

# UP Environment



**Fall 2015**

***UPEC: The UP's oldest grassroots environmental group.***

***Join us for UPEC's next Board meeting: Saturday, Oct. 3 at the Ford Forestry Center in Alberta, 12:30 to 4 p.m.***



## **Need more data to understand Yooper reptiles, amphibians**

*By Gary S. Casper & Ryne D. Rutherford*

We began researching amphibians and reptiles in the UP about 15 years ago and soon discovered that the region is something of a black hole for data on these classes of animals.

In response, we conducted numerous inventories and developed monitoring programs for the Lake Superior Binational Forum, the National Park Service, the Great Lakes Indian Fish and Wildlife Commission, and the Ottawa National Forest. These have been successful, with a baseline inventory completed for the entire Lake Superior Basin, long-term monitoring established for wood turtles and calling frogs, and monitoring methods developed for other groups (awaiting implementation). These data have been fed into the Lake Superior Biodiversity Conservation Strategy ([www.natu-](http://www.natu-)



*Wood turtle photo by Al Warren*



*Five-lined skink by Patrick Coin (middle). Northern watersnake by Matthew M. Hayes (bottom). Creative Commons Attribution-Share Alike licenses.*

[reconservancy.ca/superiorbca](http://reconservancy.ca/superiorbca)), where the special conservation features of the UP include an impressive abundance of amphibians and reptiles, an exceptional number of species at their range limits, and ecologically functional landscapes of exceptional value in biodiversity conservation.

Our work documenting distributions quickly revealed a number of long-standing errors in the literature and enormous knowledge gaps. For example, did you know ribbonsnakes were found on Isle Royale - not! The only northern watersnake record from the western UP turned out to be from Erwin, West Virginia and not Erwin Township (Gogebic County). Our research also revealed many misidentified chorus frogs, Cope's gray tree frogs, and pickerel frogs. Pickerel Frogs were last *Inventory Efforts . . . . . See Page 4*

## **Michigan moose struggle to maintain numbers**

*By Bill Ziegler*

Since the Michigan moose reestablishment project ("Moose Lift"), outdoor enthusiasts in Michigan have eagerly anticipated spotting wild moose in the UP. Moose are Michigan natives, but had largely disappeared by the late 1800s other than a few scattered individuals in the UP. The Michigan Department of Conservation attempted to re-introduce moose to the UP in the 1930s, but that attempt failed.

Decades latter, a group of Michigan DNR wildlife biologists believed that adequate moose habitat was still present in parts of the UP. In January 1985, the DNR worked with the Ontario Ministry of Natural Resources to transfer moose from Algonquin Provincial Park to Michigan. On the original Moose Lift, 29 moose (10 bulls, 19 *Moose Population . . . . . See Page 8*



*A cow and calf amble near US-141 at the Iron-Baraga County line. A beaver pond east of the road north of Cable Lake Road has become a favorite spot to spot moose in the morning or evening. Photo by Bill Ziegler*

# CLEC retreat brings forth four new UPEC board members

UPEC welcomed four new board members during the weeks following a July retreat at the Clear Lake Education Center: Dave Aho, Nick Baumgart, Grant Fenner, and Horst Schmidt.

Potential board members and other guests gathered with the board to develop relationships, share core motivations for being involved in environmental advocacy, broaden UPEC's connections across the UP, identify core priorities and goals, begin working on strategies and tactics, and also participate in some informal outdoor recreation activities.

Areas of concern emerging during the meeting included: biomass/biofuels, the Graymont land exchange and proposed limestone mine, County Road 595, alternative economics for UP, mining, public land stewardship, the aging Straits pipeline, a large potential industrial potato farm in the eastern UP, sustainable forestry, legislative issues and regulatory mechanisms, and habitat fragmentation.

As Board Member Maggie Scheffer discusses in her Page 10 article, everyone discovered similar childhood experiences in the natural world that motivate a shared desire to restore, protect, and improve the environment for future generations. And this reinforced UPEC's support of regional environmental education programming (See Back Page article about the next grant application process.).

Here are introductions for UPEC's four new board members:

**Horst Schmidt** comes to the UP and Keweenaw via Milwaukee and the other Eagle River (Wisconsin), moving here full-time in August of 2013. Horst has a



background in social services with community organizing skills from social justice work. As he has dug into his new home, Horst sees newly invigorated communities

with people willing to work together. As part of his community involvement, Horst sees a greater need than ever for environmental groups and tribes to work together, as well as drawing in other sectors to fix past mistakes and avoid future degradation. Growing, vibrant, healthy communities need to be everyone's goal.

**Grant Fenner** spent 23 years in the environmental/waste and recycling industry, holding various entrepreneurial/executive leadership positions before leaving the business world to return to school to earn his Ph.D. in business administration/management. He joined the business school faculty at Arkansas State University where he taught organization-



al behavior and business strategy for ten years. Although recently retired, he remains deeply engaged in a wide range of outdoor activities that include paddling, hiking, cycling, and x/c skiing throughout the UP. He also serves on the board of the Peter Wolfe Chapter of the North Country Trail Association, and is actively involved in economic development issues as it relates to tourism in Baraga County. He lives with his wife Renee and three cats in the old Finnish community of Aura outside of L'Anse.

**Nick Baumgart** is currently an educator with Michigan State University Extension Service, providing statewide leadership to 4-H programs related to environmental and outdoor education and the shooting sports. He received a bachelor degree in teaching from UW - Milwaukee and a master's degree in environmental education/



resource management from UW-Stevens Point. Nick was a teacher for 20 years having taught physical education, health, and environmental studies. He is happily married to Anne and they are the parents of two great kids. When not working, Nick can be found outside canoeing, bicycling, hiking, fishing, sitting in a tree, or camping.

*Board Members . . . . . See Page 3*

## 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 to promote sound planning and management decisions for all the region's natural resources.

*UP Environment* is published quarterly and available online to share with family & friends. Send comments or contributions to UPEC by standard mail at P.O. Box 673, Houghton, MI 49931, or e-mail us at [upec@upenvironment.org](mailto:upec@upenvironment.org). You can also visit us at [www.upenvironment.org](http://www.upenvironment.org) and Facebook.

## UPEC Officers, Board and Staff

- |                   |  |
|-------------------|--|
| Acting President: | Nancy Warren   |
| Secretary:        | Sherry Zoars   |
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| Board Members:    |  |
|                   | Dave Aho     David Allen     Nick Baumgart           |
|                   | Grant Fenner     Connie Julien, webmaster            |
|                   | Robert Evans     Horst Schmidt     Margaret Scheffer |
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***Interested in Serving on UPEC's Board? Contact Us!***

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

# It's all about our habitat: physical, psychological, social. . .together

By David Clanaugh, Editor

Increasingly, I've come to believe that it's all about the habitat. Habitat is vital for creatures to flourish: four-leggeds, creepy-crawlies, creatures of flight, upright bipeds, or folks with physical disabilities. For life to thrive, habitat needs initial integrity and constant maintenance, renewal, and improvement.

This newsletter's front-page articles point to habitat dynamics regarding moose, reptiles, and amphibians. For example, 30 years ago Michigan resource managers believed sufficient high-quality physical habitat existed to support 1,000 moose by the year 2000 (it was so exciting to photograph moose emerging on the Peshekee Grade and doing follow-up coverage). On-going indicators suggest that this may not have been the case, or that the habitat may be changing during intervening years.

We know that water, a critical aspect of habitat, has been under pressure in the heart of Michigan moose country: witness an ill-advised and sacrilegious nonferrous metal mine in sulfide-containing rock and continued efforts to route a mine haul road (CR595) through critical wetlands. And human psychological and social habitats have been changing as well; for example, the wrong-headed idea of a moose hunt—despite a moose population less than half of what was projected.

One convincing definition of "rational" that I recently encountered focuses on the system's ability (an individual, a

group, a society) to respond and adjust sustainably and productively to its encompassing habitat/environment. The system may be differentiated within its environment with its own set of internal rules and operations, yet the degree to which those internal rules and operation creatively resonate and evolve within the environment will determine the system's long-term survival. Dare I say that many of our civilizational systems are at a watershed moments in terms of their overall rationality and survivability?

When we consider habitat, perhaps the most fruitful starting place is to seriously plumb water's central role: as a baseline for biological life on our planet, as a lubricant for our minds and psyches, as a common social bond among all creatures. Ultimately the water's flow erodes the western fiction of the standalone (and rather insecure) self/ego which leads to me-versus-you thinking and acting. Each of us is an interpenetrated multiplicity within and beyond our very bodies. The flow of water captures this reality. Me and you dissolve with the flow, exchange, and recycling of these molecules. (For related thoughts, I refer you to Rich Sloat's fine reflection on Pages 6 & 7.).

For me, it has been humbling during my final days as UPEC's independent contractor to have engaged with two powerful habitat-and-water-witnessing movements chronicled in Page 5 photos: the *Anishinaabe*-conceived and led Waterwalkers move-  
*Water & Habitat . . . . . See Page 5*

## Board Members . . . . . From Page 2

**Dave Aho** was born and raised in the rural UP mining community of Ishpeming in the 1960's. The youngest of seven children, he lived in a minimalistic household with a strong emphasis on nature and self-reliance. Dave received a B.S. in Industrial Engineering and Technology from Central Michigan University in 1986, worked for the automotive indus-

try in various capacities for 12 years, and is currently married to Stephanie and working at Lake Superior State University as a programmer analyst. He is a vocal advocate for what is right, with a focus on preserving the environment and enriching



the lives of others and those yet to come, no matter what their species.

Welcome new board members, and thanks to all board members for their service to our region on behalf of the natural environment and the vision of sustainable, healthy communities!

## UPEC seeking Independent Contractor; Apply by Sept. 27

The Upper Peninsula Environmental Coalition (UPEC) is looking for a part-time Independent Contractor with strong writing skills and a commitment to protecting the UP environment. A partial list of duties include: editing and designing the UPEC newsletter (four issues per year); preparing an electronic newsletter as needed; assisting with the promotion of our educational grants in the newsletter, through media releases and via contact lists; managing the UPEC budget and other UPEC financial activities, including IRS filings; attending and recording minutes for quarterly board meetings held four times per year at various UP locations (most are held in the Covington-Alberta-Baraga area); maintaining membership files and keeping in contact with the UPEC board via email.

The Independent Contractor must have a computer and be proficient with newsletter layout and editing, spreadsheets, and email, and live in the Upper Peninsula.

The job averages about 20-25 hours per month for the monthly compensation of \$500.

Please submit your resume, including your qualifications/experience/skills with regard to the specific duties listed above, by September 27 to [upec@upenvironment.org](mailto:upec@upenvironment.org)

If you would like more information, including a detailed job description, contact Nancy Warren at [nwarren1@earthlink.net](mailto:nwarren1@earthlink.net) or 906-988-2892.

# Inventories needed to establish degree of biodiversity

*Inventory Efforts . . . . . See Page 4*  
confirmed in the UP in 1947, and may now have disappeared.

We have made excellent progress in filling these knowledge gaps through hundreds of hours of field surveys, but many gaps remain with species such as mink frog, leopard frog, newt, mud-puppy, Blanding's turtle, northern watersnake and others still having incompletely known distributions. Recently, our paper "Baseline Distribution Records for Amphibians and Reptiles in the Upper Peninsula of Michigan" was accepted for publication by *Herpetological Review*, where we detail and correct a large number of errors in the literature, and establish a new baseline for what is actually known about UP amphibian and reptile distributions. We also corrected all range maps for the entire UP for the forthcoming new edition of *A Field Guide to Reptiles and Amphibians: Eastern and Central North America* (Peterson Field Guides). These publications will clarify our current knowledge of the distribution of these animals in the UP, and identify remaining gaps in knowledge that can be pursued.

Our surveys have also uncovered several fascinating distributional trends. The only lizard native to the Lake Superior watershed portion of the UP, the five-lined skink, is restricted to a narrow belt of granite rock stretching from Marquette County to eastern Baraga County, with all records within five miles of Lake Superior. Presumably the moderated climate of the lake allows them to persist where they might otherwise be absent. Boreal chorus frogs, which were previously only verified from Isle Royale National Park, were discovered by our team in Gogebic County near the Wisconsin border in 2011, and more recently we confirmed records near the Wisconsin border from Iron and Menominee counties. This species may have recently invaded from the south or possibly has gone undetected.

Other species thought to be rare such as the northern ring-necked snake and four-toed salamander have actually turned out to be quite abundant after we developed effective survey methods. Northern ring-necked snakes are reliably found in northern hardwood forest edges in areas of coarse gravel and exposed bedrock, while four-toed salamanders are predictably found nesting in large clumps of moss in ephemeral pools. Fe-



**Nancy and Al Warren found Turtle 439 with an injury she did not have last year. Research revealed that porcupines and rodents will chew on the shells of turtles for the calcium.**

*Photo by Al Warren*

males guard the eggs and will move them up and down as the water level fluctuates.

The abundance of species such as spring peeper, eastern red-backed salamander, American toad, and northern red-bellied snake is truly staggering in the UP, compared with other more developed parts of their ranges. We are very fortunate to be blessed with such an abundance and should continue our important role as stewards over this wonderful land.

We are continuing our work in the UP and encourage Yooper naturalists to join our iNaturalist site, where they may report amphibian and reptile observations that will inform the scientific record. With so much ground to cover, we need all the help we can get! To join, visit [www.inaturalist.org/](http://www.inaturalist.org/) and type "UP Herp Survey" in the Search Projects pull-down menu. Once signed up, you may submit photos and observations to our UP database. You may also directly contact the authors if you have information on amphibians and reptiles in the UP.

*Gary S. Casper works at the University of Wisconsin-Milwaukee Field Station and can be reached at [gscasper@uwm.edu](mailto:gscasper@uwm.edu). Ryne D. Rutherford works at Biophilia in Rapid River and can be reached at [biophiliallc@hotmail.com](mailto:biophiliallc@hotmail.com).*

## **UPEC extends inaugural photo contest**

Summer may be the time to max out on outdoor activities with your camera in tow, but with everyone's busy schedule, we decided to extend the deadline for UPEC's first-ever photo contest to Nov. 1. So send us your best shots representing the beautiful UP, including photos on file from the other seasons. You may submit photos in these four categories:

- Nature panoramas, wildlife, and landscapes
- Humans engaged within the natural world
- Close-ups of hidden or overlooked beauty
- Wonderful fluid water

Each category has latitude open to the photographer's inter-

pretation. Photos must be from the UP, with one submission per category per person. Remember, the new deadline: Nov. 1.

Please send high-resolution (1 megabyte or larger) photos to [upec@upenvironment.org](mailto:upec@upenvironment.org). Provide your name and a description for each photo indicating the place and other aspects of the scene or subject. Also indicate in your email that you grant permission for UPEC to reproduce the photo in its newsletters and website.

In recognition, winning photos will be published in upcoming UPEC newsletters. They also may be part of an on-line photo gallery and on display at the 2016 Celebrate the UP! So start (or keep) snapping and having fun!



## Water witnessing by bike & foot

*Josephine Mandamin and a group of Anishinaabe grandmothers have organized waterwalks in the Great Lakes Region since 2003. This year's Sacred Waterwalk paralleled the Anishinaabe migration route. It began June 23 in Matane, Quebec and ended Sept. 3 at Madeline Island, WI. Walkers (left photo) east of Port Wing, WI prepare to exchange the copper water pail and eagle feather staff in their witness to protect and restore regional water integrity. For*

*more information visit [waterwalkersunited.com](http://waterwalkersunited.com). Songwriter Ben Weaver (right photo, forefront) engaged communities around Lake Superior with a water stewardship theme during an August circumnavigation of the lake. Weaver gave concerts in Houghton, Big Bay, Marquette and the U.S. Soo before crossing into Canada. Weaver and his escort rest during the final leg of his journey in Knife River, MN.*

*Left photo by David Clanaugh; Right photo courtesy of Salsa Cycles*

*Water & Habitat . . . . . From Page 3*  
 ment and Ben Weaver's bicycle travels as a charter bearer for the Great Lakes Commons. What I found particularly refreshing about both efforts is they focus as much on human psychological and social habitats as on what humans mistakenly presume to be the external (the "not us") environment of nature.

Sharon, the *Anishinaabe* women from Thunder Bay whom I had the privilege of walking with near Port Wing, shared much about how waterwalkers were having life-changing experiences and insights: their hearts, psyches, and social relations were undergoing renewals of habitat. And Ben's sharing about how lyrics come to mind while pedaling great distances—lyrics that plumb the profound interrelationships among all life—bridges this nature-culture divide and parallels traditional *Anishinaabe* wisdom about the kinship among all life. Gratitude, openness, and respect replace fear, management and control.

As environmentalists, we know too well about degradation of "natural" habitats, but can overlook our psychological and social habitats. So I was also heartened during my waning months as UPEC's IC to see the vision for a board retreat come to fruition with a gathering at the Clear Lake Education Center. What I witnessed and experienced was the growth and deepening of relationships through sharing life stories, listening, and venturing forth visions for our common habitat. And the inclusion of new perspectives with the addition of four board members was an event to celebrate, although I believe we still need more diversity and multiplicity on UPEC's board.

If there's been a theme to my editor's columns these past five years, it's that, as environmentalists, we must work on the

quality of our interactions, as well as the health and integrity of our organizations. If we are going to be effective long-term in protecting and restoring "natural" habitat, our internal habitats must become healthier. The core dynamic driving this visioning process boils down to our courageous and humble listening: to ourselves, to each other, and to the overlooked voices all around.

With all this habitat talk, I'm excited to share that I started on Sept. 8 as executive director with the Western Lake Superior Habitat for Humanity. I had hoped for environmental work in northeast Minnesota, but over a year of seeking didn't yield success despite conversations with various groups. I am now excited to be cultivating caring human relationships in the service of creating healthy habitat with low-income humans. I think this is part of the larger work and just as vital as working on conventional environmental issues.

What I discovered is UP environmental advocacy, perhaps because it has fewer urban influences and is less expert driven, may be healthier than within the Minnesota environmental groups I encountered that rely heavily on social media, internet fundraising, and fighting legal battles. Polling numbers show more people concerned about sulfide mining in Minnesota, yet I wonder whether the overall environmental effort is more polarized and precarious. I remain deeply disturbed and concerned about what I witnessed and experienced in this part of the Lake Superior basin.

I'm grateful to have served UPEC and to have had a venue for reflecting about the challenges before us. A part of my heart will always be in the UP and I will remain a member of UPEC and FOLK, helping as able. Thanks to all of you who care about this incredible region and its magnificent waters and habitats.

# Mindfulness needed toward emotions, thoughts

By Richard Sloat

Friends and I called it the Red River, as I'm sure others did as well.

I'm referring to the Iron River in Iron County, Michigan. The water was reddish-brown due to untreated waste from working mines and abandoned mines being discharged into the river at various locations along its banks. Waste rock piles with elevated concentration of contaminants are also scattered along the riverbanks, leaching the poisons by means of rainfall and spring runoff.

The reddish color is now gone, but water with elevated concentrations of contaminants continues to be discharged into the river.

I could not believe what I heard from an Environmental Protection Agency (EPA) official commenting during a recent radio broadcast about the August 5 toxic mine spill in Colorado into Cement Creek and the Animas River, which flow into the San Juan and Colorado rivers. The official said, "The river is cleaning itself."

I'm not a scientist, but I do know contamination does not disappear. Contamination ends up somewhere: watersheds, aquifers, fish, and human bodies.

The abandoned Buck Mine in Iron County, Michigan has remediation costs well over \$1 million, and I would venture to say \$1.5 million to date. I'm as-



*Similar to the recent Animas River disaster, several decades ago the Dober Mine Pond above the City of Iron River failed, sending a toxic plume down one of Michigan's best trout streams. It killed almost all aquatic organisms in the Iron River below the spill and a good distance down the Brule River below the confluence. This Michigan DNR photo of the Dober Mine site was taken in 2008.*

The deck is stacked against people wanting the water, land, air and all life protected. It appears the regulatory agencies are enacting the will of political appointees and politicians, and those politicians in turn appear to please special interests. I suppose environmental organizations and activist could be considered special interests too, yet a passion for the environment does not buy votes.

Are you feeling the least bit angry? Do you fear we have no voice and the earth is coming to its demise? These emotions are not good for the cause. The negative thoughts must stop.

It would be presumptuous for me to think that you have had the same difficulties as me.

I do think though that many of you may have become angry and fearful or at least extremely upset at times regarding issues with the environment, wildlife, and other parts of nature.

I'll be the first to admit when I became active with environmental issues to preserve public land and protect the wolves that my motivation was fear.

Fear surfaced because things that I hold dear were in a downward spiral. With fear as a motive, negative energy was expelled and both sides dug in their heels and pushed back. Negativity can be a useful emotion to become involved, but continued negativity will create animosity. I still get upset. So what can be done to create a positive change? I have been finding a solution for myself.

I have learned that negative emotions fuel the ego. Judging others inflates the ego. Taking things personally can add to a feeling of self-righteous anger, making compassion and forgiveness more difficult. If this can be recognized for what it is and dealt with, we can diminish ego's power thereby inducing a calmer attitude. Forgiving yourself for being controlled, forgiving and having compassion for others, even the opposition, will release negative energy and a flow of positive energy will fill the void, enabling our minds to clear and have positive thoughts.

And how do we recognize positive thought? *When the thoughts benefit the whole.* And acting on those thoughts will produce good.

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***'I'm not a scientist, but I do know contamination does not disappear. Contamination ends up somewhere: watersheds, aquifers, fish, and human bodies.'***

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suming taxpayers are footing the bill.

The Flambeau Mine near Lady-smith, Wisconsin has been touted as the model for the environmentally safe way to mine. Documentation showing contamination from the Flambeau was presented to Michigan authorities, yet the Eagle Mine in Marquette County was still permitted. Court battles were lost.

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# & actions: Moving beyond fear, anger & negativity

Over two years, approximately 7,000 people gathered three times. During these meetings, they were able to reduce all acts of terrorism, worldwide, by a phenomenal 72 percent. These people gathered and meditated with thoughts of love and peace. (*The Source Field Investigations* by David Wilcox, page 91).

As of 1993, fifty different scientific studies had rigorously proven that this effect really works. The meditators had created improvements in health and quality of life, as well as decreases in accidents, crime, war and other such factors. (Ibid., page 92)

This sounds too good to be true and so simple except for the time involved in coordinating such an event. Could this really work? Relying on regulatory agencies, politicians, and the court system has not worked for us.

There was an attempt one time to gather people in a collective consciousness. I do not know the extent of the success. A writing titled *A Thought For The Water* was distributed on the Western Mining Action Network (WMAN) website with the hopes people would gather in positive thought for the water. I read it from time to time and I have a ritual now of drinking some water before bed, being thankful, and envision-



*The confluence of the Iron and Brule rivers after a major release of toxic discharge from the Dober Mine in the 1970s. Mine water continued to cloud the water for several decades from other mine water discharges downstream of that spill. The resulting “yellow boy” made this trout stream look like a chocolate milkshake for many years. The issue has been somewhat treated and mitigated, although it still clouds the water from smaller point sources in the adjacent mining area in lower Iron River watershed.*

*Michigan DNR photo*

ing clean water for all people throughout the world.

Please read *A Thought For The Water*. Who knows? Maybe seven thousand people will do the same and we will have

results similar to the above-mentioned seven thousand.

*Richard Sloat has advocated for many years for water and habitat integrity related to mining impacts, past and present.*

## ***A Thought for the Water: The basis for all life***

We need to make every effort to keep the water as pure as possible, for it is the basis for all life on this planet. People of many traditions will agree that faith must be accompanied by action, but the reverse is true, as well. For this reason, we're asking you to join in a daily prayer or meditation for the health and protection of the water.

Perhaps you'd like to envision one of your favorite watery places—a stream or a lake, a pond, a waterfall—or maybe you'll want to think about the physical properties or the mysteries of water itself, its power

We should also be mindful of the struggle many people throughout the world endure to obtain water, water that is not always clean. Perhaps there is something you can do for the water. Many of us, without thinking, simply take the water for granted.

Reflect on the universal importance of water, and its presence in your life. Each time you take a drink or turn on a faucet, remember to be grateful and respectful. Ponder its presence in your body, your food, the air you breathe, the ground you walk on. Think of it with love.

Please take some time out of your day, every day, to focus your hearts and minds on a positive outcome for the planet, for the water. Just before sleep might be a good time to do this, or when you awake.

Our thoughts are made manifest in the physical. Therefore, the spirit that is in each of us literally has the power to change the world. Its strength is greatest when we are united in our purpose.

If your heart moves you, please forward this message.

—Thank you.

# 30 years later, far short of moose population goal

*Moose Population . . . . . From Page 1*  
cows) were captured using helicopters to dart them. They were airlifted with a larger helicopter to waiting trucks and transported to a release site north of Michigamme. A similar effort in 1987 transferred 30 moose from Algonquin



**A DNR lift helicopter approaches a moose to be transported from the capture location to trucks for its transfer to the UP.**  
*DNR Photo by Dave Kenyon*

to the same area.

The goal was to grow the moose population to about 1,000 animals by 2000 and then consider a limited hunting season. Unfortunately, the moose population did not increase as expected.

According to DNR Wildlife Division Research Biologist Dr. Dean Beyer, the moose population grew slowly to about 215 animals by the turn of the century. The 2015 DNR moose survey indicated a moose population of 323 animals in the western Upper Peninsula. In 2013, the DNR winter moose population estimate based on aerial survey indicated there were about 451 moose in the western UP. If these population estimates are correct, there has been a 28 percent population drop in the moose population since 2013. The survey is conducted in Baraga, Iron, and Marquette counties.

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Beyer has a central responsibility for monitoring the Michigan moose population. He said that from 1997 to 2007 the UP moose population was growing by 10 percent a year. Beyer continued to note that from 2009 to 2013 the moose population only grew by two percent per year. The population surveys are conducted biennially; this year's air survey was plagued by bad weather and high winds, causing a number of survey flights to be canceled for safety reasons.

"Despite the difficult weather conditions, DNR staff completed the survey as scheduled," Beyer said. "Sighting conditions were good, with snow covering most of the stumps and downed logs and there was snow on the conifer trees for most of the survey." The good snow cover makes the moose stand out against the background vegetation and cover.

Beyer continued, "This year's survey only indicates a moose population of 323 animals in the western UP. Although at face value this appears to be a definite decline, due to variability surrounding the estimates, biologists can't say with statistical confidence that the population has declined."

Beyer explained the DNR's survey efforts have been focused on the western UP moose population that was re-introduced by the Moose Lift program. Beyer said that the moose herd in the eastern UP likely number fewer than 100. The source of the eastern UP moose is not known for certain. It is possible that a few scattered moose remained from native moose, although it is also likely some moose migrated from eastern Ontario or the western UP.

The research biologist expressed concern over a second population variable they measure, the ratio of moose calves to cows in the population. He stated, "In recent years, this ratio averaged 59 calves per 100 cows and was consistent with estimates of calf production and survival determined by monitoring radio-collared cows

from 1999-2005. The calf to cow ratio dropped to 42 calves per 100 cows this year and is the best evidence the population has actually declined." Another indirect indicator is the number of moose vehicle accidents that had been increasing through 2012, but then dropped in 2013 and 2014.

Beyer gave three possible factors that may have contributed to the decline in the western UP moose population:

- Back-to-back severe winter weather, especially deep snow, may have negatively affected moose condition, survival and reproductive success.
- Year-round climatic changes, especially warmer weather could have led to increased parasite loads on moose weakening their overall condition.
- Possible increase in wolf predation on moose calves due to the region's lower deer population.

Future surveys will be necessary to identify any long-term trend for Michigan's moose population.

In 2011, the DNR Moose Hunt Advisory Council, created by the Legislature, considered holding a moose hunt in Michigan. The council felt a moose hunt was a feasible option provided the moose surveys indicated that the moose population continued to grow at sustained growth rate of over three percent per year. Beyer said the DNR will not recommend implementing a hunt at this time given the population's trend and the most recent estimate.

In recent years concern has been growing among wildlife management agencies across the southern tier of the continental moose range in the northern U.S. Minnesota has had a stable moose population with a carefully regulated hunting season for many years. According to the Minnesota DNR, their moose population has dropped 52% since 2010. State wildlife conservation agencies in New Hampshire

*Moose Population . . . . . See Page 9*



# Moose viewing takes strategy, patience, and a bit of luck

By Bill Ziegler

Viewing moose has become a popular activity among outdoor enthusiasts—UP residents and tourists alike. It is possible to make a moose sighting; however, no one would want to take a long trip to the western UP with the sole purpose of seeing a moose! The 323 moose in the western UP is a relatively low density compared to other popular species wildlife lovers hope to observe.



*A young bull feeding on aquatic vegetation in the “Moose Marsh” north of Cable Lake Road on US-141. Ziegler took this evening shot with a low-quality camera heading home.*

Despite their relatively low overall numbers, pockets of moose can be found in good moose habitat near roads. My own attempts to photograph them leads me to conclude that in addition to their low density, their nocturnal behavior lowers one’s chance to see them during the day compared to deer and other wildlife. For years my family regularly

found fresh moose tracks near our deer camp in northwest Iron County. We only saw a moose once during the day (last year) until I started deploying a game camera. Last year the camera was out all summer and recorded five separate moose visits. I recorded four moose, two different bulls, a cow and a calf. All but one of the “photo captures” was at night.

With these limitations in mind, one can boost their chances of seeing a UP moose by driving through the better moose range, during early morning and evening hours. Prime moose viewing areas are limited, although one of the best is located at a large marsh on the east side of US-141 south of the Iron/Baraga County border about 1.4 miles.

Moose are typically sighted near roads or trails in the entire Tracy Creek area that encompasses that “moose marsh.” Some Amasa residents commute past this wetland and semi-regular moose observation site, sharing their sightings with the proprietors of Amasa’s Tall Pines Grocery/Gas Station/Hotel. Interested moose enthusiasts can call the Tall Pines at 906-822-7713 to check if there has been recent moose activity (sightings) at the “moose marsh”.

Moose sign is also regularly found in the area around Republic, Michigamme, and the Peshekee River area northeast of Michigamme. Moose are occasionally sighted south of the West Iron County’s North Branch of the Paint River along US Forest Highway 16. Of course it is possible to see moose in other areas, although the three listed above appear to be the core of the moose range.

If you make an attempt to observe a mainland Michigan moose, bring your camera, binoculars and lots of patience.

## Other northern U.S. states also seeing declines in moose numbers

*Moose Population . . . . . From Page 8* and Montana have also reported a decline in their moose populations.

The Minnesota DNR reports they have two geographically separate moose populations. The northwest Minnesota moose population has dropped dramatically since the 1990s from about 4,000 down to about 100. The northeastern Minnesota moose population is also dropping from a recent high of about 8,000 as recently as 2006, down to about 3,000 in 2013. As a result, the Minnesota DNR suspended the 2013 moose hunting season as a precaution, and this suspension has remained in effect during subsequent years.

Minnesota DNR Commissioner Tom Landwehr said, “It is now prudent to control every source of mortality we

can as we seek to understand the causes of population decline.” Minnesota wildlife researchers are currently conducting a study to determine the factors that have lead to a major decline in their moose herd. Early results indicate there are several factors affecting the Minnesota moose population decline.

Minnesota DNR Wildlife Research Manager Lou Cornicelli said, “Preliminary results indicate the factors likely causing the decline are complicated.” A combination of parasites, disease, and wolf predation are important possible causes they have found so far. Minnesota’s early research indicates that about half of the moose mortalities are from wolf predation. It is important to note, however, that one-third of the wolf-predated moose had underlying

health conditions that made them more vulnerable to predation.

Cornicelli said Minnesota’s research indicates that the moose herd would likely still be declining in the absence of wolves due to parasite or disease factors. Further research will be required to determine how the complicated parasite (such as winter ticks, liver flukes and brain worm) and disease issues appear to have become more of a problem for moose. The Minnesota study is designed to address many of these complicated interactions like the effects of increasing summer temperatures on moose as well as parasite/disease loads.

*A retired fisheries biologist, Bill Ziegler writes for the Iron Mountain Daily News and two Michigan outdoor magazines. He contributes regularly to UP Environment.*

# Next generation stewards play, care & learn outdoors

By Maggie Scheffer, UPEC Board Member

Members of UPEC met in July for three days of canoeing, hiking, earnest discussions, and organizational business at the Clear Lake Education Center south of Shingleton. Out of our evening discussions emerged a common theme: our unstructured frequent childhood play experiences in wild settings were a major influence in developing strong conservation values.



*Stambaugh Elementary School students honed their critical, organizational, and time management skills during the planning and tracking of their Outdoor Classroom project.*

*Photo by Maggie Scheffer*

Recognition of this theme motivates UPEC's Environmental Education Grant Program and promotes a growing awareness in our organization: for future generations to carry on the work of conservation, we need to pay attention to what is happening to childhood in our society. Unstructured play in nature is disappearing. Consequently, the conservation movement is facing a slow-motion crisis: the maturation of future generations who may be less likely to share our interest and commitment to protecting the natural world.

According to the Pennsylvania Land Trust Association, "In order to sustain conservation efforts, we must emotionally connect more adults and families to nature, at a time when many trends of our society seem to be working directly against that goal. This task takes on its greatest urgency with our children".

Understanding that the emotional foundations of stewardship are built during childhood, it is essential that we restore nature play through both structured and unstructured

approaches. UPEC evaluates environmental education grant applications for approaches that will make it most likely to forge lasting child/nature bonds. One such approach is that taken by Stambaugh Elementary in Iron County.

## The Vision: "Greening Our Schoolyard"

In 2012 Green Committee members at Stambaugh Elementary decided to take their paper-recycling program a step further by engaging K-5 children in planting 20 trees on the school's campus. This was the first step in the implementation of their vision, called "Greening Our Schoolyard." A year later the committee won approval from the school's board of directors for construction of an "Outdoor Classroom", an area to be devoted to environmental education and nature play.

Over the course of a year, the committee secured funds through grants with various organizations including UPEC. In addition, the elementary students were challenged to participate in a Read-a-thon, thereby involving families and neighbors in raising money for the Outdoor Classroom project.

Construction of the Outdoor Classroom began in July. Work bees were organized, materials donated and delivered, and many volunteers turned out to operate equipment, dig dirt, rake and spread wood mulch and topsoil. Although not quite completed at the time of this writing, the site has undergone a complete transformation and promises to be a welcome retreat for students and teachers wishing to take their learning outdoors.

What does this emerging Outdoor Classroom area represent to the teachers who conceived of the idea and are seeing it to completion? It is an area where a class can be seated at the stump circle for a structured activity with their teacher, guided by the children's own desires and explorations. Materials for nature exploration and cross curricular activities may be stored beneath a covered work station where a counter top is accessible to all for writing, drawing, building, or examining objects with a magnifying glass. Wood cookie pavers provide a 'stage', or a platform for building with tree blocks, stored nearby. Cedar logs of graduated heights provide opportunities for testing climbing and balancing skills. Groups of boulders offer lessons in local geology, and native plants provide habitat for butterflies.

*Greening Our Schoolyard. . . . . See Page 11*

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

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## Children and nature: reciprocal needs and benefits

*Greening Our Schoolyard. . . . . From Page 10*

These are examples of both structured and unstructured approaches to connecting children to nature, but the very best nature play will come from the child, not from an adult, and will allow and encourage direct, multi-sensory,

reciprocal: children need nature, and nature needs children.

### Further "Nature Play" Resources:

- [ConservationTools.org](http://ConservationTools.org)
- "Guidelines for Nature Play and Learning", National Wildlife Federation
- "Nature Explore", Arbor Day Foundation

*Maggie Scheffer serves on the UPEC Board in addition to her work as a kindergarten teacher and 'green-teamer' at Stambaugh Elementary School.*

***'Understanding that the emotional foundations of stewardship are built during childhood, it is essential that we restore nature play through both structured and unstructured approaches.'***

physical interaction with nature: catching bugs, following a butterfly as it moves from flower to flower in the butterfly garden, collecting leaves, digging for buried treasure, and counting the growth rings in the log seats. The sign over the entrance sums it up: "Welcome, Play Freely, Have Fun!"

Like a caterpillar's metamorphosis to butterfly, this corner of the schoolyard where children once broke branches from the neglected shrubs is transforming and taking on very special value as a place that will nurture a connection with nature and stewardship can be born. The benefits are

### ***Env Ed Grants. . . . From Back Page***

be an opportunity this year for projects that blend environmental awareness with the arts, thanks to the Bonnie Miljour Memorial Fund established by Chester Sermak.

To learn more about the program, download a grant application, and obtain mailing information, go to UPEC's website at [upenvironment.org](http://upenvironment.org). Completed applications must be received by mail or emailed no later than Jan. 4, 2016. Funding for successful proposals will be announced by the end of January.

**Upper Peninsula  
Environmental Coalition**

P.O. Box 673  
Houghton, MI 49931

[www.upenvironment.org](http://www.upenvironment.org)

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## **UPEC seeking Environmental Education Grant applications**

*By David Clanaugh, Editor*

UPEC announces a grant opportunity for educators and youth workers who provide quality environmental education programs to regional children from preschool to high school. The UPEC Environmental Education Fund offers grants of up to \$500 for the 2016 calendar year, with applications due Monday, Jan. 4, 2016. Please share word of this opportunity with potential participants.

Teachers, 4-H and Scout leaders, museum staff members, youth service workers, or anyone wishing to start or maintain an environmental project involving preschool through high school age children are eligible for funding which may be used for all program expenses except salaries.

During 2015 UPEC funded 11 projects that included hands-on education about Lake Superior; studies of watersheds, native plants, and aquatic species; scholarships for regional students to attend the biennial Lake Superior Youth Symposium in Thunder Bay; a program about the biology of bats and threats they face; the conversion of a school playground into an outdoor nature classroom; and citizen science about the human footprint on the landscape. As the UP's oldest grassroots environmental organization, UPEC is equally willing to fund outstanding projects inside and outside of formal school settings. And there continues to *Environmental Education Grants*. . . . . See Page 11



*Stambaugh Elementary School students spread wood chips in their Outdoor Classroom as part of a "Greening our Schoolyard" project. A UPEC Environmental Education Grant supported this effort, which Board Member Maggie Scheffer profiles on Page 10.*

*Photo by Maggie Scheffer*

### **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.*