

The Upper Peninsula Environment

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CHOCOLAY RIVER WATERSHED

by Chris Fries

"A river is water in its loveliest form; rivers have life and sound and movement and the infinity of variations; rivers are veins through which the life blood returns to the heart."

—Roderick Haig-Brown

Recently Friends of the Land of the Keweenaw (FOLK) took action to protect the Otter River watershed. This raised the question of what is being done to protect other watersheds that empty into Lake Superior. What follows is the first part of a report of two groups working to protect the Chocolay River watershed and the Yellowdog River watershed.

In 1992, a group of citizens concerned with water quality problems confronting the Chocolay River, along with the Marquette Soil and Water Conservation District, formed a Watershed Advisory Council to study the problems confronting the watershed. The Council is made up of watershed residents, local officials and resource management professionals.

Soon after being formed, the Council identified key concerns that needed to be targeted in order to improve the quality of the river: erosion, sedimentation, and the degradation of aquatic habitat. These problems stem from nonpoint source pollution or runoff pollution which can result from logging, road construction, road maintenance, agricultural

practices as well as building construction.

The Council's next step was to secure a grant from the Environmental Protection Agency (EPA) in order to fund a management position, and to begin the project inventory and planning process. The management position was filled by Carl Lindquist, who has gone on to secure further funding for watershed improvement.

According to Carl, "The first phase of the Watershed Project involved a comprehensive land use inventory to evaluate and prioritize the extent of erosion and other sources of nonpoint pollution." Based upon the inventory results, a watershed remediation action plan was developed that identified best management practices (BMPs) needed to reduce pollution.

Once the plan was approved, Project personnel provided qualifying landowners with technical and financial assistance to adopt BMP improvements which were both economically and ecologically sound.

From the beginning the Project stressed citizen and community involvement for its success. Members of the public are encouraged to participate in the Adopt-A-Stream Program, among other activities.

Various public groups have been involved in cleaning up parts of the watershed, including the Harvey 4-H Club, which adopted the Silver Creek, and the Northern Great Lakes Canoe Club, which cleaned up the lower Chocolay River. To further de-

velop public support and participation, the Project holds an annual RiverFest in order to disseminate information in a fun and informal way.

The Project boasts numerous successes, including the removal of two dams—an earthen dam on the Silver Lead Creek (located on the former K.I. Sawyer AFB), and a small concrete dam on the West Branch of the Chocolay River. In addition, numerous stream crossing replacements, cattle crossing improvements, forestry BMPs, as well as many miles of erosion control measures, have been completed.

Carl looks for continued successes, and has a broad vision for the future of the Project. He wants "to combine local Marquette watershed projects (including the Chocolay and Carp rivers, and the Whetstone Creek), in order to strengthen and help promote local watershed approaches to resource management." He realizes that this approach means that people will need to move beyond political boundaries and differences within the community.

His vision includes looking at the entire ecosystem with regard to primary pollution focus—not just erosion and sedimentation buildup, but involving groundwater and stormwater as well.

Carl broadens his vision further by stating that we must "look beyond the watershed towards the Great Lakes. Watershed projects should address sustainability, human health, critical pollutants, and critical habitat concerns."

To this end, watershed projects should not only involve the local community, but also utilize recommendations for protecting the lakes through the Lakewide Area Management Plan (LAMP). Carl reminds us that "we need to get beyond band-aid approaches."

Special thanks to Carl Lindquist, Chocolay River Watershed Project Manager. For more information, or to find out how you can assist with the project, contact Carl at (906) 226-9460, or check out the Chocolay River Watershed Web page at <http://www.portup.com/~lindq/>

Next issue: **Yellowdog River.**



LSA PLANS FOR 1999

by Vern Simula

As the UPEC representative to the Lake Superior Alliance, I wish to provide UPEC members with a brief background of the Alliance, and to report on the Alliance's development plans for the coming year.

UPEC has been an active member in the "umbrella" Lake Superior Alliance since the Alliance was organized in 1991. The Alliance, or "LSA," was created to serve as a first-line defense network of grassroots environmental groups in the Lake Superior Basin. Currently, there are thirty member organizations.

The Alliance is structured as a coalition of autonomous member organizations. The governance structure consists of a steering committee charged with bringing member organizations together periodically to exchange information, offer resolutions for the consideration of the member groups, and to oversee the publication of the newsletter, "Superior Vision."

Member groups have historically insisted upon retaining their primary autonomy, and thus have been reluctant to give the umbrella Alliance the prerogative to unilaterally take positions on issues, to issue statements on behalf of the Alliance, or to negotiate resolutions to environmental problems with regulatory agencies or legislative units.

The Strategic Planning Process undertaken by the Alliance in January 1998 revealed that the existing relationship between the member groups and the Alliance seriously limits the vitality of any number of environmental protection initiatives around the Basin, as well as the current effectiveness and future potential of the Alliance itself.

The Alliance is now embarking on an organizational development process by which the organization's integrity, competence, influence, and permanence—as perceived by the general public, the media, and particularly government and industry—will be increased.

In the year ahead, member groups such as UPEC will be invited to participate in this development process.

(This article is based on material prepared by Alden Lind of Duluth and Vern Simula of Toivola.)

WHITE PINE

December meeting with the Department of Environmental Quality (DEQ) in Marquette, MI
by Sandra Harting

Representatives of area environmental groups were asked to meet with the DEQ on December 10th in Marquette. The main topic of discussion was the "mine filling" plan. During mining at White Pine, a strongly saline (seven times as salty as seawater) "aquifer," the remnant of an ancient sea, was breached. The salt water has been flowing, albeit slowly, into the deepest parts of the mine ever since. When the mine was in operation, this salt water, along with fresh ground water and surface water was constantly pumped from the mine and discharged into the tailings basins.

Constant "dewatering" is necessary in all working mines. However, mine dewatering ceased in 1996 with cessation of operations at the mine, and the mine is filling with water, some of it very salty. White Pine is a relatively "dry" mine, so natural filling is expected to take from 30 to 40 years. If the mine is allowed to fill on its own, this extremely saline water will mix with the fresh, resulting in an output of saline water which would then flow into a shallow aquifer 25-130 feet below the mine's surface, area rivers, and ultimately into Lake Superior. Some of these rivers, particularly the Mineral River, have already been impacted by saline water from the mine.

Before any saline water reaches the level of the fresh water aquifer, CRC is mandated by law to "pump and treat" the water in perpetuity.



Copper Range wants to slow the seepage of the salt water into (and out of) the mine by "capping" the salt water quickly with fresh water (about 16 billion gallons worth), from Lake Superior. This would serve three purposes: one, it would create a "hydraulic head" that would slow the flow of salt water into the mine, and two, CRC believes that stratification would occur and the much denser saline water would have minimal mixing with fresh water and therefore would be unlikely to reach the surface, and three, the water in the mine would support the sides and roof of the mine (13 square miles of it) thereby reducing the potential for future caving and subsidence.

Mathematical models predict that with the freshwater cap in place, it will take 200 years for outflowing water to become sufficiently saline to warrant treatment.

However, there is a not-so-slight wrinkle in the mine filling plan. As the underground mine was very extensive, and travel underground takes many hours, workshops, garages, and storage areas were located underground, along with an extensive electrical system.

During the duration of the mine's operation, many older areas of the mine, particularly the deepest areas, became "played out" or became prone to caving. Many of these areas had the support pillars and parts of the roofs and floors cannibalized decades ago to recover extra copper ore and are therefore unsafe to enter.

Although the newer and shallower underground workings have had all equipment, wiring, etc., removed, it is not known whether the "unsafe" areas, abandoned hurriedly or before the advent of strict environmental laws, were thoroughly cleared out prior to abandonment. These areas encompass from 25-30% of the underground workings. As there can never be any guarantee that there is not old machinery, and

related waste located in the unreachable areas, CRC will have to implement an extensive monitoring plan for the water that fills the mine.

So, in addition to monitoring salinity, CRC must now also monitor the mine water for PCB's, volatile and semivolatile organic hydrocarbons, and heavy metals. The type of treatment needed before mine water is eventually discharged into surface waters will not be known until CRC determines what (literally), if anything, surfaces.



GREAT LAKES WATER QUALITY BOARD

November 1998: The Board, as principal advisor to the International Joint Commission (IJC) on matters relating to the US/Canada Great Lakes Water Quality Agreement, recently surveyed 17 key US and Canadian federal, state and provincial agencies responsible for delivery of programs under the Agreement.

Information from the survey is published in a new report entitled *"Review of Government Resources and Changing Program Thrusts as They Relate to Delivery of Programs under the Great Lakes Water Quality Agreement."* The survey looked at agency support for regulatory and enforcement programs, Remedial Action Plans, and monitoring and surveillance.

The report is of interest to those concerned with Great Lakes issues, and the US and Canadian governments' progress to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes basin

ecosystem, and is designed to be of use to both groups and individuals.

The entire report, including survey method and summary information for each agency, can be found on the Internet at <www.ijc.org>. **The IJC is continuing to assess this issue, and is accepting comments on the information contained in the report.** Comments may be posted on the IJC web site. Hard copies of the report are available from the International Joint Commission's Great Lakes Regional Office in Canada at 100 Ouellette Ave., Suite 800, Windsor, ON N9A 6T3, phone (519)257-6700; or in the US at PO Box 32869, Detroit, MI 48232, phone (313)226-2170. Comments can also be mailed to John Hartig at the address above.

IJC Report on Transboundary Air Quality

November 1998: A Special Report on Transboundary Air Quality Issues prepared by the International Air Quality Advisory Board (IAQAB) of the International Joint Commission (IJC) has been released. It highlights many significant transboundary air quality issues facing Canada and the United States, and makes a series of recommendations to address those issues.

The IJC has endorsed the recommendations contained in the report, and has urged the Canadian and US governments to move toward a more fully integrated approach to management of transboundary air quality issues that are having an effect on human health and the environment.

Among the recommendations, the IJC highlights the following:

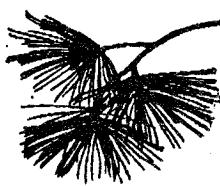
- a. From an air quality perspective, the transboundary region should be managed in as seamless a manner as possible, as air pollutants are not restrained by political boundaries.

- b. Jurisdictions on both sides of the border should move toward a fully integrated approach to air issues management. The Transboundary Air Pollution Transport Regions (TAPTRs) concept identified by the board provides a focus to further joint efforts by the governments.
- c. Sustained cooperation is required between Canada and the United States to deal with transboundary air quality issues. Compatibility in methodologies relating to monitoring, and data collection and research, is needed to better understand and take action on transboundary air quality issues.

In addition, the IAQAB presents a rationale for a more concentrated focus on nitrogen oxides as the pivotal pollutants for the next decade. These pollutants are a consequence of various combustion processes, such as coal-fired power plants and automobile emissions. They play a role in the formation of ground level ozone, particulate matter, acid deposition, and contribute to smog, thereby having a significant effect on ecosystem and human health.

The report reiterates the board's position calling for low levels of sulfur in gasoline, and notes the IJC's previous advice to the governments for appropriate action on this matter.

More information, including the Special Report on Transboundary Air Quality Issues, may be found on the IJC's web site: <www.ijc.org> For more information, contact Frank Bevacqua at 202/736-9024.



UPEC BOARD MEETS JANUARY 17, 1999

Jon Saari reported that the final decision on the Perkins-Manistique 138K transmission line reflected UPEC's suggested changes.

Doug Welker brought everyone up to snuff on the status of the web site. Though "partly under construction, it is at <http://members.xoom.com/NCT_hiker/upechome.htm>.

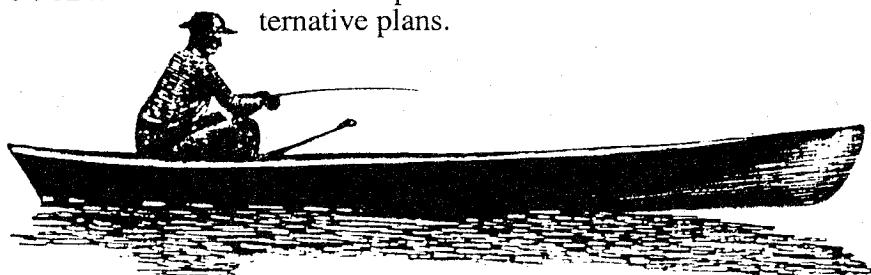
The Forestry Handbook is progressing pretty much on schedule, with a planned total of 16 articles authored by various board members.

Bill Malmsten gave an update on the status of the Sylvania motorboat lawsuits (3 of them to date).

Bob Myers reported regarding potential use of public radio spots to put UPEC before a broader public's attention.

Jon Saari noted that, in the five years that UPEC has been a part of the Marquette Community Foundation, the balance of the UPEC endowment fund has risen to just under \$20,000. See box on last page for details on how you can contribute to this fund.

Dave Allen went over the issues involved with the Big Island Lake Wilderness Environmental Assessment, highlighting the salient points of the four alternative plans.



ISLE ROYALE GMP

The wheels of progress grind, and they grind on and on, through all the proper steps and procedures needed to make the product of careful planning a reality.

As we know, the Final General Management Plan/Environmental Impact Statement for Isle Royale National Park was released at the end of last September. This was followed by a flurry of reaction and response by its opponents in the general public, most particularly motor boating proponents.

Unfortunately, sounds of **approval** of the plan have been very resounding in their absence. (If enough volume hits the editor of the local press, he just might sit up and take notice.)

Nevertheless, the process has gone on. On November 3, an announcement of a required 30-day waiting period appeared in *The Federal Register*, after which time any additional public comments received would be compiled with the plan in a Record of Decision (ROD), all of which would be forwarded to the National Park Service Regional Director for his review and decision, in consultation with the Superintendent of the Park.

The ROD has now been forwarded to the Regional Director, who has asked the U.S. Solicitors Office in Denver to go over it for legal ramifications. When they have finished their review and recommendations, the plan will go back to the Regional Director, for his decision.

This is where we are now.

THOUGHTS FROM BILL...

(Bill Robinson retired from the biology department at NMU last year, but he's found that flipping that switch in one's life just doesn't stop a fertile mind from spinning on and on. In the following "article," with tongue firmly wedged in cheek, Bill picks up Wayne Stanley's baton of satire, expressing great concern for the strength of the economy, and the boring and overwhelming burden of peace and quiet.)

A SOLUTION TO THE ENVIRONMENTAL AND ECONOMIC PROBLEMS OF CROSS COUNTRY SKIING

Cross-country skiing in the U.P. is a fairly popular sport, but there are three serious problems with it. First it is too quiet. People don't hear you coming or going, thus raising questions about your motives for being in the woods. Second, it requires you to exert yourself, often working up a sweat, and causing you to breathe deeply and rapidly. You can get pneumonia that way! Third, and most important, it is bad for the business of commerce.

That is, once you get the boots, skis and poles paid for, all you need is a little wax which lasts for a good year or two; the skis may last for decades. How can we expect to maintain a healthy economy if everyone's recreation is run like present day cross-country skiing? This could be a serious problem.

I have come up with a solution - a way of getting cross-country skiers into the flow of the economy and increasing the use of petroleum, which now seems to be glutting the market - motorized cross-country skis!

Now, I am not an engineer, but I can suggest this basic design: A small, two-cylinder, gasoline-powered motor would be mounted just ahead of the foot. The gas tank, for safety reasons,

would be long and flat and mounted behind the foot or on the skier's belt in the rear.

Partly beneath and ahead of the foot for about 18 inches would be the drive belt in a long slit in the ski. This would resemble a miniature snowmobile belt, with cleats that dig into the snow and propel the skis and the person bound onto them. For faster and more powerful skis, and for those tough uphills, a second drive belt could be placed behind the heel, and brought into service by use of a simple switch on the hip.

Motorized cross-country skis would solve once and for all two of the major drawbacks of traditional skis: First, it is often too quiet out there in the winter woods--sort of spooky, you might say.

Actually the sound of a motor cranking out about 100 decibels on each ski would be comforting, as well as letting everyone else within a mile or two know where you are. Secondly, with traditional skis you are hardly supporting either the petroleum or the tourist industry. As motorized skis gain in popularity, they will be a boon to tourism, as well as the petroleum industry and your local Mobil station.

With the development of motorized skis, the days will soon be gone when you will ski hearing only the wind in the trees and the irritating calls of chickadees and ravens.

Cross-country skiing has until now been sort of like being on lakes with no outboard motors or "personal watercraft" churning up the water and making lots of cheery motor sounds. Motorized skis will take care of the excess quiet problem in the winter woods, and they probably will go places where snowmobiles can't.

Within a few years there will be motorized ski races, with thousands of dollars in prize money (cross-country racers on traditional skis don't make much money at all), and, if we make the motors powerful enough, there

will be State and National Motor Ski Race Championships, keeping of speed records, and people coming to the "U.P. 100" — a 100 mile motorized ski race on a track built on the tailings of the Empire and Tilden Mines.

I envision grandstands filled with cheering spectators, who have paid \$20 each to watch the most skilled Motoski racers in the world taking spills on sharp turns, and eventually the winner put-putting the victory lap holding the cup over his or her head. What an exciting tourist attraction — pile-ups of skiers and skis replayed on television in the evening, with an occasional fire as spills, sparks and gasoline get mingled together.

People will be spending money on tickets, food, lodging and booze. It's the American way. And Ex-Governor Engler will accept the invitation to shoot the starter's gun, and at the conclusion, present the trophies in a lingering cloud of exhaust smoke.

I would encourage all members of UPEC (not to be confused with OPEC) who enjoy the thrill of watching, hearing, and smelling jet skis (oops — I mean "personal watercraft") on a lake, and all those who just can't stand quiet places, to encourage the development of motorized cross-country skis.

Start your kids on them at a young age. It will be good for the environment, for the economy, and just good, clean American winter fun for adults and children alike.

(Ahem!)



UPEC Forestry Committee meeting to be held Sunday, February 21, 2-5 pm, at the Ford Forestry Center, Alberta, MI

ANNUAL MEETING

The UPEC Annual Meeting has been set for Saturday, March 27. It will take place at the Northwoods Supper Club, 260 Northwoods Road in Marquette (watch for Northwoods signs on US 41 west of Marquette).

The schedule will be: 4:00 Board Meeting, 6:00 Dinner, 7:00 Annual Business Meeting, and 7:30 Special Guest Speaker.

This year's speaker is William R. Jordan, III, professor of botany at the University of Wisconsin Arboretum, Madison. Dr. Jordan is known internationally as one of the founding fathers of the field of restoration ecology, and is editor of Restoration and Management Notes. He will speak on "Ecological Restoration and the New Communion with Nature."

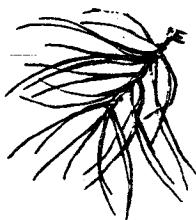
He considers restorationism to be the next phase of natural resources management, now emerging to replace the traditional conservation and environmental paradigms.

CHRIS BURNETT TO ADDRESS SIERRA CLUB

On February 11, UPEC Board member Chris Burnett will address the Central Upper Peninsula Sierra Club at 270 West Science Bldg., NMU, Marquette, at 7:00 pm. Topic: "Restoration, Rehabilitation and Revival: New Paradigms for Woodland Management," which should provide an excellent preview of what we will be hearing from Dr. Jordan in March at the Annual Meeting.

YOU...on the UPEC Board??? ***It's That Time Again***

Board members come, they see, they contribute. Then sometimes their lives turn a corner and they move to new challenges. Due to this natural life flow of the UPEC Board membership, openings have materialized. Are you interested? Contact Bill Malmsten, president.



WOLF DEATHS IN THE UPPER PENINSULA

The Michigan Department of Natural Resources (DNR) reports that a one-and-one-half-year-old female gray wolf was discovered dead of a gunshot wound in Iron County last month. She was discovered during a routine aerial survey on December 16, when the radio collar that had been replaced by DNR wildlife biologists in October 1998, after she had been accidentally caught in a trap, emitted a mortality mode signal.

Two weeks earlier, the radio collar of another young female wolf was recovered in Dickinson County. This collar

had originally been placed on her while she was still a pup in 1997.

This wolf was a member of the Skunk Creek Pack. Lt. Tom Corchaine, DNR Law Enforcement Supervisor at the Crystal Falls District office, is coordinating that investigation.

"That we would lose two wolves, both young females and both radio-collared study animals, within such a short span of time, is very troubling," Corchaine said. "DNR Conservation officers, as well as other state and local police agencies, will be diligently seeking any information that can help solve these significant cases."

The gray wolf is listed as an endangered species, and is protected by both state and federal laws.

The DNR's Report-All-Poaching program is seeking information about the more recent wolf death. RAP is offering a \$2,000 reward for information that leads to the arrest and conviction of the person or persons responsible for this crime. This reward matches the amount offered by the DNR in the first wolf incident.

To help solve the first case, the Timber Wolf Alliance, a program of the Sigurd Olson Environmental Institute of Northland College, has offered an additional \$900, bringing the total reward to \$2,900.

The DNR's RAP Hotline accepts any poaching-related information confidentially: 1-800-292-7800.



Membership in UPEC is open to all individuals and groups who wish to support the goals of the Coalition. Applications for membership should be sent to P.O. Box 847, Marquette, MI 49855. UPEC is a nonprofit organization [IRS 501(c)(3)] and dues and contributions are tax deductible to the extent allowed by law.

The Upper Peninsula Environment is published four times per year. Articles, press releases, or correspondence intended for the newsletter should be sent to UPEC c/o Newsletter Editor, P.O. Box 673, Houghton, MI 49931.

WHAT DO YOU THINK???

Having paid your membership dues (which are coming due again soon), and having read what's been being presented to you in the newsletters, you very likely, we thought, have ideas you would like to see aired here...and we would like to hear from you... your letters or notes or short articles of interest within the goals of UPEC: "...to protect and maintain the unique environmental quality of the U.P. of Michigan; to evaluate and promote planning and sound management decisions for all the resources of the U.P.; and to work toward these goals through coordination of member groups, **individual members**, and public information."

Let us hear what you would like others to hear, and, space permitting of course, we will be pleased to provide you a forum.

YOU MAY WONDER...at the two addresses given herein. The Marquette address is the official organization address; the Hancock one is for newsletter purposes, as well as business affairs connection point for folks in the upper Upper Peninsula.

Write Your Reps!

Here are the addresses and phone numbers for state and federal lawmakers that represent the U.P. Let them know what you think about the issues!

Senator Spencer Abraham
United States Senate
Washington, DC 20510
Phone: (202) 224-4822
Fax: (202) 224-8834
E-mail:
michigan@abraham.senate.gov

Senator Carl Levin
United States Senate
Washington, DC 20510
Phone: (202) 224-6221
Fax: (202) 224-1388
E-mail: senator@levin.senate.gov

Representative Bart Stupak
U. S. House of Representatives
Washington, DC 20515
Phone: (202) 225-4735
Fax: (202) 225-4744
E-mail: stupak@hr.house.gov

Both State Senators at:
State Capitol, P.O. Box 30036,
Lansing, MI 48909-7536

State Senator Don Koivisto
(517) 373-7840

State Senator Walter North
(517) 373-2413

All State Reps at:
State Capitol, P.O. Box 30014,
Lansing, MI 48909-7514

State Representative Pat Gagliardi
(517) 373-2629

State Representative David Anthony
(517) 373-0156

State Representative Michael Prusi
(517) 373-0498

State Rep. Paul Tesanovich
(517) 373-0850 or 800-PAUL110

About UPEC

The Upper Peninsula Environmental Coalition was organized on December 6, 1975. The goals of UPEC are to protect and maintain the unique environmental quality of the U.P. of Michigan; to evaluate and promote planning and sound management decisions for all the resources of the U.P.; and to work toward these goals through coordination of member groups, individual members, and public information.

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Doug Welker, Pelkie
338-2680; dwelker@up.net

Newsletter Editor: Holley Linn

Yes! I want to protect the U.P.!

Name _____

Address _____

City/State/Zip _____

Phone _____

I would like to support the goals of UPEC by becoming a member. My annual dues are enclosed (check one):

Regular Member (\$15)
 Supporting Member (\$50)
 Student/Senior/Low Income (\$10)
 Here's an additional contribution of \$_____.

I'd like to ensure the long-term viability of UPEC by contributing \$_____ to the UPEC Endowment Fund.

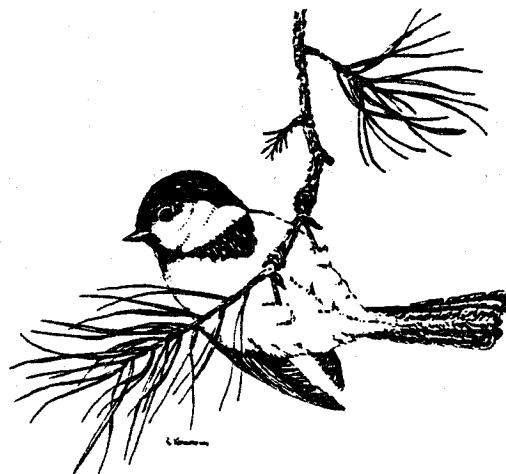
NOTE: If you make the endowment check out to the Marquette Community Foundation (MCF) and put "UPEC Fund" on the memo line, you can take a 50% tax credit on your MI state income tax (up to \$200 for individuals, \$400 for couples). Mail Endowment Fund contributions to MCF, Attn: UPEC Fund, P.O. Box 185, Marquette, MI 49855. Or you can send your contribution directly to UPEC and take a regular tax break. Please send membership dues to UPEC at P.O. Box 847, Marquette, MI 49855.

Thanks for helping to support UPEC!



CONTINUING THANKS

to those who have contributed thoughts, comments and text; to the George Wright Society for electronic facilities and smarts; Ray Krumm, Mike Keranen and "Superior Vision" for sketches; and Marc Norton and his crew at Greenlee Printing.



The Upper Peninsula ENVIRONMENT

Upper Peninsula Environmental Coalition

c/o Newsletter Editor

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