



WISCONSIN'S
greenfire
VOICES FOR CONSERVATION

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NEWSLETTER

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Living with the Dynamic Great Lakes— **Strategic Analysis of Shoreline Management in Door Peninsula**



Photo credit: Michael Cain

By Nancy Larson

High-water levels and intense storms on the Great Lakes can spell trouble for homes, buildings, and public infrastructure along the shore. But using rip rap and other hard erosion control structures on shorelines (see photo) impacts natural habitat and can increase erosion nearby. Wisconsin state law requires permit approval for many shoreline construction projects.

Recently, the Wisconsin Department of Natural Resources (WDNR) began responding to the demand for such projects by using an "emergency authorization" to allow work on erosion control structures on the Great Lakes to begin without a permit, as would normally be required. Wisconsin's Green Fire (WGF) and Midwest Environmental Advocates (MEA) expressed concern to the WDNR about this process, given the large number of armoring projects underway, observations of inappropriate material impacting natural scenic beauty, and the fact that high water levels are an on-going condition rather than a short term emergency.

Both WGF and MEA recognize the difficult position the WDNR is in, with limited staff for project review and for enforcement of environmental laws.

The WDNR will undertake a "strategic analysis" (roughly using the concept of the environmental impact statement) of Great Lakes coastal management issues, focusing on the Door Peninsula. This relatively new tool for the WDNR has the purpose of addressing a broad and important issue in a way that informs both the public and policy-making. In July, a core group from WGF's Public Trust and Wetlands Work Group, in support of this approach, provided input on the scope of the Door Peninsula analysis, stressing the importance of developing appropriate management given the impacts of climate change on coastal processes.

In particular, WGF commented that the analysis should recognize limitations of the landscape for shoreline protection, and acknowledge critical habitats where shoreline armoring should not occur.

Shoreline Management: continued on page 12

President's Message

Photo credit: Jeff Wilson



Hope in the Face of Code Red

By Terry Daulton

This morning's headlines included raging forest fires in our western states and in Greece, surging COVID delta variant cases, and the just-released International Panel on Climate Change (IPCC) 2021 report. I listened to a National Public Radio

program on the IPCC report, which described the gradual transformation of Amazon rainforest into savannah, the declaration by Canada that their managed forests are now a carbon *source* due to management practices, and the impacts of melting glaciers on ocean chemistry and rising levels. The United Nations Secretary-General, Antonio Guterres, blew past all softening verbiage stating that the report is "Code Red" for humanity.

In 2007 I organized an exhibit on climate change called "Paradise Lost?—Climate Change in the Northwoods." A number of WGF members were involved in that project, which brought scientists, artists, and educators together to encourage citizens to climate action. At that time, the question mark in the title was really important to us, as we felt that with thoughtful action we could avert many of the worst impacts of fossil fuel use. The exhibit travelled throughout the Midwest and was seen by over 100,000 people—but to what end? Listening to the news this morning, I felt a wave of hopelessness thinking of the seeming lack of effective global leadership in addressing all the work to be done. And just yesterday, one of my neighbors said he missed the \$2.00/gallon gasoline we had enjoyed under past national leaders. A exhibit pastel by artist JD Slack came to mind. It showed a blindfolded man approaching a cliff. Would the man step over the precipice? Would the man remove the blindfold and prevent his fall.

As an optimist, I quelled my gloomy thoughts to look for hope. Guterres's statement laid out a series of actions—from clean energy to financial investment. He covered not just the science but also the social and moral imperatives we must consider. He said, "There is no time for delay and no room for excuses." My hope resurged when I thought about how WGF supporters already embody this philosophy. When things are difficult, you double down and do the work. Since our inception five years ago, you have given your expertise, your financial support, and helped us to increase our network and partnerships.

In this issue of the newsletter you will see highlights of our climate projects on resilience (in Monroe County), shoreline erosion (in northeast Wisconsin), and on northern lakes and forests. Thank you all for keeping the fire alive and stepping up when it would be easy to fall prey to despair. As we hold our annual meeting, fundraiser events, and donation drives, we look forward to thanking you again! Picture my recent linocut "MMXXI," the Roman numeral for 2021 (see page 3), in which a sailor navigates in turbulent waters through an impossibly narrow passage with cliffs on either side. Yet, ahead lies hope for the open lake; the sailor's hand on the tiller is firm. This visual for our work ahead includes adventures, challenges, and an "open-lake" silver lining.

Wisconsin's Green Fire: Voices for Conservation

Mission

Wisconsin's Green Fire supports the conservation legacy of Wisconsin by promoting science-based management of Wisconsin's natural resources.

Vision

Wisconsin's citizens understand and support scientific and thoughtful long-term management of natural resources, and value the many benefits of clean water, clean air, and healthy ecosystems.

Values

- We honor our strong and robust conservation heritage in Wisconsin.
- We believe that public policy, laws, and natural resource management should be informed by objective scientific understanding.
- We believe that robust and independent scientific research, knowledge, and education are necessary foundations for a fair and prosperous society.
- We are dedicated to the principle that all people and groups in our society have the right to clean water, clean air, healthy natural ecosystems, outdoor recreation, and land managed sustainably to produce economic benefit to everyone. We are dedicated to the principle that a sound environment and economy go hand in hand. We are dedicated to environmental justice.
- We support transparent governmental decision-making and fair and just treatment of all sides of issues.
- Our actions challenge policy makers to think beyond the short term and to act on behalf of future generations.

Wisconsin's Green Fire: Voices for Conservation

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Art credit: Terry Daulton



From the Executive Director

Surveys, Socials, and So Much More

By Fred Clark

It's hard to believe it's fall already, and how much Wisconsin's Green Fire has accomplished already this year. Our members have been hard at work on issues ranging from renewable energy, to climate change, to the future of our deer herd, to wetlands and waterways.

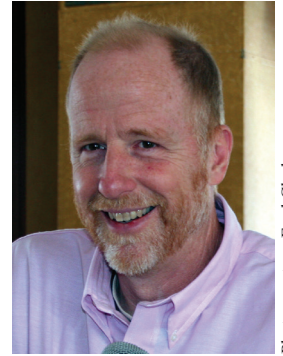


Photo courtesy Fred Clark

Are we effectively fulfilling our mission while working on such a wide range of issues? That's one of the things we wanted to know when we conducted our WGF member survey last spring. Thankfully, 190 of you took the time to respond and help us rate our work. We were gratified to hear that 89 percent of respondents agreed that "WGF's work reflects the balance needed to address Wisconsin's most important conservation needs." You also provided many good suggestions for ways to increase our effectiveness and we'll be using that information in our work planning for 2022.

We're excited to announce opportunities for WGF members and friends to get together in person—the first time since February 2020. Between September 22 and October 7, we'll be hosting a series of WGF Conservation Socials around the state (featuring beer and cheese curds of course!) to give members and prospective members the chance to meet other members and learn about our work in a casual setting. These Conservation Socials will all be in spaces with enough physical distance and fresh air to minimize risks and ensure a safe event. Check out the dates on page 5 (and on our website) for events in Madison, Milwaukee, Eau Claire, Eagle River, and Ashland. Register early (no charge) as space will be limited.

And there's room for everyone at our (virtual) Annual Meeting on September 23 from 4:00–6:00 p.m. (see page 5). We'll hear perspective and inspiration from our keynote speaker Christine Thomas, who will talk about her role on Wisconsin's Natural Resources Board and her career working with young people entering conservation fields. And you'll have a chance to meet in groups with WGF issue leaders.

As we enter our fifth year of existence, we want you to know that your volunteer involvement and your financial support is deeply appreciated. With a growing number of program commitments, it is also more important now than ever. I'm always available to talk with you about ways you can contribute time or financial support toward our work at Wisconsin's Green Fire. You can contact me at fclark@wigreenfire.org.

Thanks for all you do!

“Lightning Flash” Updates from WGF Work Groups

Photo credit: NRCS



Agriculture and Water Quality

WGF provided comments to the WDNR on NR151 relating to groundwater, nitrate contamination, and monitoring of public and private wells. The work group also offered comments on the WDNR Central Sands study, highlighting accomplishments of that work and offering suggestions for additional analysis. The group is also beginning discussions about sustainable food systems and ways to improve practices in Wisconsin.

—Paul La Liberte

Photo credit: Lucy Tyrrell



Public Trust & Wetlands

Work group members are tracking the implementation of two recent Wisconsin Supreme Court decisions which dealt with the regulatory authority of the WDNR related to high capacity wells in North Central Wisconsin and to limits on the number of animal units on Concentrated Feeding Operations (CAFOs). These decisions may be the most important clean water decisions in Wisconsin in the last 50 years.

The **high cap well case** found that the State has the mandate (under the Public Trust Doctrine) to consider cumulative effects of high-capacity wells rather than each one individually. The decision stated the court’s desire to avoid the “absurd result” where the WDNR would be forced to approve a permit for a well that met other statutory requirements but that the WDNR “knew. . . would cause harm to the waters of the state.”

The **CAFO case** concluded the WDNR was within its authority to include an animal unit maximum in permits and to require groundwater monitoring around manure-spreading sites. The court noted “a case-by-case analysis allows the WDNR to use its expertise to make fact-specific determinations and gives it the flexibility to prescribe conditions that are specifically tailored to a particular applicant.”

—Michael Cain

Photo credit: Ron Eckstein



Public Lands & Forestry

The work group focuses on the wildlife habitat and biodiversity of Wisconsin’s public lands and forests. Our main input is through representation on WDNR and Forestry advisory teams including the Silviculture Guidance Team, the Council on Forestry, and the Wisconsin Initiative for Climate Change Impacts. In addition, we made recommendations on WDNR’s Southwest Savannas Regional Master Plan and master plans for Blue Mounds and Rib Mountain State Parks. We attended the virtual national Northern Hardwoods Conference and the in-person Birds & Forests meeting at Michigan Tech.

—Ron Eckstein & John Robinson



Student and Young Professional

The S&YP has inaugurated its e-newsletter, *Conservation Connections*, to engage more early career professionals in the work of WGF. The next *Conservation Connections* is planned for October. To subscribe find the **Conservation Connections** signup at <https://wigreenfire.org/newsletters/>.

We continue to work on membership outreach. We will also be prioritizing Facebook, LinkedIn, and Twitter to share WGF news, events, job opportunities, and relevant content from other organizations. If you have relevant content to be shared with our student mailing list or on social media, please email us at syp.workgroup@gmail.com.

—Loretha Jack

Wisconsin's Green Fire Annual Meeting, September 23

"Wisconsin Conservation: Today's Challenges, Tomorrow's Leaders"

Virtual Meeting: Thursday, September 23, 4:00–6:00 p.m.
Keynote Speaker: Christine Thomas

We had hoped to hold this fall's WGF annual meeting in person, but given the uncertainty of COVID, we have opted for a Zoom platform. We are working to make this meeting interactive and engaging for all. Please mark your calendars for September 23 from 4:00–6:00 p.m. and plan to attend WGF's virtual annual meeting, which will focus on the state of our conservation tradition, with special emphasis on the students and young professionals joining today's conservation movement.

Our keynote speaker Christine Thomas is past Dean of the College of Natural Resources at UW–Stevens Point, with tenure on the Wisconsin Natural Resources Board as both member and chair. She will share her thoughts on the future for students and young professionals in the conservation field as well as her insights into Wisconsin's conservation history and policy.

We'll hear from the leaders of our recently formed Student and Young Professional Work Group. And we'll offer breakout sessions where you can hear from our member experts on issues ranging from climate change and clean energy to the future of our deer and wolf populations. We plan to include introductions and comments from our staff and board, results from our recent WGF member's survey, as well as the annual business meeting. We're looking forward to seeing you!

Registration for the WGF annual meeting (and fundraisers, see list at right) can be found at our WGF website, <http://wlgreenfire.org/events/>

Regional Conservation Socials

Wisconsin's Green Fire members and friends will be gathering around Wisconsin this fall to celebrate our conservation successes, tip a glass, and greet each other in person once again. Whether you're an active WGF member or someone looking to learn more about our work, you'll be warmly welcomed at any of our regional Conservation Socials. The beer will be cold and the cheese curds will be hot—all that's needed is for you to join us!



In order to help assure a COVID-safe experience for all, we'll be holding all of these events at venues with outdoor seating, and if warranted we'll move to outside locations altogether. Registration is free, however space may be limited, so please sign up early to hold your spot.

September 22, 5:00–7:00 p.m.

Eau Claire

The Brewing Projekt
1807 N. Oxford Avenue

September 29, 5:00–7:00 p.m.

Milwaukee

City Lights Brewery
2200 W. Mt Vernon Avenue

September 30, 5:00–7:00 p.m.

Madison

Pyle Center, UW–Madison
702 Langdon Street

October 6, 5:00–7:00 p.m.

Eagle River

Eagle Waters Resort
3958 Eagle Waters Road

October 7, 5:00–7:00 p.m.

Washburn

Washburn Brewery and Taphouse
532 W. Bayfield Street



Wisconsin's Green Fire and Jim and Joy Perry were show sponsors of the Lake Superior's Big Top Chautauqua performance of "Dear Earth" on Friday, August 13 near Bayfield. Jim Perry welcomes key WGF volunteers, major donors, and potential new friends/donors, who enjoyed dinner, heard Tia Nelson speak, and attended the show honoring Earth and key conservationists.

Additional Reports— Opportunities Now 2021-2023

Wisconsin's Green Fire has published separate reports on priority issues in our *Opportunities Now 2.0* series. Each report summarizes an analysis of current literature, interviews with agency staff and experts, and the consensus recommendations of experts. Two new reports are completed and are posted on WGF's website. WGF Science Director Sarah Peterson has led the development of these reports in collaboration with WGF's subject matter experts.

Meeting Wisconsin's Deer Conservation Challenges

Released: June 29, 2021

With fall color and cooling temperatures, white-tailed deer are on the minds of many in Wisconsin. The future of this iconic species was the focus of our Wildlife Work Group's recent addition to WGF's *Opportunities Now 2021-2023* series. *Meeting Wisconsin's Deer Conservation Challenges* covers issues from Chronic Wasting Disease (CWD) to hunter recruitment and long-term deer management planning.

<https://wlgreenfire.org/meeting-wisconsins-deer-conservation-challenges-wisconsins-green-fire-opportunities-now-july-2021-report/>

Wetlands and Waterways in Wisconsin: Navigating Changes to Waters of the United States (WOTUS) Rule

Released: May 12, 2021

Whether or not you have been tracking changes in federal Waters of the United States (WOTUS) policy, our Public Trust and Wetlands Work Group has made it easy to understand in its *Wetlands and Waterways in Wisconsin: Navigating Changes to the Federal Waters of the United States (WOTUS) Rule*. The report examines the intersection and overlap between federal and state water protection authority; explains the increasingly important functions, environmental benefits, and ecosystem services provided by wetlands, especially in light of the impacts being experienced as a result of climate change; and concludes with recommendations for policy and actions at the federal and state level to protect wetlands and the many invaluable benefits they provide.

<https://wlgreenfire.org/category/wetlands/>

Member Survey Elicits Strong Support for WGF to Do More

By Don Behm

In a spring 2021 survey of Wisconsin's Green Fire members, a majority of respondents said they had participated in at least one WGF activity and gave highest marks to online policy forums, described several of its publications as highly valued, and agreed that the organization's work addressed the state's most important conservation priorities.

Two widely shared themes among those commenting in their own words on WGF's activities were "keep up the great work" and "let's have more of it," according to a survey report prepared by Kate Reilly, a Wisconsin's Green Fire board member and chair of the communications committee.

Of the 1,600 members and supporters who received the emailed survey on May 6, responses came from 190, or 12 percent. The survey is one tool for evaluating if the organization's programs and communications achieve its goals and strategies. For that reason, responses will be distributed to WGF board, staff, and issue work groups.

Survey respondents endorsed the science-based policy analysis provided by the organization, and a 59-percent majority said WGF should remain focused on policy analysis and education while carefully considering advocacy for specific actions or outcomes only when its member's professional experience provides credibility.

Fully 35 percent of respondents, a larger share than in past surveys, said WGF should advocate for pro-conservation outcomes on a wider range of policy issues and include more voices from a wider range of backgrounds in its policy and program work. Only 6 percent, a smaller share than in past years, said WGF should remain neutral on all policy questions.

When asked to choose their top five issues among twelve options for WGF to focus on over the next five years, responses from 143 respondents, or 75 percent, gave this ranking, with number one being the most important: (1) climate change, (2) agriculture practices and water quality/quantity, (3) groundwater, (4) wildlife management, and (5) wetlands. Wisconsin's Green Fire has addressed each of those issues in its publications, webinars, and online public forums.

Member Survey: continued on page 8

WGF Leadership—Wolf Management in Wisconsin

By Jenny Oren

Gray wolf recovery and management has been controversial since wolves returned to Wisconsin in the 1970s. The story of wolves in Wisconsin has become even more controversial after wolves were delisted from the federal Endangered Species List on January 4, 2021, quickly moving from a story of success in species recovery to a story of division over proper agency management. Throughout the delisting process, Wisconsin's Green Fire members—experts in natural resources science and policy—have recommended science-based wolf management decisions by the Wisconsin Department of Natural Resources (WDNR).

In November 2020, WGF science experts published *Creating a Shared Vision for Wolves in Wisconsin Opportunities Now 2021-2023* recommending responsible agency action to maintain wolf population levels and ensure appropriate consideration and respect is given to stakeholder views, including tribes.

Acting on a court order to implement a hunt before the end of February 2021, the WDNR recommended to the Natural Resources Board (NRB) a harvest quota of 200 wolves and up to 2,000 licenses. The NRB approved the wolf quota and 4,000 licenses. Of the 200 wolves, after the tribal declaration of 81, 119 quota animals remained. After three days, the hunt was closed. The final reported harvest was 218 wolves, exceeding the quota for state-authorized hunters by 99 animals.

In response to the February hunt, WGF science experts collaboratively published *The February 2021 Wisconsin Wolf Hunt: A Preliminary Assessment* (May 2021). This analysis reviewed the February hunt, emphasizing the significant probable impacts on wolf population viability—estimating that 60–100 of Wisconsin's wolf packs could lose pup production due to the hunt. It also provided recommendations for future management actions, and once again encouraged the WDNR to remain conservative and cautious in wolf management decisions, encouraging responsible revisions to the extent, timing, and methods of wolf harvest in Wisconsin.

In the meantime, several WGF members served on two WDNR-organized committees to discuss the future of

Wisconsin's wolves. WGF members Adrian Wydeven, Jodi Habush Sinykin, Peter David, and Erik Olson served on the Wolf Harvest Advisory Committee to provide input on a quota for the statutorily-required fall 2021 wolf hunt. They each advocated for a conservative quota to ensure that Wisconsin's wolf population was not reduced below its current levels until a new state wolf management plan is developed. These same four WGF members plus Tim Van Deelen serve on the Wolf Management Plan Committee to revise the Wisconsin Wolf Management Plan (the current 1999 plan was last updated in 2007). The first of four committee meetings was held on July 22, 2021.

Through these meetings, WGF members continue to encourage the WDNR to remain conservative in their management approach—particularly when proposing a fall wolf hunt quota. In late July, the WDNR released its proposed quota of 130 wolves for NRB approval, taking into consideration tribal views and other stakeholder opinions. WGF wildlife experts advocated for a much lower (more conservative) quota based on the uncertainties of the status of the wolf population following the February harvest.

On August 11, 2021, the NRB met to discuss the WDNR-proposed fall hunt quota of 130 wolves. During the meeting, members of the public, including

WGF members Adrian Wydeven and Jodi Habush Sinykin, provided verbal testimony. Adrian, Jodi, and many others voiced concerns about the proposed quota and echoed the need to remain conservative considering the uncertainties related to the wolf population. The NRB debated the quota and voted 4 to 3 on a quota of 300 wolves, greatly exceeding the WDNR's proposed quota. A quota of 300 wolves will likely lead to an unprecedented reduction in wolf numbers, with the risk of long-term damage to the viability of the wolf population. The NRB voted 5 to 2 that any revisions to the quota, including tribal declarations, should be brought back to the NRB for final approval.

As the November 2021 wolf hunt approaches, WGF leaders and science experts will continue to advocate for science-based management of Wisconsin's natural resources—in this case, maintaining a healthy wolf population.



Photo Credit: U.S. Fish and Wildlife Service



WGF and NOVA Ecological Services (Mike Meyer and Jim Kreitlow) will be offering the Lake Users workshop series, beginning later this fall.

Northern Highlands Lake User Toolbox

By Mike Meyer

Wisconsin's Green Fire continues work on the Northern Highlands Lake User Toolbox in partnership with NOVA Ecological Services. The project includes a workshop series to train lake association leaders to access online the Wisconsin DNR's lake and GIS data, explore ways they can use this data to make sound lake management and planning decisions, and producing a planning path forward for each participant.

I presented information about the project to two virtual conferences to generate interest by lake association members: The Northwest Wisconsin Lakes Conference in June covered Bayfield, Burnett, Douglas, Sawyer, Washburn, and Polk Counties. The Six County Lakes and Rivers Conference - NE, in July was hosted by Vilas County Extension. A video of that conference is available at <https://vclra.org/2020/07/20/six-county-lakes-rivers-conference-video/>

Project partners are consulting with the WDNR and UW Extension Lakes Programs to coordinate Toolbox outcomes with current lake planning guidance. It is anticipated that the first workshops will be held in fall 2021. This project is supported by a grant from the Arthur and Elaine Johnson Foundation.



WGF Honored with Conservation Leader Award

In May, the University of Wisconsin–Stevens Point (UWSP) College of Natural Resources announced Wisconsin's Green Fire will receive the 2020-2021 Conservation Leader Award. The College bestows this award annually to honor individuals and organizations that have made significant contributions to the improvement of College programs. UWSP Wildlife faculty nominated WGF, noting that "WGF is an independent, nonpartisan organization with a membership list of working and retired natural resource professionals and citizens that reads like a Who's Who of environmental leaders. Founded in 2017, WGF has moved mountains in a relatively short period."

"We are deeply moved by this award," said Tom Hauge, WGF Wildlife Work Group co-chair, "It's a big deal for us and WGF is strengthened by our relationships with UW–Stevens Point faculty and students and by the involvement of students around the state."

In his award letter to WGF, Dean Brian Sloss wrote "You set an excellent example for our current students."



Member Survey: continued from page 6

On the question of whether WGF's work provides "the right balance for addressing Wisconsin's most important conservation needs," fully 89 percent of the 142 respondents either strongly agreed or agreed.

Wisconsin's Green Fire releases numerous publications each year, from its *Opportunities Now* and Issue Analysis papers to the print newsletter and E-newsletters. All are available on its website and survey respondents were asked to rank each of them on a scale of 1 to 5, with 1 being the highest value.

When tallying what publications received the most "high value" scores, 50 percent of respondents selected the *Opportunities Now* series as highest value while the Issue Analysis papers garnered 38 percent of highest marks. When combining both "high value" and "moderately high value" scores, the E-newsletter gathered the highest overall marks, with 78 percent, while the print newsletter attracted a combined score of 63 percent.

WGF Leads Climate “Resiliency” Project in Monroe County

by Heather Stricker

In the warm afternoon sun of August 4, staff and members of Wisconsin’s Green Fire (WGF) stood on the picturesque ridgetops of the Driftless Area of Wisconsin discussing climate change with local community leaders. With remnant smoke of Canadian wildfires still hanging in the valleys, WGF staff and project experts toured local farms, road/stream crossings, and dam failures caused by recent large-scale storm events. This field day was part of WGF’s work leading the Monroe County Climate Change Readiness and Rural Economic Opportunity Assessment, a county-wide project to address climate change. Monroe County includes the cities of Tomah and Sparta, Fort McCoy, and the Driftless Area landscapes of forests, farms, deep valleys, and streams.

Led by Wisconsin’s Green Fire staff Fred Clark and Heather Stricker, alongside Monroe County Land Conservation Director Bob Micheel, this project aims to help Monroe County increase “resilience” to climate change through nature-based solutions and economically viable land management options.

Additional professional expertise is being donated by other WGF members, many top scientists from the University of Wisconsin (Madison, Stevens Point, and Extension), The Nature Conservancy, Northern Institute of Applied Climate Science, Wisconsin Department of Natural Resources, and Wisconsin Initiative on Climate Change Impacts.

The project goals are to assess and identify the vulnerabilities of hydrologic, wetland, forest, and agricultural systems to climate change impacts (e.g., severe storms, flooding), and to identify threats to “built” infrastructure and susceptible human communities. After the vulnerability assessment, the team will work with communities to develop “resiliency” *strategies* to reduce risk from climate change and *plans* for how landowners can use nature-based solutions to increase resiliency and sustainability while maintaining revenue from their lands. The project will offer a number of workshops and surveys for community participation, to ensure that the “resiliency” recommendations developed will be centered on the needs and desires of the people who live there.

The August field day was intended to foster a personal understanding of the impacts that climate change has already had on the community, as well as to see the ways the community is already increasing resiliency. The group toured local farms, road/stream crossings, and slope erosion after dam failures (see photo below), such as the Korn Coulee dam failure site which experienced extensive damage during a flood event in August 2018.



Photo credit: Heather Stricker

The group also toured some of the streamside monitoring efforts the Monroe County Climate Change Task Force has implemented (see right).



Photo credit: Heather Stricker

Organic farmer and dairy producer Tucker Gretebeck gave the group a tour of his farm and his conservation practices. Gretebeck cited a trip to a spring-fed creek as a transformative moment in his operation; the creek, once cool and clear and a favorite place for his children, had become stagnant, green, and murky due to nutrient offloading and erosion. He has switched to such practices as maintaining a continuous perennial cover, keeping grass-fed cattle (see photo below), composting, and improving soil health.



Photo credit: Heather Stricker

For more information on the project, including funding sources, see <https://www.co.monroe.wi.us/government/county-board-of-supervisors/boards-committees/climate-change-task-force/greenfire-project>. The Monroe County project is being structured to serve as a model for other counties and municipalities seeking models for community engagement around climate resilience. Hopefully WGF’s work will provide tools for pro-active strategies that respond to the climate crisis while building economic and community well-being.

WGF Welcomes New Staff

Heather Stricker, Membership and Project Support Specialist

In early June, Wisconsin's Green Fire brought Heather Stricker on board as a Membership and Project Support Specialist. Her role with WGF is two-fold: to work with members and membership-related goals as well as to provide technical support and professional scientific input on WGF-led projects. Heather is already an integral part of the team working on the Monroe County Climate Change Readiness and Rural Economic Opportunity Assessment. She contributes GIS analyses, provides input on project design and vulnerability assessments, and develops deliverables. Before being hired, she was an active member of WGF, contributing to the report following the February 2021 wolf hunt.



Photo courtesy Heather Stricker

Heather is a certified Wildlife Biologist and brings specialties in landscape ecology, large carnivores, geographic information systems (GIS), and biodiversity issues. She has worked for various universities, state agencies, and tribal governments and was a member of the Wisconsin Wolf Advisory Committee (2011–2013) and the Wisconsin Beaver Task Force (2011–2015). Heather has worked on a wide range of wildlife research projects, ranging from bears, wolves, and deer to salamanders, sturgeon, and bats. Heather is a past chair of the Native Peoples Wildlife Management Working Group of The Wildlife Society and has a strong interest in making the conservation process more democratic, inclusive, and socially just.

Heather holds a B.S. in Animal (Wildlife) Ecology from Iowa State University where she studied the ecology of bobcats, which were naturally repopulating the state. She received her M.S. in Conservation Biology from Central Michigan University where she studied wolf recolonization and critical habitats through a partnership with the Little Traverse Bay Bands of Odawa Indians. Heather is currently pursuing a doctoral degree in educational sustainability at UW–Stevens Point, focusing on improving conservation through systems thinking, community engagement, and transformative education.

Heather grew up in the farming landscape of Iowa, developing a passion for prairie restoration and sustainable agriculture. She is converting her yard to native pollinator habitat and developing a small permaculture-based hobby farm in northern Wisconsin. Heather enjoys hiking, camping, and paddling with her husband Joe Orlovsky, two young sons, and two old dogs.

Jenny Oren, Communications Assistant

In late June, **Jenny Oren** joined Wisconsin's Green Fire as a half-time Communications Assistant for three months through the end of September. In this role, she spearheads WGF's social media presence, coordinates monthly e-newsletters, and contributes to other WGF communications. She is excited to be involved in Wisconsin's conservation efforts through WGF!



Photo courtesy Jenny Oren

She holds a B.S. in Fisheries, Wildlife, and Conservation Biology from North Carolina State University. In her senior year, Jenny was a policy intern with Wildlands Network where she engaged partners to develop state-level wildlife corridor legislation in her home state of Virginia. Jenny recently completed her M.S. in Environmental Conservation from the University of Wisconsin–Madison. For her capstone project, she worked with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), to develop communication materials amplifying the Ojibwe perspective on the gray wolf or *ma'iingan*.

Jenny has been an active member of WGF's Student and Young Professional Work Group since its creation in 2020, working with fellow WGF student members and leaders to develop and grow the work group. She lives in Middleton with her soon-to-be husband Owen. In her free time, she enjoys exploring via bike or foot the trails and parks that Wisconsin has to offer.

Profiles in Conservation—with Interview

We are trying out a new format for “Profiles in Conservation,” asking our Student and Young Professional (S&YP) Work Group members to interview our featured professional.

Profile

Many Roles Protecting Aquatic Resources

By Joan Elias

After earning a B.S. degree in zoology from UW–Madison, I pursued a M.S. degree in environmental science from UW–Green Bay. My thesis explored the relationships between breeding birds and their habitat in the Bad River corridor.

There were three segments to my career, but I always considered protection of aquatic resources of utmost importance. First, I worked for the UW–Madison’s Center for Limnology, primarily at Trout Lake Station near Boulder Junction, assisting with various research projects. In the middle portion of my career, I consulted for various agencies, organizations, and the Bad River Band of Lake Superior Chippewa. I conducted bird and vegetation surveys, developed shoreland protection and restoration guidance, and assisted my late husband Jim Meeker with research on the impacts of fluctuations in lake levels.

I retired from my third career as senior aquatic ecologist for the National Park Service - Great Lakes Inventory & Monitoring Network, where I designed and implemented a water quality monitoring program for Apostle Islands National Lakeshore, St. Croix National Scenic River, and seven other National Park Service units.

I find it amusing that over my 30-year career, I am now widely known for having collected what turned out to be a new species of *Semiorbis* diatom from a single, routine sediment sample from the Outer Island Lagoon in the Apostle Islands—the species was named *S. eliasiae* after me. The moral from the story is that routine, tedious tasks involved in data collection can yield ground-breaking results and you never know when that might occur.

A resident of Iron County since 1990, I strive to be a good steward of the land I pay taxes on. I enjoy outdoor activities such as gardening, cross-country skiing, hiking, and camping. I continue to serve in environmental organizations—as technical advisor for the Superior Rivers Watershed Association and as chair of the Natural Resources Committee of the League of Women Voters of Ashland and Bayfield Counties.



Photo courtesy Joan Elias

Interview by S&YP Work Group

S&YP: What schooling did you have to secure your job(s)?

JE: As an undergraduate I took just about every “ology” course offered, e.g., zoology, ecology, limnology, entomology, hydrobiology, parasitology, mammalogy, wildlife ecology, ornithology. I memorized so many Latin names and life cycles that sometimes I would dream about organisms in Latin.

S&YP: How did you decide to specialize in your field? What advice would you give to emerging scientists?

JE: Even though I considered music and math, I’d always been interested in the natural world, so I started taking classes. Follow what you’re interested in. Hang out with others who love the same thing and you will learn from one another. Take hourly or limited term jobs with agencies or a university to meet people who might hire you in the future.

S&YP: What is your advice for learning field skills

JE: Spend time with those who have expertise in that area. Don’t be afraid to ask questions or to ask the same questions again. “What’s that bird?” “Why is that a red-eyed vireo?” Specifically for learning birds, spend time with field guides looking up what you might have seen (and similar species) and studying their ranges. Use apps, but also use hard copy field guides to compare multiple species on a page.

S&YP: What skills did you use most frequently in your work? What challenges did you face?

JE: I’d say the most frequently-used skill was listening. Your voice will be better respected if you listen first. To generalize my experience, private groups sometimes had their minds already made up and simply wanted an “expert” to affirm their thoughts. If the expert presented information that countered their preconceived ideas, they simply would not take in the information. I sometimes saw hostility by the private sector towards federal/state employees. The challenge was to get the message across. Another challenge was encountering greater levels of bureaucratic and administrative rules and responsibilities as I rose up the ladder, which took me away from the field work I loved.

S&YP: What climate change impacts did you see in aquatic/ lake systems that you studied in your career?

JE: Even in remote lakes of national parks, blooms of cyanobacteria and less habitat for cold water fish species are becoming problems—caused by such factors as warming temperatures, shorter duration of ice cover, earlier warming of surface waters, increasing storms that mix lake layers, and severe storm runoff of phosphorus.

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Shoreline Management: *continued from page 1*

Additional WGF comments recommended that the WDNR look at two other aspects. One is the effectiveness and impacts of shoreline protection measures that are already installed. The second is examining a suite of management options, which go beyond engineering solutions, to encourage long-term approaches to living with the dynamic nature of the shoreline, while recognizing the importance of public rights.



Photo credit: Michael Cain

Appropriate coastal management options include cost sharing, land acquisition, habitat restoration, as well as steering development away from risk areas and moving



Photo credit: Michael Cain

structures where appropriate. WGF technical experts also suggested that the WDNR evaluate approaches from other Great Lakes states, notably Ohio, which has a useful Great Lakes shoreline manual. Finally, WGF comments stressed the importance of protecting natural scenic beauty of the Great Lakes shoreline, investing in equitable access, and supporting tribal interests and rights in the Great Lakes.

The WDNR will draft the *Strategic Analysis of Coastal Management on the Door Peninsula* over the next several months and will provide for a public comment period. WGF will continue to engage with the WDNR on Great Lakes coastal issues.

More information on the analysis is at <https://dnr.wisconsin.gov/topic/EIA/DoorPeninsulaSA>.