to 4 p.m. Quarterly UPEC board meeting. All are welcome.

7 p.m. **Keynote Speaker John Davis on "Continental Wildways: Reconnecting Natural Habitats for Wide-Ranging Species, Hikers, and Paddlers."**

With photos from recent traverses of proposed Eastern and Western Wildways, Davis will offer ideas on why we should be working to reconnect wild habitats on a continental scale and how we might begin to achieve such gains on the ground. He will propose that the Upper Peninsula be recognized as an essential part of an east-west Northern Forest Wildway and as a stepping stone to cougar recolonization of the east.

Saturday, March 14 — Presentations at Multiple Locations

Lunch from 12:15 – 1:30 p.m. is available at the Landmark Inn and other area eateries.

Peter White Public Library – Marquette Arts & Cultural Center, Wave Room

10:15 a.m. Kathleen M. Heideman: **Something In The Starry Night Keeps Asking To Be Held**
A poetry reading featuring wild and threatened places in the UP, inspired by the particulars of swamps, wolves, star-gazing, starvation on Isle Royale, nickel mining on the Yellow Dog Plains, imaginary islands in Lake Superior, sandhill cranes, bark beetles, stream-sampling, collapsing mining towns, crooked white pines, carnivorous plants, and more. Multimedia visuals, including Heideman's watercolors and photos, will accompany the poems and watercolors from her artist residency at Isle Royale.

11:30 a.m. Joshua Lopac: **Lights in the Sky**
Josh introduces viewing the phenomenon known as the Northern Lights/Aurora Borealis. Learn what causes these amazing displays in our sky, when to view them, helpful viewing tips, and view some of his photographs of the northern lights from the past four years of "light chasing".

Peter White Public Library – Marquette Arts & Cultural Center, Large Workshop

- 10:15 a.m. Roger LaBine, Charlie LaBine Fox, and Terry Fox: **Birch Bark Basket Weaving Workshop**
Build a traditional Ojibwe birch bark basket with indigenous teachers. Participants will be instructed on the construction of a small basket. The discussion will share the time to best harvest the bark and the method to properly remove the bark to not injure the tree. There will be suggestions on how to decorate and what materials to use. Materials will be provided for this two-hour workshop, but donations would be appreciated to help offset the costs to the instructors. Space is limited to 20 participants (two hour session).
- 1:30 p.m. Dr. Marc Himes: **Woodturning; From the Tree to the Table**
Marc will demonstrate the use of the wood lathe in the turning of functional and artistic items. He will have a selection of items both functional and artistic to display and discuss.

The Landmark Inn – Board Room

- 10 a.m. Dr. Susy Ziegler: **Landscapes of the Upper Peninsula**
In this presentation we will explore the physical, environmental, and human geography that contribute to the UP's unique character. What makes the region so special to you? Is it the scenic landscapes and rugged beauty? The snowy winters and mild summers moderated by Lake Superior? The Native American and European heritage? Celebrate UP landscapes.
- 11:30 a.m. Dr. Chris Burnett & Jeff Caldwell: **Permanent Protection of Private Conservation Lands**
Chris and Jeff will explain the role of land conservancies (land trusts) in helping private landowners establish permanent legal protection of conservation lands. The main methods of protection used by land conservancies are conservation easements, where the landowner retains ownership, and conservation preserves, where the landowner donates the land. Chris and Jeff will explain the costs and benefits involved with each method. They also will highlight new UP Land Conservancy preserves with public access and talk about ways to support their organization's mission.
- 1:30 p.m. Dr. Pat Lederle: **Governance & the Challenges of Michigan Wolf Management**
Under the public trust doctrine, it is the government's responsibility to manage wildlife resources for the benefit of the people. How the laws, regulations, policies, and decision-making authorities are structured have significant influence over how wolves are managed in Michigan. Recent changes in the governance structure have resulted in widespread confusion and misunderstanding and have posed significant challenges for managers, decision makers, and the people affected by the changes.

The Landmark Inn – Sky Room

- 10 a.m. Dr. Alec Lindsay: **Loon Migration in the Upper Great Lakes**
This talk will demonstrate how the Upper Great Lakes serve as important staging areas for common and red-throated loons during migration. Long-term waterbird counts at Whitefish Point Observatory show changing patterns of migration on the Great Lakes while genetic data from loons killed on migration indicate the Upper Great Lakes may play a much larger continental role for migrating loons than was previously known.
- 11:30 a.m. Jan Schultz: **The Spectacular Secrets of Crop Wild Relatives**
A crop wild relative (CWR) is a plant occurring in the "wild" that is the congener from which a crop was domesticated, or a closely related species to a particular domesticated crop. A CWR contributes genetic material to the crop species, which may provide increased disease resistance, fertility, crop yield or other desirable traits. Almost every species of plant that humans have domesticated and cultivate has one or more CWR. These CWR are now receiving an increased level of focus as our climate changes, food security is challenged, and inherent biodiversity is lost.

1:30 p.m. Tara Gluski & Dave Kalishek: **Introduction to Wilderness Survival**
Do you know the items you should never be without when you go into the woods? Don't let poor planning ruin a trip. Learn about putting together a basic Wilderness Survival Kit. The best time to practice these skills is before you need to use them. Tara and Dave are actively involved as instructors for the Michigan DNR's Becoming an Outdoors-Woman. They'll conclude with an overview of this successful program. This presentation, however, is geared to all genders, so come one, come all!

Federated Women's Clubhouse

10 a.m. Dr. Kathryn Remlinger: **Touring the UP's Linguistic Landscape**
This talk will analyze the linguistic landscape of the UP to investigate tourism's role in defining the dialect—what it means to “sound like a Yooper”—and in shaping perceptions of the dialect. An examination of language in public spaces—from tourist brochures, to t-shirts, web sites, and bumper stickers—provides visible evidence of how marketing the UP as a tourist destination is tied to the dialect's positive value.

11:30 a.m. John Davis: **Adopting Wildlife Corridors**
This session will look at the work entailed in actually identifying and protecting wildlife corridors (habitat connections) on the ground. Davis will briefly describe work in his adopted wildlife corridor, Split Rock Wildway, in northern New York's Adirondack Park. Davis will then invite others to share their experiences, to generate discussion of how better to restore and conserve wildlife habitat connections in the UP and beyond.

1:30 p.m. ***Ojibwe Birch Bark Wigwam* by Dr. Michael Loukinen**
This 53-minute documentary film by sociologist filmmaker Michael Loukinen premiered in March, 2009 at Northern Michigan University. Ten years in the making, it shows the late Nick Hockings, an acclaimed Ojibwe educator from Lac du Flambeau, Wisconsin, building an authentic birch bark wigwam at the Timid Mink Archeological Site on the shores of Hagerman Lake near Iron River. More than a how-to film, Loukinen said it conveys the spiritual knowledge of the Ojibwe and how the forest was the people's hardware, building supply, pharmacy, and grocery store. Roger LaBine and Charlie Fox will introduce the film.

Panel Discussion – First United Methodist Church Sanctuary

3 – 4:45 p.m. **Predators and Ecosystems: The Connections**
Panelists: John Davis, Dr. Pat Lederle, D. Cody Norton, Marv Roberson, and Nancy Warren

Public Reception – Federated Women's Clubhouse

5 – 7 p.m. Please join us for refreshments and hors d'oeuvres, meet other folks who share a love of the UP, and talk with many of the presenters and panelists.

Sunday, March 15 – Sponsored by the UP Land Conservancy

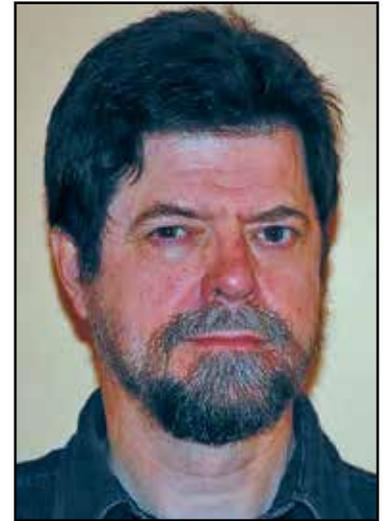
“Over the River and through the Woods”

5K Snowshoe Race & Trek at the future Vielmetti-Peters Preserve, 2- 4 p.m.
Followed by dinner for participants & friends at the Ore Dock Brewing Company, 4 - 6 p.m.

* **Please register for Sunday's events at uplandconservancy.org**

Presenter Biographies

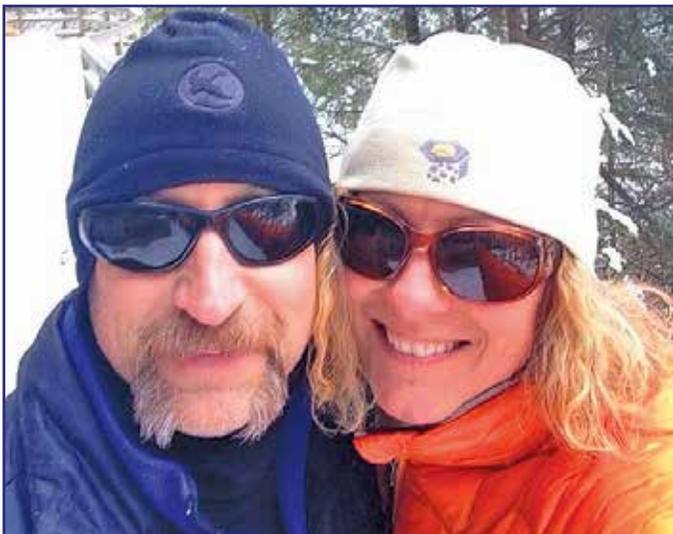
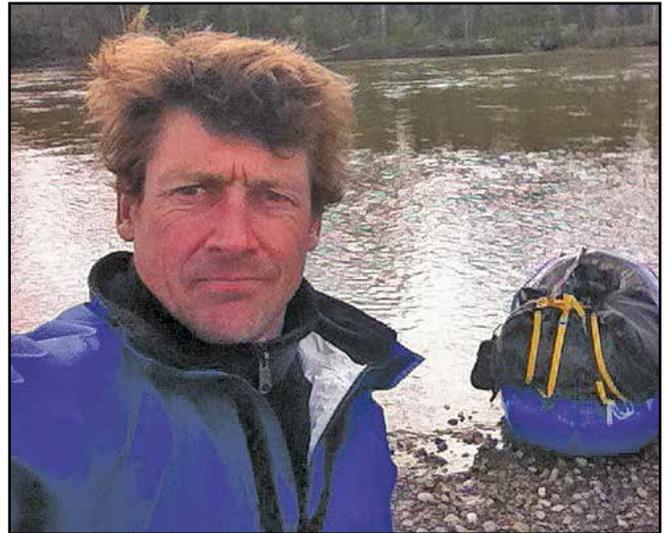
Dr. Chris Burnett grew up as a country boy in the Berkshire Hills of western Massachusetts. He received a B.S. in forest biology from the SUNY College of Environmental Science and Forestry at Syracuse in 1971 and a Ph.D. in mammalian ecology from Boston University in 1982. He has worked as an environmental consultant, interpretive naturalist, wildlife ecologist (specializing in the energetics and behavior of bats), consulting forester, public service forester, forest certification auditor, and professor of forestry, biology and education. Currently, Chris is the executive director of Upper Peninsula Land Conservancy. He moved to Chocoday Township in 1989 where he manages 80 acres of woodland, farmland, and streams for recreation, biodiversity, water resources, timber, and good things to eat and drink. Chris is a former board member of UPEC and the Yellow Dog Watershed Preserve.



Jeff Caldwell is new to the UP but has been proud to call it home for over a year. He grew up in a small southern Wisconsin town on the Mississippi River. He received a B.S. in genetics and zoology from the University of Wisconsin-Madison in 2004 and an M.S. in ecological teaching and learning from Lesley University in Cambridge, Massachusetts in 2013. Jeff has held a variety of science-related jobs, including technician in a potato genetics laboratory, science teacher, and field biologist—first studying carnivores in Sequoia National Park and later desert bighorn sheep in Southern California. Currently, he is the assistant director of the Upper Peninsula Land Conservancy and is working on an M.B.A.

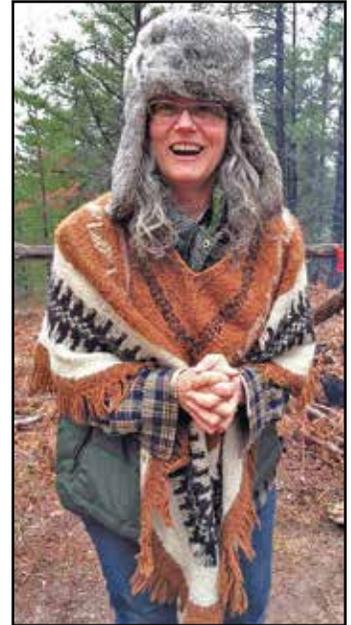
John Davis works part-time as a wildways advocate and explorer for Wildlands Network, and part-time as a land steward in Split Rock Wildway, eastern Adirondack Park, NY. He

serves on the boards of The Rewilding Institute, RESTORE: The North Woods, and Wild Farm Alliance. In 2011 and 2013, John trekked thousands of miles through the proposed Eastern and Western Wildway. TrekEast is described—and conservation lessons offered—in John's book, *Big Wild, and Connected* (published as three e-books by Island Press).



Tara Gluski has been hiking, backpacking, paddling, and otherwise enjoying the backcountry for nearly 20 years. **Dave Kalishek** was born and raised in the UP. He has 40 years of outdoor experience, including hunting, fishing, backpacking, and paddling. Tara and Dave have instructed wilderness survival and ice fishing. They also have led hiking excursions for the Central American Youth Ambassadors. In addition, Tara and Dave serve as volunteer instructors for the Michigan DNR's Becoming an Outdoorswoman Program. For that program, they have taught wilderness survival and winter camping, and have led numerous backpacking trips.

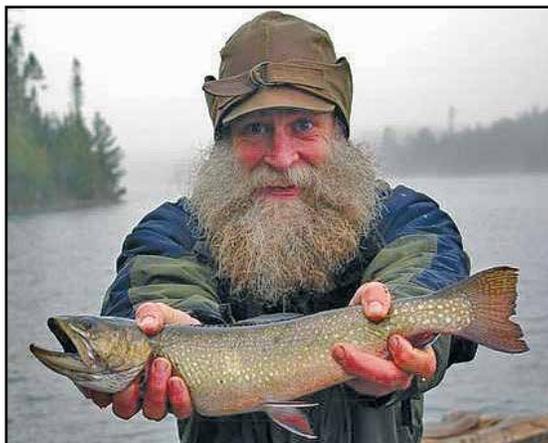
Kathleen M. Heideman is a writer and artist based in Upper Michigan. She's completed artist residencies with watersheds, forests, the National Park Service (including Isle Royale and Sleeping Bear Dunes) and the National Science Foundation's Antarctic Artists & Writers Program. Her watercolors have been shown locally and nationally. Heideman's poetry appears in literary journals, anthologies, and chapbooks; she's been twice-nominated for UP Poet Laureate, and received first prize in the "UP Nature Writing Contest" in 2014. She serves as president of Save the Wild UP and works along the wild shore of Lake Superior, where she resides with husband Daniel Rydholm.



Dr. Marc Himes feels fortunate to be able to live and work in the UP after completing his education (his mother was born and raised in the region). Marc practiced medicine in the Marquette General Hospital system from 1979 through his July 2013 retirement. Marc's father introduced him to woodturning. Over the last ten years, he has developed a shop at his home and increased his skills. He has taken several courses and has displayed his work in UP Galleries (Zero Degrees Gallery in Marquette, Nook and Cranny Gallery in Ishpeming and the Paige Wiard gallery in Calumet). Marc's work has been in multiple shows in

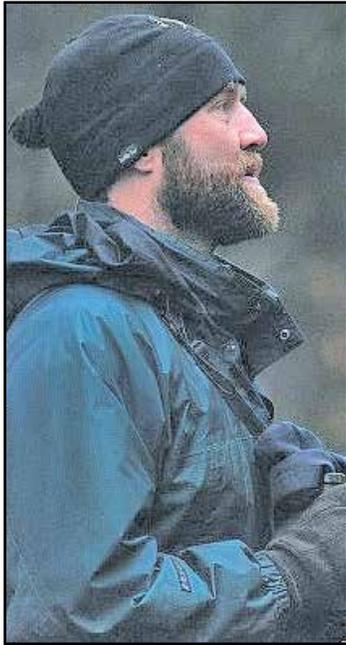
the UP as well as nationally. 2014 was the first year he was able to enter and show his work in Art On The Rocks, where he won the Best of Show in 3D Award. He is a member of the American Association of Woodturners and the local AAW chapter, Superiorland Woodturners. Using mainly local woods, Marc's goal as a woodturner and artist is to show the wood's beauty, both in the form of the piece and figure within the wood, hoping to create an emotional connection with the viewer.

Roger LaBine is an enrolled member of the Lac Vieux Desert Band of Lake Superior Chippewa (LVD) in Watersmeet and a water resource technician. He is currently chairman of the LVD Culture and Conservation Committees and is co-chairman of the Native Wild Rice Coalition. Working with birch bark to make baskets is part of Roger's efforts to preserve and share indigenous culture. He is also active in wild rice restoration efforts on traditional and historic tribal lands and in area lakes and rivers. He shares his knowledge through conducting wild rice camps on his traditional homelands. Roger was inspired by his Uncle Niigaanash, who was also his mentor. **Terry LaBine Fox** is an enrolled member of the Lac Vieux Desert Band and is married to **Charles Fox** who is an enrolled member of the Sokaogon Chippewa Community in Mole Lake, Wisconsin. They are respected elders in their communities and enjoy sharing the traditional, cultural, and spiritual knowledge gifted to them. One of these gifts is their expertise in working with and constructing tools from birch bark to assist with the annual harvesting from Mother Earth. These tools include baskets of all types and sizes for berry collection, maple sap collection, winnowing wild rice, storage, and serving. Over time they have become experienced teachers and look forward to working with individuals who will attend the workshop.



Dr. Pat Lederle has been a wildlife planning supervisor for the Michigan DNR Wildlife Division for 15 years, and serves as an adjunct associate professor at Michigan State University. He manages a collaborative statewide wildlife planning program on both game and non-game species and the Wildlife Division's strategic planning efforts. Pat previously served eight years as the research supervisor and three years as the endangered species coordinator. Prior to working for DNR, he was involved with research on ecological impacts from Department of Energy's Yucca Mountain Project, a proposed nuclear waste repository. He also spent more than ten years in the UP running a comprehensive research project evaluating the impacts of extremely low frequency electromagnetic fields on birds and mammals. Pat is

also a past president of the North Central Section of the Wildlife Society. He tries to spend as much spare time as possible hunting, canoeing, bicycle touring, and camping.



Dr. Alec Lindsay's research broadly focuses on studies of evolution, animal behavior and conservation, incorporating data gathered from molecular genetic methods, and detailed field studies. He is interested in evolutionary theory and its application to animal behavior, molecular evolution and conservation. His research work has predominantly focused on studies of genetics and behavior of Holarctic birds, but students and collaborators work on varied taxa like deer, ticks, black flies and parasites.

Josh Lopac has lived in the UP since childhood, currently Bergland. He received a B.S. at Northern Michigan University in outdoor recreation leadership and management with a criminal justice minor. He currently works as a forestry technician in the Ottawa National Forest's recreation program. "I've been chasing the northern lights for four years now," Josh says, "and I have seen some amazing displays. I enjoy that each time, it's something different and I'm still learning and trying different things in hopes to catch the perfect shot.

The northern lights are just one of the things that make this place, the UP, special." Josh, his wife, and their two children enjoy exploring the Ottawa, especially during berry season. Josh also enjoys fishing, golfing, photography, coaching football and spending time outside with his family.



D. Cody Norton is a master's student in biology at Northern Michigan University. His master's research near Escanaba and Crystal Falls involves investigating black bear space use and infanticide risk in response to timber harvest. His research is part of the Michigan Predator-Prey Project, which studies the effects of winter weather, habitat, and predators on white-tailed deer fawn survival in the UP. He has been involved with the project for over five years, which has provided him with experiences working with various large predators including black bears, wolves, coyotes, and bobcats.

Dr. Kathryn Remlinger earned a B.A. in sociology and French, and an M.A. in English from Morehead State University (Kentucky), and a Ph.D. from Michigan Tech University in Rhetoric and Technical Communication with emphasis in sociolinguistics. She is a professor of English linguistics at Grand Valley

State University, where she has taught a variety of linguistics courses. Her research focuses on language variation and change, gender and language, and the connections among language, place, and identity. Originally from Ohio, Kathryn transplanted her Buckeye roots to West Michigan in 1995, where she enjoys cycling, cross-country skiing, and working with refugee resettlement. She serves on the executive council of the American Dialect Society and on the Linguistic Society of America's Committee on the Status of Women in Linguistics.





Marvin Roberson is a lifelong Michigan resident. He has lived in the UP for almost 25 years, and has been involved with the Sierra Club for just as long. He was educated as an undergraduate and graduate student in both philosophy and forest ecology. Marvin is an avid backpacker, canoeist, kayaker, fly fisherman, and bird hunter. He enjoys walking in the woods with his beloved Gordon Setter, Ruger.

Jan Schultz has lived in Marquette County for about 40 years. During that time she has enjoyed the UP's beautiful, natural environment and especially its fascinating flora. Jan served as the Hiawatha National Forest forest botanist for many years. She is now the program leader for Botany, Nonnative Invasive Species, and Special Forest Products for the Eastern Region of the U.S. Forest Service.



Dr. Susy Ziegler is head of the Department of Earth, Environmental, and Geographical Sciences at Northern Michigan University. She was drawn to the rugged beauty of the UP in 2010. For the past five years she has enjoyed learning about the stunning landscapes of the region. She prefers to explore this area on cross country skis and is delighted by this winter's fresh powder.

Nancy Warren's passion for wolves began in the early 1990's when she discovered there were a handful of wolves in the UP. Nancy soon realized that, for wolves to survive and thrive, there needs to be human tolerance, and she came to believe one way to improve social tolerance is by gaining a better understanding of wolf behavior through education. Nancy volunteers by presenting programs at schools and various



organizations throughout Northern Wisconsin and the Western UP. For 18 seasons, she was a volunteer tracker for the Wisconsin DNR, conducted howling surveys, and assisted with the collaring of several wolves. Nancy served on the Michigan DNR Wolf Roundtable where the guiding principles for the Wolf Management Plan were developed. She lives in Ewen with her husband and dog. The Warrens have welcomed and adapted to having wolves and other wild animals frequent their property.

Consider EarthShare payroll deduction to support UPEC

UPEC is a proud member of EarthShare of Michigan and Wisconsin, organizations that help working people to donate to environmental organizations through workplace giving campaigns. Each year EarthShare provides UPEC with critically needed funding for environmental education and program operation. If you would like to help UPEC receive more funding, consider letting your employer know you want to participate in the EarthShare giving option at your workplace through the annual payroll deduction plan. For more info, please call 1-800-875-3863 or visit www.earthsharemichigan.org or <http://www.earthshare.org/2014/03/wisconsin.html>



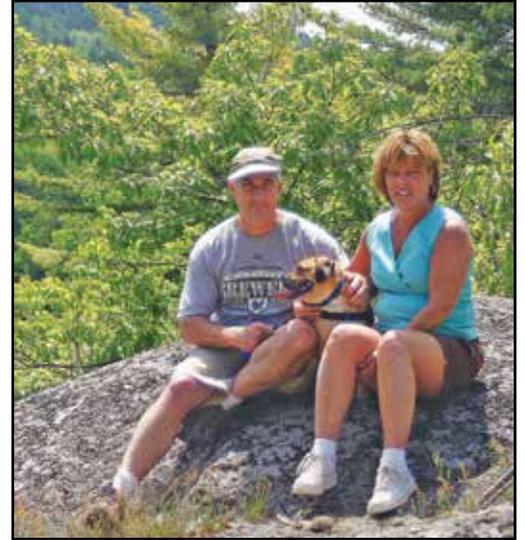
A Special Thank You from all of UPEC

Mark and Christine Troutd have again generously lent financial support for **Celebrate the UP!** They share a bit about their love for the region:

We first visited the UP in 1996 during a convention in Marquette. Before we returned to our home state of Wisconsin, we had made an offer on a lake property in Marquette County. The property was placed into a conservation easement in 2006.

We love visiting the UP and enjoying the beauty of the land and waters and abundant variety of wildlife. This is such a special place to us that we intend to retire in the UP and continue to enjoy and preserve the pristine nature of these remote lands.

We have attended the UPEC Celebrate the UP event every year, and we have always enjoyed being with like-minded nature lovers who share our passion for the UP in a positive setting. We are very pleased to be able to sponsor this event and look forward to meeting new people in the UP who we have always found to be very friendly and have a genuine concern for the environment. We are committed to doing whatever we can to keep the UP a special place for this and future generations.



Yes! I Want to Partner with UPEC in Making a Difference!

*Please complete and give this to a UPEC board member or mail to UPEC; PO Box 673; Houghton, MI 49931
Or you can contribute on-line through justgive.org at UPEC's website at www.upenvironment.org*

I'd like to support UPEC's goals by enclosing a contribution for (please check one):

- _____ Regular Membership (\$20)
- _____ Supporting or Organizational Membership (\$50)
- _____ Student/Low Income Membership (\$15)
- _____ Lifetime Membership (\$1,000)
- _____ Contact me: I want to Volunteer
- _____ Gift Membership (please provide person's name and mailing address on reverse side of this form)
- _____ In Honor or Memory (please circle) of _____
(please provide person's or family's name and mailing address on separate sheet of paper)

UPEC is a 501(c)(3) nonprofit organization; your contribution is tax-deductible. Your support helps us work together to protect and enhance the UP's unique natural environment. Please consider making a gift membership to help us expand our circle of people working together. You may also contribute in **Memory** or **Honor** of a family member or friend.

Also consider enclosing a note with your contribution with feedback about this newsletter and UPEC's work.

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

I'm already a member, but I'd like to make additional contributions to these UPEC funds:

- _____ Environmental Education
- _____ Land Acquisition/Protection
- _____ Community Outreach
- _____ Unrestricted
- _____ Marquette County Community Foundation Fund

*Check this newsletter's mailing label for your membership status.
Phone & Email information is optional – Thanks for your Support!*

Syrup making connects people and generations

Sugaring From Page 4
down into one gallon of maple syrup. Sap will not run every day of the sap run season. During cold or warm periods without the cold nights with warm days, the sap run will stop until the proper daily temperature conditions reoccur.

The sap should be collected daily when it is running. Ideally, you should boil it down as soon as possible to make the highest quality syrup. If maple sap sits around very long in warmer weather it quickly degrades. Equipment to boil the sap down can vary from a pot on the stove or outdoor wood cooking area to a high volume commercially purchased fuel fired evaporator pan/pans. If you are going to boil down more than a few gallons of sap, it is best to set up most of your boiling operation outside. I find that a good compromise boiling system is some sort of wood-fired cooker (like the one in the Page 1 photo), and then finish the sap on a high output LP gas stove. As the sap becomes more concentrated and close to completion we transfer the boiling syrup inside to our kitchen and finish it there. I like to use a maple syrup hydrometer that measures the density of the syrup and has a mark on the hydrometer to tell you when it is done. The other option is a large-scale thermometer can be used to measure when the syrup maintains 180° F so it will not spoil when canned and stored. The boiling syrup should be closely watched and checked with the thermometer or hydrometer when it turns brown and the boiling bubbles get smaller at the surface of the batch (foaming up). At this point the syrup can quickly foam over and burn, possibly damaging, and at the very least, making a mess of your pan.

The maple sap running season can last anywhere from a few days to six weeks or more. The season really varies from year to year. It is very important to stop collecting sap when the maple buds pop out. If you make “buddy” syrup, all of your hours of work will have only produced bitter syrup

that is not palatable. In the North Country I stop collecting sap when I see the first aspen buds pop out. The maple buds don't typically develop until after the first aspen buds. The nice thing about making syrup for fun is you can quit making it any time you need to. However, pure maple syrup makes a popular gift and you may want to make a little more



An old-time sugaring photo from the Ziegler Family archives.

than your immediate family needs.

An excellent maple syrup making reference is the USDA Handbook No. 134 – *Maple Syrup Producers Manual*. This handbook can be obtained from book sellers online. You can typically obtain more maple syrup information from your County Michigan State Extension Agent. Some hardware stores stock a few maple syrup making supplies, but if yours does not the equipment is readily available on line.

Maple syrup production is something our predecessors learned from Native American tribes living in the Great Lake States and New England. My family started making maple syrup in Michigan in the 1870's. Over the generations it built up a large commercial operation annually producing hundreds of gallons on the family's Michigan farm. In the UP our family does not make our living from farming, but we have continued making maple syrup on a smaller scale.

I hope future generations of my family continue this excellent family tradition. Even if you don't intend to make maple syrup for many years to come, a low-budget family maple syrup operation is a great activity to introduce your family to this traditional spring outdoor practice. You and your family will take great pride in the product of your labors, and your kids will always fondly remember when their family made the maple syrup they used for the family breakfast.

Receive action alerts & breaking news: Sign up for UPEC's new e-newsletter!

UPEC now has an e-newsletter and action alert system. If you want to receive these emails, please sign up at <http://tinyurl.com/obu49xe>

Different ways to support UPEC

Consider contributing to UPEC in honor or memory of a special friend or loved one.

When you make a gift on behalf of another person, we will send an acknowledgment of the gift to that person or his/her family, so enclose mailing information. When you contribute on behalf of someone else, encourage them to become a UPEC member through your gift.

Do you or someone you know have a wedding or other special celebration in the future? Consider making it a “green occasion” by designating UPEC as a recipient of honor gifts. UPEC has a JustGive link at its website that can help you to do this.

Jeffers HS BioBlitzes Lake Perrault, Brown Sanctuary

By Joan Chadde

Jeffers Middle & High School (Adams Township School) students were the first in the Copper Country to conduct a BioBlitz. The BioBlitz took place on Sept. 30, 2014 at the school's "adopted" school forest at Lake Perrault (owned by the Michigan Department of Natural Resources) and at the Michigan Nature Association's adjacent Robert Brown Nature Sanctuary.

A BioBlitz is an intense period of biological surveying in an attempt to identify and record all the living species within a designated area. Scientists, naturalists, teachers, students, and community volunteers conduct an intensive inventory over a one-day period.

"Participating in these hands-on field studies was a fun and exciting way for students to learn about biodiversity and better understand how to protect it," explained Cindy McCormick, Jeffers High School science and English teacher and co-coordinator of the event. "Instead of a highly structured technical field survey, the BioBlitz event had the atmosphere of a festival. The short time frame makes the searching more exciting."

"The BioBlitz promoted students' interest in learning about a special place," added Joan Chadde, event co-coordinator and director of the Michigan Tech Center for Science & Environmental Outreach. "We hope the experience will stimulate students' interest in science and the natural world, and encourage future study and exploration. The purpose of a BioBlitz is to provide baseline data to help us better understand these unique ecosystems. Data can be compared year to year, and it can be used to guide future monitoring efforts. The BioBlitz is also a great opportunity for students and community members to meet working scientists and learn more about what they do."

Remembering & honoring those who share stewardship values

UP Environment provides a place to remember and honor people dear to us in the name of environmental protection and stewardship. Your gift in Honor or Memory of others enables them to continue to participate in UPEC's work. The holiday season is a perfect time to make this type of gift. If you want your contribution to honor or remember someone, please provide relevant information with that contribution.

Honoring Sen. Carl Levin's Service by Steve Syrja

Memory of Henry & Bessie Pommer by D. Clanaugh

UP Environment



Jeffers ninth graders (l-r) Ivy Klemett, Michael Johnson, and Carson Turner conduct a macroninvertebrate inventory of Lake Perrault (to compare to Salmon-Trout River and the fen at the Brown Sanctuary)

Photo by Nathan Miller

The BioBlitz included these study areas and respective instructors: Frog, toad & salamander surveys, Joan Chadde; fish, Tom Rozich; ferns, Nancy Leonard; flowering plants, Adrienne Bozic; trees and shrubs, Shawn Hagan and Jean Marie Hagan; moths and butterflies, Jim Bess and Chris Hohnholt; invasive plants, Meral Jackson; lichens, Karena Schmidt; macroinvertebrates, Amy Schrank; event photographer, Nathan Miller; wildlife tracking and small mammal trapping, Dan Haskell and Marcy Erickson; and water quality, Denise Landsberg. Organizations involved in the BioBlitz included Copper Country Trout Unlimited, Lorest Land Group, Lake Superior Stewardship Initiative, Michigan Nature Association, Michigan Tech, and the Keweenaw Land Trust.

The BioBlitz was funded with a grant from UPEC and support from the Lake Superior Stewardship Initiative.

How to Contact Your State Legislators

37th District Senator Wayne Schmidt

571-373-2413 SenWSchmidt@senate.mi.gov

38th District Senator Tom Casperson

517-373-7840; SenTCasperson@senate.mi.gov

107th District Rep. Lee Chatfield

517-373-2629; LeeChatfield@house.mi.gov

108th District Rep. Ed McBroom

517-373-0156; EdMcBroom@house.mi.gov

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517-373-0498; JohnKivela@house.mi.gov

110th District Rep. Scott Dianda

517-373-0850; scottdianda@house.mi.gov

For more info: www.legislature.mi.gov

UPEC supports 'citizen science' among region's young people

Environmental Ed Grants From Back Page

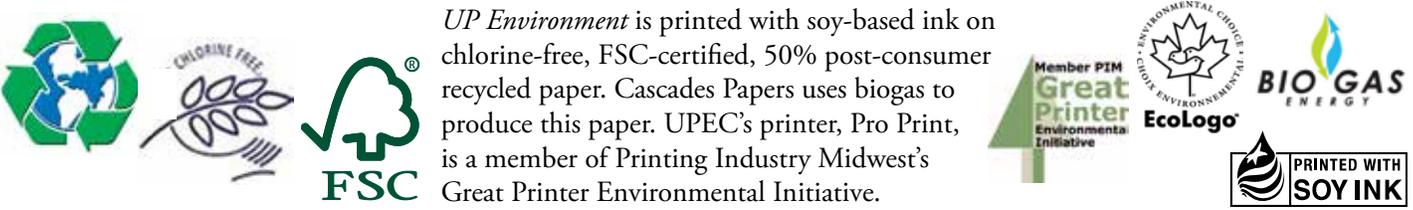
- **Jeffers High School, MTU Center for Science and Environment, and Houghton High School.** UPEC funding will support scholarships for regional 7th through 12th grade students to attend the 11th Biennial Lake Superior Youth Symposium in Thunder Bay, Ontario this May. At the symposium, students will participate in workshops and activities focusing on the Great Lakes and the Lake Superior Watershed in particular. The workshops revolve around diverse aspects of regional watersheds, including history, art, music, science, nature, writing, the environment, and taking action to address issues facing the Great Lakes and Lake Superior. "Our students sincerely appreciate the help to attend the Lake Superior Youth Symposium," Jeffers teacher Cindy McCormick commented. "So far, three of the students who have applied have indicated that they would only be able to attend if they had to pay \$20 or less toward the event."
- **Life of Lake Superior Youth Program.** This project in Munising entails a series of outdoor experiences designed to open the minds of youths ages eight through 14 about Lake Superior's vast natural, cultural, and economic potential. "This support provides a free educational event that helps enrich the lives of youth through environmental education," MSU Extension Educator Nick Baumgart said. "It creates community partnerships with various agencies working toward common goals, and it establishes inter-generational relationships between youth, adults and retirees with common interests."
- **UP Land Conservancy.** Marquette middle school students at North Star Academy will learn about native plant species through instruction, research, and nature journaling. Using GPS, they will find and identify plants during a field trip to the Vielmetti-Peters Preserve. They will also install signage for other preserve users.
- **Michigan Tech Department of Social Sciences.** Houghton County's Energy Efficiency Education Kickoff will spearhead the community's participation in a national two-year energy-efficiency competition sponsored by Georgetown University. One U.S. community (from 52 quarter-finalists) that leads the way in energy efficiency planning will receive a \$5 million incentive prize.
- **Stambaugh Elementary School.** UPEC will support renovation of part of an existing playground to become an "outdoor classroom." The space will include natu-

ral materials and native plants in a setting that supports language and literacy, science, mathematics, social/emotional adjustment, body competence, creative arts and visual/spatial learning. "This support from UPEC will be critical to creating a space for students and teachers to take education outside," commented Stambaugh Elementary School teacher Maggie Scheffer, "The UPEC grant money will help provide the space and opportunity for environmental education for all elementary grade levels in a natural setting."

- **MooseWood Nature Center.** MooseWood will offer aquatic science field trips to all fourth graders in the Marquette area this spring. Traveling aboard the Marquette Harbor Cruises Isle Royale Queen III, students will participate in an experiential learning program studying Lake Superior water quality, bottomlands quality food webs, invasive species, fishing practices, effects of runoff, and scientific sampling work of area aquatic species with research scientists and educators.
- **Marquette Regional History Center.** "Citizen Science: Crowd Source Time Lapse Photography" will show in visual terms the effect of the human footprint on the landscape, as well as seasonal changes and weather as reflected in water levels and plant development. Citizens will submit photos of two forest sites to be edited into a time lapse museum display. Support from UPEC's Bonnie Miljour Memorial Fund for the Arts and Environment will enable this project. "The natural landscape is forever changing, often so subtly that we don't even notice," said Kaye Hibel, history center executive director. "Our hope is that citizen science will show a visual time lapse of those changes and the roles humans play in those changes."

UPEC board member Connie Sherry chaired a committee that reviewed proposals and made funding recommendations to the full UPEC board at its January meeting. Other committee members included board members Nancy Warren and Doug Welker, and Friends of the Land of Keweenaw (FOLK) President Linda Rulison (a retired K-12 educator).

All programs will have strong hands-on and outdoor components. Although science figures prominently in many of the projects, experiences in the arts and theater also play key roles in fostering awareness, appreciation and stewardship. The diversity of programs reflects UPEC's appreciation for a holistic approach to environmental awareness and advocacy.



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**Upper Peninsula
Environmental Coalition**

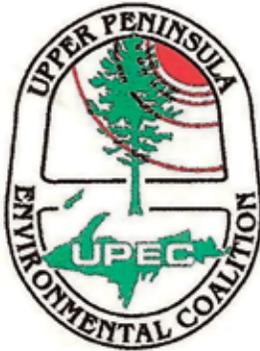
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*Protecting and maintaining the
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of Michigan's Upper Peninsula
by educating the public and
acting as a watchdog to
industry and government.*

**UPEC awards record number
of environmental ed grants**

By David Clanaugh, Editor

The Upper Peninsula Environmental Coalition (UPEC) recently awarded 11 environmental education grants totaling \$4,000. These grants will support programs across the UP benefiting 3,000 youths and involving 1,000 adults to deepen knowledge, appreciation, and stewardship of the region. The number of programs funded, total support, and anticipated impacts are all records. UPEC's support is part of a diverse environmental education partnership that includes community organizations, foundations, state and federal resource management agencies, universities, K-12 school districts, intermediate school districts, and other nonprofit environmental advocacy groups. Grant recipients for 2015 include:

- **Clear Lake Education Center.** UPEC support will help purchase supplies and materials to create "Vespers: Evening Flyers" - a program about Upper Peninsula bats, their ecological and economic value, impact, and vulnerabilities.
- **Houghton Middle School.** The Huron Creek Watershed Partnership (as part of the Lake Superior Stewardship Initiative) will purchase equipment and conduct additional field trips for water quality research and remediation, with an eye toward impacts from legacy copper mining and urbanization.

Environmental Ed Grants See Page 15



*Jeffers seventh graders Novelyn Verran (left) and Mara Pietila look for deformities as part of an amphibian inventory in Lake Perrault, at the Brown Nature Sanctuary fen, and in surrounding areas.
Photo by Nathan Miller*

Please review your membership status

Check your mailing label above for your membership status with UPEC. When you renew, please consider an additional level of support as part of UPEC's efforts to safeguard public lands, wildlife habitat, and prudent environmental policies.