

U. P. Environment

Summer 2010

Quarterly Newsletter for the
Upper Peninsula Environmental Coalition
The oldest grassroots environmental
organization in the U.P.



Aerial view of the Salmon-Trout River on the
Yellow Dog Plains
By Chauncey Moran
Courtesy of Save the Wild U.P.

The Ongoing Battle Against Rio Tinto

How do you get a handle on an issue that has more twists and turns to it than the Sturgeon River Sloughs? About all you can do is report on what things look like at the bend of the river you happen to occupy at that particular moment. That is how hard it is to stay current with what is going on at Kennecott's proposed metallic sulfide mine on the Yellow Dog Plains.

Over the past three months, the Plains has been the site of nonviolent protest and the subject of continuing legal battles. The protests started when longtime anti-sulfide-mining activist Cynthia Pryor decided to sit on a tree stump rather than get out of the way of a bulldozer bent on tearing up that stump—and all the land around it. Her arrest was followed by a sit-in, then a camp-in, by water and Eagle Rock advocates from the Keweenaw Bay Tribe of Indians. The forcible dissolution of their camp several weeks later was followed by the trial of Pryor (who was found guilty) and Kennecott's sudden abandonment of the so-called Woodland Road, a pathway better named the Wetland Road given its destructive trail through vulnerable area wetlands. Anyway, new UPEC President William Malmsten does his best starting on page 3 to describe for us the most recent fast-turning bends in this particular river.

—Editor



Another view of the Yellow Dog Plains—this time
through a fence erected by Kennecott at the edge of the
bluff leading to Eagle Rock
Photo by Wm. Malmsten

Don't forget those Econo Foods Slips!

Thanks to you and Econo Foods, UPEC has earned several hundred dollars over the past few years by submitting grocery receipts from the store collected by UPEC members. That amount represents 1% of total gross receipts from all the slips.

That may not seem like a lot, but when you're a non-profit organization every little bit helps. Of course, that amount could be even higher this year if more of you were to save your slips and send them to us!

Either save them throughout the year and mail them off to us, or simply hand them to a UPEC board member when you attend a meeting—whichever is most convenient. It's one of the easier ways you can offer your support.



UPEC is a proud member of EarthShare of Michigan, an organiza-

tion that allows working people to donate to environmental organizations through workplace giving campaigns.

Each year EarthShare provides UPEC with critically-needed funding for environmental education and program operation.

If you would like to help us earn more funding for UPEC, consider letting your employer know you want the EarthShare of Michigan giving option at your workplace and give to the annual payroll deduction plan.

For more information, please call 1 (800) 386-3326 or view the website at www.earthsharemichigan.org

About UPEC...

The Upper Peninsula Environmental Coalition has a 30-year track record of protecting and seeking to maintain the unique environmental qualities of the U.P. through public education and watchful monitoring of industry and government.

UPEC seeks common ground with diverse individuals and organizations in order to promote sound planning and management decisions for all the region's natural resources.

Our newsletter, the *U.P. Environment*, is published four times a year.

You can send your comments or contributions to UPEC by standard mail at P.O. Box 673, Houghton, MI 49931, or e-mail us from our website at upenvironment.org.

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What acid drainage looks like:
Photo of mine drainage polluting nearby waters
in Sudbury, Ont.
Photo by Edward Burtynsky
Courtesy of Save the Wild U.P.

SULFIDE MINING UPDATE

As we go to print with this newsletter, Kennecott Eagle Minerals has begun construction of the surface facilities for their nickel copper mine on the Yellow Dog Plains in Northern Marquette County. They have cleared the final regulatory obstacle with the July 1 announcement by the Environmental Protection Agency (EPA) that a federal permit for the underground injection of the effluent from Kennecott's wastewater treatment plant will not be required.

Unfortunately, the saga of Kennecott's sulfide mine includes many parallels to the regulatory failures responsible for the British Petroleum (BP) gulf oil disaster. We believe that if the current state and federal environmental regulations were enforced to the letter and intent of the law, Kennecott's mine would not be allowed, at least not with its current mine plan.

The determination by the EPA that an underground injection control (UIC) permit will not be required is just the latest example of regulatory failure. This federal permit is required under the Safe Drinking Water Act which is intended to protect aquifers that are used, or could be used, as drinking water sources.

Kennecott had originally applied for the permit, but in February of this year Kennecott changed the design of their injection system. In a March 22 letter to the Michigan Department of Natural Resources and Environment (DNRE), Kennecott General Manager Jon Cherry made the following statement: "Kennecott has determined that the redesigned [treated water infiltration system] does not qualify as a subsurface fluid distribution system and therefore does not implicate the UIC requirements. This obviates the need for the UIC permit."

In a response dated the very same day as Kennecott's letter, March 22, Lynne Boyd, DNRE Forest Management Chief, responded: "Based on the certification you provided, the Forest Management Division of the Department of Natural Resources and Environment acknowledges that Kennecott has met the requirements of Section 4.A.4. of the subject lease. As a result, Kennecott now may use the Premises in accordance with the terms and conditions contained in the subject lease." The referenced lease stipulates that the lease of state land is not valid until Kennecott obtains all of the required state and federal permits.

One would think that Mr. Boyd would have responded with something like: what do you mean you don't need a UIC permit? But no such inquiry was made, and no explanation is provided on the rationale behind Kennecott's determination that a UIC permit would not be required.

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(Sulfide Mining Update continued from page 3)

On April 20, environmental activist Cynthia Pryor happened to be driving by the proposed mine site near Eagle Rock and noticed a bulldozer had been excavating the perimeter of the site. Believing that Kennecott did not have a valid lease for the state-owned land because of the missing UIC permit, Cynthia walked over to talk with the bulldozer driver who was not operating his machine at the time. When the driver left to get a blue print of the excavation plan, Cynthia sat on a nearby stump to wait for his return. When the driver returned with Kennecott security guards, Cynthia refused to leave. The police were called and Cynthia was arrested. In a last minute pretrial hearing, the prosecution managed to persuade the Judge to prohibit the invalid lease issue, so Cynthia was left without a defense and was subsequently convicted of trespassing on state-owned land.

The state permit allows Kennecott to discharge 504,000 gallons of treated effluent a day into the aquifer. The potential for contamination of the aquifer is clear. The clear intent of the Safe Drinking Water Act is to protect aquifers from such potential sources of contamination. Yet in its July 1 letter, the EPA states: "Based upon our review of the modified TWIS [treated water infiltration system], the lateral perforated piping that constitutes the fluid distribution system is above ground and is thus not a subsurface system."

Kennecott's modified effluent injection system would inject the same amount of effluent at the same elevation as their original system. The only difference in the modified system is that the distribution grid pipes would be covered with Styrofoam and a plastic tarp, instead of being covered with soil, and there would be an inconsequential change in the diameter of the grid pipes.

In our June 28 e-mail to the EPA, UPEC pointed out that in fact the distribution pipes in the modified system are still subsurface. An engineering diagram included with Kennecott's application to amend their injection system shows that the lateral piping would still be about six inches below the surface. We also pointed out to the EPA that if the pipes were not subsurface, the effluent would be discharged to the surface rather than being injected into the ground as intended.

Furthermore, the plan calls for a one-foot high berm to be constructed between cells in the system to prevent effluent from flowing between cells. Kennecott's proposed system is similar to a septic system drain field with perforated piping systems divided into five adjacent cells. It would follow that if the effluent would overflow between cells without the berm, it would also be expected to overflow at the perimeter of the system without the berm. But Kennecott's modified plan does not include a berm at the perimeter of the system. Since the pipes at the perimeter of the system are only about six inches below the surface, it seems obvious that the system will release effluent to the surface at the perimeter.

It appears that both the Michigan DNRE and the EPA have approved a system that obviously won't work. Rule 203 of Michigan's nonferrous mining law requires that Kennecott demonstrate that all methods, materials, and techniques proposed to be utilized are capable of accomplishing their stated objectives. This is one of many examples of where Kennecott has failed to do so.

We speculate that the reason Kennecott did not include a berm at the perimeter in their design is so they can claim that the system is not subsurface. If the perimeter berm is included, then the top of the berm could be considered to be the surface elevation, and the lateral pipes would then be about a foot and half below the surface. It seems to be all part of an obvious ruse to provide an excuse for allowing Kennecott to proceed without the UIC permit. It seems that the whole reason for Kennecott's plan change is to circumvent the federal Safe Drinking Water Act.

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Rolf Peterson in winter work gear
Photo courtesy of George Desort

An Interview with Wolf Biologist Rolf Peterson

(This is another in a series of interviews by independent filmmaker and UPEC board member George Desort which reminds us some of the U.P.'s greatest natural resources are people. This interview took place February, 2010, amid the annual Winter study on Isle Royale. –Ed.)

George Desort: When did the Winter Study on Isle Royale begin?

Rolf Peterson: Winter Study on Isle Royale started in 1959 through the Purdue University Study. Graduate student Dave Mech came out and had a succession of pilots lined up to cover seven weeks.

GD: What do you look forward to most in the weeks leading up to the annual Winter Study?

RP: It is the curiosity of how many wolves are there going to be, because you are always guessing how many there are going to be or ought to be on what you know. But, of course, we don't know enough to predict it very well, but that first look at the wolves and the various packs is treated with a lot of anticipation.

GD: Compare the Summer Study with the seven weeks of Winter Study.

RP: The return on what we get here during the seven weeks is very high. Spring, summer, and fall we are on the ground. We are on foot, picking up bones that are very valuable. But the winter work is critical to get the basic numbers of wolves and moose and the number of moose wolves are killing. (That) core data comes from Winter Study.

GD: What pioneering study tactics originated on Isle Royale?

RP: Isle Royale was the first place airplanes were used for intensive studies of wolves. There had been one study in Alaska where they followed wolves for over twenty days and published a paper on it because it was so novel, but prior to that airplanes were used to kill wolves. Period. Isle Royale was the first place airplanes were used on an intensive basis. And now it is standard in any wolf study in the world.

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(Rolf Peterson Interview continued from page 5)

GD: What are the essentials of Winter Study?

RP: Food, water, and shelter. There have only been two buildings used in the last fifty years. Originally it was an old CCC bunkhouse and that lasted until 1988, and a new bunkhouse was built. The water all comes straight from the lake and we take a snowmobile down and fill cans with the water and haul them back up to camp with the snowmobile. And we have been drinking the water right out of the lake all these years. Fuel for the woodstove comes from right around the bunkhouse and that is all put up in the fall. So food, water, shelter, and heat. Those are the critical things.



Rolf on warmer days
Photo by George Desort

GD: Describe a day in the life of the Isle Royale Winter Study.

RP: If the weather is good, which means calm, either John Vucetich or I. we split the duties, go down to the harbor and turn the generator on by the airplane that we plug a little electric heater into to heat the airplane. It takes about three hours of heat, so (we) start the generator at five a.m., try to go back to sleep until 6:30 or so. We try to be in the air by eight a.m., which is sunrise. It takes about an hour from the bed to flying. In the middle there you eat oatmeal or sometimes cream of wheat. It's dark outside when you leave the bunkhouse for the airplane. Load the plane and Then John usually takes the morning shift; there are four hours of fuel in the plane, so he will be back midday. Then I go out for four hours in the afternoon if the weather is good. Fly until sundown. Then (there's) dinner, occasionally a sauna, and usually into bed by ten.

GD: Talk about weather and the plane?

RP: Our biggest enemy in terms of the airplane and making it work is wind. If it is very windy you cannot do anything. So we need winds less than 15mph and to find wolf tracks in the snow you need sun, you need shadows. If it is sunny and calm and with fresh snow, or soft snow, then you can follow wolves that way. And that is important, we may have radio collars in several of the packs that does not get you the loners, single wolves wandering around. Those wolves are part of the count as well, so we usually have to find those by following tracks. Tracking this year is particularly difficult because we have not gotten any significant snow since Christmas, almost a month and a half. We have had dustings here and there, but nothing really. So we are landing to see if that is a new track or old track, wolves often walk in their old tracks again or foxes will walk in wolf tracks and make them look fresh. All those things are variations that you have to look at. If it is cloudy, we count moose, (looking) for low-contrast scenes where the moose stand out.

GD: What special arrangements were made in the fall for the founding Winter Study?

RP: In 1959 they did what we do now, put food in the root cellar, (both) canned and bottled goods. And back then they hung smoked ham around Isle Royale because they did not know if they were going to be camping or emergencies (would arise). And, in the end, their food was so tight, they went around and picked up all those hams and brought them back to bunkhouse and ate them. (laughs)

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(Rolf Peterson interview cont. from page 6)

GD: So refinements have been made?

RP: Oh yeah, we don't put ham in the field, nothing too attractive, but we do place emergency rations in other places.

GD: What was it that Tech discovered, making Winter Study the institution it is today?

RP: The success of seeing and counting the wolves from the airplane. It exceeded (his) wildest hopes. He could watch their behavior and, especially, determine how many moose they were killing on a continuing basis.



Moose cow and calf
Photo by Jeannine McKenzie

GD: What was known about the wolves before 1959?

RP: In 1959, we had no idea how many wolves there were or what the packs were. We knew nothing. That basic information on wolf numbers first came out in 1959. And most of this was a result of the airplane work.

GD: The airplane is vital to the study?

RP: The airplane defines everything we do on the island in the winter in terms of wolf-moose interaction. All wolf counting is done from the air ... wolf observing ... the wolves are very used to seeing the airplane. They anticipate it, they know what we're doing, we're finding wolves, (even if) they don't know we are counting them. We count the moose through sampling, but we count every wolf, hopefully several times over the seven weeks.

GD: How do you determine packs and pack territories?

RP: We determine territories by watching them travel over the course of several weeks, essentially mapping out where they have gone. They do trespass on other territories, but usually there is very little overlap. Adjacent packs will come up against each other, but usually not trespass.

GD: How has forty years on Isle Royale impacted you?

RP: For me, personally, what I have gained is a sense of place more than anything. This is a place I know. I have spent enough time on Isle Royale to really know the place. Every square mile I have been in and it's changing all the time. And to see and be really connected to the changes that are enveloping us all the time here, that is a special experience.

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(Rolf Peterson Interview continued from page 7)

GD: This island must trigger memories all the time.

RP: Oh yeah. There are individual trees, rocks or lakeshores where something happened. Either wolves killed a moose or I remember falling down there once or camping there in the summer time. Memories are all over the place.

GD: What keeps you coming back year after year?

RP: The motivation for me is that the island is the most fascinating thing I have ever seen. Of course, I enjoy the fieldwork immensely, but still it's an attraction to the unfolding story, and it is always doing something interesting and unexpected and new. So even after fifty years a lot of things are new.

- George Desort, Board Member

(Mining Update cont. from page 4)

We also predict that when Kennecott constructs the injection system they will include the perimeter berm or some other similar provision to prevent overflow at the perimeter. It remains to be seen if the EPA will examine the completed system to determine if it will then require a UIC permit. Federal law prohibits the construction of an underground injection system without a UIC permit, so if the system as constructed requires a permit, Kennecott will have violated the law.

One of the most frustrating aspects of the battle to protect our water from the ravaging effects of Kennecott's proposed sulfide mine has been the lack of willingness of our government officials and elected representatives to enforce the existing laws intended to protect our surface and ground waters. It remains unclear to those of us who are trying to protect them whether Kennecott is so persuasive that they are able to convince these officials to overlook the regulations or whether they are providing some sort of improper compensation to these officials to induce their cooperation.

It is clear that Kennecott's parent company, Rio Tinto, is a financially and politically powerful organization. US Representative Bart Stupak has been our only representative with the backbone to stand up to that power; the rest of our representatives appear to be firmly in the pocket of Rio Tinto. If we can't depend on our government officials to require a safe mining plan, it does not seem likely that we will be able to depend upon these same officials to require the safe operation of the mine if the plan proceeds. The situation appears all too similar to the BP gulf oil fiasco. It seems as though our government does not have the power or the will to protect its citizens from abuse by these huge international corporations.

A lawsuit filed by the National Wildlife Federation, the Huron Mountain Club, and the Keweenaw Bay Indian Community is expected to move forward soon, so there is still hope that the judicial system will succeed where the legislative and executive systems have failed us.

—Wm. Malmsten, UPEC President



No, this isn't a prison guardhouse. It's the entrance to Kennecott's Eagle Mine on the Yellow Dog Plains
Photo by Wm. Malmsten



Peterson addressing an enthralled crowd
Photo by Mary Martin

Another Great U.P. Party!

UPEC's second annual "U.P. Celebration at the Three Corners," held in Marquette, was a tremendous success. On Friday evening, March 19th, Dr. Rolf Peterson dazzled a standing-room-only crowd at the Federated Women's Clubhouse with slides and stories of Isle Royale wolves and moose population dynamics. George Desort's new short film about his experiences on the island, *Winter Study*, was a fitting finale for the keynote event.

On Saturday, hundreds of people attended talks held throughout the day at the Landmark Inn, Peter White Public Library, and the Federated Women's Clubhouse. Speakers covered a smorgasbord of topics for outdoor enthusiasts and those interested in environmental protection -- everything from birding to landscape painting to native wild rice harvest to making a birch bark canoe to the history of Porcupine Mountains Wilderness State Park! Our stellar lineup of presenters included Michael Neiger, Eric Hanson, Roger LaBine (introducing a Michael Loukinen film), Scot Stewart, Craig Rademacher, Bob Sprague, Joan Chadde, John and Victoria Jungwirth, Sue Robishaw and Steve Schmeck, Patrick St. Germain, Mary Kinnunen, Jeff Eaton, Steve Pence and Chris Ozminski. The day's presentations concluded with a panel conversation with the public entitled "Protecting the U.P. Landscape: A How-to Guide for Landowners Large and Small." The lively and informative discussion was led by Kim Herman, Justin Miller, Jessica Mistak and Bill Davis, each of whom represented an agency or business that helps property owners manage their land in a sustainable and ecologically responsible manner.



John and Victoria Jungwirth with three of their handmade birch bark canoes
Photo by Mary Martin



An afterglow reception at the Federated Women's Clubhouse (left) encouraged the public to mingle with the presenters, and board member Doug Welker provided updates on happenings in the lives of former board members as a tribute to these volunteers.

In 2011, the U.P. Celebration moves west to the Houghton/Hancock area. Be sure to circle March 19th and 20th on your calendars!

-Mary Martin, UPEC V.P. and 2010 Celebration Coordinator

The Pilgrim River Watershed Project



Pilgrim River
Photo by Bill Deephouse

If you learned of the existence of a large, virtually undisturbed tract of land that is home to thousands of animal, bird, and plant species with a pristine trout stream running through the heart of it, would you seek to conserve it for the benefit of society? If you are Joe Hovel, of Conover, WI, that is exactly what you do. Joe and his family recently purchased over 1360 acres of land in the Pilgrim River valley of Houghton County, Michigan, situated less than five miles from the City of Houghton.

The property, with its magnificent stands of white pine, maple, and oak, has been managed as a timber resource for decades under Michigan's Commercial Forest Reserve (CFR) program, which allows non-motorized public access for outdoor nature activities, such as fishing and hunting. The property includes over two miles of the Pilgrim River and its headwaters, with year-round cold-water flows that support an excellent native brook trout fishery. The Hovels intend to continue the long-standing tradition of public enjoyment through the establishment of a conservation easement to ensure permanent public access rights. The property will be available for recreational use by future generations in perpetuity, regardless of ownership, while maintaining its value as a high-quality timber resource.

The beginnings of an extensive trail system for hiking, mountain-biking and skiing has already been established in the eastern portion of the tract. The trail system will eventually stretch along the entire length of the property and, hopefully, will be tied into other established trail systems.

A partnership of local conservation groups, including the Copper Country Chapter of Trout Unlimited, Keweenaw Land Trust, Partners in Forestry Landowner Cooperative, Keweenaw Trails Alliance, Northwood Alliance, Houghton-Keweenaw Conservation District, Copper Country Audubon, and private landowners, have joined forces with the Hovel family to establish the Pilgrim River Watershed Project to pursue establishment of the conservation easement through a combination of private donations and grants that will be used to secure the development rights for the property. Since the project's launch in December, 2009, over \$24,000 has already been collected towards this goal. If the fundraising activities are successful, the Hovel family intends to reinvest the monies by purchasing even more land in the Pilgrim River or neighboring watersheds.

To learn more about the project and how you can help, please visit www.pilgrimriverwatershed.org. All donations from individuals are tax-deductible.

— Bob Page, Copper Country Chapter of
Trout Unlimited

“When A Raven Comes To Visit”

By Patrick St. Germain

When Ravens come to play, they let you know.
It is a raucous joyful dance
as they spin amongst the tree tops.

When a raven comes to visit, it is very different.

A shining shadow slides down
to command the proper branch.

The messenger of the wind speaks,
“A great magic has been let loose upon this day,
upon this moment”.

A chant, a wordless story,
is written in a leaf
in the waters’ dance
in the flight of a bird,
“Maybe even in an old raven like me.”

“It is time to listen
time to come home.
Soon the shadows will grow long
And the stars will collect their bounty.”

(See the back page to enjoy Patrick’s beautiful, whimsical illustration of this poem. –Ed.)

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Renew your UPEC membership online! Just go to our website,

www.upenvironment.org,

and click on “Donate to UPEC” in the right hand column. It’s as easy as that!

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*Protecting and maintaining the unique
Environmental qualities of the Upper Peninsula
of Michigan by educating the public and
acting as a watchdog to industry and government*



When a Raven Comes to Visit
By Patrick St. Germain