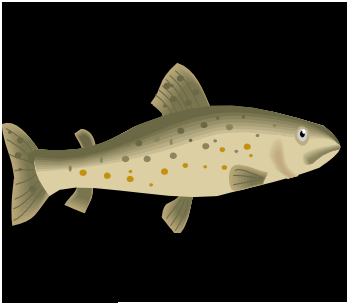


Join Us for UPEC's Annual Meeting & Barry Lopez Presentation!

By Suzanne Van Dam



UPPER PENINSULA ENVIRONMENTAL COALITION

U.P. Environment

Barry Lopez, naturalist, international traveler, and award-winning author will be speaking at 7:00 p.m. on Saturday, April 3, at Finlandia University's Finnish/American Heritage Center in Hancock. For this year's annual meeting, UPEC decided to take advantage of having this world-renowned author in our neck of the woods, and so have scheduled our board meeting and dinner in conjunction with Barry Lopez's public presentation. Please join us for all or part of the festivities!

Board Meeting: The UPEC board meeting will be held at the Ramada Inn in Hancock from 1:30-4:30 p.m. Topics to be discussed include: Update from the Keweenaw Point Advisory Committee, awards of environmental education and/or land protection mini-grants, initial mapping of the Trap Hills Wilderness/Recreation Area, Board policy on the post-flood restoration of the Dead River ecosystem, the addition of new board members, and UPEC's partnering with the Eagle Alliance on sulfide mining issues. The public is welcome to bring additional local environmental concerns to the board at this time.



Photo Courtesy of the Steven Barclay Agency

Dinner: The dinner will be scheduled from 5:00-6:30 p.m. at the Ramada, and door prizes will be provided, including copies of Lopez's books! Please RSVP Suzanne at svandam@chartermi.net or (906) 483-4729 if you plan to attend the dinner.

(Continued on page 3)

UPEC Participates in Keweenaw Point Advisory Committee

By Friederike Greuer & Doug Welker

The Keweenaw Point Advisory Committee was formed by the Michigan Department of Natural Resources (DNR) to solicit citizen input for the management plan of the newly-purchased land near the tip of the Keweenaw. The DNR will take the recommendations listed by the committee

into consideration, but the DNR will have the ultimate say in how the land is managed.

The Committee has met twice in the Allouez Community Center. Groups represented besides UPEC include: Trout Unlimited (Bill Deephouse), the Nature Conservancy (Jeff

Knoop), the Michigan Nature Association (Charlie Eshbach), Keweenaw Tourism Council (Don Kaupi), Western UP Planning and Development (Lori Hauswirth), Keweenaw Adventure Company (Sam Raymond), Copper Country Audubon Society (Dana Rich-



(Continued on page 3)

Inside this issue:

UPEC & Legislative Contact Information	2
Barry Lopez: Background & Public Presentation	3
Dove Hunting Counterpoint	4
Birding By the Bay Festival	5
Struggle Over Sulfide Mining in Yellow Dog Plains	6-8
Sulfide Mining Elsewhere in the UP?	8
UPEC Membership Form	11

UPEC Action...

- UPEC to host forum on sulfide mining in March, 2004 for Copper Country Residents.
- UPEC reviews Environmental Education Mini-Grant applications
- UPEC welcomes new board member, Jim Rivard

Newsletter Editor: Suzanne Van Dam

About UPEC...



The Upper Peninsula Environmental Coalition has a 27-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.

The *Upper Peninsula Environment* is published four times per year. Contributions and correspondence should be sent to: P.O. Box 673, Houghton, MI 49931 or e-mailed to: svandam@chartermi.net.

The *Upper Peninsula Environment* is published four times per year. Contributions and correspondence should be sent to: P.O. Box 673, Houghton, MI 49931 or e-mailed to: svandam@chartermi.net.

Meet the Officers, Board & Staff!

President, Jon Saari: jsaari@nmu.edu

Vice President, Bill Malmsten: wmalmsten@chartermi.net

Secretary/Treasurer, Friederike Greuer: lilli@up.net

Newsletter Editor & Business Manager, Suzanne Van Dam: svandam@chartermi.net

David Allen: dallen@nmu.edu

Karen Bacula: KBacula@mapsnet.org

Connie Julien: cjulien7@direcway.com

Marcel Potvin: marcel_potvin@yahoo.ca

Karin Steffens: ksteffen@nmu.edu

Doug Welker: dwelker@up.net

Jim Rivard: jcrivard@up.net

Home Office: (906) 483-4729

E-mail: svandam@chartermi.net

Website: www.upenvironment.org



Earth Share
OF MICHIGAN

Earth Share of Michigan allows working people to donate to environmental organizations through workplace giving campaigns.

Each year Earth Share 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 Earth Share 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



Send a Letter to Your Legislators

Senator Carl Levin

U. S. Senate 269 Russell Senate Bldg.
Washington, DC 20510
Phone: (202) 224-6221
Fax: (202) 224-1388
senator@levin.senate.gov

Senator Debbie Stabenow

U.S. Senate, 702 Hart Senate Bldg.
Washington, DC 20510
Phone: (202) 224-4822
Fax: (202) 224-8834
senator@stabenow.senate.gov

U.S. Congressman Bart Stupak

2348 Rayburn Office Bldg.
Washington, D.C. 20515
Phone: (202) 225-4735
Fax: (202) 225-4744

Stupak@mail.house.gov

Gov. Jenifer Granholm

Northern Michigan Office
1504 West Washington, Suite B
Marquette, MI 49855
(906) 228-2850

State Senator Mike Prusi

State Capitol, P.O. Box 30036
Lansing, MI 48909
(866) 305-2038 or
(517) 373-7840

State Senator Jason Allen

State Capitol, P.O. Box 30036
Lansing, MI 48909
(517) 373-2413

All State Representatives at:

State Capitol, P.O. Box 30014
Lansing, MI 48909

Rep. Scott Shackleton : (517) 373-2629

Rep. Tom Casperson: (517) 373-0156

Rep. Stephen Adamini: (517) 373-0498

Rep. Richard Brown: (888) 663-4031

Wondering if your membership is current? Your expiration date is written on your mailing label on the front cover of this newsletter!

UPEC Annual Meeting, Continued

(Continued from page 1)

Public Presentation: Barry Lopez: At 7:00 p.m. at the Finnish/American Heritage Center in downtown Hancock, Barry Lopez will be speaking on "The Wisdom of Local Knowledge."

Lopez is the author of *Arctic Dreams*, for which he received the National Book Award. Among his other nonfiction books are *About This Life* and *Of Wolves and Men*. He is also the author of several award-winning works of fiction, including *Field Notes*, *Winter Count*, and a novella-length, illustrated fable, *Crow and Weasel*.

Lopez is considered one of the nation's premier nature writers and his non-fiction often examines the relationship between physical landscape and human culture. He will be on the Finlandia campus from March 31-April 6th 2004 making classroom presentations, going on fieldtrips, conducting a book reading for area high

school students, and participating in an open dialogue with teachers and professors on how to integrate ethical discussions about the environment into their classes.

Lopez's visit is sponsored by a generous grant from the Mc Gregor Fund. He was specifically recruited to Finlandia to serve as a Campus Mentor for the university's new interdisciplinary bachelor's degree entitled *Arts, Culture and the Environment*, or the ACE Program.

The ACE program combines the great voices of history, literature, philosophy, religion and the arts to gain a greater understanding of the natural world. Lopez collaborated with Harvard Professor E.O. Wilson to create a similar interdisciplinary curriculum at Texas Tech that combines the sciences and humanities.

His books, including *Vintage Lopez* (January, 2004) a new collection of es-

says and excerpts, are available at North Wind Book store in Hancock and will be on sale at the reading. His public presentation on Saturday, April 3, 2004 is free and open to the public, but seating is limited, so interested persons should arrive early.

Suzanne Van Dam is the UPEC Business Manager and Newsletter editor. She is also the coordinator of the ACE Program at Finlandia University.



Keweenaw Point Advisory Committee, Continued



(Continued from page 1)

ter), Calumet-Laurium's Sportsmen's Club (James Junttila), MTU Four Wheelers (Thad Dowker),

Keweenaw County Historical Society (Clarence J. Monette); and the Michigan Association of Timbermen (Warren Suchovsky).

Two representatives from the local government included Don Keith, who is a commissioner on the Keweenaw County Board of Commissioners, and Richard Powers, who is the Grant Township Su-

pervisor. Friederike Greuer represented UPEC along with Doug Welker serving as alternate.

The actual tip of the Keweenaw is still under private ownership, but the 6,275 acres of state land may already be accessed by the public for diverse purposes, including motorized and non-motorized recreation. The land is also protected from development. The area contains five lakes, five rivers and various streams along with about six miles of Lake Superior Shoreline. There are also a number of rare plants and animals present.

Most of the forest is second growth hardwoods, with more conifers near the Lake Superior shoreline. The hardwoods have

been heavily impacted by past logging, but the shoreline has experienced fewer disturbances.

Meetings are scheduled for the first Tuesday of each month at 6:30 pm at the Allouez Township Community Center at 2 Bumbletown Road in Allouez. All meetings are free and open to the public.

For more information, contact Friederike Greuer at 523-4429 or at lilli@up.net.



UPEC Member Makes Counterpoint in Dove Hunting Issue

By Chris Fries



In the last issue of *U.P. Environment* (Fall/Winter 2003) an article was included regarding the legalizing of dove hunting in Michigan: “Unfair

Game: Audubon Opposes Listing of Mourning Doves.” The article listed several reasons why the Michigan Audubon Society is opposed to listing the dove as a game bird. The article makes some questionable ethical and factual assumptions, and omits some important information.

First, the article impugns the ethics of bird hunters who supposedly cannot distinguish mourning doves from other birds, and who are mostly out for target practice. Sure, there are people who take guns afield and behave like buffoons, but most hunters harbor ethical conservation values in their hearts and follow prescribed management practices. Doves may share the same habitats with other birds, but hunters are knowledgeable enough to differentiate between the birds.

Another claim is that ammunition manufacturers are lobbying for the legalizing of dove hunting because dove hunting will be a form of target practice. Who are these manufacturers? It seems a reach to make the assertion that if manufacturers are supporting the hunt, then the birds will mostly be used for target practice. These claims are a disservice to those who conduct hunts in an ethical manner.

As for the meat on the birds not being large enough to be a substantial food source, yes one bird is not, but a number of them can make a tasty meal. Woodcock do not possess a great deal of meat, but if you have never had barbecued woodcock breasts wrapped in bacon, you have missed a wild game delicacy. One bluegill usually does not make a meal, but a number of fillets coated with seasoned flour and fried to a light brown make a

fine centerpiece to a camp breakfast.

Bird hunters, such as myself, can also be bird watchers and bird lovers. Hunters have long taken a strong interest in wildlife conservation. In fact, fellow birders and other non-hunting wildlife enthusiasts have enjoyed their activities thanks in part to funds raised by people who hunt and fish. It was President Franklin D. Roosevelt who signed the Federal Aid in Wildlife Restoration Act, popularly known as the Pittman-Robertson Act, on September 2, 1937. Since then over \$2 billion in Federal excise taxes have been matched by more than \$500 million in State funds (chiefly in hunting license fees) for wildlife restoration. [U.S. Fish & Wildlife Service: Restoring America’s Wildlife

Bird hunters, such as myself, can also be bird watchers and bird lovers. Hunters have long taken a strong interest in wildlife conservation.

(<http://federalaid.fws.gov/wr/restorin.html>)]

These funds are derived from an 11 percent Federal excise tax on sporting arms, ammunition, and archery equipment, and a 10 percent tax on handguns. These funds are collected from the manufacturers by the Department of the Treasury and are apportioned each year to the States. Appropriate State agencies are the only entities eligible to receive grant funds. Funds for hunter education and target ranges are derived from one-half of the tax on handguns and archery equipment.

Finally, here are some other facts about dove hunting:

- Dove hunting is a legitimate activity under the Migratory Bird Treaty Act, where the dove is listed as a game bird.
- Currently doves are hunted in 39 states, jointly managed by the U.S. Fish and Wildlife Service and state wildlife agencies.
- Professional wildlife managers man-

age doves as a renewable resource, regulated by surveys and scientific methods.

Dove hunting, I believe, is a valid use of a renewable natural resource. If dove hunting were to be legalized, it would not diminish any “unique environmental qualities” in the U.P., which is UPEC’s mission to protect.

Ed. Note: Chris Fries, a current UPEC member and former UPEC board member, is also a member of the Michigan Audubon Society, and is involved in the activities of Trout Unlimited and the Central Lake Superior Watershed Partnership. We are presenting Fries’

“Counterpoint,” which supports the hunting of mourning doves, for the ethical and factual issues it raises. UPEC has always counted hunters and fishers among its members; like all UPEC members, they are of course no monolithic group in how they analyze facts and weigh values.



Legislative Update:

It appears that the bill to get mourning doves listed as game may be stalled in a senate committee. According to recent news reports, Governor Granholm has indicated that she will not sign this legislation unless a citizen’s referendum for the issue passes, showing majority support. A recent poll reported on National Public Radio, Michigan news, reported that 50% were opposed to dove hunting, 30% in favor, and 20% undecided, with a standard margin of error.

UPEC Members Invited to Join Other Groups for Trail Clean-Up Day



vice trip in the Western U.P. This year,

Each year, the Sierra Club and the Peter Wolfe Chapter of the North Country Trail Association join forces to do a significant trail-related ser-

vice trip in the Western U.P. This year, the trip is scheduled for August 14-22. We will likely be working in the Porkies (Porcupine Mountains Wilderness State Park) and/or in the Trap Hills west of Victoria.

The service trip offers a great chance for non-motorized recreationalists to have fun, see some great country, get their hands dirty, and do something

“on-the-ground” in the wild areas where they often like to go. Participants may join in for as many days as they choose.

Keep an eye on the website <http://www.northcountrytrail.org/pwf/sierra.html> for occasional updates, or contact Doug Welker at dwelker@up.net or (906) 338-2680. *By Doug Welker*

Birding-By-the-Bay Festival: May 21-23!



MUNISING, MI – Although winter has not yet disappeared, Birding By the Bay organizers in Munising, MI, are already encouraging birders to “Think Spring!” The weekend event, slated for May 21, 22 and 23,

2004, will celebrate International Migratory Bird Day by offering birding and nature recreation field trips, speakers and other events for bird lovers of all ages.

If you enjoy watching birds – whether you’re an amateur or a hardcore birder – Birding By the Bay has activities to suit. Plans for the second annual festival include numerous field trips, mini-workshops, booths, speakers, children’s activities and an evening banquet.

The Festival features birding field trips into scenic public lands, including Seney National Wildlife Refuge, Grand Island National Recreation Area, Pictured Rocks National Lakeshore and Hiawatha National Forest. Species of special interest include Kirtland’s and other warblers, peregrine falcon, piping plover, sharp-tail grouse, boreal chickadee and other species of interest.

When registering, birding enthusiasts may choose among field trips that combine

their birding passion with recreation opportunities such as Lake Superior sea kayaking, canoeing an inland river, birding on Grand Island National Recreation Area, lighthouse-looking, hiking Pictured Rocks National Lakeshore, and touring Seney National Wildlife Refuge.

Birding enthusiasts will also enjoy the festival’s opening presentation by Scott Hickman, PhD entitled “Bird Research on an Uninhabited Tropical Island.” He will describe the joys and perils of spending two weeks conducting research on a 20-acre, cliff-edged rock covered with nesting seabirds in the U.S. Virgin Islands.

Saturday, a selection of raptors will be on hand along with the experts who care for them. They’ll make visits to area schools and will make public presentations, too. Families will also enjoy kid-oriented activities and a wildflower presentation by retired park ranger, Fred Young.



Interested in seeing an extensive array of outstanding bird photography – and maybe even picking up a few hints?

Keynote speaker for the event will be internationally known nature photographer Rod Planck. Planck’s photography has graced the pages of magazines like *Audubon*, *Natural History*, *Birder’s World* and *Ranger Rick for Kids* to name a few!

The event is co-sponsored by Alger Chamber of Commerce, Hiawatha Na-

tional Forest, Pictured Rocks National Lakeshore, and Seney National Wildlife Refuge. Other sponsors of the event include Hiawatha Interpretive Association, Seney Natural History Association, Alger Birding Society, and Eastern National.

To register and obtain more information, visit the festival’s website at: <http://midwest.fws.gov/seney/IMBD.htm>, or contact the Alger Chamber of Commerce (906-387-2138).



Economics of Birding

Birding is fun, but it also has incredible economic potential for areas that promote it. According to one 1996 survey, 62.6 million Americans engaged in wildlife watching (with bird feeding, observing & photographing at the top of the list), spending over \$29.2 billion in the process.

According to the American Birding Association, average annual birding-related expenditures per birder include \$737 for lodging, \$471 for meals and \$206 in miscellaneous expenses. For detailed information about the economics of birding, business owners should visit ABA’s webpage at <http://americanbirding.org/programs/consecon.htm>.

The Coming Struggle Over a New Mining Era in the U.P.

By Jon Saari

Summer, 2003. It seems tiny against the backdrop of the dark forest: a drilling rig reaching deep within the mineral crust beneath the Yellow Dog Plains of Northern Marquette County, searching for a valuable deposit of nickel and copper. But this image is deceptive, for the potential consequences of one commercially-viable mineral discovery are great, and mostly worrisome.

The broadest context on this sulfide mining issue is to look at the Upper Peninsula as from a satellite in space with x-ray vision. Throughout the 1990s, U.S. Geological Survey scientists have been studying the potential for new nickel-copper sulfide deposits in the Lake Superior Region in an area known as the Midcontinent Rift System. The rift system is a 1.1 billion year fracture in the earth's crust extending some 2,500 kilometers but only exposed on the surface in the Lake Superior region; even here the rift-related rocks are 30 kilometers thick. Within the complex geology of these mineral formations lies a high potential for new discoveries of varying amounts of copper, nickel, platinum-group metals, and cobalt (http://pubs.usgs.gov/info/mwni_cu/).

The discovery of Yellow Dog Peridotite on the Yellow Dog plains may be only the first of many such discoveries. Has a new era of sulfide mining begun in Michigan? Are we as a state and region prepared for this particular type of mining? Do we want to regulate it, ban it? The prospecting companies are here en masse, not just

Kennecott and its parent trans-national company Rio Tinto, but also Bitterroot Resources, Prime Meridian, and Trans Resources. These companies have already purchased or leased hundreds of thousands of acres of mineral rights in

the Western Upper Peninsula. Kennecott alone purchased 460,000 acres of mineral rights in Marquette and Baraga counties in 1994. A story is unfolding which could have great impact on the entire Upper Peninsula; it deserves our closest scrutiny and well-grounded activism.

January, 2004. Kennecott Exploration Company spokespersons are cautionary about concerned citizens jumping too far ahead. They argue, at their website, that the Marquette Eagle Project is at the "concept stage," where basic questions about underground or open pit, railroads or trucks, processing on site or elsewhere, are just now being assessed as parts of a decision. The decision to proceed, and in what ways, is to be made in the spring of 2004, most likely in May.

Concerned citizens are not waiting around for a spring announcement, but have been organizing to oppose a prospective mine.

Lacking reliable and specific information about the company's plans, the presumption among watchful observers has nevertheless been that this mining project is likely to be a go. So much has already been invested in land, mineral rights, and exploration.

Concerned citizens are not waiting around for a spring announcement, but have been organizing to oppose a prospective mine. The lead has been taken by the Yellow Dog Watershed Preserve, a group dedicated to protecting the Yellow Dog River, from its headwaters in the McCormick Tract (federal wilderness) to its mouth in Lake Independence near Big Bay; from there its waters flow on to Lake Superior. The National Wildlife Federation's Lake Superior Project has committed funds and staff time to develop new mining legislation and to forge ties with downstate groups. Concerned citizen groups in the Upper Peninsula have joined together to form the Eagle Alliance (www.ydeaglescry.com), whose name mimics Kennecott's Eagle Project. The UPEC

Board decided to join the Alliance in November, 2003.

The logo of Eagle Alliance – an eagle and a lone spruce tree rising above a rock-bound watery landscape – suggests the twin themes of the alliance: that the waters and landscape of the Upper Peninsula are at risk.

The concern about water is rooted in the messy reality of sulfide mining. Once nickel-copper sulfide deposits are wrested from the earth, both as waste rock and as processed ore, air and water exposure begin a chemical process that creates sulfuric acid and then a heavy

metal toxic soup called Acid Mine Drainage (AMD), sometimes called Acid Rock Drainage (ARD). Although mining companies and some mining consultants claim that the technology exists now to separate the toxics from surface water and groundwater, the historic record reveals many instances of severe water contamination, particularly out West. Would state-of-the-art technology and design eliminate such risks? Skepticism abounds, fed by the lack of specific information on Kennecott's plans and by the abundant warnings on AMD/ARD in the internet-accessible literature on mining.

A broader level of concern among Alliance supporters is the impact of a new mine on remote, wild landscapes in the Upper Peninsula. The actual footprint of the ore body appears small, perhaps less than 20 acres, but the transforming reach of a potential mining operation could be very large. The Yellow Dog Plains adjoin the Michigamme Highlands, forming a wild region that stretches fifty miles from Big Bay to L'Anse; it has few roads (almost all seasonal i.e. closed in winter),



The Coming Struggle, Continued

no railroads, no electricity or power lines, no permanent settlements (only remote camps and a few self-sufficient homesteads), and mostly healthy natural ecosystems. These characteristics have made this region one of the largest priority areas in the Upper Peninsula targeted for protection by The Nature Conservancy.

With the coming of a major mining operation, this area would be primed for development by infrastructure changes: year-round access on paved roads and possible rail and power lines. The remote character of this region, and the way of life that has grown up in tandem with it, would be changed permanently, even after the mine itself closed (its life expectancy is projected at 7-10 years).

March, 2004.

Kennecott is disclosing more and more information about Eagle Prospect.

The deposit size and shape have been revealed, as well as the estimates in tons of nickel and copper: "The total resource is 5 million tonnes at 3.68% nickel, 3.06% copper and 0.1% cobalt." (*Eagle Prospect Update 3*) This translates into a small but valuable deposit. Eagle Alliance has calculated that the gross value, at today's high commodity prices (and assuming a 65% recovery of the metal), is just over two billion dollars.

The surface footprint of the deposit is about six acres; computer models show an upper and lower zone, both wedge shaped and tapering downward. Just how much land would be disturbed, however, to mine this deposit is not yet clear, or perhaps even decided. Kennecott owns 1600 acres outright, but the type of mining and processing will help determine the larger footprint of the mine itself. Right now, Kennecott is leaning towards an underground mine with waste rock being used to refill the mine openings after extraction.



To counter the anticipated concerns about sulfide mining, Kennecott is proposing the Ridgeway Mine in South Carolina as a recent example of a successful sulfide mine. This mine operated from 1988 to 1999, extracting 1.4 million ounces of gold and some silver from two open pits containing some sulfide ores. They argue that they have successfully minimized and/or prevented the generation of ARD by design features in the mine, such as capping tailings impoundments with three to six feet of clay, and backfilling waste rock into pit lakes which also serve to submerge the pit walls.

These claims will no doubt be evaluated by Eagle Alliance, as will the appropriateness of mine comparisons elsewhere in this country or in the world. Every place

and every mineral deposit is a bit different, and the water-rich green landscape of the Great Lakes region is hard to duplicate anywhere.

To many supporters of Eagle Alliance, no sulfide mine is worth the risk posed to the Yellow Dog Plains, especially to its streams, lakes, and aquifers. The Salmon Trout River, under whose headwaters this mineral deposit lies, is famous for its rare "coasters," a type of large brook trout surviving in only a few places around Lake Superior. The aquifer underlying the prospective mine replenishes waters from the Salmon Trout, the Yellow Dog, the Huron, the Peshekee, and the Dead River systems – all legendary places in the "Superior Heartland" whose stories were written down by regional historian Fred Rydholm. How can Kennecott counter this powerful sense of place?

As newcomers to the Upper Peninsula, its spokespersons are ill-equipped to do so. In their view the region is zoned for industrial "resource extraction" which certainly includes timber and minerals. Zon-

ing and the legal possession of mineral rights are the governing conditions. Citizen opposition groups in



some places, like South Carolina, have also apparently been turned around by arguments that there are more benefits than liabilities to a mining venture. Kennecott has adopted the language, and perhaps the substance, of "sustainable development" in its appeal, which emphasizes "community benefit, environmental protection and improvement, and transparent and honest governance" in addition to economic benefits. It remains to be seen

how effective this appeal will be in this region, in particular in the most

affected communities of Michigamme, Champion, and Powell Townships and more broadly within Marquette and Baraga counties.

Sometimes this regional sense of place is non-negotiable. No reputed improvements, no rehabilitated wildlife, no remediated wetlands can ever replace the destroyed landscape. A mine location is a sacrificial landscape, changed forever; tailing basins may eventually be revegetated, pits turned into lakes, and waste piles into mountainous habitat, but the original landscape is gone. This is a cost many refuse to accept for this special area. Only by deciding that the Yellow Dog Plains is a "no-go area" whose critical natural capital must be maintained could Kennecott (and the governmental permitting bodies) meet this argument head-on. But the company is not likely to go away and leave two billion dollars unexploited in the ground.

Instead of the No Change/No Mine option, they will likely try to minimize the

(Continued on page 8)

The Coming Struggle, continued



(Continued from page 7)
mine footprint and the disturbance area. The Small Change/Small Mine/Small Disturbance option has some political appeal, and it may be sweetened by a “post-mine closure vision” that provides

“commercial, ecological, recreational, and educational land use outcomes that the community desires.”

But does the community want commercial and educational ventures on the Yellow Dog Plains? Does it want degraded ecological and recreational outcomes on the Yellow Dog Plains? Come summertime, a Community Advisory Group will be asked to provide input on this post-

mine closure vision. The one option it will not have before it, however, is No Change/No Mine on the Yellow Dog Plains. If the community cannot debate this central issue, what is the meaning of the debate?



Jon Saari is the President of UPEC and has been active in the Eagle Alliance.

Another Potential Sulfide Mine for the U.P.?

By Doug Welker



The Yellow Dog Plains of northern Marquette County is not the only place in the U.P. where the mineral industry may have set its sights. A second

ore body lies beneath a fairly wild area on the Ottawa National Forest, in southern Houghton County between Kenton and Nisula.

Like the Marquette County deposit, which is called the Yellow Dog Peridotite, the Echo Lake Gabbro (ELG) has the potential for economically-recoverable quantities of sulfide minerals. The ELG is suspected of containing sulfides of nickel, copper, platinum-group metals, and cobalt. These metals are in high demand because, with the exception of copper, the U.S. must get them primarily from foreign sources because large deposits are rare here.

Gabbro is the intrusive equivalent of ba-

salt; that is, it has a very similar chemical composition. Basalt and associated rocks such as conglomerate and sandstone form the backbone of the Keweenaw Peninsula, and are the source of its copper deposits. In contrast to basalt, which cooled quickly above ground as lava flows and contains mostly very tiny mineral crystals, gabbro cooled very slowly deep within the earth, and contains larger crystals. It is believed that partial melting of the ELG, well below the surface some 1.1 billion years ago, may have provided the source of the lava flows now exposed on the Keweenaw.

Recently, exploratory drilling into the ELG has taken place. The top of the ELG is around 1100 feet below the surface, and is covered by about 1000 feet of Jacobsville Sandstone, and by up to perhaps 200 feet of glacial deposits at the surface. We have requested the general (+/- one mile) locations of the drilling sites, but to date the Ottawa National Forest has not responded to our request.

Given the depth of the deposit, if a mine is someday proposed it would almost definitely be an underground mine. Nonetheless, it would produce waste waters of high acidity, which would need to be dealt with. Echo Lake is surrounded by old-growth hemlock/hardwoods forest, and has decent fishing for bass and panfish. Penegor Lake, just to the northwest, has brook trout. Neither lake has a surface outlet. Three miles north of Echo Lake, and 150 feet lower, is the North Country Trail, running east-west, and several small streams have their headwaters between Echo Lake and the trail. In addition to pollution issues, a mine would drastically change the nature of this remote and beautiful area.

Two useful documents are:

http://www.bitterrootresources.com/i/pdf/Michigan_AIF_final.pdf
http://pubs.usgs.gov/info/mwni_cu/



UPEC Welcomes New Board Member Jim Rivard

Jim Rivard, a forester from Houghton, has been nominated to the UPEC board of directors. He will be officially added to our ranks at our next meeting, on April 3.

Jim has a Masters Degree in Forestry from Michigan Tech, and has been working as a forestry consultant with private landowners since 1997. He promotes di-

versity and natural succession in his forestry practices. Jim will be a valued member of our Forestry Committee, and we look forward to working with him!

Teaching With the Outdoors Workshop!

Attention Educators! The Western UP Center for Science, Math & Environmental Education is offering a 1 1/2 day workshop on "Teaching with the Outdoors" at the Ford Forestry Center on May 7th - 8th, 2004.

There will be 6 concurrent sessions offered both days on a variety of topics: geology, energy, water, ROVs, ecosystems, global warming, outdoor camping programs, mathematics, and more. The

goal of the workshop is to help teachers use the outdoors to teach about many Michigan Content Standards in science, social studies, and math. **The workshop flyer and application form are available at: http://wupcenter.mtu.edu/teachers_professional.html**

Registration is \$85 for both days (includes lodging, meals, and field trips) or \$45 for Friday only. University students are \$45. Registration deadline is

Wednesday, April 21, 2004. For more information, contact Joan Chadde (jchadde@mtu.edu).

Michigan Tech is offering the "Ecology of the Great Lakes" workshop aboard the EPA's Research Vessel, the Lake Guardian on July 5-10. Applications for that teacher-accredited workshop are due April 2nd.



Buckthorn and Prison Blues

By Marcel Potvin



Ed Note: Marcel Potvin is a UPEC board member who worked as a wildlife biologist in the Seney National Wildlife Refuge this past summer.

Under the hot, mid-July sun, amidst a hoard of mosquitoes, a chain gang waded into the Seney swamp cutting the thick entangled shrubs. Two ran chainsaws and five others stood in a line handing the brush uphill and piling it at the edge of the trail where the Corrections Officer watched. The inner city accents of the working men and the whining of their chainsaws floated across the swamp in an improbable duet for this remote area of the Upper Peninsula.

The brush was thick and the work, monotonous. In a trance, the five prisoners turned to the left, grabbed a handful of brush, turned to the right, handed off the brush. As they advanced following the sawyers, the first man in the line quietly spotted one of the most common inhabitants of the swamp, a garter snake. The next handful passed down the line slithered in the ungloved hand of an unsuspecting prisoner. Following was perhaps the quickest movement ever observed in a prison work crew; he simultaneously shrieked a high-pitched string of profanity, dropped the two-foot snake and

dashed up to the high ground of the trail. Two other prisoners who had witnessed the attack also scampered up to high ground. The corrections officer, unimpressed, loudly ordered them to return to the swamp and their work. The prisoners, shattering an aura of John Wayne type toughness I had associated with chain gangs, refused his order,

"We ain't goin' back down there. There is snakes!"

Luckily for this gruff chain gang the object of their work is not harmless garter snakes, but buckthorn removal. Glossy buckthorn (*Rhamnus frangula*) is an aggressive exotic shrub which resembles the native tag alder in form and habitat. On the east side of Seney National Wildlife Refuge, buckthorn has colonized dikes and outcompeted tag alder in many swampy areas. Once mature, buckthorn bears thousands of dark tart berries which are carried away by birds to colonize other areas.

Throughout the summer, the prison work crew cut and piled buckthorn on state and federal land on both sides of M-77 just north of Entrance Road. Members of the staff at Seney National Wildlife Refuge followed the crews as they worked, painting the stumps with herbicide to kill the shrubs. The buckthorn was thick but most of it within 1/4 mile of M-77 from En-

trance Rd to North Show Pool is now in piles to be burned.

Besides labor, the prison crew provided an unexpected diversity to the Seney area. On breaks, while smoking hand rolled cigarettes from the prison store, refuge personnel exaggerated the size and viciousness of the wolves, bears, and moose lurking just out of sight and prisoners spun yarns of harrowing adventures from an inner city culture that we had seen only on TV. Some were bilingual and added richly to our Spanish vocabulary.

At Seney, conservation efforts have been greatly advanced by these prison crews and hopefully, the prisoners learned something about the environment and hard work. The prisoners seem interested and the \$2.50 per day of work goes to a good cause - cigarettes, snuff, or a stamp to write home to their wives and children, or their mothers. In talking with them, one sees that most are just regular people that have fallen on hard times or made poor choices. So the next time you see a prison work crew on the side of the road, look past the hard stares usually given to gawking motorists and think of the important work they've done at Seney in controlling exotic species. If you wish to stop and thank them, go ahead, take a chance.

You may be pleasantly surprised.





Return Service Requested

**Nonprofit Organization
U.S. POSTAGE PAID
Permit No. 35
Houghton, MI 49931**

**UPPER PENINSULA
ENVIRONMENTAL COALITION**

P.O. Box 673
Houghton, MI 49931

Phone: (906) 483-4729
Fax: (906) 483-4729
Email: svandam@chartermi.net
www.upenvironment.org

*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.*

**Join Us for the Next UPEC Board Meeting!
Saturday, April 3, 2004 at 1:30 p.m. : Ramada Inn, Hancock**



Yes! I Want to Help UPEC Make a Difference

**Wondering if your membership
is current? Your expiration
date is written on your mailing
label on the front cover of this
newsletter!**

Name: _____
E-mail: _____
Address: _____
City/State/Zip: _____

I would like to support the goals of UPEC
by enclosing a contribution for: (Please
check one)

- Regular Membership (\$20)
- Supporting Membership (\$50)
- Student/Low-Income (\$15)
- Other

**UPEC appreciates your generous
and timely response!**

I'm already a Member! Here is an addi-
tional contribution for:
(Please check one)

- UPEC Land Acquisition/ Protection Fund
- UPEC Environmental Education Fund.
- UPEC Endowment Fund.*

• If you make your check out to the Marquette Community Foundation (MCF) and put UPEC FUND on the memo line, you can take a 50% tax credit on your Michigan state income tax (up to \$200 for individuals, \$400 for couples). OR, you can make a contribution directly to UPEC. As a 501(c)3 nonprofit organization, dues and contributions are tax deductible.

**Mail all contributions to:
UPEC
Box #673
Houghton MI 49931**

When available electronically, I would like to receive UPEC information via:
___ regular mail ___ e-mail

Join Us For Our Annual Meeting!

Board Meeting: 1:30 p.m. -4:30 p.m.
Ramada Inn, Hancock

Dinner: 5:00 p.m.-6:30 p.m. Ramada Inn, Hancock

Directions: The Ramada is located on the waterfront, near the lift bridge. For those coming from Marquette or Baraga areas, cross the bridge, taking a right at the end of it, and another hard right at the first turn-off. Follow the signs!

Presentation: 7:00 p.m. at the Finnish/American Heritage Center, Hancock. Barry Lopez will speak on "The Wisdom of Local Knowledge."