



UP Environment

UPEC: THE UP'S OLDEST GRASSROOTS ENVIRONMENTAL GROUP

**UPEC Board Meeting October 15, 2016 - 1 PM to 4 PM EDT
1st Floor Conference Room, Peter White Library, Marquette**

Fall 2016



NEW ERA OF COLLABORATION AS UPEC AND SWUP COMBINE FORCES

by Horst Schmidt

To celebrate the upcoming merger of our two organizations, an event was planned at the Peter White Camp in Deerton that combined our new 'togetherness' and fundraising. The camp consists of two houses, outbuildings and an outhouse in a clearing which appears suddenly after several miles of two track through the woods.

Guests were invited to the camp that Peter White once retired to in remote Deerton. Once there, they were greeted by Save the Wild UP's (SWUP) Kathleen Heideman and Alexandra Maxwell along with UPEC's officers--Jon Saari, Horst Schmidt, Grant Fenner and Dave Allen. Being in this beautiful setting on the Laughing Whitefish River, we regaled our guests with a wide variety of food and drink.

The challenge for us was the rainfall that was predicted and fell with extra vigor during the event. Fortunately, Grant Fenner, our secretary, thought it prudent to have tents brought in which kept us dry as the rain pummeled down.

An introduction by Grant Fenner, one of the primary organizers of the merger activity for UPEC and SWUP, started off the program which put the audience in a good mood. He explained unique creatures, SWUPers and UPECers, which inhabit the UP to the audience.

Then Peter White—aka Chip Truscon—came out of the woodwork to tell us about his life, going on at great length; greater than we anticipated! He did mention our union during his lengthy monologue, saying, "My spirit soars like an eagle knowing that guardians of our beautiful natural heritage, Save the Wild UP and the Upper Peninsula Environmental Coalition have linked arms. This union reflects my belief that community is not an individual effort but the work of many." After his kind words, we attempted to get his attention, but being the practiced speaker he is, Peter evaded us and continued on. Eventually he was accosted by one of us and persuaded to have a cup of his signature punch to quench his thirst.



The Honorable Peter (Chip Truscon) White

Kathleen Heideman and Alex Maxwell spoke about the great benefit to the UP this merger will have in continuing their work under the auspices of UPEC as the new autonomous Mining Action Group. Kathleen and Alex's energy and talent will, in joining the UPEC board, add greater depth and knowledge. The merger works to the strengths of both groups to be highlighted in their cooperative work to protect clean water and wild places. SWUP's strength lies in its social media contacts and in its hard hitting public commentary on sulfide mining related permits, most recently on the proposed zinc copper mine targeting the Menominee River and the proposed expansion of the Eagle Mine in Marquette County.

Horst Schmidt spoke briefly about taking on the presidency of UPEC this year, telling the audience, "I've headed

continued on page 4

Soo Hosts Public Advisory Council by Horst Schmidt

On June 27th and 28th, 2016 the Michigan Statewide Public Advisory Council met at Lake Superior State University in Sault Ste. Marie, MI to discuss issues that concern the functioning of public advisory councils (PAC) throughout the state as well as getting an update on what is happening at each area of concern (AOC). I attended as a member of the Torch Lake AOC.



The Canadian lock is on the left and the American locks are on the right. The rapids are in the center to the right of the island.

Rick Hobrla, Chief, Great Lakes Management Unit, spoke about this year's funding. Congress has appropriated \$300 million for the Great Lakes Restoration Initiative which is in line with previous fiscal years. Their office receives a portion of that funding for Michigan AOCs. A subsequent story in **Mlive** has the largest chunk of the \$10 million funding for 2015-2016, \$7.9 million, go to the "... Lower Muskegon River Hydrological Reconnection and Wetland Restoration Project, which hopes to remove Muskegon Lake from a U.S. and Canadian list of toxic hot spots known as Great Lakes Areas of Concern." In order for an AOC to receive a large clean-up grant, the local PAC has to develop a cleanup plan with the help of local residents and to implement a community participation plan.

AGENCIES

Great Lakes Commission-formal organization of US states and Canadian provinces. **Office of Great Lakes** (OGL)-Michigan-Inserted in Department of Environmental Quality, but extension of governor's office. **State-Wide Public Action Council**-all PACs in Michigan belong with meetings to share information, updates on national and state activities, developing and implementing remedial action plans. **Public Action Council**-each AOC has a citizen-based council to develop plans to remove pollutants. **International Joint Commission**-US-Canada commission to work on matters related to the Great Lakes

There was an emphasis on improving communications between PACs and their communities in order to create awareness of their AOCs and generate community participation. The use of social media was highlighted by Jordan Lubketin, communications director of the National Wildlife Federation. Jordan spoke of the different platforms from Twitter to Facebook to Snapchat among others. Each serves different, overlapping niches. How you make a decision on which to pick depends on the audience that is being sought. Frequency of messaging, according to Jordan, varies from site to site. For Twitter, daily tweets are necessary to stay connected to your users. Facebook has more flexibility from once a day to once a week. Instagram focuses on photos. In talking with Jon Allan, director of Office of Great Lakes (OGL), there is a renewed emphasis on community participation and acceptance of a cleanup with a concomitant desire to develop a plan to eliminate the pollution in their AOC.

The Menominee River PAC is in the final stages of its clean up in the lower part of the river before it enters the Green Bay part of Lake Michigan. In the slide presentation, we were able to see the efforts of volunteers in removing invasive plants such as buckthorn shrubs from two islands near the mouth of the river of its namesake city. They then replanted with native species. They are ready to be delisted.

Jon Allan whose agency is attached to the Department of Environmental Quality, but remains an extension of the governor's office, administers some of the Great Lakes Restoration Initiative funding approved by Congress. He is concerned about the lack of progress by Torch Lake PAC and a negative history of interactions with their Office. There has been some progress with the addition of new members, a completed grant application submitted for funds and recent community outreach. Director Allan said he would get in touch with me to help us move forward on our clean-up plan.

There were two outside activities during our stay. One was a tour of the American and Canadian locks in Sault Ste. Marie. It gave us an opportunity to see the progress their bi-national PAC has made in the clean-up on the Canadian side where the most of the industrial pollution came from



Bridge construction on St. Mary's Rapids with SPAC group tour. The bridge pad is behind safety sign. A portion of the old causeway on the right will be removed.

AREAS OF CONCERN-HISTORY

Areas of Concern (AOC) created in 1987. Legal basis: US-Canada Great Lakes Water Quality Agreement. Purpose: Clean up the waters shared by the two countries. Number of AOCs: Originally 43 with 26 in the US, 12 in Canada and 5 shared by both countries. Common problems: Contaminated sediments, sewage plant discharge, combined sewer/stormwater overflows, non-point source runoff, habitat degradation and destruction. Geographical extent: Boundary of Great Lakes water basin.

a steel plant and paper mill. The other was a ceremony on the American side marking the commencement of construction of a new bridge over the St. Mary's Rapids. It is an area where a causeway built decades ago impedes water flow and changed water temperature and fish species. After the ceremony local government officials, state and federal representatives and Native American representatives spoke about the benefits of the coming changes to the rapids. Afterwards the SPAC group was taken to the construction site where islands have been created for bridge footings. An explanation of the plans was given to us by a representative of Payne & Dolan who is doing the construction. If you look at the aerial photo, you will see there are islands that divide the river into channels that extend almost the entire length of the river until it enters Lake Huron. Our field trip was in the far distance of the photo. The St. Mary's River historically had many rapids which required European travelers to carry their boats around the river from lake to lake. By removing the rocks, it changed the river's characteristics for migrating and spawning of native fish species.

SAULT STE. MARIE (SSM) PAC

One of 5 shared PACs.

American problems: Prior release of sewage/stormwater during rain events into St. Mary's River from SSM water treatment facility. A combined causeway/culvert system was built over the St. Mary's Rapids which are adjacent to the main river channel. The project reduced water flow, raised water temperatures and changed fish species. **Solutions:** The city has just replaced the last of its old sewer system. Heavy rain events should not be able to overwhelm its water treatment plant. A new bridge is being erected that has wide spans to allow return to prior conditions. Old causeway/culverts will be removed.

Canadian problems: Algoma Steel dumped its contaminants into the river. St. Mary's paper mill dumped contaminants into the river. SSM has combined sewer/stormwater system that overflows during heavy rain events. **Solutions:** Algoma Steel has significantly reduced its pollution and contaminants are in process of being removed. St. Mary's paper mill is closed while chemicals and waste dumped into river are in the process of being cleaned up SSM is working on changing over its sewage system.

Merger from page 1



Alexandra Maxwell and Kathleen Heideman

up a number of organizations. I told myself, ‘How hard can it be?’” Well, he found out once the merger was proposed. He thanked Grant Fenner, Dave Allen and Jon Saari for all the hard work and dedication that is required to consummate this coming together. It fits in with his goal of making UPEC a truly UP-wide organization in a far flung region as we face ever greater challenges from mining companies and the Michigan Department of Environmental Quality.

Jon Saari, long-time activist who has served in leadership roles in both UPEC and SWUP, shared his thoughts on what this merger means. “U.P. environmental groups have vacillated about the best way to do our work. The Hard Power wing pushes lobbying, watchdogging government and industry, relentless pursuit in crisis mode, while the Soft Power wing stresses public education, strategic grant giving, long term cultural changes. SWUP is more in the former tradition, UPEC in the latter. Now the two approaches will be combined in one organization.”

As the speeches wound down, the rain and wind did their best to drown us out. We persevered as did our guests. Those tents saved us! Then the storm passed. Our guests enjoyed more conversation. Those of us from UPEC and SWUP mingled with the crowd as the event wound down towards evening. A few of us who stayed overnight sat around the fireplace talking about the many facets of environmentalism, personal reminiscences and laughing at each other’s stories.

Steve Garske, an advisory board member of SWUP, feels strongly about what is happening. His thoughts were expressed in a forceful way about our merger as well as the need for strong environmental protection. “It was great to see so many dedicated and talented activists from both organizations join forces to protect the UP from the current industrial-scale resource rush. With the lack of effective environmental and public health oversight in this state, it’s



Jon Saari

up to those of us who care about the UP to see that it isn’t turned into a sacrifice zone for corporate profit.”

Doris Heideman, Kathleen’s mother and our chief cook and bottle washer was moved to say, “It’s the people—such a diverse group from all walks of life—who have a long standing history of working to protect the water and other natural resources for future generations. It’s so exciting to see that people understand the consequences of bad environmental decisions and want to raise awareness of how to work together to protect the UP for future generations.” With her willingness to come up from Wisconsin to help us, all the delicious potato and pasta salads, the seasoned yellow tomatoes, the fruits and much more made for a great time for everyone. Thanks Doris and to all who attended and those who support UPEC and SWUP!

UPEC’s Mission

“As the longest serving environmental organization in Michigan’s U.P., the Upper Peninsula Environmental Coalition (UPEC) strives to preserve the unique cultural and natural resources of the Upper Peninsula through public education, the promotion of sound land stewardship, and reasoned dialogue with communities, governments, industries and others with whom we share this land.”

Stewardship on an Austrian Mountain Farm by Jon Saari

Attitudes about land use and stewardship lie buried in the details of cultural practices and histories. What do farm roads, electric bills, predator attitudes, trade magazines, tell us about a place? As US society struggles with infrastructure, energy policies, top predators in rural areas, and climate change, what might we learn from a mountainous central European country of eight million people?



The farm road (Gueterweg)

In 1965, as a freshly married lad of 25 to an Austrian farm girl, my two hands and shovel were the labor contribution of our farm in Upper Austria to the making of a new road. These roads, called “goods-hauling roads,” are narrow asphalt ribbons that link the hillside farms to the villages in the river valleys. It is the same road we use today, fifty years later.

These farm roads are one-way roads with intermittent passing places for oncoming vehicles. Though narrow, the roadbed actually has a variable width, as the contours of the alpine landscape permit. A driver must always be alert to spot an oncoming vehicle, which can be a huge tandem logging truck, a mini-van school bus, or the neighbor’s tractor. I spot the nearest widening in the road and pull over, whether I am the uphill-bound car with the right of way or not. The oncoming driver flicks his or her fingers in thanks for the courtesy of yielding. Once I had to back up 250 yards, around a blind curve, to allow a logging truck to pass. Guard rails are infrequent, as Austrians expect you to be expert and know what you have to do. It is a decided advantage when you are in the lane hugging the hillside, and not out on the edge.

The asphalt farm roads have almost no shoulder, except for the passing places. The run-off from rain storms goes harmlessly into the green grass of the bordering meadows, pastures, and woodlots. Erosion is rare, except on forest roads which have gravel beds, similar to many smaller roads in the U.P.

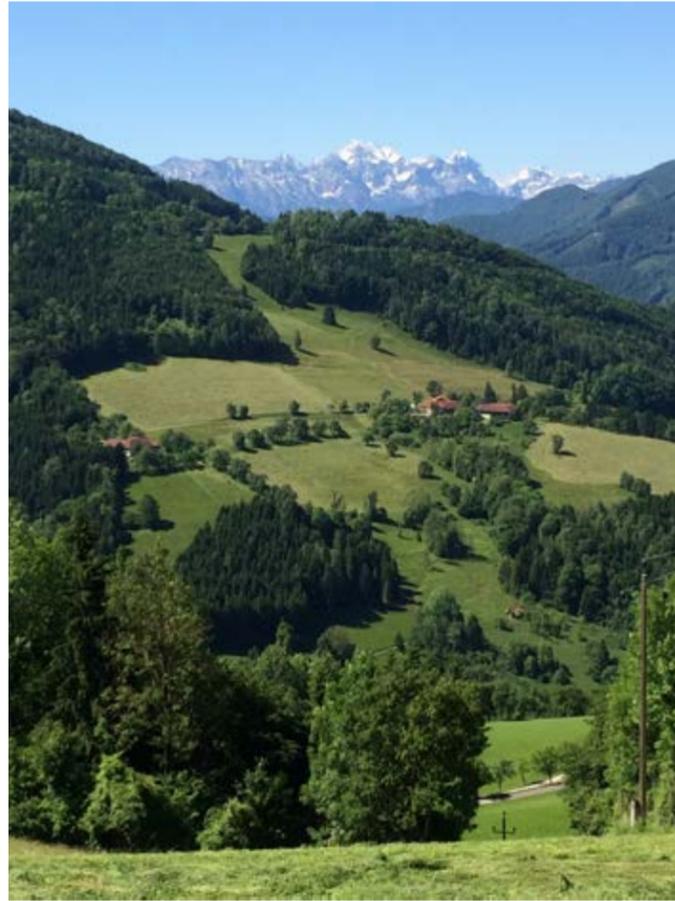
Our energy bill

Until 2000, when we installed a central heating system on the farm, only the living room (Stube) and the kitchen were heated with wood and tile stoves, so in the depths of winter it was ice cold in the bedrooms. Now we have a wood pellet furnace that heats five zones within the large farmhouse, including a renter’s apartment that is heated year round. The pellets are an industrial product made from compressed softwood wood scraps, coated with a film that allows them to burn intensely and flow easily. We use about nine tons of pellets per year, which are stored in a special room that was formerly part of the stable; they cost \$250 per ton, and are blown into the storage area from a huge container truck that comes once a year to the farm on the narrow Gueter Weg. Austrian wood pellet technology is well known throughout Europe, and thousands of farms and residences are heated with wood chips or pellets.

But of course we still need electricity to run our appliances and computers. Electricity came to the farm around 1953, and my wife Christine still fondly remembers the ambient glow of oil lanterns from her childhood. Our electric bill here is different from our bill in the USA because we are educated about where our electricity comes from. For the past year, it came from hydropower (72.69%), wind (9.12%), biomass (4.86%), biogas (1.06%), solar (1.23%), coal (4.94%), natural gas (3.75%), oil (0.07%), and other (2.28%). The country sources were Austria (79%), Finland (2.20%), France (8.45%), Norway (8.65%), and Sweden (1.70%.) For an additional premium it is possible to get a 100 percent renewable energy plan that has zero CO2 emissions and no radioactive fallout, and is produced 100 percent in Austria. Our supplier, EnergieAG, is a company that promotes a whole range of energy solutions, from geothermal warm earth pumps to energy conservation and efficient lighting and appliances. They see clearly the bigger picture.

Predators in the neighborhood

Our farm has been noted in local tax registers since 1480. That is about how long the battle has been going on to wrest the land for agriculture from the forest and “bad animals.” Our farm acquired the name Lower Stag Farm (Unter Hiasn Hub) and was an active part of this struggle; it was one of 14 farms in the region that were considered by the landowning aristocracy and church to be “hunting farms” which paid their feudal dues by assisting in hunts, such as guiding and retrieving game. Not only the sport-loving aristocrats but also the farmers with their domesticated animals (chickens, pigs, cows, horses) had an interest in hunting and keeping predators at bay.



The three big predators were wolves, bear, and lynx. They inspired fear and were regarded as formidable beasts that should be exterminated in the interest of peace and prosperity. Individual bear hunters were allowed to “parade” a slain bear’s head from farm to farm to collect donations for their prowess. When a big predator was spotted, organized hunts of 20-40 conscripted and armed men would pursue the animal for days deep into mountain retreats. Records are sporadic but lists of slain predators in our immediate area indicate a standoff that lasted centuries: one wolf (1684), one lynx and one wolf (1714), two lynx and one wolf (1715), three lynx (1732), one wolf (1811.) Improved guns as well as coordinated extermination campaigns led to the last animals being sighted long ago in this region: wolves around 1811, lynx around 1821, bears in 1869.

Today top predators are understood to have an important role in ecosystems. But the landscape is too densely settled and popular attitudes too hostile to permit reintroductions except in very remote locations. Brown bear were reintroduced in the mountainous Kalkalpen National Park (about 25 miles from our farm) in 1990 and are very occasionally sighted. Lynx returned to the park region in 1995. A wolf den was discovered in August 2016 on a military reserva-

tion. A full range of smaller predators — foxes, otter, marten, weasels, wildcats, badgers, eagles, vultures, cormorants, herons, cranes, and crows — continues to thrive in the settled rural landscape interlaced with woods and waters. The battle continues in a lower key over who has the right to habitat and livelihood among humans and wildlife.

The Farmer (Der Bauer), a weekly trade magazine

A pile of these weekly magazines await me when we get to Austria for our three month stay each year. It’s a quick way to catch up on agricultural developments and trends, as well as attitudes. The magazine is political, in that it is published by the Agricultural Chamber of the province of Upper Austria, which is run by the conservative party. What is always striking to me is the in-depth discussions of biodiversity and climate change. Biodiversity seems to be accepted as a value, as part of the framework of farming and caring for the land. Subsidies through the European Union exist for many programs, whether it is leaving snags for woodpeckers in the woods or late harvesting of swathes in meadows allowed to go to seed.

Past are the days of spruce plantations, present is the mixed forest of hardwoods and conifers. On climate change there are technical reports on how to adapt to a drier, hotter climate. Nobody seems to regard climate change as a socialist plot or hoax. It is refreshing to see science so respected by ordinary people, who might not always find it in their best short-term economic interest.

Austria is admittedly a pro-Green country, having taken strong national positions against nuclear energy and genetically modified food crops. But it is the way environmental issues are framed by people in the small towns, villages and countryside that most impresses me. They want to make a living, but also to do the right thing by the land. Sometimes that means yielding to nature and taking the long view. The wisdom of centuries of survival pushes them in that direction.

UPEC Officers, Board and Staff	
President:	Horst Schmidt
Vice President:	David Allen
Secretary:	Grant Fenner
Treasurer:	Jon Saari
Board Members:	Dave Aho Nick Baumgart Margaret Scheffer Connie Sherry Nancy Warren Connie Julien (webmaster)
Staff:	Gregg Bruff, Contractor

OVERVIEW OF CLEANUP CRITERIA, Part 201 of Environmental Remediation, Natural Resources and Environmental Protection Act, 1994 by Horst Schmidt

Why an overview? It’s a comprehensive rewrite of the regulations that govern the cleanup of toxic land, water and ambient air. It’s based on science rather than prescriptive rules alone. Using science-based research, DEQ remediation staff are able to update requirements without having to change the regulations themselves. This offers a great deal of flexibility, since the proposed regulations number 390 pages of dense text.

Why? There are developmental effects to children. Both carcinogenic and non-carcinogenic substances can threaten people’s health. Mutagenic means “an agent, such as a chemical, ultraviolet light, or a radioactive element, that can induce or increase the frequency of mutation in an organism.” With the many ways humans have found to make changes, there are unintended consequences that can lead to dangerous outcomes.

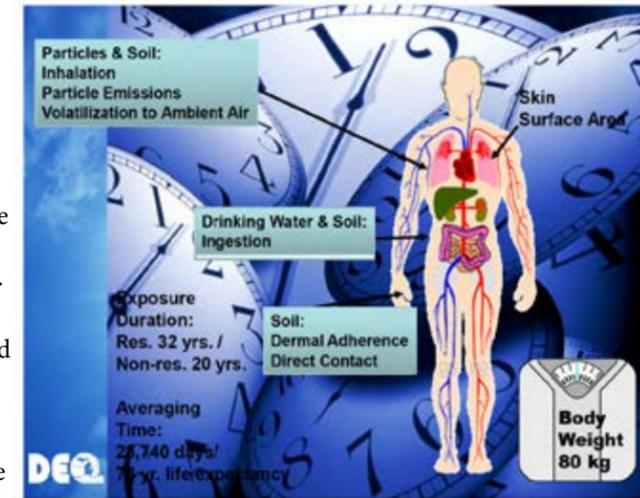
What is important is the lowest value for a specific compound becomes the health-based value. In other words, if there are two values, one is 25 parts pbb another is 10, the latter would be chosen. And value is not stated in the regulations, but will be determined by the latest data from the EPA and scientific research. Because water and air can move in myriad ways and soil has many different directions through which can go, the DEQ division’s workers will look for the pathways that led to the pollution ending up at a person’s house.

Is it earth shaking? Yes. Does it elicit our interest? No. So little interest has been shown that the DEQ cancelled a public hearing scheduled for Marquette in July; the only location picked for the UP.

All rule changes impacting homes and businesses have to be approved by legislature.

With significant advances in exposure effects from chemical dangers since 2002, it will be able to draw upon up-to-date databases to protect human health and our environment.

If drinking water is polluted by toxic chemicals in the soil; if soil touches your skin and causes injury; if particles in your home’s air contaminate the soil. All of these can be investigated.



Source: http://www.michigan.gov/documents/deq/deq-rrd-Criteria-PublicInformationMeetingsPresentation2016_526536_7.pdf

Why? Both carcinogenic and non-carcinogenic substances can threaten people’s health. Mutagenic means “an agent, such as a chemical, ultraviolet light, or a radioactive element, that can induce or increase the frequency of mutation in an organism.”

There are unintended consequences that can lead to dangerous outcomes, such as developmental effects to children.

Of importance is the lowest value for a specific compound becomes the health-based value. In other words, if there are two values, one is 25 parts ppb another is 10 ppb, the lower value would be chosen. Although the

value is not stated in the regulations, but will be determined by the latest data from the EPA and scientific research.

Because water and air can move in myriad ways and soil has many different directions through which water can go, the DEQ division’s workers will look for the pathways that led to the pollution ending up at a person’s house.

Will it work? That depends on the state, on it’s employees, and on our legislators. Exciting? It is if something terrible happens to you!

About UPEC...

The Upper Peninsula Environmental Coalition has a four-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 your comments or contributions to UPEC at:

**P.O. Box 673, Houghton, MI 49931.
E-mail: upec@upenvironment.org.
and Facebook.**

**Call us at 906-201-1949.
Website: www.upenvironment.org**

Summer Holiday in Finland by Dave and Stephanie Aho

This summer we had the luxury of spending two weeks visiting southern Finland, having the opportunity to see part of this beautiful country firsthand and experience how the Finnish systems work. The trip left us wanting more. From the people and their customs, the state of the art technologies and designs, the blending of historical and modern architecture, the medieval history, to its beautiful lakes and streams and the Baltic Sea, all of which is part of what defines current Finland.

Staying at a cousin's lake cottage near Nummela about a half hour north of Helsinki, Villa Pennala was the perfect base camp for our excursions. Morning saunas coupled with a cool swim in a seemingly private lake, and then coffee, fruit, and cheese with sliced cucumbers on rye bread, became the only proper way to start the day. Our hosts, Erkki, Eero and Tehri could not have been more accommodating. We felt so at home staying at their cabin and on our travels alike, they took such good care of us.

Helsinki with its 1,500,000 plus residents combined with its history and architecture, created from Swedish, Russian and German influences, was an amazing, vibrant city. Helsinki, Espoo, and Vantaa's various transportation systems worked flawlessly. With people constantly on the move; walking, biking, skating, riding trams, busses, in cars and boats, moving people from place to place with a seemingly effortless grace. Traveling with natives was exciting, and fluid, as they knew the routes to take and the connections to make. Catch the bus, duck into this building, around that park, jump the tram, and take the tunnel here; we were able to travel long distances in no time at all. Using all the various technologies to secure our timed course, from the Smartphone apps for the bus and tram schedule, to Googling where to shop or grab a bite to eat or make a purchase, we got where we needed and what we needed with incredible ease.

From Turku, to Poorvo, and to Estonia's capital city Tallinn, travels outside of the Helsinki area were equally noteworthy. The simplicity of the transportation systems was very evident as we moved through the roundabouts or Liikenneympyrä, onto the motorways, passing farm fields, going through wild-life pathway tunnels, and rock cuts.

Variable speed limit signage, speed cameras, and the beautiful scenery was a special part of the trip. From the classical beauty of the Turku Castle and its medieval battle championship, to the themed restaurant ships in Poorvo, to the history



of the sea fortress of Suomenlinna and the well preserved medieval city of Tallinn, there was constantly something wonderful to experience.

Wood is king in Finland. Not only do they utilize wood for many things, their largest export is wood and yet Finland is heavily wooded. Finnish laws enforce the proper management of public and private forests, and support their timber industry.

The food was amazing as we found that being vegetarian was much easier to adhere to in Finland. Everywhere we ate there were options for all eating styles. From Nepalese, Russian, Japanese, traditional Finnish, and Finnish fast food - Hesburger, the options seemed endless. Visiting the Farmer's Market or Tori in Nummela was fantastic, the fresh local fruits, vegetables, mushrooms, fish, were so nice to add to our menu. At the Villa Pennala there were fresh picked blueberries and raspberries, and chanterelles (mushrooms), this with some boiled new potatoes with dill weed, and fresh wild caught ocean salmon, mealtime was a treat to say the least.

Being so fortunate to take this trip it sometimes still feels like a dream, spending time with relatives from a different country/culture, traveling through and experiencing Southern Finland was one of the most amazing experiences we have ever had. We've described our trip to Finland as a trip of a lifetime, and it sure was all of that, but we hope to go back again before too long. What a spectacular country.

Näkemiin Finland. Until we meet again...



Take Advantage of Late Summer "Warm" Water to Snorkel Shallow Munising Shipwrecks by Bill Ziegler

The Munising Bay area (Alger Underwater Preserve) has several outstanding shallow shipwrecks that provide a unique experience to snorkel divers with access to at minimum, a 16 foot boat. Typically this type of experience is only available to SCUBA Divers equipped with wet suits and dive equipment. Munising Bay/Grand Island has several shallow shipwrecks that are easily viewed up close, by snorkel divers and boaters. All three shallow wrecks are buoyed and with Polarizing sunglasses you can see the wrecks on the bottom when you are at the buoy. The best of these is the wreck of the **Bermuda** in Murray Bay at the southern end of Grand Island. The water in Murray Bay can be surprisingly warm depending on recent conditions. When we last went snorkel diving on these



Munising area shallow wrecks in early August the surface water temperature was 71 F. That is typically the summer temperature for swimming in most of our Upper Peninsula inland lakes. This makes this a great late summer trip to Munising Bay with your boat and snorkel gear to view sights in part of the Pictured Rocks National Lake Shore and Grand Island.

Munising is one of the few dive areas in the Great Lakes that has an intact shipwreck; the **Bermuda**. The best part is it is only 12 feet deep at the deck. Our family consists of experienced SCUBA divers and novice snorkel divers (without wet suits) and all enjoy this snorkel dive on the **Bermuda**. This ship is a wooden canal schooner that reportedly sank in 1870.

There are two shallow shipwrecks along the East side of Grand Island between the historic lighthouse (across from Sand Point) and Trout Bay.

The **Manhattan** is the most southerly buoy along this part of Grand Island. The wreck of the **Manhattan** is resting in 20 to 30 feet of water. A snorkel dive is the best way to observe this wreck although you can see it from a boat with adequate visibility. As in most of Lake Superior, water visibility from the surface ranges between 25 to 40 feet in depth, depending on light conditions. This 250 foot long wooden steamer reportedly was wrecked in 1903 and burned to the water line. Some varied machinery and sections of the hull are visible on the bottom.

The second wreck that is buoyed in this East side of Grand Island area is the **Herman Hettler** which is north of the Manhattan and just southeast of Trout Point, in about 25 to 40 feet of water. The **Hettler** was a wooden steamer over 200 feet in length that struck the reef in November 1926 and sunk. Divers can view part of the hull and numerous pieces of equipment including the boiler with the excellent water visibility.

Another very scenic location to visit is a small cove and waterfalls about 4.5 miles up the west shore of Grand Island from the old ferry landing at the south tip of the island. If you have a safe wind forecast this spot is a great place to swim with the water falls pouring down on you from the cliff above. A sea cave can be viewed up close by heading about six miles (from the old ferry landing) up the East side of the island to the inside tip of Trout Point in Trout Bay of Grand Island.



Erich Ziegler looking into the hold of the Bermuda in a southern bay of Grand Island.



Anne Ziegler coming up from the Bermuda after exploring part of the hull.

There are two good reference books relating the details of shipwrecks in the Munising area: **Munising Shipwrecks** by Frederick Stonehouse -1983 and **The Divers Guide to Michigan** by Steve Harrington -1990. Both of these books are typically carried by local book stores. Another good source is the Alger Underwater Preserve web site - <http://www.michiganpreserves.org/alger.htm>, which gives GPS coordinates and a map of the major dive sites. Remember the ship wrecks and all the associated artifacts are all protected from removal, so this is an excellent place to use your underwater camera. If you have additional questions you can stop in at the Pictured Rocks National Lakeshore/ U.S. Forest Service Visitor Center on M- 28 in Munising or call them at 906-387-3700.

Annual Call for Education Grants

UPEC reminds educators that a grant opportunity exists for teachers 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 2017 calendar year, with applications due Monday, Jan. 4, 2017.

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.

As the UP's oldest grassroots environmental organization, UPEC is equally willing to fund outstanding projects inside and outside of formal school settings. Opportunities continue 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. **NOTE: Applications must be submitted in either a Microsoft Word file or a pdf format. Applications should be in one file.** Completed applications must be received by mail or emailed no later than Jan. 4, 2017. Funding for successful proposals will be announced in early February.

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 please 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.

Thank You!

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 circle 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 fund

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

**Call UPEC at:
906-201-1949**

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!

Call for UPEC Annual Photo Contest

The Upper Peninsula Environmental Coalition announces the 2017 second **Annual Photograph Contest**. The purpose of the contest is to highlight "the best of" the Upper Peninsula's scenes and activities. Photographs will be used by UPEC in print and on-line publications, and exhibited at the annual "Celebrate the UP!" and other venues.

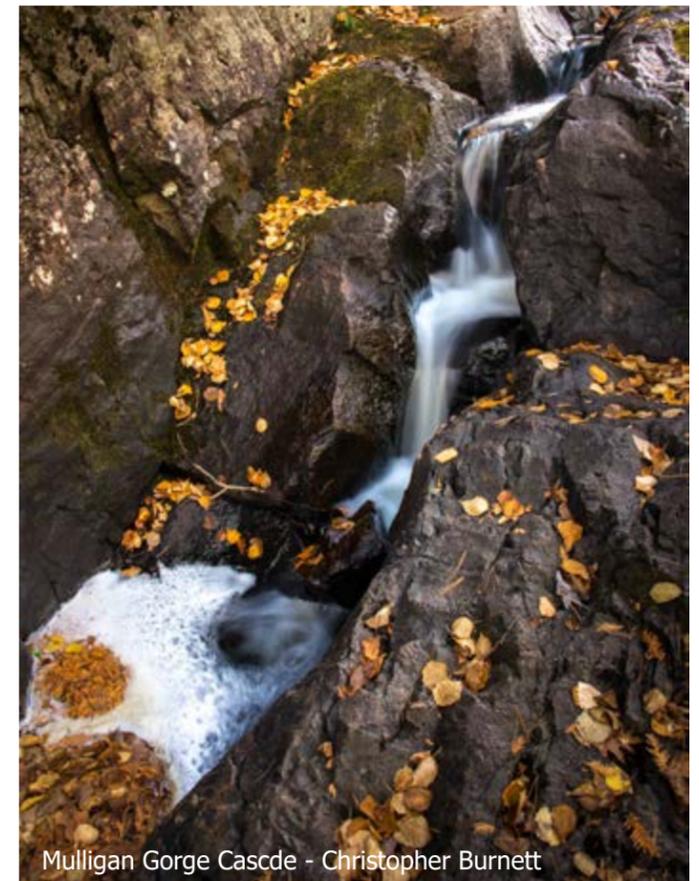
The contest includes four categories:

- 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.

Electronic entries must include:

- 1 - A statement or permission for UPEC to use the photos, (if children are featured in the photo, a specific statement of permission to use that photo of the named child;)
- 2 - The photographer's name, address, and email;
- 3 - digital photographs in either raw, tiff or jpg formats;
- 4 - Each photo should be named and labeled as to which category in which it is entered.

Please send your entries to: upec@upenvironment.org. Deadline for entries is November 15.



Mulligan Gorge Cascade - Christopher Burnett



**Upper Peninsula
Environmental Coalition**

P.O. Box 673
Houghton, MI 49931

Return Service Requested

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

www.upenvironment.org

906-201-1949

Follow UPEC on Facebook!

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

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
109th District Rep. John Kivela
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

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.



Fall in the Hiawatha National Forest by Randy Nichols