THE RACE IS ON: MINING ACTIVITIES RAMP UP
See page 6

THE HOWL

NEW GRANT OPPORTUNITY FOR LAND PURCHASE
See page 7

Fall/Winter 2023

www.yellowdogwatershed.org

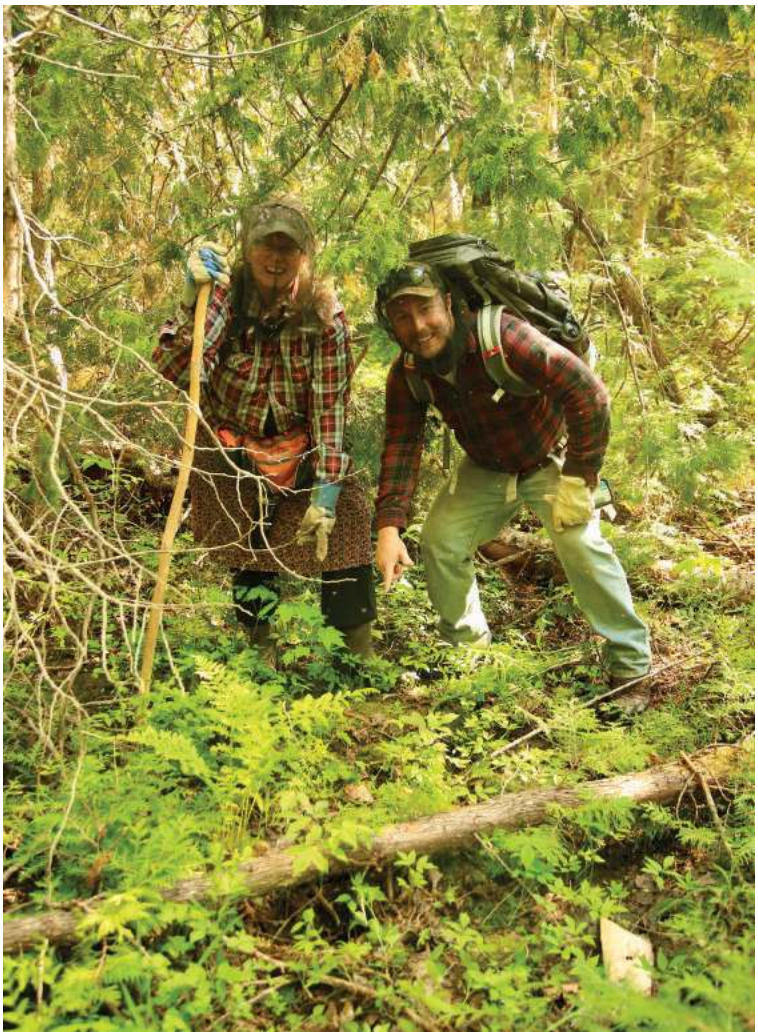
Bi-annual Newsletter
Volume 27, Issue 2

Preserving the Yellow Dog Watershed in its most natural state for the use of the public, now, and for the benefit of future generations.

WORK ON THE BENTLEY TRAIL IN HONOR OF DICK BENTLEY (1937-2022)

By Kathleen M. Heideman, YDWP member

Howl readers may recall that in October 2022, working in a couple feet of snow, YDWP supporter Mike Finlay and I located and cleared sections of the Bentley Trail in the Mudjekewis Wildlife Refuge. In some places, we found tangled piles of fallen trees that needed to be cut – more than we could tackle alone, in the snow – so we carefully marked the buried sections with biodegradable ribbons and made plans to return in the spring.



The author and volunteer Wade Saari on Bentley Trail corduroy. Photo by Chauncey Moran.

This year's work on the Trail took on increased gravity when we were tasked with sprinkling some of the ashes of Richard N. Bentley (1937-2022) in the waters of the eponymous Bentley Lake. Dick, as he was known, was a friend of Fred Rydholm and grandson of Cyrus Bentley, the same Bentley who once hiked these wetlands with Christ Andersen, establishing the Trail route in 1914 and for whom both Bentley Lake and Bentley Pond are named.

Over the past winter, while we strolled along the Trail in our dreams, ice storms and winds pounded the Huron Mountains and Michigamme Highlands. When snow finally melted, it was clear that the Bentley Trail would not be our only concern: trees blocked roads and trails all over Marquette County. The camp road into Mudjekewis was blocked by dozens of storm-snapped jack pines, and fallen trees needed to be cleared around the historic buildings.

What followed were momentous days of trail-clearing and camaraderie. To be honest, it blurs together now. I walked into camp only to find that a fallen tree blocked the outhouse door. I cut wood, opened up the cabin, and prepared to host our volunteers. When they arrived, via the Pesheekee Grade, Bentley Trail enthusiasts Wade Saari and Dan Vrieland cut their way down the camp road, toward me, as I cut my way toward them. After that, vehicles could reach the camp buildings. Mike soon arrived from Wisconsin, and YDWP Board members Kristi Mills and Jan Zender would join us shortly.

After clearing the road and parking area, we slowly beavered our way south through several major logjams blocking the Bentley Trail. Finding the swamp full of meltwater, we turned back shy of Bentley Lake. With still-enthusiastic spirits and muscles, we decided to tackle the Bentley Trail from the other side – one of those "lost sections" of trail, well-remembered only by moose. We headed for the Christ Andersen Headwaters – only to find ourselves on another two-track choked with fallen trees. Undaunted, we pushed on. Progress was stop-and-go, like rush hour on a clogged freeway. Dan, Wade, and Mike used chainsaws and loppers to cut the route; the rest of us dragged cut branches off into the woods. At last, we reached the area where we believed the Bentley Trail crossed the road.

Before we could follow the trail, though, we'd have to find it. Dan, Wade, and Mike threw themselves into the search, dispersing and disappearing from view. Having slogged around the swamp by myself, in vain I feared, we'd need to navigate by compass to reach Bentley Lake. With a head-net full of mosquitoes, I tripped and wrenched my hip. Jan and I tied some blazing ribbons around a few trees without much certainty if we were on the right trail. After a long day of tree-clearing, energy levels sagged. Suddenly joyful hoots and howls came from the swamp: "TRAIL!" The guys found a series of logs lying parallel: "Corduroy!"

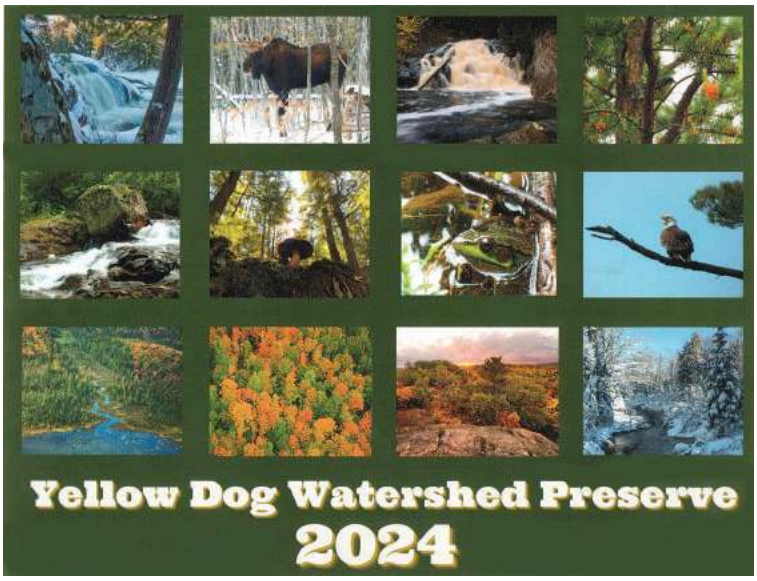
(continued on page 4)

2024 YELLOW DOG CALENDARS: GET 'EM WHILE THEY LAST!

Share the gift of the Yellow Dog this season! Sales of our 2024 calendar, designed by board member Jacklyn Lenten and featuring photographs taken in the watershed by YDWP members, have been brisk. Great Christmas gifts for nature lovers, calendars are available at our online store and the following Marquette businesses: Down Wind Sports, Superior Outfitters, The Gallery, and Park Chiropractic, P.C. Proceeds support our education and outreach programs.

Online orders must be received by December 16 to be delivered before Christmas.

Board members Jacklyn Lenten and Roy Sarosik, promoting the 2024 YDWP calendar in July at the Outback Art Festival in Marquette. Photo by Kristi Mills.



Directors & Officers

Chauncey Moran, *Chairperson*
Jan Zender, *Vice Chair*
Kristi Mills, *Secretary*
Lynn Roovers, *Treasurer*
Kathy Binoniemi, *Director*
Jay Johnson, *Director*
Jacklyn Lenten, *Director*
Dan Rydholm, *Director*
Roy Sarosik, *Director*

Staff

Rochelle Dale, *Administrator*
Sarah Heuer, *Programs Coordinator*
Brian Noell, *Administrative Assistant*

A FLURRY OF ACTIVITY AT YDWP'S TWENTY-EIGHTH ANNUAL MEETING

By Brian Noell, Administrative Assistant

This year's YDWP annual meeting on Saturday, October 28, was action-packed. The day began with a well-attended hike up the Breakfast Roll, whose trailhead lies within the boundaries of the Huron Mountain Club. Around 30 of us ascended cautiously through a dusting of snow to the rocky summit, an outcrop with expansive 360-degree views. It is a rare treat to peer out over the lakes and peaks of the Huron Mountains, with Lake Superior, the Huron Islands, and the Keweenaw Peninsula in the distance. Although one accesses the trailhead by passing through the gate of the Huron Mountain Club, the summit itself is on private land. Our thanks go out both to the Club and to the landowners, without whose permission we would not have been able to lead our group of fortunate hikers on this expedition.

The meeting itself was held at the Thunder Bay Inn in Big Bay, where YDWP board and staff shared a potluck dinner with hikers, members, and supporters. The live auction, presided over by the Thunder Bay Inn's owner, Mark Bevins, was animated and netted nearly $1,100 for our education and outreach programs. We extend our gratitude to all those who pitched in to make the event a success! The annual meeting capped a year in which YDWP returned with gusto to community work. It feels good, with the pandemic behind us, to be doing more education and outreach, which not only builds good will, but gives us a chance to share our knowledge and enthusiasm about the watershed with audiences of all ages.

Expedition leader Kristi Mills and hikers on the summit of Breakfast Roll, October 28, 2023. Photo by Mike Springer.

Our youngest Bioblitz volunteer snapped this picture of a pink lady's slipper (*Cypripedium acaule*) blooming in the Community Forest. Photo by Florence Zender.

FROM THE CHAIR

By Chauncey Moran, Chairman of the Board

Blessings to all who read these words, that they may find it within their hearts to recognize stewardship as not only a belief, but a mandate to preserve for future generations. The Yellow Dog Watershed has as its central principle to keep the Yellow Dog River Watershed in its most natural state for future generations. Therefore, the word "Preserve" was included in our organization's name by its founders. This continues to be a primary focus for us today, not only to respect the natural course of the four seasons, but also to recognize and address land use activities that are deleterious to water quality as well as to the trees and plants growing along and sustaining the banks of the river.

Over the past 28 years, YDWP has monitored activity in the watershed, acquired land to retain access for public recreation, enhanced water quality, reached out to townships to improve bank protection through zoning, presented educational projects at schools, sponsored events such as Bioblitz and trout fishing workshops, maintained foot trails, and more. You will find written and visual records of these activities in this and other editions of the *Howl* newsletter.

It should be noted that the YDWP board members do not receive monetary compensation for fulfilling their duties, and while the staff are paid for their work, it is not equal to the amount of dedicated work they do; they and the board are driven by the desire to preserve and protect the watershed and the places we love.

We also are truly grateful for all our many partners and members, who have helped us accomplish our goals over the years. If you have assisted us through your contributions, purchase of YDWP merchandise, attendance at events, or volunteer work, we thank you for supporting the YDWP vision to bequeath a healthy watershed to the next seven generations and beyond.

Hope to see you on the river or in the snow this winter!

WORK ON THE BENTLEY TRAIL

(continued from page 1)

It was no mean accomplishment to discover this section of the Bentley Trail. Fred Rydholm himself had a terrible time trying to find it in that swamp, and he was hunting for it with none other than Christ Andersen, who had built and maintained the trail decades earlier. Fred told the story in a public appearance, captured on film and available on YouTube (tinyurl.com/Bentley-swamp):

> When I first got a hold of Christ (Andersen)…I told him I was trying to find the Bentley Trail, and I had found (almost) all of it, but I couldn't find it through the swamp, and he and Matt Leff – Matt Leff was an old blacksmith who worked in a lot of the lumber camps around – he and Christ came out with me, and they wallowed around in the swamp for days, crawling around, and Christ would go down to his elbow in the muck and he'd come up with a spike. We're right in the middle of the Bentley Trail, he'd say. We found it all the way across.

To clarify the vicinity of our labors, the aerial photo at right by Chauncey Moran illustrates the wide Andersen Headwater wetlands (pale green) feed into Bentley Lake, which in turn feeds the Yellow Dog River (not seen in the photo). In the upper right corner, the Triple A Road and Andersen Corner are visible, as well as the sandy two-track we cleared to reach Andersen Headwaters. The dark green patches below Bentley Lake are islands of high ground hidden within the swamp, covered by white pines. The "corduroy" section of the Bentley Trail crosses the bottom of the photo, the route we followed crossing from left to right.

The discovery of corduroy lifted everyone's spirits, and we returned to the cabins for a dip in the adjacent Bentley Pond, appetizers, drinks, and dinner. The crew stayed up chatting late into the night.

The next day, we met up with Chauncey and Nancy Moran, and followed the corduroy toward Bentley Lake. Sore from the previous day's efforts, we left our chainsaws in the truck. We picked our way down the trail (a sort of sidewalk made of chunks of cedar), hand-sawing branches and finding blazed trees on both sides, flagging as we went. We crossed standing water on logs, some of which were probably adze-flattened on top, now moss-covered. We lost the trail, found it, lost it, found it again. At last, climbing an island of white pine, we saw Bentley Lake brimming below.

Bentley Lake, June, 2023, view to the north. Photo by Chauncey Moran.

Remembering the Bentley Trail

Kathleen's article on the Bentley Trail (fall 2022 *Howl*) really took me back – to the 1970s – when Fred took a group of us from a Community Schools' Marquette County History class on a 2-day walk on the Bentley Trail – from the entrance to the McCormick Tract to an overnight at his cabin (where we fell asleep on his floor still listening to his stories), and on to the Huron Mountain Club…. his stories among the mosquitoes, the rainstorm (after Fred's assurance that we wouldn't need raingear), the boards across the swamp which disappeared when you stepped on them, the last creek bridge into the Club, where Fred reached under and pulled up a beaver by the tail (!)… the trail was fading even then, but Fred had no problem with that, he carried an axe and blazed a new passage! Thanks for taking me back!

-Lynn Emerick, YDWP member

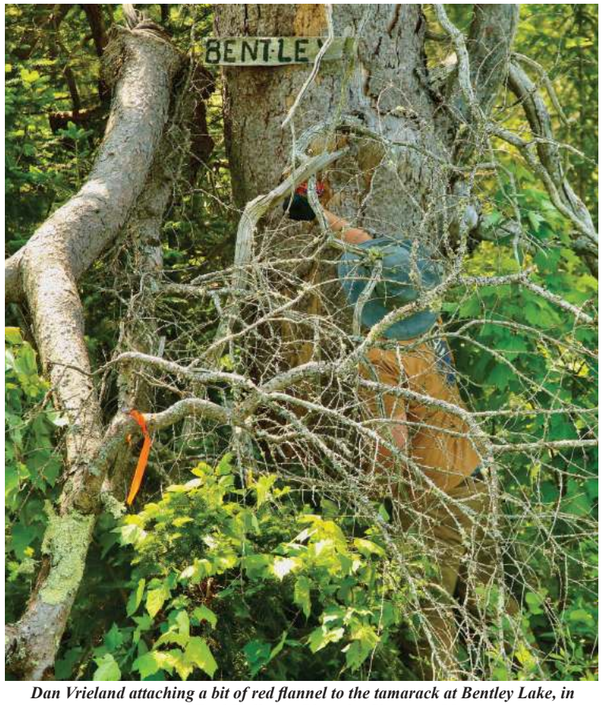
We bushwhacked along the beaver-razed shore until we found an old tamarack snag, still holding – barely – its weathered, hand-painted sign: "Bentley."

At Bentley Lake, we held our heartfelt ceremony for Dick Bentley. We laid down tobacco and blessings, shared poetry, and released Bentley's ashes to the lake. The memorial service recharged our spirits, and we continued hiking, skirting the lake, pushing through tangles of tag alder toward the section we'd cleared previously. Part compass, part blazes, a few muddy moose-paths, and voila: we easily reconnected with the Bentley Trail after leaving the alder maze. We kept hiking until we reached the cabin once again!

"It's an impressive amount of swamp we covered," wrote Mike Finley. "Doing the thru hike was unbelievable! And certainly our time at Bentley Lake will not be forgotten. Can't wait to get back on the search for the trail."

Volunteer Wade Saari reflected, "What a proud few days spent finding and working on the Bentley Trail, and what an honor to have been there for Dick Bentley's celebration of life. Thanks for having us along on this journey. It's been one of the most rewarding experiences of my life thus far. Humbling to know we've made the progress we did so far; yet the best is to come!"

Wade Saari's shadow as he releases Dick Bentley's ashes into Bentley Lake. Photo by Chauncey Moran.



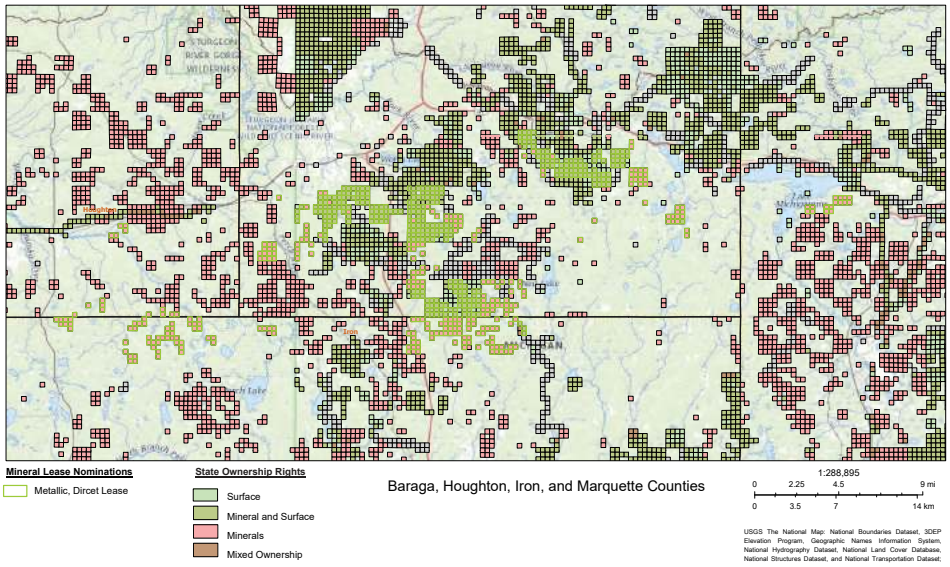
Dan Vrieland attaching a bit of red flannel to the tamarack at Bentley Lake, in memory of Fred Rydholm. Photo by Chauncey Moran.

THE RACE IS ON: WITH FEDERAL HELP, MINING COMPANIES RUSH TO EXPLOIT NICKEL DEPOSITS IN THE UP

By Rochelle Dale, Administrator, and Brian Noell

Two mining companies are using (or hoping to use) federal assistance to facilitate extraction of the Western UP's untapped rare earth metal deposits, identified by the Biden administration as critical to the "clean energy" economy. While Eagle Mine angles to extend its useful life and exploit additional deposits of nickel, Talon is seeking state approval to explore for minerals on hundreds of thousands of acres in the Western UP, including in the Yellow Dog Watershed. This new push has been enabled by a series of federal actions benefiting mining interests. President Biden has declared nickel to be a "critical mineral of national importance" and, in 2022, invoked the Defense Production Act to increase the domestic production of this metal, crucial to the production of high-temperature aerospace alloys, stainless steel, and chemicals for lithium-ion batteries for electric vehicles.

Talon Michigan LLC, Direct Metallic Minerals Lease Requested Parcels



Michigan DNR map of parcels in the proposed Talon lease for mineral exploration. Visit https://www.michigan.gov/dnr/managing-resources/minerals/metallic for more information on this and other recent lease requests in the Western UP.

At a community forum in Big Bay on November 7, Eagle representatives updated attendees about new activities and developments at the mine and at the Humboldt Mill. As we know from the last forum, the original Eagle deposit has been depleted. However, Eagle East still holds valuable ore, and development of a new deposit, Eagle Upper East, has begun. If nickel prices continue to remain stable, Eagle now predicts that the life of the mine may extend to 2029. At the same time, they continue to search for deposit veins from Eagle East and other minable deposits from Upper East. These finds could extend the mine's life even longer, especially considering the funding possibilities available from the Inflation Reduction Act of 2022, designed to secure domestic supplies of critical minerals.

Eagle says they will apply for federal funding under this act to expand facilities at the Humboldt Mill. Currently, they are submitting an air quality permit for a dewatering facility. The process would remove Pyrrhotite from the tailings. Pyrrhotite prevents the tailings from hardening, but once removed, Eagle claims the tailings can be mixed with hardening materials and safely put back into the mine instead of rocks purchased from outside sources for that purpose. In addition, Pyrrhotite may become an important component for electric vehicles. More tests will need to be performed to verify the safety of such a procedure, and two other permits will still be required before they can move forward.

Meanwhile, Talon Metals is ramping up its capacity both in Michigan's Upper Peninsula and further west. In September 2023, the US Department of Defense entered an agreement with Talon, providing $20.6 million to speed exploration and exploitation of deposits at their flagship mine in Tamarack, Minnesota. In November Talon secured an additional $114.8 million from the Department of Energy, made possible by the 2021 Bipartisan Infrastructure Act, for a battery minerals processing facility to be built in Mercer County, North Dakota. In recent days it has touted additional mineral deposits discovered outside the Tamarack complex, suggesting the possibilities for expansion there. Here in the UP, Talon entered into an option agreement with UPX Minerals in August 2022 for an 80% share in the mineral rights on around 400,000 acres in Marquette, Baraga, Houghton, and Iron County, initially owned by the Ford Motor Company, then sold to Rio Tinto (former owners of Eagle Mine) and finally to UPX. Following the public comment phase, which closed with a Zoom meeting on October 11 of this year, Talon is proceeding through the Michigan DNR permitting process to begin exploring for nickel in this vast tract of privately-owned land.

Since surface ownership and mineral rights are "severable" in Michigan, the owner of a piece of land does not necessarily possess the rights to what lies beneath. Thus, owners of land in the huge swath targeted by Talon are sure to be impacted if viable nickel deposits are discovered on their properties. Although the DNR is no longer accepting public input on the matter, there is still something landowners in the affected areas can do. We urge all those who own property in the region to visit their county registrar of deeds to investigate who owns mineral rights on their parcels, and, if they remain unclaimed, to file documentation to claim them before mining companies do.

YDWP APPLIES FOR GRANT TO PURCHASE EXTRAORDINARY 200-ACRE WETLAND

By Rochelle Dale and Brian Noell

The words "preservation," "conservation," and "protection," are so closely related that one may think them interchangeable. "Preservation," though, has the nuance of continuation, keeping something as it is. "Conservation" may infer upkeep and management, while "protection" carries the ultimate meaning of security, shelter, and defense.

2023 brought an opportunity for YDWP to preserve, conserve, and protect another 200 acres of wetland within the watershed, some contiguous with the Christ Andersen Headwaters Preserve, and some contiguous with the YDWP's Gateway to the McCormick. The value of these wetlands is not economic. From the scientific perspective, of course, they preserve water quality, sequester carbon, and serve as valuable habitat. But their worth is also in our individual experience with them: the beauty of a moose crossing a marsh, cranberries gleaming in a black spruce/tamarack bog, or a silent American bittern wading in the morning mist.

Vaccinium oxycoccos ***or bog cranberry discovered in the wetlands we hope to acquire using the NAWCA grant. Photo by Sarah Heuer.***

Gray wolf (*Canus lupus*) in Negaunee Township, Marquette County, MI. Photo by Carl R. Sams II.

YDWP staff, with the help and advice of board members and partner organizations, worked diligently for several months to apply for a federal grant for the acquisition of these wetlands. The funds are made available through the North American Wetlands Conservation Act (NAWCA), whose intent is to protect migratory bird species dependent on wetlands for breeding, feeding, and shelter. However, the US Fish and Wildlife Service, which administers the grant, is also concerned about other endangered or threatened species on the federal list, as well as "species of greatest conservation need" found in individual state wildlife action plans. Moose are included in Michigan's plan, as are little brown bats, spruce grouse, northern harriers, and black-backed woodpeckers, all of which are found on the parcels we hope to acquire.

While we believe we have a strong application, we also know there will be stiff competition from worthy projects all over the country, as well as in Canada and Mexico. We should learn in February if we will receive the NAWCA grant. If we are not funded, we will continue to work to make the conservation of this valuable habitat a reality. The grant writing process has yielded strong relationships with our partners. For example, the Laughing Whitefish Chapter of the National Audubon Society helped us to identify species on the parcels and has expressed interest in making further contributions to our project should the opportunity arise. The American Bird Conservancy and the Upper Mississippi/Great Lakes Joint Venture also have been supportive, making suggestions on our proposal and alerting us to other potential sources of funding. Finally, we are grateful to the current landowner for their flexibility, as well as for working with us to improve the grant proposal itself. In whatever way it comes to pass, we are committed to preserving, conserving, and protecting these habitats of incomparable value, creating a virtually unbroken corridor of preserved land stretching from the McCormick Wilderness Area to the Mudjekewis Wildlife Preserve.

ENGANGERED SPECIES ACT TURNS 50

By Rochelle Dale and Brian Noell

On December 28, 2023 the Endangered Species Act (ESA) will celebrate its fiftieth anniversary. Signed into law by President Richard Nixon in 1973, the Act has saved hundreds of animal species from extinction: grizzlies, gray wolves, and bald eagles being just a few notable successes. The intent of the ESA was and is "to prevent the loss or harm of endangered and threatened species and to preserve the places they live." And to this point, ESA has been effective in preserving 99% of the species it protects.

YDWP had the opportunity this fall to observe the enduring power of the ESA, applying for a grant to aid with the purchase and conservation of 200 acres of wetland habitat on the Yellow Dog Plains (see article above). Administered by the US Fish and Wildlife Service using funds allocated from the North American Wetlands Conservation Act (NAWCA) of 1989, the grant application bears the indelible mark of the ESA. The much-cited federal endangered and threatened species list created under ESA auspices is echoed in corresponding lists compiled at the state level as well as among quasi-governmental organizations and conservation non-profits. Using the federal and supplementary lists of species in need of conservation support, readers of NAWCA grants assess the merits of each application.

Whatever the outcome of our own NAWCA application, thanks to the research into threatened and endangered species done on all levels using the federal model developed as a result of the ESA, these funds doubtless will be distributed to worthy conservation projects. While the ESA has been an incredible success, the wildlife it seeks to preserve will face grave challenges in years to come as habitat loss, invasive species, and climate change continue to wreak havoc on ecosystems. It will take the effort and intention of us all to ensure that the ESA continues its remarkable record of success over the next 50 years.

BACK IN THE DAY: THE LEGACY OF ALDO LEOPOLD

By Rochelle Dale

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. . . That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known, but latterly often forgotten.
***Aldo Leopold*, A Sand County Almanac**

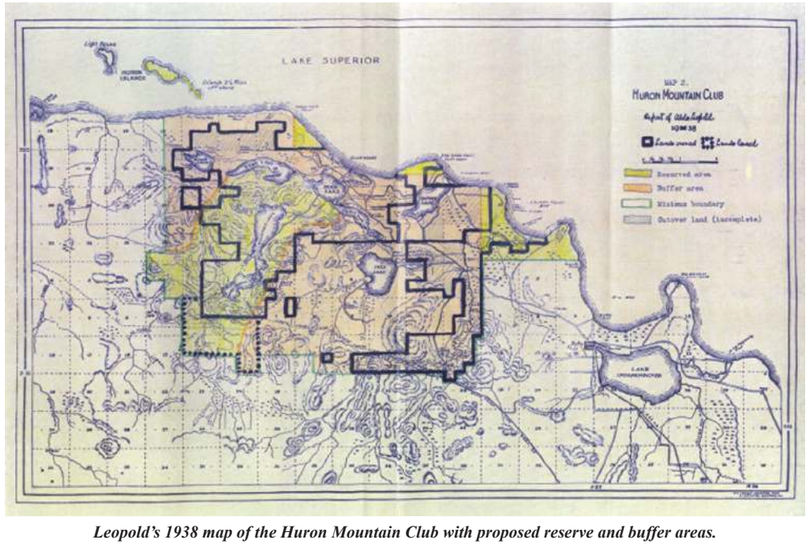
Leopold in the Huron Mountain Club, 1938.

I have been acquainted with Aldo Leopold's work for many years, but it was Leopold the nature writer that I knew. However, he was much more than that; he was a philosopher and a scientist, an ecologist and a forester, a conservationist, and an environmentalist. Leopold was born in 1887 in Iowa, graduated from Yale University School of Forestry in 1909, and began his professional career with the US Forest Service upon receiving his degree. Through his childhood experiences in the outdoors, cataloguing and observing wildlife, and with studies conducted as an adult, Leopold developed some of the first theories of environmental ethics and wilderness conservation. He is considered the founder of wildlife management.

Not long ago and much to my surprise, I learned that Leopold had visited and created a land management plan for the Huron Mountain Club in 1938. At that time, Leopold was Professor of Game Management in the Agricultural Economics Department of the University of Wisconsin-Madison and an influential voice in the budding science of ecology. HMC sought him out, looking for advice on how to "manage the area in order to make the best use of [their] forests for silviculture, wild life and the unique aesthetic values which the place offers."

Leopold was excited about the Club's proposal. First, he studied the history of the area, and then visited in person in June of 1938 and again in August of the same year. This project was a perfect fit for Leopold. He understood the interconnectedness of all living things, understood the need for wilderness and all things wild, including wolves and otters which the Club, up to that time, had thought should be eliminated.

Leopold's 29-page *Report on Huron Mountain Club* was prefaced with these words: "All earth-sciences must, in the long run, learn how to use land by referring to unused land as a base-datum or starting point. Whoever owns such land will one day find it in demand for scientific investigations… The Club has not only a unique property, but a large opportunity for public service in science and conservation." For the time, his plan was innovative and groundbreaking. In the words of David Flaspohler and Curt Meine,



Leopold's 1938 map of the Huron Mountain Club with proposed reserve and buffer areas. Both images on this page reprinted from Flaspohler and Meine, "Planning for Wilderness: Aldo Leopold's Report on Huron Mountain Club".* Journal of Forestry *January/February 2006, 32-42.

"His report stands out as an early example of long-term, large-scale, integrated planning for ecosystem sustainability." The Huron Mountain Club did indeed adopt Leopold's land management plan and then worked with the US Forest Service in the early 1940s to implement many of his recommendations.

Leopold's legacy lives on in Big Bay even today. Mark Bevins, current owner of the Historic Thunder Bay Inn, enthusiastically explained to me one day how Leopold had been his hero, how Mark's father, Earl Bevins, who has been teaching hunter's safety since the 1950s, had always used Leopold's work as the standard for hunter ethics and wildlife management.

Specifically, Leopold set the bar for what became known as fair chase ideals, which means ensuring that wildlife have an equal chance with the solitary hunter. Rules were set in place so that massacres like what happened to the buffalo in the East and the West, would not happen again. Wildlife population studies were designed to determine the carrying capacity of certain geographical areas. Bag limits were introduced to create consistency in the various wildlife populations.

Leopold himself learned many of these lessons as a child from his father and then from his many experiences in the wild. He was given his first single barreled shotgun at an early age with permission to hunt rabbits. He was also told that he could hunt partridges with it, but that he could not shoot them out of a tree; instead, his father told him he was old enough to learn wing-shooting. To fire at the partridge as it flew gave the bird a much better chance at survival.

Leopold credits those early years of wondering the woods alone, hunting and learning the ways of nature, as the source of his lifelong appreciation of wilderness. In *A Sand County Almanac* Leopold tells of shooting his first partridge in flight, "It was a swinging shot of the sort the partridge hunter dreams about. . . I could draw a map toady of each clump of red bunch berry and each blue aster that adorned the mossy spot where he lay, my first partridge on the wing. I suspect my present affection for bunchberries and asters dates from that moment."

Leopold spent most of his young life outdoors, climbing cliffs, cataloging birds, studying plants, and yes, hunting, but hunting with the scientist's and or the writer's obsession for observation and keen eye for details, habits he maintained throughout his life, which allowed him to learn the intricacies of wildlife, plants, and birds and which provided the knowledge to formulate his theories on conservation, wildlife, and land management and the interconnectedness of all.

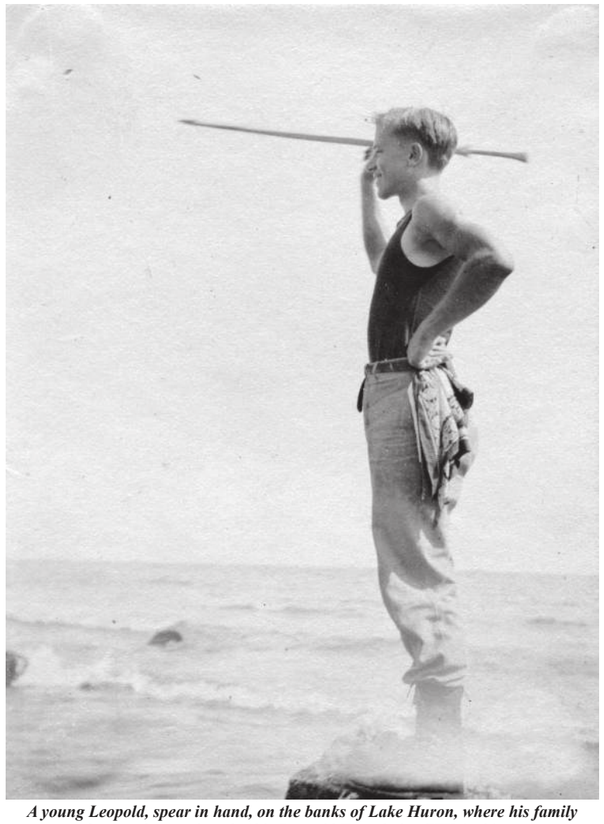
Near his Baraboo shack in 1946, weighing specimens after a woodcock hunt. Courtesy Aldo Leopold Foundation and University of Wisconsin-Madison Archives.

By 1934, Leopold had become a member of the President's Committee on Wild-Life Restoration, which then presented to Franklin Roosevelt a national plan. The report offered critical evidence of the decline in wildlife and offered various solutions. The committee's recommendation that an 11% federal tax on arms and ammunition be used for conservation funding (an idea Leopold had first suggested in 1930) became the foundation of the Pittman-Robertson Act. Since its signing into law in September of 1937, the Pittman-Robertson Act has generated over $19 billion in conservation funding for state and territorial wildlife agencies and has become one of the most successful pieces of U.S. conservation legislation.

Leopold's influence also dwells among his readership, which remains strong almost 75 years since the publication of his posthumously published final work. I recently returned to *A Sand County Almanac* and was awed by the sensitivity and gentleness of "Marshland Elegy", the raw honesty of "Thinking Like a Mountain" and inspired by his unabashed insistence that conservation cannot depend on economic value. There is an aesthetic value and an intrinsic value in all living things, and all relate to one another to make our lands and our lives healthy or not.

In the mid 1800s, Henry David Thoreau claimed, "In wilderness is the salvation of the world." 60-some years later, Leopold responded to Thoreau's dictum, "Perhaps this is the hidden meaning in the howl of the wolf, long known among mountains, but seldom perceived among men."

Aldo Leopold died of a sudden heart attack in 1948 while helping a neighbor battle a wildfire. His work lives on, but it will be up to all of us to continue upholding those ideals and passing them on to future generations.

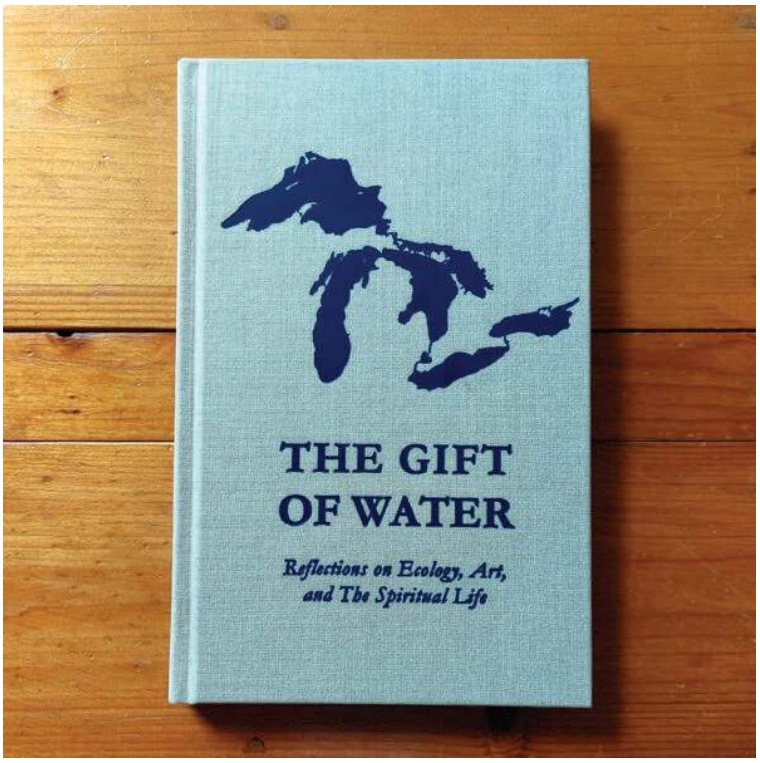


A young Leopold, spear in hand, on the banks of Lake Huron, where his family frequently vacationed. Aldo Leopold Foundation/UW Archives.

NEW BOOK CAPTURES IMPRESSIONS OF UP WRITERS ON ENVIRONMENTAL STEWARDSHIP

By Paul Lehmberg, Editor, **The Gift of Water**

This brief dispatch is to alert readers that there's a new book in town. Published locally by the Cedar Tree Institute, this slim hardcover is titled *The Gift of Water: Reflections on Ecology, Art, and the Spiritual Life*. I happen to be the editor of this collection of forty-five essays. Our collection is intended to serve as a beacon of hope. Modest in scope and positive in intent, *The Gift of Water* also celebrates the lands and waters of one far corner of North America's Great Lakes Basin, Michigan's Upper Peninsula. Our contributors are exactly who they need to be to accomplish this task. Our writers have done more than visit this remote and lovely place; all of them have lived here, many of them for decades, some for their entire lives. They know this land and its waters; they love this land and its waters.



This book also seeks to underscore some provocative questions that need to be asked and that, now, demand to be answered regarding how we will live as a global community with what remains of Earth's natural resources. The most recent research on health and environment indicates that our answers to these questions will profoundly affect our quality of life, not just for decades but for generations to come.

Our book was years in the making, and it was born from years of interfaith environmental work. In 2004, recognizing the necessity for active citizen-care of our environment, leaders of ten faith traditions in the Northern Great Lakes Basin signed what we called an EarthKeepers Covenant. Peninsula-wide, 222 churches, synagogues, temples, and communities of faith banded together in a unique collaboration with the Lake Superior Partnership, a leading regional nonprofit environmental organization. The United States Environmental Protection Agency would provide guidance and funding for what we envisioned as a variety of Peninsula-wide projects.

From 2004 through 2014, we collaborated with local Native American tribes, environmental groups, and government agencies in projects intended not only to preserve our resources but also to create a vision for better, more sustainable, and more responsible ways of living with the forests, the wildlife, and the waters of the Upper Peninsula. And we did more than envision. We also began the work—we collected and recycled over 320 tons of electronic waste; we planted 20,000 trees; we held twelve public educational forums; and we established fifteen community gardens across the Peninsula.

Our latest iteration, the Interfaith Northern Great Lakes Water Stewards Initiative I (2016–2020), grew out of that original EarthKeepers Covenant. Our focus continues to be raising public consciousness about specific issues surrounding water in the Northern Great Lakes Basin.

Initial publication of the 45 essays in *The Gift of Water* appeared over a span of six years in *Marquette Monthly* magazine. Our writers ranged in age from 19 to 94 years of age, and we came from many walks of life. We were churched and unchurched, and we included students, poets, artists, elementary school crossing guards, faith leaders, journalists, sociologists, social workers, teachers, priests, musicians, environmental activists, physicians, and volunteers and retirees of all sorts.

The resulting collection, in its entirety, represents a witness by individuals from a wide variety of backgrounds and faith-based traditions. In diverse ways and from a range of creative perspectives, these essays speak to the power and the sacred presence of water, which is the base of all life on our jeweled blue planet. The future holds formidable challenges. The bulk of evidence suggests that technology alone cannot save us. Our hope—our conviction—is that a vibrant spirituality and a deepening consciousness, along with the best of science, will.

Copies of this handsome, slim hardcover, now in its second printing, are being sold at cost, $24.50 per volume. Copies are available at the Marquette Regional History Center Gift Shop, Snowbound Books, and the Cedar Tree Institute, at http://cedartreeinstitute.org. In addition, the volume has been published as an e-book, also available at the Cedar Tree Institute website.

CEDAR TREE INSTITUTE

EXPLORING COMMUNITY FOREST FLORA AND FAUNA: BIOBLITZ II, 2023

By Sarah Heuer, Programs Coordinator

On June 17 and 18 YDWP convened a group of 20 volunteers for our first Bioblitz species survey since 2017. Over the course of 2 days, participants studied lifeforms in the varied habitats of the Yellow Dog Community Forest, amassing 463 records and identifying 227 species in total.

We categorized species into four main groups: mammals, plants (and fungi), birds, and reptiles (including amphibians and aquatic insects). YDWP staff reached out to specialists and professionals to lead each group and sought amateurs and members of the public of all ages to fill out the research teams.

Participants showed up early Saturday afternoon at the Community Forest trailhead and proceeded to the first of the preselected survey sites. Despite clouds of black flies and mosquitoes, the 5-member groups managed not to lose too much blood for the sake of science.

Our headquarters was the Zender/Dale Wilderness Retreat, 2 miles southwest of the Community Forest and less than 400 yards south of the Yellow Dog River. Following the initial foray, participants pitched camp there, and, after a dinner cooked over an open campfire, proceeded to the day's second survey site. We spent Saturday evening sharing stories of our discoveries and encounters of the day.

Sunday morning came early for the bird group, as they ambitiously rose to immerse themselves in the dawn chorus of feathered friends. They were not disappointed, said Nancy Moran, the group's leader. Although late in the spring birding season, it turned out to be a productive weekend, especially Sunday, when the most species were heard and seen, among them many fledglings. The team identified 43 unique species, up from the 2017 count. We should not infer, however, that bird populations are increasing. In fact, most are on the decline, but here along the Yellow Dog River, the variety of species and number of individuals are truly stunning.

The others sipped coffee and ate a hearty breakfast before packing up camp and heading to the third and final survey site. I was one of the leaders of the reptile group. After we had discovered plenty of green frogs and red-backed salamanders in the lowlands, I led the team to a higher location in search of larger quarry. We crossed the river to the north side, some in bare feet, and scaled a small rock outcropping. I was on a mission to see a garter snake to make our reptile list more complete, and to show our youngest participant something just as exciting as the salamanders she had marveled at down below. We had covered most of the ground on the outcropping and were coming around the east side to descend. I was starting to give up hope, and then there it was: one of the

Garter snake (*Thamnophis sirtalis*) basking in the sun. Photo by Sarah Heuer.

of the largest garter snakes I have seen in the UP, basking in the warmth of the morning sun. We snapped a couple of photographs and took a short video of it slithering away behind a rock.

Kathleen Heideman, who led the plant group (and whose article on the Bentley Trail is this edition's cover piece), had this to say about her experience:

> If there was a time-lapse video, it would show members of the Plant Team flowing swiftly from tree to tree, fern to flower, kneeling, making notes, greeting the native plant beings by name — everyone except me. I hardly moved! Having assigned myself the arbitrary task of looking only at lichens, I came prepared with magnifying glasses, a device to capture digital photos, envelopes with preprinted collection ID forms, pens, and a razor. But a single tree may have a dozen types of lichens, some large and shrubby, others barely visible! Ditto for a fleck of decaying wood! Since I am still a lichen-novice, I knew I'd need to take tiny samples, and confirm my observations after the Bioblitz finished — I imagined this might take me a few more days. In truth, it took me several more weeks: taking photos at higher levels of magnification (to review the small reproductive features), pouring over the *Lichens of North America* guide by Irwin Brodo, and checking my results against the *Huron Mountain Club's All Taxa* guide. During the Bioblitz (and in observations later in the summer), I found many lichens that prefer old-growth habitat, many lichens that are exquisitely sensitive to air pollution, and lichen-colonized outcrops with great diversity!

Another of the plant group's leaders, for his part, was surprised to find an invasive species deep in the Community Forest. Steve Garske, GLIFWC botanist, observed,

Lobaria pulmonaria, a *lichen that both prefers old growth and is pollution-sensitive.* *Photo by Kathleen Heideman.*

For site 2 (surveyed on Sunday) one of the young botanists found the introduced (and weedy) *Cynoglossum officinale*. I thought we should run it through the key in *Michigan Flora* to be sure it was this plant and not the native *C. boreale*, which is fairly rare. Even though the plant she found keyed to *C. officinale*, I couldn't believe it would show up in such a remote spot and kind of disagreed with her. I had seen this plant in Superior, WI many years ago, and totally mis-remembered what it looked like! Anyway, she was correct…It probably should be pulled before it spreads.

The mammal group identified only 9 unique species. As co-leader Jan Zender explains,

To think that we might get a mountain lion or a bear to come to our little spot in our two-day time frame is unrealistic, but we know they're there because tracks and sightings have been documented at other places, other times. On a more positive note, this indicates the amount of space that mammals need to survive and thrive. Otters, for instance, have a 50-mile territorial range, and the mountain lion range must be huge. We really can't expect they would show up when we ask. Look at how often hunters set out bait, wait, and nothing happens.

*Track of a gray wolf (***Canis lupus***) identified by members of the bird team near the Bushy Creek Falls in the Community Forest. Photo by Janet Parker.*

Cynoglossum officinale, ***a pretty but invasive plant indentified in the Community Forest. Photo by Steve Garske.***

Since the invention of the bioblitz by Susan Rudy of the US National Park Service in 1996 and carried out by citizen scientists that year in the Washington DC area, many such surveys have been conducted all over the world in order to facilitate information sharing about biodiversity. The data we collect contributes to this data set, and, who knows, we may discover a new species in the Community Forest that we had never seen before, or didn't know existed here. This species information can also help YDWP develop land management plans and/or to seek grant funding for further work to preserve species in the Community Forest. The bioblitz also engages the public in biological research, improving knowledge of species and the environment in which they are found. Lastly, it is a great way to promote our organization and get people excited about who we are and what we do.

Watch for detailed results of our 2023 Bioblitz survey, which we will mount on our website and announce in the near future.

Photos taken durning Bioblitz II, June 17 & 18, 2023. Clockwise from top left:

*Red-backed salamander (***Plethodon cinereus***). By Clare Fastiggi.*

*Green frog (***Lithobates clamitans***). By Sarah Heuer.*

*Dobsonfly hellgrammite (***Corydalus cornutus***). By Sarah Heuer.*

*Dobsonfly adult (***Corydalus cornutus***). By Troy Zorn.*

WATERSHED MODEL PRESENTED AT BIG BAY FALL FEST & AGRIPALOOZA

By Brian Noell

The Yellow Dog Watershed model, created with funding from the Community Foundation of Marquette County and premiered in April at Powell Township School, saw further action this autumn. On September 23 we presented it to the public at Big Bay Fall Fest, where it provoked stimulating conversation with visitors to our booth. In addition, around 200 fifth graders put the model to the test on September 29 at the thirteenth-annual Agripalooza Field Day, sponsored by Marquette and Alger County Conservation Districts and held at the MSU Upper Peninsula Research and Extension Center farm in Chatham.

If we had doubts about the relevance of the model to students outside our watershed, they were dispelled with the fog that lay over the grounds on the morning of the event. Although this was a truncated version of the program we offered at Powell, students responded with equal enthusiasm, eagerly exploring the interactive landscape, sending water through the river channel, introducing food-dye "pollutants," and simulating rainfall using a spray bottle. The geography and landmarks of the model may be different from those found in Marquette, Harvey, Ishpeming, KI Sawyer, and Skandia, but students readily recognized that hydrological principles are the same everywhere and that the runoff of road salt, oils, and lawn chemicals threaten their rivers and streams as well.

Fifth graders at Agripalooza, working with the Yellow Dog watershed model. YDWP staff presented to ten groups of students throughout the course of the day. Photo by Sarah Heuer.

WEDNESDAY WANDERERS TREK, McCORMICK WILDERNESS

By Brian Noell

On September 27, I led a group of 16 intrepid seniors from the Marquette-based Wednesday Wanderers on a hike from the north entrance of the McCormick Wilderness to the falls on the main branch of the Yellow Dog River. This was the second such expedition I had undertaken with the group, the first being a shorter outing to the falls in the Community Forest in September of 2022. As a crisp morning yielded to a glorious afternoon, the highlight of the trip was undoubtedly the abundance of mushrooms in evidence all along the trail, among them lion's mane and delicious oysters in their prime. Thanks to all the Wanderers, many of whom are now YDWP members, for their rugged determination and appreciation of our watershed's natural wonders, as well as to Sven Gonstead of the Big Bay Stewardship Council, for putting us in touch with one another!

THANK YOU MEMBERS AND DONORS

June 3 - November 15, 2023

Donors

John & Patricia Case
Mandy Chardoul
Timothy Cotts
Natalie Dale
Mark & Mary Beth Gentry
Daniel Hales
Dan R.J. Hales
Trapper Hales
Mary Lambert
Beth Millner Jewelry
James Moyle
Gordon Niessen
Terry & Frances O'Neill
Joanne Rohde
Gloria & Frank Schoepf
Catherine Whitney
Kay Williamson
Michael Wood

Renewing Members

John Biddlecome
Lizabeth Binns
Kathy Binoniemi
Amy Blair
Liz & Dennis Boe
Brenda Crothers
Jeff & Rhea Dever
Susan Schenk Drobny
Reg & Lyn Durant
Frank & Laura Farwell
Richard & Karen Fitchett
Jane Fitkin
Deb & Bruce Geldine
Mark & Mary Beth Gentry
Marcia & Sven Gonstead
Dan & Paula Paszke-Hardie
William & Diantha Harris
Joan & Richard Heuer
Bev Hill
Matt Hopkins
Jay Johnson
Sue Kartman & Cindy Walters
Keith & Vada Kepler
Elizabeth & Paul Koch
Chad & Amy Kooyer
Kim Kost
Phyllis Lathrope
Amy Lehman
John & Karin Mattis
Mark F. Miller
Andrew Morrill & Marie Knoerl
Tim Oatley
John & Tory Parlin
Aaron Peterson
Nancy & Pete Price
Susan Ritter
Paul & Carol Rose
Christine and Jon Saari
Patrick St. Germain & Maggie MacDevitt
Maggie Scannell
Donald & Mary Snitgen
Bruce Sugarman
Craig Sparks & Roberta Tisdale
Jeff TenEyck & Linda Angotto
Michael Uschold
Steve & Cathy Waller

Welcome New Members!

Cathy Benda
Kate Kenney
Peter Laus
Michele Moran & Mike Springer
Sally Olsen
Alan Reynolds & Bonnie Bolz
Wade Saari
David & Katherine Savu
LeRoy & Helen Smith
Dan Vrieland

In-Kind Donations

John Anderson
Mark Bevins
Nick & Sharon Cartier
Gordon Gearheart
Joan Heuer
Beth Millner Jewelry
Les Milligan

Honor Gifts

Eeva & Bob Miller
In memory of Nancy Railey

Susan Houston
In honor of Seth Houston

If we have accidentally omitted your name, or if you find an error, we apologize. Please contact Brian at (906)345-9223 or email brian@yellowdogwatershed.org so we can make it right.

After 35+ years, the rustic barn at Mudjekewis finally got a shiny metal roof by Hendrickson Builders. Photo by Jim Hendrickson.

Yellow Dog Watershed Preserve
PO Box 5
Big Bay, MI 49808
(906)345-9223
ydwp@yellowdogwatershed.org
www.yellowdogwatershed.org

Kay Mitchell and Lynn Baldwin of the Wednesday Wanderers at the falls on the main branch of the Yellow Dog River in the McCormick Wilderness. Photo by Kay Mitchell.

Lynn Parkhurst caught her first brook trout on a fly at our fly-fishing workshop in August. Photo by Amy Raska.

Volunteer Eleanor Dohrenwend netting aquatic insects on the Salmon Trout River in the Huron Mountain Club. Photo by Sarah Heuer.