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

Citizens contest ill-advised land exchange in Ottawa

By Sherry Zoars & David Clanaugh

UPEC has lent its support to a recently filed suit that contests a pending land exchange in the Ottawa National Forest (ONF). Plaintiffs in the suit are two organizations, Partners in Forestry and the Northwood Alliance, and a number of citizens. The exchange would involve the ONF trading four 40-acre parcels near County Line Lake northwest of Watersmeet and 80 acres west of Lake Gogebic for 421 acres of heavily cutover land currently owned by Wakefield logger and developer Robert Delich.



Wildcat Falls has been a favorite outing destination in the Ottawa National Forest for regional residents, but a proposed land exchange would privatize it. Photo by Rod Sharka

Delich's land lies between the northern border of the Ottawa and the southern border of the Porcupine Mountain Wilderness State Park. It is relatively flat and suited to industrial forestry, yet may take awhile to regenerate given recent timber harvesting.

The land exchange process, which began in 2008, would ostensibly consolidate ONF land holdings in exchange for non-

contiguous parcels, but when citizens became aware of the deal, they began questioning whether it would be an equal and advisable exchange because of the unique features of the ONF parcels. The acreage near County Line Lake (CLL) features old-growth hemlock and cedar, unusual rock outcroppings, meandering Scott and Howe Creek, a beaver pond, and Wildcat Falls, a site with significant visual and geographical features and the destination for generations of local families for picnics, hikes, and other recreational activities.

Once the proposal was defined, ONF had to do an environmental assessment (EA) and publish the proposed exchange for public comment. This was the

first time local citizens heard about the proposed exchange. At that time, several organizations and individuals commented against the exchange and the EA, specifying that the appraised value of the Land Exchange See Page 11

UP Environment

Summer 2012

The Upper Peninsula Environmental Coalition's quarterly newsletter.
UPEC is the UP's oldest grassroots environmental organization.



Plovers testify to degraded natural systems

By Teresa Bertossi

For the last two summers I have worked closely with one of the region's most critically endangered species, the Great Lakes piping plover. Throughout this experience—looking face-to-face with a living breathing creature on the brink of extinction—I have come to appreciate the immense difficulty we face in trying to fix the natural systems we have severely degraded, but have also learned not to underestimate nature's resilience and human compassion in the face of great obstacles.

The Great Lakes pip-

ing plover is a small, stocky, and sand-colored migratory shorebird that makes its nests in small depressions on Great Lakes cobble beaches. It spends a short time in our region—between May and early August—until it gets the itch to migrate south, where it spends winters along the Atlantic and Gulf Coasts; a schedule not unlike our UP snowbirds in their annual migrations.

Originally, plover populations declined due to over-hunting, egg collecting and the millinery trade in the late 19th and early 20th centuries.

Plovers. See Page 3



Through patience and persistence, Great Lakers piping plovers have made a slow, steady recovery in Michigan and surrounding states. The person who took this photo has been part of the recovery effort for over 30 years. Photo by Evelyn Woods

Confronting short-sighted politics:

Advocating for the one world that sustains us all

By Nancy Warren

It was more than 20 years ago that we announced to our friends and family that we purchased a parcel of land in Ontonagon County with the intent to move there "someday." Most asked why, yet the answers were clear to us. As canoeists we enjoy clean rivers. We are captivated by the summer night sounds and the stillness of winter. We savor getting lost in thought while exploring the Ottawa National Forest with hopes of hearing coyotes and wolves howl. Our dream became reality only a few years after making our decision.

Since that time, I have come to learn that Yoopers do not live here because we enjoy picking off ticks and swatting deer flies. Some folks born and raised here stay because of family, but when asked why Citizens of Place. See Page 5



Nancy introduces Arryn to her first wood turtle, 472. A few days later, Nancy found 410, featured last year in this newsletter

Photo by David Clanaugh

By Editor David Clanaugh

Many of us who call ourselves environmentalists identify specific experiences and reasons that ground our sensitivities and commitments to protecting the one world to which we belong. This newsletter chronicles some of these experiences and reasons, sensitivities and commitments: protecting piping plovers, developing relationships with wood turtles, absorbing the peace and serenity available at special places like Wildcat Falls and Rock Dam, bushwacking on Manitou Island, and marveling at bats flying about us at night.

I am humbled to edit this collection of compelling stories. And I am grateful to live where people such as Al and Nancy Warren generously share these experiences by taking seven-year-olds like my daughter turtling (See Arryn's report on page 4.).

Humbled. See Page 4

Birds & Brush:

The unique ecosystem of Manitou Island

By Doug Welker

Earlier this spring I had the opportunity to accompany Joseph Youngman to Manitou Island, three miles east of Keweenaw Point, to assist with a raptor survey. Perhaps the word assist is a little strong. Joe is a very experienced raptor counter, and my skills are somewhat limited. However, I was there to help in emergencies, had they developed, and

for sure. Spring migrants head up the Keweenaw Peninsula, only to discover that it ends. So, what to do? Most won't try to cross the Big Lake, but they can see 1,000-acre Manitou off to the east. So, what the heck many say, and off to the east they head. Then they reach the east end of Manitou and see nothing but open lake ahead and the Huron Mountains far to the south (which is not the way they

departures of raptors and other birds for six days, and between 500 and 1,000 raptors moved in each direction during that period. At times the island hosts a couple hundred soaring birds such as Bald and Golden Eagles, Rough-legged Hawks, Broad-winged Hawks, and Northern Harriers. Meanwhile, the island's forests become the temporary home of a few Northern Goshawks and numerous Sharp-shinned Hawks. "Sharpies" are the dreaded predators of every small forest songbird, so I pity the poor little fellows when sharpies may average one every 10 or 20 acres on the island.

Many of you have been to Isle Royale, and noted the low diversity of mammals there compared to on the mainland. Compared to Manitou, though, Isle Royale has a diverse mammalian fauna. Other than snowshoe hares, a few beaver, some small mouse-sized critters, and probably occasional bats Manitou seems devoid of mammals. There seem to be no canines, felines, porcupines, skunks, weasels, or bears. There are no deer or moose. The largest prey animals seem to be beavers and snowshoe hares, and the largest predators are probably raptors. I tried fishing Manitou's sole inland body of water, 30-acre Perch Lake, but found no evidence of carnivorous fish, even perch or bluegills, but they could be there. The lake looks shallow and weedy.

Except for in some black spruce bogs and one area of larger trees where the soil
Birds & Brush.....See Page 8



Expert raptor counter Joseph Youngman scopes out action on the water surrounding Manitou Island from Fadner Point. Doug Welker recently joined Youngman for six days of raptor monitoring on this last outpost from the Keweenaw. Photo by Doug Welker

was probably critical in our canoe shuttle to the east end of the island (more on that later...).

I'm not sure that the term unique is far off the mark, though, in terms of the ecosystem of Manitou Island. What migrating birds do there is pretty unusual

want to go). So, they hang out on and over Manitou for hours or perhaps a few days and most then head back west to the mainland. Once there, some stay on the Keweenaw, but most raptors likely head southwest toward Duluth to get around Lake Superior. We monitored arrivals and

About UPEC...

The Upper Peninsula Environmental Coalition has over a 35-year track record of protecting and seeking to enhance the unique environmental qualities of the UP through public education and monitoring of industry and government. UPEC seeks common ground with diverse individuals and organizations in order to promote sound planning and management decisions for all the region's natural resources.

UP Environment is published four times a year and available online to share with family & friends. Send your comments or contributions to UPEC by standard mail at P.O. Box 673, Houghton, MI 49931, or e-mail us at upec@upenvironment.org. You can also visit us at www.upenvironment.org

Questionable Ottawa land exchange deflects public input

Land Exchange.....Continued from Page 12
CLL parcels was faulty, not considering other criteria than the value of the timber, and that the old growth was not mentioned in the EA. These comments were reviewed by a USFS person in Region 9, Milwaukee, and the objection was upheld. The result was that ONF added a few lines in the EA to deal with the old growth, and republished the proposal, which featured only one alternative other than "no action." Further appeals objected to the lack of other alternatives to consider as well as faulty appraisals.

By this time, folks were alarmed at how public comments were not being taken into account during the process, and that surveys for endangered or threatened species are not required in a land exchange. During the second appeal, a "last chance" hike to Wildcats Falls attracted over 100 people from local communities as well as Houghton, Marquette, and Rhinelander. A video appeared on YouTube (www.youtube.com/watch?v=bns0aFaBceM), and an online petition attracted over 1000 signatures.

These signatures were personally delivered to the review officer in Milwaukee. However, according to the National Environmental Policy Act (NEPA), the agency doesn't have to listen to public comment, as long as it acknowledges the objections and states that the proposal's benefits outweigh any negative impacts. So the review officer actually had no way of taking into account the public comments, but has to decide whether the EA acknowl-

edges any objections in the appeals.

The process of land exchange is deeply flawed as it relies on a landowner approaching the national forest with a proposal that may specify the land he wants. If he declares there is no other land to which he would agree, the USFS must decide whether the trade is worth pursuing by trading away the land the proposer wants. The practice of selecting non-contiguous parcels is justified as the parcels are deemed "hard to manage" if they are not contiguous. In the case of the CLL parcels, they are within less than a mile of other ONF land, which makes the "hard to manage" argument questionable.

The suit claims that the negative impacts far outweigh the benefits from acquiring the heavily cutover land. It maintains that the ONF's finding of "no significant impact" is in error, and that the ONF fails to consider a sufficient number of alternatives -- that a single alternative (other than "no action") does not constitute "all reasonable alternatives" as required under NEPA. It also maintains that an Environmental Impact Statement (more detailed than an EA) should have been prepared to better evaluate the loss of the old growth, loss of public access, and loss of wildlife habitat, among other impacts. The case has been assigned to a federal court in Grand Rapids, Michigan.

For more information on this case see www.northwoodalliance.org



Well over regional 100 citizens gathered northwest of Watersmeet this spring to protest a proposed exchange of national forest land with old growth timber and unique natural features for a parcel of cutover land more suited to industrial forestry (when it eventually regenerates) than public recreational use. Photos by David Clanaugh

Consider EarthShare payroll deduction to support UPEC

UPEC is a proud member of EarthShare of Michigan, an organization 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 UPEC receive more funding, consider letting your employer know you want to participate in the EarthShare of Michigan giving option at your workplace through the annual payroll deduction plan. For more information, please call 1-800-386-3326 or visit www.earthsharemichigan.org



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Remembering & honoring those who share stewardship values

With this issue of UP Environment we begin the practice of remembering and honoring people in the name of environmental protection and stewardship. Your gift in honor of or memory of others allows them to continue participating in UPEC's work. If you want your contribution to honor or remember someone, please provide relevant information with that contribution.

- In Memory of John M. Allen by Edith Maynard**
- In Memory of Bob Linn by Rebecca Brown**
- In Memory of Bill Mataczynski by David Clanaugh**
- In Honor of UPEC Board Members by Tom Church**

Don't forget those Econo Foods slips -- a slow & steady way to support UPEC!

Thanks to you and Econo Foods, UPEC has earned several hundred dollars over the past few years by submitting grocery receipts 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 us were to save our slips and

send them in! For a family that spends \$100/week on groceries at Econo, this would translate into \$50 of annual support for UPEC. Either save receipts throughout the year and mail them to us, or give them to a UPEC board member -- whichever is more convenient. It's one of the easier low-cost ways you can offer your support. Thanks!

Different ways to support UPEC

Consider contributing to UPEC in honor or memory of a special friend or loved one. When you make a gift on behalf of another person, we will send an acknowledgement of the gift to that person or his/her family, so enclose mailing information. When you contribute on behalf of someone else, encourage them to become a UPEC member through your gift. Do you or someone you know have a wedding in the future? Consider making it a "green wedding" by designating UPEC as a recipient of honor gifts. UPEC has a PayPal link at its website that you can use to do this.

Rock Dam: Dickinson County's hidden gem

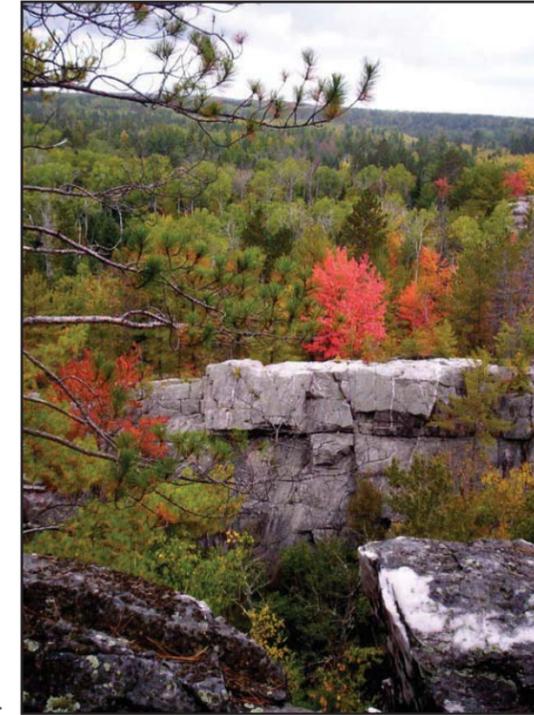
By Connie Sherry

Having been born and raised in Iron River, Michigan I was sure I was familiar with most scenic attractions and special places of interest in the south-central Upper Peninsula. It was not until many years later that I "discovered" Rock Dam on Pine Creek in Dickinson County through an outing with my Silent Sports group from that area. Pine Creek and the surrounding land is part of the Copper Country State Forest. The creek starts near the old Groveland Mine and eventually joins the Sturgeon River a mile above the US-2 crossing near Loretto.

The name Rock Dam derives from the remains of an old logging dam across Pine Creek in the bottom of the canyon. In the logging heydays of the UP it was common practice to build a wooden dam across a river or creek, collect logs behind it, and then dynamite the dam during spring melt-off when the high water would wash the logs downstream to be loaded onto trains at a more convenient location. The only remains of Rock Dam today are a few notched logs upstream from the falls in the canyon.

Besides being a spectacular place

for a hike as a unique geological area, Rock Dam is also an interesting botanical area. The local Silent Sports group sponsored a lichen identification hike there in October 2011. Field notes



Rock Dam on Dickinson County's Pine Creek is geologically, botanically, and historically interesting.

Photo by Catherine Vivio

from that trip organized by Catherine Vivio of Norway and led by Ryne and Jen Rutherford, show that sixty lichens are found in the Rock Dam area. The types of lichens on the north and south cliff faces and talus slopes are quite different from other areas due to differences in moisture and sunlight. Lichens are a good indicator of air quality so there must be pure air in the vicinity.

Golden Glow Lichen (*Dimerlaena oriena*) grows on the quartzite bedrock at Rock Dam. Smooth Rock Tripe (*Umbilicaria mammulata*) and Frosted Rock Tripe (*Umbilicaria Americana*), both foliose lichens, can be found on the north-facing cliff. They look like leathery leaves clinging to the cliff. Ryne also pointed out Grey Reindeer Lichen (*Thorn Caldonia*) and many others to the thirty people who attended this outing. A rock tripe is attached at its center to an umbilicus or umbilical cord, and *Rock Dam. See Page 9*

Protections for endangered plovers under attack

Plovers Continued from Page 1 Numbers continued to drop as sensitive plover habitat was converted for public recreation and development. In 1986 when there were fewer than 19 breeding pairs (all in Michigan), the Great Lakes piping plover was listed under the Endangered Species Act. Prior to the plover's listing, a long-time Grand Marais resident I work closely with, Evelyn Woods, also began working to protect the plovers in the 1980s.

"I use to carry eggs in my bra and chicks in my hand before the government got involved," chuckled Evelyn in reference to saving chicks and eggs. Evelyn, with over 30 years experience, continues to work with her township to protect plovers near her cabin rental business in the small Lake Superior town.

Today, protocols are in place to protect the plovers with as little human disturbance as possible, and a consortium of citizens, townships, government agencies like the U.S. Fish and Wildlife Service, universities such as the University of Minnesota, and organizations such as the UP Land Conservancy are working to stabilize the population. The program consists of a captive rearing program for abandoned eggs, and nest and chick protection from predators and human disturbances, and some critical habitat protection.

These efforts have worked so far: the nesting locations of the

plover have expanded outside of Michigan, and the population continues to range from 50 to more than 70 pairs since 2001.

However, today plovers remain threatened by development, recreation, invasive species, disease, natural and introduced predation, and other disturbances from humans and dogs that can cause nest abandonment. Furthermore, fluctuating lake levels and changing weather conditions also threaten the population.

The Endangered Species Act—a law that has protected the plover and safeguarded 99% of listed species from extinction—is also under threat, putting plovers and numerous plant and animal species in harm's way. But against this bleak backdrop, it is important to remember the plovers' innate drive to carry on despite all odds, and the Evelyns and ordinary citizens and officials who are tirelessly working to recreate stability in a very unbalanced world.

You can help by calling your representatives and letting them know that the Endangered Species Act should continue because it is helping to protect species like the Great Lakes piping plover. Also, if you would like to volunteer, the Upper Peninsula Land Conservancy is looking for piping plover volunteers for the summer through the end of July. Call (906)-225-8067 to become involved.

Yes! I want to join UPEC in making a difference

(Please complete and give this to a UPEC board member or mail to UPEC, Box 673, Houghton, MI 49931)

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I'd like to make an additional contribution to the following fund (s):
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 \$ _____ UPEC Land Acquisition/Protection
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I'd like to support the goals of UPEC by enclosing a contribution for (please check one):

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 (include information above)

Consider enclosing a note with feedback about this newsletter & UPEC's work.

* If you want your contribution to go directly to the Marquette County Community Foundation, put **UPEC Fund** on the memo line and make it out to the foundation. We will forward the check to them. OR you can make your contribution directly to UPEC. We are a 501(c)(3) nonprofit organization and your contributions are tax deductible. THANKS! A UPEC membership and newsletter subscription make a great gift. Just provide the details and we will gladly do the rest.

472: The Turtle

By Arryn Clanaugh

On May 25, 2012 I went turtling on the South Branch of the Ontonagon River with Nancy, Al, and my dad. It was fun, but we had to cross the river six times: three times to get there and three times to get back! We found none on the first beach, but we found one on the second beach and her number was 472 -- my first wood turtle!

The first time the people counted 472 was on June 10, 2008. Back then she weighed 1260 grams and was 185 millimeters long and 150 millimeters wide. She was 20-plus years old (they can count ages up to age 20, but after that it becomes hard). The second time they caught her was on June 4, 2009. Then they captured 472 on June 8, 2011. The last time 472 was caught was on May 25, 2012 and I was with them. We caught 472 first and last at two different beaches across the river from each other.

472 is a female which means she has a flat belly which is called a plastron. Males have a concave belly like 1104. Because 472 is so old, she is very special. She's special to me because I found her twice on this trip. She was the first turtle and last turtle I found.

My time turtling was exciting and I liked everything about it.



It was worth wading the swift, cool waters of the South Branch of the Ontonagon to discover creatures like 472. By return trip, Arryn and her dad had the routine down to make possible a cheese stick snack in midstream. Photos by Al Warren

More young voices coming this fall: Watch for a report on the Grant Township School wetlands & watershed environmental education project.

Humbled. Continued from Page 1

These motivating experiences are vital, yet we live during a watershed moment that calls for an increasingly pragmatic, practical, flexible, and holistic approach to environmental work. This approach requires us to step beyond our narrow reasons for claiming the environmental mantle. Our moment demands we imaginatively leap to identify common values and communicate compelling visions that will help us engage beyond our groups.

Despite the apathy all around us, I believe in my bones that countless people hunger for a tangible, plausible vision of a better world. If this hunger wasn't so great, people wouldn't be so easily seduced by back-to-the-future extractive visions of social, economic, and political development. We need to step up and offer better visions that have more integrity, more justice, more shared responsibilities and benefits, more grounding in solid scientific research, and more resonance with our deepest longings.

Through working within UPEC, FOLK, and the academy, I have encountered much evidence that we must change how we communicate about issues to better engage those who are overwhelmed by daily survival, a deep sense of vulnerability, and a tendency to tune out bad news. We must talk less overtly about our commitment to stewardship and environmental values in or-

Towering quartzite cliffs make Rock Dam unique

Rock Dam. Continued from Page 3 that is why it has the Latin name Umbilicaria. They are the largest lichens in North America.

The glacially polished quartzite cliffs that tower above Pine Creek are unique to this area. They were formed from the deposition of sand in ancient seas followed by deep burial, compression, uplift, and subsequent erosion of overlying rocks. These quartzite bluffs are so hard they do not show the glacial striations and grooves characteristic of many other rock bluffs in the western Upper Peninsula. The color varies from white to pink where iron has stained the minerals.

Surrounding the Rock Dam area are the more typical granites (north towards Sagola) and gneisses, which are Archean in age, old Precambrian rocks that characterize the Canadian Shield and are the oldest (approximately three billion years) and most stable part of the North American continent. The exact ages of Precambrian rocks are very difficult to determine.

According to Shawn Carlson, who is active in the Geology Club of Florence Wisconsin, the gorge through which Pine Creek runs is too deep to have been eroded since the last glacier melted away from the UP 10,000 years ago. Glacial ice will follow pre-existing landforms that even a mile-thick ice sheet cannot completely obliterate.

These hard quartzite bluffs are in many places crosscut by white bands of younger quartz. The remains of an 1800's gold exploration pit is found beside a trail at rock dam. No known gold has been found at Rock Dam, but there is a vein of quartz in east Kingsford that has shown some color. Gold in the Ishpeming area is also found in quartz as opposed to placer gold that can be found as specks or nuggets having eroded from surrounding rock.

Nate Alwine lives about twenty minutes from Rock Dam. A member of the Dickinson County Bike Path Committee, Alwine has taken advantage of two existing bridges and a switchback trail that climbs the bluff on the east side of the creek to share this area with silent sports groups and local

residents. Blue dots mark the trees and currently lead hikers to another overlook about three-quarters of a mile past the overlook on the East Bluff.

Last September Alwine submitted a request to the DNR to construct a two-mile-long DNR-approved trail at Rock Dam that would cross the creek further upstream and return to the parking lot on the west side. An official trailhead would have signs and encourage more people to enjoy the Rock Dam area. Ronald Yesney of the DNR has been encouraging about the proposal for a new recreation trail but action from Lansing has been slow.



Outcrops near Wildcat Falls in Gogebic County also contain old hard rocks like found at Rock Dam in Dickinson County. These rock resist weathering and chronicle the natural forces shaping the landscape over the millenia.

Photo by Rod Sharka

The three-year plan when complete would connect the Rock Dam trails with a web of hiking trails intersecting each other and leading to different areas of interest on DNR land, areas such as beautiful little Lake 29, the Merriman hiking/ski trails, Carney Lake State Forest Park, Carney Lake State Forest Campground and a pretty little waterfall on nearby Lost Creek. The Lost Creek area already has a parking place remaining from the time when a trail to the Lost Creek area was maintained for hikers. The trail system will contain approximately ten miles of trails when complete.

For now, adventurous people seeking a unique outdoors experience can find Rock Dam by following these directions from Iron Mountain: From the US-2/M-95 intersection in Iron Mountain follow M-95 north 3.9 miles until you reach the Merriman Road (Sportsman's Club Road). Turn right (east) and follow Merriman Road for 2.6 miles to Carney Lake Road. Turn right on Carney Lake Road, which is a dirt road and follow it four miles to Rock Dam Road. Follow Rock Dam Rd for 1.2 miles. You will see a small parking area on your left.

Contact Information for State Legislators

38th District Senator Tom Casperson

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517-373-7840 SenTCasperson@senate.mi.gov

110th District Representative Matt Huuki

PO Box 30014
Lansing, MI 48909
888-663-4031 MattHuuki@house.mi.gov

Go to www.legislature.mi.gov to contact other reps.

Thin soils, dense brush, limited wildlife, exposed shoreline characterize Manitou

Birds & Brush Continued from Page 2

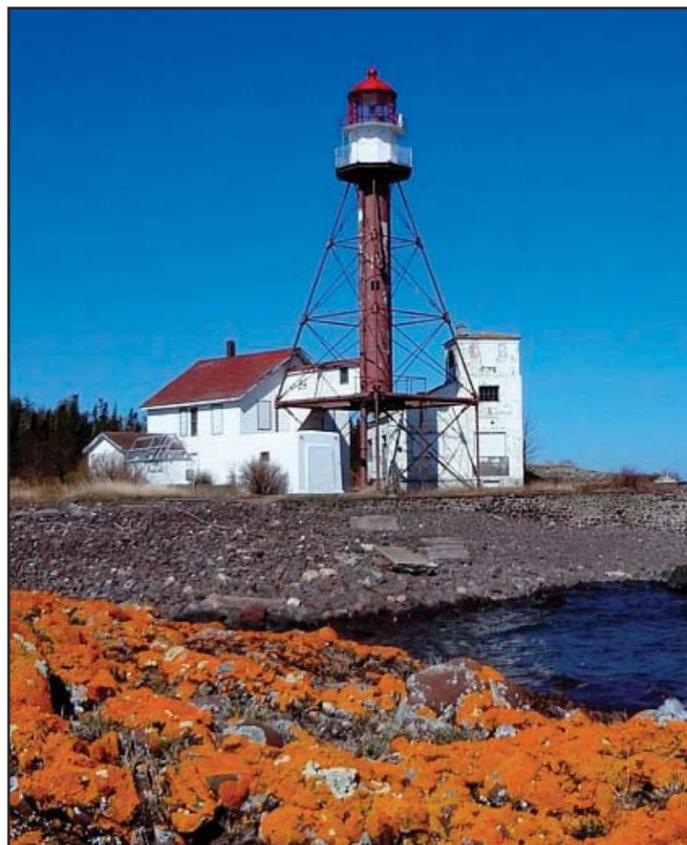
is less thin (perhaps a couple feet of sandy soil instead of the typical story of bedrock with a few inches of soil), the primary larger tree is balsam fir, with some yellow and paper birch, mountain ash, and mountain maple. In drier areas the understory is a dense thicket of Canada yew, with red-osier dogwood thickets in wet areas. I did some interior bushwhacking and found it really slow going. On some treks I literally did not step on the ground for a few hundred feet (just on the branches of Canada yew and dogwood!) The yew thickets are there because there are no browsers like deer or moose to eat them. Only in the area of sandy soil could I walk more than 25 feet or so in a straight line. That area's better soil creates a lovely, true old-growth forest of balsam fir, yellow and paper birch, and white spruce. I measured one spruce at about 100 feet tall. On the shallow soils, though, many trees are dead or dying. Some surveys of breeding birds have been made on the island, suggesting that fewer species may nest there than on the nearby mainland. Perhaps this is because the island has fewer different habitats, but it may be that more extensive surveys are needed.

The island is underlain primarily by conglomerate, with some areas of basalt. Most of the island is nearly flat, with little ground more than 20 feet above lake level. The shorelines are the easiest walking, on bedrock, cobbles, and a little sand.

In the past, Manitou has hosted cabins of commercial fisherman and the residences of lighthouse-keepers. Minor copper exploration has taken place. Regular commercial logging may not have occurred due to the lack of quality timber as well as access issues. A small private cabin is located at the west end (Fadner Point), and the Manitou Island Lighthouse (now automated) is at the east end. Half a mile west of Fadner Point is the Gull Rock Light Station.

If you're thinking of visiting the island here are some things you should know. There is no regular commercial boat service to the island. One must charter a boat or bring your own. Some hardy kayakers have come from High Rock Bay near Keweenaw Point, but beware that the winds, waves, and currents make this a very risky paddle. For private power boats, landing sites are limited, and every place on the shoreline is at risk from high waves from at least some directions. Most of the island is public land (state or federal), but the far west end and much of the east end are private. The Nature Conservancy owns several hundred acres at the east end, including the lighthouse and a dock, but visitors will not normally have access into the lighthouse buildings, and no camping is permitted there.

The boat taking Joe and me to the island is unable to come all the way up to shore, so we needed to canoe from the boat to shore. Good conditions allowed us to be dropped at our surveying location near Fadner Point, but as the week wore on we realized we would need to be picked up at one of the more sheltered bays at the east end. That required a one-hour paddle along the



Manitou Island Light has weathered November gales and guided watercraft around the Keweenaw for many years. The Nature Conservancy currently owns several hundred acres and the light.

Photo by Doug Welker

north shore, on the day before our pickup day. What started out as a piece of cake turned into some trickier paddling as we encountered breaking swells (leftovers from waves created by high winds the day before) as we headed east. Fortunately we kept our head in waves up to five feet and managed to arrive safely!

The Manitou Island Bird Survey is part of a larger effort to monitor raptor movements in the upper Great Lakes. Spring and fall migrations involve following shorelines and island-hopping, for raptors, water birds, and songbirds. The study will likely continue as a number of unanswered questions remain. Brockway Mountain, easily visited by car, is extensively monitored in spring migration, so check it out in late April and May and you might see someone busy counting birds, especially if there's a strong south or southwest wind.

For more information visit:
www.manitouislandbirds survey.org/

or

http://en.wikipedia.org/wiki/Manitou_Island_%28Lake_Superior%29

Informed voting essential to region's long-term future

Citizens of Place Continued from Page 1
they value living in the UP a general consensus becomes apparent. Living within reach of millions of acres of public lands and all the opportunities it offers is truly living -- whether or not you were born here with multigenerational roots, this is a common shared value.

Yet few people realize that the things that make the UP a special place to live can quickly be lost by being a misinformed or uninformed voter. Unfortunately, many mistakenly vote against their own best interest. During political discussions, I often hear catch phrases such as, "all politicians are the same" or "I just have no interest in politics" and I just cringe.

As stewards of the land, our challenge is to educate our neighbors, friends, relatives, co-workers and explain to them how they can protect what they cherish through their vote. Through just a few examples, I hope to illustrate the constant

I propose that the long-term social, political, and economic security of our region depends on prudent, responsible, and appreciative stewardship of its natural features and environmental integrity.

assaults against our natural resources and why it is critical to stay informed and remain active.

If asked, I am confident most residents would agree that we should delay all new natural gas exploration and extraction by hydraulic fracking in Michigan until our laws and regulations are updated to protect water quality and to require public disclosure of chemical use and public participation in the permitting process. On Nov. 3, 2011 three bills (HB 5149, HB 5150, HB 5151) were introduced to protect us from the dangers of fracking. Unfortunately, all three bills have been stalled, without even a hearing, in the Energy and Technology Committee of which Representative Ed McBroom (who is the UP's only representative on this committee) is a member.

Zoning laws are enacted at the local township or city level to reflect and respect the needs of residents with the expectation that zoning will protect their property values and other values. If you purchase a home near a school it is obvious you can expect to hear children, but if you buy a home in a quiet area zoned residential, you should have confidence that a commercial operation will not be allowed on your neighboring property. In 2010, the Michigan Supreme Court ruled that townships can restrict where gravel pits are dug. However, we are no longer secure.

Act 113 introduced by State Representative Matt Huuki and with support from Representative McBroom and State Senator Tom Casperson, was signed into law July 20, 2011. Act 113 essentially removed the protection of local zoning. It states, "An ordinance shall not prevent the extraction, by mining, of valuable natural resources from any property unless very serious consequences would result from the extraction of those natural resources." The law does not just allow gravel pits, it states, "A

county or township shall not regulate or control the drilling, completion, or operation of oil or gas wells or other wells drilled for oil or gas exploration purposes." The sounds of nature you hear from your backyard one day, can now be replaced by the sound of crushers and gravel trucks thanks to the efforts of Huuki, McBroom, Casperson, their allies, and their funders from within and outside our region.

You may have heard that SB 248, "The Land Cap Bill", introduced by Senator Tom Casperson, has passed the Senate and is pending with the House Committee on Natural Resources, Tourism, and Recreation. If passed by the House and signed into law, it will cap the amount of land the state can own at 4.65 million acres, essentially forcing the state to sell off an equal amount of our public recreation land before it can purchase any additional land for our public use.

The assaults on our environment have escalated at the federal level as well. Congressman Dan Benishek continues to criticize EPA rules that will reduce the amount of mercury spewed by coal plants, the primary source of mercury pollution in Michigan. Benishek is putting our Great Lakes at risk. He voted against HR 3408, a Democratic motion to bar oil and natural gas drilling within five miles of the Great Lakes, including Lake Superior. He also took the lead on measures to continue allowing out-dated ferries on Lake Michigan to dump toxic fly ash containing heavy metals into the lake.

Congressman Benishek sponsored and voted for HR 4089, the "Sportsmen's Heritage Act" of 2012. HR 4089 has passed the House and its companion bill S 2066, has been introduced in the Senate and referred to committee. If enacted, it may open more than 109 million acres of wilderness areas, including the McCormick Tract and Sylvania Wilderness, to motor vehicle use, effectively eliminate the president's ability to designate any new national monuments and potentially open our wilderness areas to oil and gas drilling, logging, and mining.

Each year hundreds of thousands of people seek the Upper Peninsula for quality access to public lands while residents can enjoy our great outdoors every day. Whether you are a hiker, biker, camper, hunter, birdwatcher or angler, we have all benefited from the conservation of our public lands.

We have competing visions for the future of the Upper Peninsula, and we must ask ourselves what we truly desire. I propose that the long-term social, political, and economic security of our region depends on prudent, responsible, and appreciative stewardship of its natural features and environmental integrity. For the sake of future generations and to ensure they have the same benefits we have enjoyed, it is our duty to vote for the environment in the primary elections this August and in November.

Become informed, challenge elected officials and candidates, tell them you care about the legacy we leave. Get involved, write letters to the editor, talk with your neighbors, and participate in the processes available to you as citizens. To stay informed, sign up for legislative alerts at [http://www.legislature.mi.gov/\(S\(a51k0qytonvqx2n20tmp5iue\)\)/mileg.aspx?page=lists erverSignup](http://www.legislature.mi.gov/(S(a51k0qytonvqx2n20tmp5iue))/mileg.aspx?page=lists erverSignup) *And remember to vote!*

Abandoned mines provide vital bat habitat as species battles effects of White Nose Syndrome

Will UP become last bastion for flying insectivores?

By Suzanne Van Dam

On a gray March morning, Dr. Allen Kurta, a wildlife biologist from Eastern Michigan University, stands outside a former iron mine in Vulcan, Michigan. He and his “bat squad,” including Steve Smith, a caver from Iron Mountain, and Bill Scullon, a DNR field biologist, are here to survey hibernating bat populations. They hope to learn as much about these bats as possible, “before they are all gone,” as Kurta says.

An estimated six million bats have died in North America from a terrible disease called “White Nose Syndrome,” caused by *Geomyces destructans*, a cold-loving fungus that weakens and eventually kills bats while they hibernate. With no known way to eradicate the fungus without harming the hosts, scientists are calling this the most significant wildlife calamity in recent history—more important than the extinction of the passenger pigeon or the decline in American bison, as the disease wreaks havoc on an entire ecological niche: predators of night-flying insects.

The fungus destroys its host in a uniquely cruel way. It grows on live skin located on the tail membrane, wings, and nose, frequently producing a white muzzle. Researchers believe that *destructans* does not kill the bats outright; instead it acts as an irritant, rousing the animals frequently from their normal state of torpor and burning up critically-needed energy reserves so that they slowly starve before spring comes. It may also interfere with bats’ ability to fly, as it eats into their wings.

Furthermore, the disease is easily transmittable: from bat-to-bat contact during roosting, mating or hibernating, and from human-to-bat when people inadvertently carry the spores into the bats’ environment. (Humans, however, cannot contract the disease from bats). New research has confirmed scientists’ hunch that the disease originated in cave-dwelling bats in Europe. Most likely, *destructans* crossed the Atlantic on a caver’s boot soles or clothing.

Since it first appeared in a cave in New York in 2006, the disease has spread as far north as Ontario, to as far south as Alabama, but it hasn’t reached Michigan yet. This is significant because Michigan may be crucial to bats’ survival in North America. The state offers everything bats need: a robust insect population for food, vast forest cover for summer roosting, and miles of underground mine networks for winter hibernation. The UP is especially critical, for, according to a 2012 study, 91 percent of all hibernating bats in Michigan are found in only 79 mines, most of which are in the UP. As Al Hicks, the former mammal specialist for New York’s endangered species program, ex-

plains, “There’s hostile habitat out west pushing from one side and the disease pushing from the other, so Michigan is it. It’s their last stand.”

The odds are daunting that Michigan bats will be able to hold out against the fungus. Mortality rates where White Nose has shown up have been staggering—as high as 96 percent in some eastern states. Is the remaining four percent somehow immune? Bill Scullon from Michigan’s DNR gives a sobering answer. “When we talk about a 96 percent die-off rate and a survivor’s population of four percent, we have to ask if it’s four percent because they’re resistant, or just because they got lucky.” Kurta puts the rate further into context, stating, “Bats are highly social animals. If you don’t have your buddies to cuddle up with in the summer, there are going to be other impacts. We aren’t even sure if the surviving population would be genetically viable.”

What does Michigan stand to lose if we lose our bats?

The nine species of bats in Michigan are all insectivores, consuming literally tons of moths, beetles, flies, and other insects each year, including those harmful to farmers and foresters. According to a 2011 Science article by Justin G. Boyles, et al., “The loss of bats in North America could lead to agricultural losses estimated at more than \$3.7 billion/year.” The authors add, “Urgent efforts are needed to educate the public and policy-makers about the ecological and economic impor-

tance of insectivorous bats and to provide practical conservation solutions.” Unfortunately, the most likely fix in the absence of these natural predators will be increased pesticide use, which would cost farmers more money and potentially raise food prices. It could also trigger ripple effects through the food chain, as chemical run-off from farms, orchards and tree nurseries increases.

If *destructans* spreads even further, there will be a pro-



Wildlife biologist Allen Kurta from Eastern Michigan University has been surveying UP bats which so far remain unaffected by White Nose Syndrome that has decimated bat populations elsewhere.

Photos by Suzanne Van Dam

found spiritual loss, as the summer evenings now abuzz with bats dipping and diving become eerily empty. Bats lost habitat when we felled trees in our desire to extract metals from the earth, but they found a way to adapt, even to thrive, in the very mines that we abandoned once the money stopped rolling in. The vast network of underground tunnels that historically provided bats a safe haven may now become the source of their demise; the dark, cool environment in the mines also provides the perfect growing conditions for the disease that kills them. Soon these amazing creatures that fly in the dark, use echolocation to find their food, sometimes consuming as much as 125% of their body weight in insects in a single night—soon these mammals who bear live young and hang upside down,

together, in colonies by the thousands—soon, perhaps in our lifetime, these remarkable animals may go extinct because of our unnatural relationship with the natural world.

Where We Stand

Researchers believe the first places in Michigan that White Nose will be found are in caves, rather than in mines. Bear Cave (a popular tourist attraction) is near contaminated sites in Indiana. Closer to home is the Hendrie River Water Cave, located in the eastern UP near Trout Lake, across Lake Superior from an infected site in Ontario. Michigan doesn’t require visitors to tourist mines or caves to observe any type of decontamination protocol, such as disinfecting gear, clothing, or shoes used in other underground sites. In contrast, Wisconsin has declared White Nose an invasive species, and this status requires stricter underground protocol and tougher regulations. With no feasible cure on the horizon, the best thing we can do is to prevent the disease from entering Michigan and slow its spread once it’s here.

Why the UP Mines?

Despite the negative impacts of mining, it did create one amazing byproduct: habitat. The subterranean passages provide everything bats need to make it through the long UP winters. Constant air temperatures of 40-50 degrees allow bats to relax into an energy-conserving state of torpor, water trickling through the fissures provides the ambient moisture needed to prevent desiccation, and rough-hewn rock ceilings provide the perfect toe-hold for these upside-down sleepers. Even the remnants of drill holes originally intended to hold sticks of dynamite now cradle as many as 18 Little Brown bats, who share warmth and companionship.

What You Can Do!

- Write your legislators, urging greater protection of bats in Michigan. State agencies can hire more staff to help monitor the disease and conduct studies. They can also fund more bat-friendly gates, which keep humans from falling or sneaking in to abandoned mines, but allow bats free access.
- Stay out of mines during winter hibernating season to prevent arousal.
- Follow U.S. Fish & Wildlife Service decontamination guidelines and take care not to bring equipment or clothing from one underground site to another. Visit www.fws.gov/WhiteNoseSyndrome/cavers.html for more information.
- Report unusual behavior to the DNR, including bats flying during the daytime in winter, bats having difficulty flying, or large numbers of dead or dying bats, especially at mine entrances. See www.michigan.gov/emergingdiseases for details.
- Donate to Bat Conservation International at www.batcon.org