



UP Environment

**UPEC: THE UP'S OLDEST GRASSROOTS
ENVIRONMENTAL GROUP**

FALL 2018



Can You Run? by Horst Schmidt

At UPEC's upcoming 2019 spring board meeting, we are required to hold elections for 2 year terms.

What does it mean to be a board member, an officer? It means you live here, in the UP. You joined UPEC. A realization our environment is under siege. We have children and grandchildren. We have our generation. We see the need to protect both.

Air, water, land and the biology and chemistry that comes from them, not so much to support us, but as an opportunity to survive. Now, as the demands emanating from world population growth continue, the UP is called upon to once again to give up its forests and its minerals. Many other places throughout the world are also called upon. These so-called 'natural resources' come from the same three--air, land, water--from which the web of life emanates.

Over four decades ago a group of people came together in the UP in the wake of response to the destruction from a 'Century of Progress' which for us meant logging and mining. Many have served. Now it's your turn. The demand for our 'natural resources' is greater than ever. The climate has changed due to our 'Progress'. The change is for the worse.



Our future is in our collective hands. No place to hide. No planet B. ***So, can you run?***

UPEC Welcomes New Member to Its Board



The UPEC Board of Directors is proud to announce the appointment of Jeff Towner as our latest board member this year. Jeff has already distinguished himself in working with the Friends of Huron Mountains on their effort to stop the wind farm in the Michigamme Highlands. As his biography attests, he is carrying on in his retirement what he did in his career: making sure our UP environment is not further compromised.

Jeff has been motivated by a love for wildlife and wilderness all his life. He earned a B.S. in Zoology from Ohio State University and an M.S. in Wildlife Biology from Michigan State University. Out of college he worked for an entomology lab in Ohio, then served in fisheries and national parks positions with the Peace Corps in Cameroon and Niger, West Africa, and later served as the anti-poaching officer for the World Wildlife Fund's mountain gorilla project in Rwanda, East Africa. He held several positions with the Corps of Engineers environmental analysis and regulatory programs in Chicago, Detroit, and Alaska, and as the field supervisor for the U.S. Fish & Wildlife Service's West Virginia and North Dakota field offices.

Jeff and his wife Diane moved to the UP because of its high quality of life and outstanding environmental values. They both enjoy hiking, skiing, paddling, and wildlife observation. Welcome Jeff!

2017 Upper Peninsula's Mainland Moose Population Update

by Bill Ziegler



The 2017 Michigan DNR moose survey suggests an encouraging modest increase in the core area of the west central UP moose range. This year's moose population estimate indicated 378 moose in the core population area; up from 285 in 2015. This is a good sign since the 2015 moose population survey indicated a 28% population decline.

Dr. Dean Beyer of the Michigan DNR Wildlife Division monitors the Michigan moose population. In a February interview Beyer said their "wildlife staff had completed the aerial moose survey in the core high density plots of the primary moose range". He went on to say melting snow conditions hampered the staff's visibility of moose against the snow which caused them to curtail the survey before completing the low density plots. Good snow cover makes the moose stand out against the background vegetation and cover.

"As a result, an overall population estimate could not be generated in direct comparison to previous surveys" Beyer said. Instead Wildlife Division staff calculated a population estimate trend for just the high density plots over time. Beyer said "in the past the core zone supported 80 to 90% of the moose population." He continued, "The western UP moose range covers about 1400 square miles in parts of Baraga, Iron, and Marquette Counties."

The DNR researchers believe if the survey would have been completed on the entire western moose area it would have "yielded a population estimate of between 420 to 470 animals". Beyer stated "from 1997 to 2007 the UP moose population was growing by 10 percent a year". He went on to say that "from 2009 to 2013 the moose population only grew by two percent per year."

Beyer explained the DNR's survey efforts have been focused on the western UP moose population that was re-

introduced in the "Moose Lift" program. Beyer explained 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 immigrated from eastern Ontario or the western UP. Moose also maintain a strong population in Michigan's Isle Royale National Park.

The research biologist said the ratio of moose calves to cows in the population is an important parameter. 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 increased slightly to 47 calves per 100 cows this year after dropping to 42 per 100 cows last survey."

In 2011, the DNR Moose Hunt Advisory Council, a legislatively created council, investigated the potential of 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.



In recent years concern has been growing among wildlife management agencies across the southern tier of the US moose range. 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. On the southern tier of the moose range state wildlife conservation agencies like New Hampshire and Montana have also reported a decline in their moose population.

The Minnesota DNR reports they had two geographically separate moose populations. The northwest Minnesota

continued on next page 6...

UPEC's 2019 COMMUNITY CONSERVATION GRANT PROGRAM ANNOUNCED

UPEC's Community Conservation Projects Grant program began in 2016 and was made possible by a bequest from UPEC member Tom Church of Watersmeet. The application deadline for 2019 grants is January 17, 2019.

This grant is designed to enable communities in the U.P. to step up a level in their promotion of conservation values in their watershed or locality. In the past the landscape of the U.P. was often hostage to the short-sighted actions of human owners, whether large corporations or small non-industrial landowners, and to the relentless play of market forces. The opposite trend, embodied in the environmental laws of state and federal governments as well as in the private conservancy movement, works to protect natural areas for public benefit and to safeguard significant populations of fish, wildlife, and plants and the ecosystems which support them. These latter values are the conservation values which this Fund is intended to enhance at the level of community action.

The Upper Peninsula is in an envious position in terms of conservation planning. Over forty percent of the landscape is protected, which may be enough to insure most of our native flora and fauna will not be pressed into extinction, even with the added stresses of climate chaos and invasive species. Our task is to hold our ground, and steadily to enhance the capacity of our public and private lands to support the full abundance of wildlife that once characterized the Great Lakes biosphere. The return of all the top predators — wolves, cougars, lynx — is essential to a fully functioning ecosystem, where all the players are present in the drama of the evolution of life. In its small way, the new

UPEC grant program offers all of us, within our communities, the chance to be players, too, in what is being called the rewilding of North America.

Central to this new grant program is consensus-building among community stakeholders: naturalists, city and township board members, planners, recreational groups, local job providers, civic and religious groups, schools and universities. One or more of these stakeholders may initiate a grant request. The "homework" phase in applying for a grant is understanding local land use: public and private ownership patterns; economic, residential, and recreational uses of the land; the capacity of local fields, streams, woodlots, and forests to support native fish and wildlife. The second task is identifying opportunities for enhancing these natural areas, perhaps by cleaning up abandoned or vacant sites, restoring wetlands, or removing barriers on streams. Finally, community stakeholders must develop a plan and timeline for achieving these conservation actions. The UPEC grant is to facilitate planning and enable activities; it is assumed that on-the-ground remedial or enhancing activities may require additional and different funding.

The following list contains examples of ways in which communities may enhance conservation values at the local level. It is not an exhaustive list.

Community forests - This federal program under the USDA supports qualified organizations in identifying, purchasing, and managing a forested part of a local landscape as a community asset. A fifty percent match is required for the purchase of private properties that are then managed by a partnership of community members and groups. The time frame is a 100-year perspective that combines economic, social, ecological, and recreational uses of the community forest. The UPEC grant would be a planning grant to help a community succeed with this program initiative.

Heritage days - How a community thinks of itself can be transformed through a local festive event that addresses the region's history and cultural traditions, its stewardship of the landscape, and the knowledge of local animals and plants. Several days can be devoted to lectures, demonstrations, and performances, as well as field trips to highlighted sites. The grant would enable a mixture of local and outside speakers and perspectives.

Restoration projects - Various abandoned, delinquent, or vacant lands can be made productive and ecologically healthy once again through timely interventions, such as cleanups, invasive eradication, and reforestation. Com-



Wildcat Falls - Northwood Alliance, 2018 recipient of Conservation Grant. Photo: www.waterfalls of the Keweenaw.com

continued on next page...

conservation grants continued...

munities that plan such interventions through mobilizing volunteers and school-aged youth may be eligible for funds to assist with mapping, planning, and implementation.

Enhanced protection campaigns - Public lands (federal, state, county, township) are managed through various classifications that determine what can be done and not done on them. Concerted citizen action can change these management classifications, for example by nominating special areas within national and state forests for wilderness or wild and scenic river designations. Citizens can also create watershed study groups that engage private as well as public landowners in exploring ways to improve the health and connectivity of watersheds. Zoning reform is another tool for cities and towns to use in addressing the disruption of new and perhaps inappropriate industrial activities within their borders.

Awards

Community Conservation grants up to \$10,000 each may be awarded annually by the UPEC Board. The money budgeted for this fund shall be recommended by the Treasurer and approved by the Board at the January Board meeting. The number and size of the grants for any given year will vary, depending upon the perceived quality of the applications and funding constraints; in some years none may be awarded.

Deadlines

Grant applications are due January 17. Awards will be announced in February. Funding for the projects will be available from April 1 to March 31 of the following year, although extensions may be possible.

COMMUNITY CONSERVATION GRANTS APPLICATION GUIDELINES

UPEC invites high-quality projects on a competitive basis that enhance conservation values in U.P. communities and are characterized by many of the following:

- receives favorable attention and has a high profile and visibility
- appeals to and will be experienced by many community residents
- involves worthy activity for children and young adults to assure an interest in conservation values by future generations
- has multiplier and leverage qualities

- can be replicated or become a permanent addition to the life of a community
- is well planned and implemented by individuals or groups
- involves service of volunteers
- has a detailed budget, income and expenses
- adds to the body of research about the natural and cultural history of a region

The entire application, except for signatures, must be typed (not handwritten). The application must not exceed 10 pages. Grant proposals must relate to a project occurring between April 1 of the grant year and March 31 of the following year. Extensions of the grant period may be requested.

Grant applications may be sent via email or mail. All applications must be emailed or postmarked by January 17, 2019. This deadline relates to all application materials, including attachments and letters of support sent separately. If you send support material, send only copies of originals. None will be returned. Do not send books, CDs, tapes, DVDs or videos. To send via email: upec@upenvironment.org. To send via mail: UPEC, Box 673, Houghton, MI 49931 (must be postmarked no later than deadline date)



Yellowdog Watershed Preserve - 2018 Conservation Grant recipient-
Photo: YDWP

***“Was this the bright vastness the poet
Bashō saw when he wrote of the Milky
Way arched over a stormy sea?”***

Yasunari Kawabata, Snow Country

Teacher Alert! – 2019 UPEC Annual Environmental Education Grants

The Upper Peninsula Environmental Coalition reminds educators of their annual Environmental Education Grant program. The upcoming round of applications is due Friday, January 4, 2019.

Since 2003, Upper Peninsula Environmental Coalition (UPEC) Board has approved up to \$4000 annually to support environmental education in the Upper Peninsula by providing small grants to educator-promoted environmental projects within public or private K-12 schools. Grant maximum per application are \$500 per year.

UPEC President Horst Schmidt underscores the importance of this grant series because schools are strapped for dollars to do innovative environmental education programs.

During 2018 UPEC funded educational grants that including Michigan Rocks! education curriculum, Life of Lake Superior programming, Lake Superior ecology signage, pollinator gardens, and a program to promote science careers to underrepresented youth.

Education Grant FAQs

WHO? K-12 educators in Upper Peninsula schools, public or private, or other groups and institutions wanting to create or enhance an environmental program or support an ongoing activity.



Life of Lake Superior Day hike at Pictured Rocks National Lakeshore, 2018 recipient of an Environmental Education Grant.

WHY? Grants will be funded to provide financial assistance in providing quality environmental education programs and/or ongoing projects in need of support. We welcome proposals that provide hands-on experiences for young people in outdoor settings.

Special consideration will be to fund at least one grant, among these funded, that advocates for the environment through the arts, which will be broadly interpreted to in-



Kayaking Lake Superior

clude art, dance or music; this arts grant award is in memory of a donor, the late Bonnie Miljour.

WHAT? Grant may not be used for salaries, but all other expenses (for example, transportation, meals, supplies, honoraria) are acceptable. Grant recipients will be required to present a final report that includes an accounting of funds expended and outcomes achieved upon completion of the program. Reports may be published in the UPEC newsletter and may be edited.

HOW MUCH? Depending upon the quality of the application as evaluated by the UPEC board, monetary awards up to \$500 each will be made for projects completed over the next 12-month period. We welcome new proposals and seek to help new projects receive funding.

WHEN Do I need to Apply? Applications are due January 4, 2019

HOW Do I Apply? Please e-mail completed applications to: upec@upenvironment.org

NOTE: Applications must be submitted in either a Microsoft Word file or a pdf format. Applications must be in one file, not in a number of attachments.



To Our Helpful Supporters

Thanks to you saving food receipts, we receive regular checks from Econofood. This is great way to support us...small donations add up! Do you shop at Econofood? If so, keep an envelope handy at home where you can deposit the receipts after shopping. When its full, send them to UPEC, PO Box 673, Houghton MI 49931. It's that simple! Thank you!



moose population dropped dramatically since the 1990's from about 4000 down to about 100 recently. The north-eastern Minnesota moose population is also dropping from a recent high of about 8000 as recently as 2006, down to about 3000 in 2013.

Although a number of factors are likely to have contributed to Minnesota's moose decline, Minnesota DNR suspended their 2013 moose hunting season as a precaution. Tom Landwehr, Minnesota DNR Commissioner said "it is now prudent to control every source of mortality we can as we seek to understand the causes of population decline".

Minnesota DNR wildlife researchers are currently conducting a comprehensive study to determine the factors that have led to a major decline in their moose herd. Early results indicate there are several factors affecting the Minnesota moose population decline. Lou Cornicelli, Minnesota DNR Wildlife Research Manager, said "preliminary results indicate the factors likely causing the decline are complicated". It appears that a combination of parasites/disease and wolf predation, are important causes they have found so far. Their early research indicates that about one third of the adult moose mortalities are from wolf predation. Although it is important to note that 33% of the wolf predated moose had underlying health conditions that likely made them more vulnerable to predation. Minnesota moose researchers are currently focused on moose calf survival rates and moose nutrition. Recent moose calf mortality study indicated wolves killed about $\frac{3}{4}$ of the 40 calves that were collared for the study.

Additional Minnesota moose research indicates that the warm winter weather stresses moose nutrition. It appears the more time winter temperatures are above 23 F moose do not eat enough to remain well nourished.

Although the 2017 moose population appears to be up modestly there is still concern about long term UP moose population trends. Retired Michigan DNR Moose Biologist Rob Aho said "the moose have not filled all the available UP habitat". A good qualitative indicator that moose have reached their population potential would be when the moose occupy the entire good moose habitat. Future moose population surveys will be necessary to identify any long-term trend for Michigan's moose population.



UPEC Annual Photo Contest Announced

The Upper Peninsula Environmental Coalition announces its annual photo contest. Help us recognize the beauty of our landscape and its inhabitants through your photos. Send us your best shots representing the beautiful UP, including photos on file from the other seasons. Contest deadline is Friday, November 16th, 2018 with winners announced in each category a subsequent UPEC newsletter.

UPEC Photo Contest Rules:

You may submit one photo in each of these four categories:

1. Nature panoramas, wildlife, and landscapes
2. Humans engaged with the natural world
3. Close-ups of hidden or overlooked beauty
4. Wonderful fluid water



Send a separate email for each category you enter, indicating the category name in the subject line.

PLEASE put your last name and photo caption in each photo title along with the two letter category designation, e.g. NP, HE, HB, FL. Thank you! Example: **richardson evening sunset HB.jpg**

Each category has latitude open to the photographer's interpretation. Photos must be from the Upper Peninsula, with one submission per category per person. Remember, the deadline: Nov. 16.

Please send high-resolution (1 megabyte or larger) photos to **upec@upenvironment.org**. Provide your name, the category it should be considered under, and a description for each photo indicating the place and other aspects of the scene or subject. Photos not following the titling format listed above will not be considered.

In your email please 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 next Celebrate the UP!

Enjoy taking those photos!

About UPEC...

The Upper Peninsula Environmental Coalition has a four-decade track record of protecting and enhancing the unique environmental qualities of the U.P. through public education and monitoring of industry and government. UPEC and the more recently formed Mining Action Group seek common ground with diverse individuals and organizations to promote sound planning and management decisions for all the region's natural resources. U.P. Environment is published quarterly and available online to share with family & friends. Send your comments or contributions to:

UPEC - P.O. Box 673, Houghton, MI 49931

upec@upenvironment.org

Facebook

906-201-1949

www.upenvironment.org

Environmental and Human Health Threats from Poorly-Regulated Mining in Michigan's Upper Peninsula Continue to Mount

by Steve Garske

On May 30, 2017 Highland Copper Company Inc. acquired approximately 447,842 acres (700 square miles) of mineral properties in the central UP (the “UPX Properties”) from the Rio Tinto Group. Then this spring Highland/UPX Minerals requested some 3900 acres (over 6.1 square miles) of mineral leases from the state.

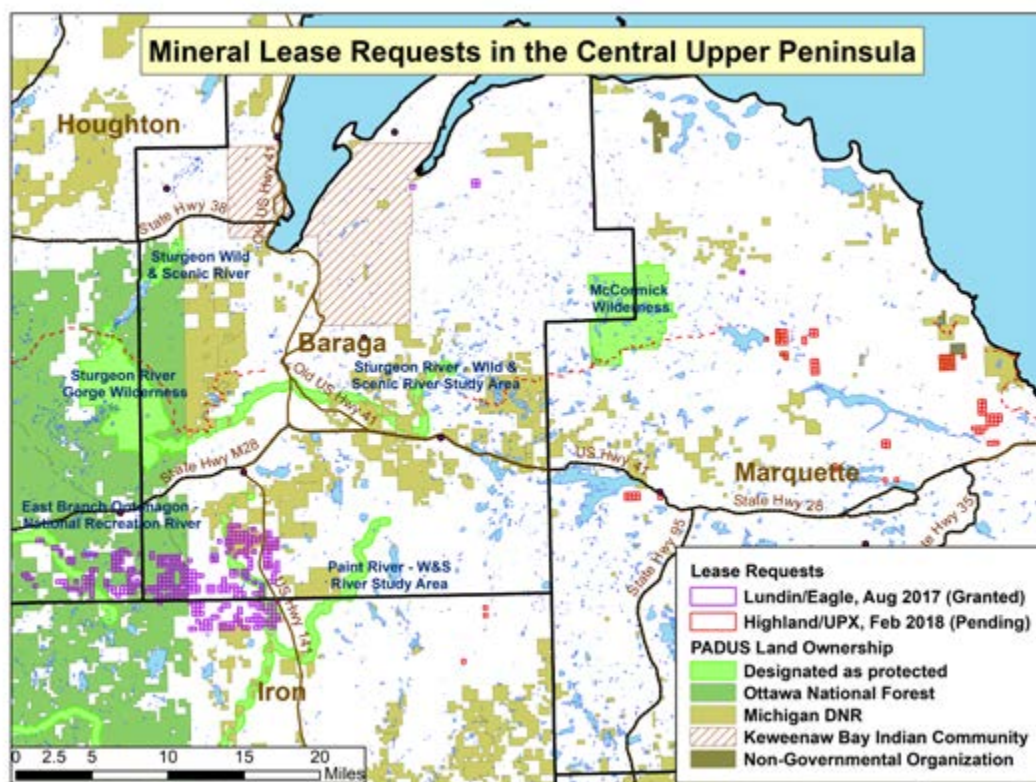
Unlike previous lease requests, which targeted primarily state and commercial forest lands, these potential leases include a state natural area (Rocking Chair Lakes), the Noquemanon Trail Network in the Forestville Trailhead area, and the Upper Peninsula Land Conservancy's Vielmetti-Peters Conservation Reserve near Marquette. They also include lakes, wetlands, streams and rivers, camps, homesteads and residential areas. Affected landowners are understandably upset with the possibility of mineral exploration under their lands and even their homes.

Highland's lease request follows on the heels of the Michigan DNR's handing mineral leases for 15,300 acres (23.9 square miles) of mostly public and private forest land in Baraga, Houghton, Iron and Marquette Counties to Eagle Mine/Lundin LLC in 2017. Soon after Lundin requested a lease for state mineral rights under Haystack Mountain in Houghton County, which the state gladly handed them earlier this year. Haystack Mountain is a unique geologic feature, an ancient 100-foot high “volcanic plug” that straddles Ottawa National Forest and private land.

Except for Highland's lease request, which is still “under consideration”, the Michigan DNR has handed over leases to every square inch of mineral rights that mining companies have requested. Why? It certainly can't be the state royalties. As stated by the state's Metallic Minerals Lease Agreement, “Rental for the first (1st) through fifth (5th) year shall be paid at the rate of \$3.00 per acre per lease year, and for the sixth (6th) through tenth (10th) year at the rate of \$6.00 per acre per lease year.” Lease royalties don't kick in until the 11th year, when rates go to \$10.00/acre and up. (See https://www.michigan.gov/documents/dnr/PR4340MetallicMineralLease_197342_7.pdf)

Topping off the state's willingness to please the mining industry was the decision by DEQ director Heidi Grether to overrule her professional staff and hand Aquila Resources Inc. a wetland destruction permit for their “Back 40” mine, even though the company's application failed to meet the requirements of state and federal law.

The willingness of the DNR and DEQ to freely hand out exploration and mining permits can be blamed in large part on a phenomenon known as “regulatory capture”. Wikipedia (2018) defines regulatory capture as “... a form of government failure which occurs when a regulatory agency, created to act in the public interest, instead advances the commercial or political concerns of special interest groups that dominate the industry or sector it is charged with regulating.” A University of Chicago School of Business blogger defines it as “...the tendency of regulators, politicians, and bureaucrats to cater to the



continued on page 10...

Drowning in Light by Gregg Bruff

As we sailed our boat “Arcturus” out onto Little Bay de Noc, the first thing we noticed was the bright lights of Escanaba receding behind us and the dark void enveloping us ahead. It was so good to leave behind the harbor lights, street lights, and HD vehicle lights. It would take some distance and time before we could actually see the summer sky - constellations like Scorpio, Ursa Major, Cassiopeia, and Sagittarius. It is a scene that humans have enjoyed for millenia, but which now is threatened in many places with extinction by overlighting.

Humans and other animals have evolved for millions of years in a world that gets dark at night. We have of course dramatically changed that the past 100 years with “security lighting”, “architectural lighting”, and ever expanding global commercial and residential development.

You may have noticed that your town and many others across the U.S. are rapidly converting the former sodium vapor street lights to powerful, superbright LEDs. While this conversion may be a boon to energy conservation (a good thing - right?), it has created other concerns among physicians, psychologists, wild country and night sky enthusiasts.



Photo: United States Department of Defense

According to the *International Dark Sky Association*:

Exposure to Artificial Light at Night Can Harm Your Health

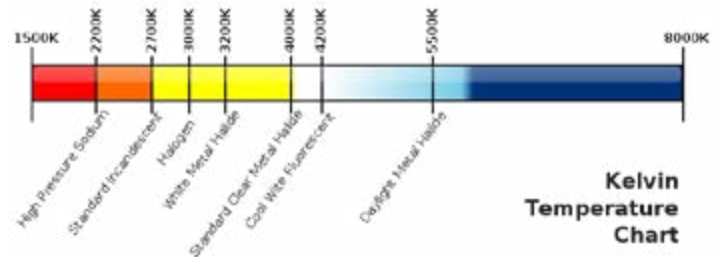
Humans evolved to the rhythms of the natural light-dark cycle of day and night. The spread of artificial lighting means most of us no longer experience truly dark nights.

Research suggests that artificial light at night can negatively affect human health, increasing risks for obesity, depression, sleep disorders, diabetes, breast cancer and more.

Circadian Rhythm and Melatonin

Like most life on Earth, humans adhere to a circadian rhythm — our biological clock — a sleep-wake pattern governed by the day-night cycle. Artificial light at night can disrupt that cycle.

Our bodies produce the hormone melatonin in response to circadian rhythm. Melatonin helps keep us healthy. It has antioxidant properties, induces sleep, boosts the immune system, lowers cholesterol, and helps the functioning of the thyroid, pancreas, ovaries, testes and adrenal glands. Nighttime exposure to artificial light suppresses melatonin production.



Not All Artificial Light Is Created Equally

Exposure to blue light at night is particularly harmful. Unfortunately, most LEDs used for outdoor lighting — as well as computer screens, TVs, and other electronic displays — create abundant blue light.

According to experts at Harvard Medical School, “If blue light does have adverse health effects, then environmental concerns, and the quest for energy-efficient lighting could be at odds with personal health. Those curlicue compact fluorescent lightbulbs and LED lights are much more energy-efficient than the old-fashioned incandescent lightbulbs we grew up with. But they also tend to produce more blue light.”

A 2016 American Medical Association report expressed concern about exposure to blue light from outdoor lighting and recommends shielding all light fixtures and only using lighting with 3000K color temperature and below.

To minimize harm from blue light in your home, choose the right light bulb and download a color temperature app that adapts your electronic screen to the time of day – cool light during the day and warm light at night.

Just look at the headlines: ***Artificial Light Affects Zooplankton in Arctic, Artificial Light at Night Affects American Toad Metamorphosis and Growth, How Light Pollution Affects the Pennsylvanian Ecosystem, Artificial Light at Night May be Contributing to “Ecological Armageddon”.***

I was amazed recently to learn that the New York Audubon group has successfully convinced the 9/11 “Tribute in Light” memorial installation to periodically turn off the

continued on next page ...



Headlands International Dark Sky Park photo - note loom of city lights on horizon

lights when large concentrations of birds are migrating over the city. The masses of birds are attracted to the bright zenon lights that disrupts their migration.

People need to be aware that increased lighting does not reduce either crime or vehicle accidents. Studies in Chicago, Wales and England have shown no correlation between incidence of crime and outdoor lighting. Indeed, some vandalism is made easier with bright lighting. In 2012, the American Medical Association concluded “Glare from nighttime lighting can create hazards ranging from discomfort to frank visual disability.”

There is an aesthetic component to this too. If Van Gogh were alive, he might not paint “Starry Night” because one can no longer see the Milky Way in Saint Remey. For millions of years, poets, artists, storytellers and navigators have looked up to the heavens to wonder at the night sky. That sky is still there - but the places from which we can see it are rapidly disappearing.

So - what to do? It may seem like a daunting task, but let your local officials know of your concerns based on scientific studies. Identify areas that have NOT been converted yet and focus on those. Encourage officials to continue to adopt energy saving lighting strategies while avoiding harmful blue light technologies. Support local initiatives like Marquette’s Dark Sky Park at Presque Isle. You might also travel across the Mackinac Bridge to the Headlands International Dark Sky Park in Emmet County and enjoy an “evening with the stars.”

For more information: www.darksky.org & www.midarkskypark.org

poorly regulated mining continued...

interests of special interest groups that are highly informed and not to the interests of the general public “ (Rolnik 2017). Regulatory capture can also occur when industry is the only source of technical expertise needed to understand production processes and what might go wrong (Cohen 2018).

Cohen goes on to describe a new form of regulatory capture: the willful rejection of science in setting environmental policy. This form of regulatory capture is based on fantasy and a disregard for expertise. In June Governor Snyder institutionalized regulatory capture in Michigan by passing the “Fox in the Henhouse” bills (Senate Bills 662-654), which lets the governor appoint a panel of mostly industry representatives with the power to veto regulations written by the DEQ’s environmental and health professionals.

The wild U.P. that many of us know and love is under threat like never before. The government agencies that are supposed to protect it are in large part working for the industries they are supposed to be regulating. It’s going to be up to the rest of us to save the wild U.P.

Sources

Wikipedia. 2018. Regulatory capture. https://en.wikipedia.org/wiki/Regulatory_capture.

Rolnik, Guy. April 17, 2017. When We Are Less Interested in the Truth, Capture Thrives. ProMarket: the blog of the Stigler Center at the University of Chicago Booth School of Business. <https://promarket.org/less-interested-truth-capture-thrives/>.

Cohen, Steve. April 16, 2018. Scott Pruitt, Andrew Wheeler, and regulatory capture at the EPA. <https://blogs.ei.columbia.edu/2018/04/16/pruitt-wheeler-regulatory-capture-epa/>.

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

Please complete, attach a check, and give to a UPEC board member or mail to UPEC: PO Box 673, Houghton, MI 49931

Or you can contribute on-line through justgive on UPEC's website: www.upenvironment.org/join-donate/

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

☐ Regular Membership (\$25)

☐ Supporting or Organizational Membership (\$50)

☐ Student/Low Income Membership (\$15)

☐ Lifetime Membership (\$500)

☐ 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 of _____

* (Please mark correct category, and provide person's or family's name and mailing address on separate sheet of paper)

Contributions beyond membership are suggested for these UPEC funds - (please indicate amount of donation)

☐ Environmental Education fund

☐ Community Conservation Grants fund

☐ UPEC/SWUP Mining Action Group (MAG) fund

☐ UPEC General Fund

To simplify accounting, all UPEC memberships are due Jan/Feb for each calendar year.

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

Would you like to receive the quarterly UPEC via mail or email? (Circle one.)
Is this address a seasonal address?

Check your newsletter's mailing label for your membership status. Phone and E-mail information is optional - UPEC does not share members' contact information with any other organizations. Thank You for your support!

Fall Celebrate in the Sault a Success! by Dave Aho

The Three Lakes at 350 - Celebrate the UP! event in Sault Sainte Marie was a success. The fundraiser at the 1668 Winery and Lock Side Brewery was well attended and everyone had a nice time.

The Three Lakes group of the Michigan Sierra Club and the UPEC board deserves thanks for helping make this celebration so special. In particular, Phil Bellfy and Teri Foust worked tirelessly to make everything turn out perfect. The venues were well planned, the presenters were phenomenal, and the messages they delivered were informative and interesting.

A huge thank you to all who helped, presented and attended.

Information will be forthcoming on our next Celebrate the UP! event, which will take place in Marquette in 2019. UPEC invites all community members who care about the environment of the UP - watch for further information and to plan to attend.



"You were the stars, and I was the dark sky behind you." "Without dark sky, you couldn't see the stars." "I knew I was useful," he says. "You're essential."

Jenn Bennett, Author



**Upper Peninsula
Environmental Coalition**

P.O. Box 673
Houghton, MI 49931

www.upenvironment.org

906-201-1949

Return Service Requested

**NONPROFIT
US POSTAGE PAID
DULUTH, MN
PERMIT NO 1003**



Adam Manninen photo