# NEWSLETTER

Volume 2 Number 4

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# WGF Encourages State Actions

#### **Climate Mitigation through Natural and Working Lands**

By Fred Clark

On October 17, 2019, Governor Evers issued Executive Order #52, creating a Wisconsin Climate Change Task Force. Evers has also made commitments to join the U.S. Climate Alliance, create a new Office of Sustainability and Clean Energy, restore investment in the Wisconsin Initiative on Climate Change Impacts (WICCI), and produce fully net carbon neutral electricity in our state by 2050. These are encouraging signs that Wisconsin is once again poised to lead in both science and policy in addressing climate change.

As for WGF, in addition to our Climate Change Work Group, most work groups are addressing climate-related issues at some level. Our Energy Policy, Forestry, and Fisheries work groups have been especially focused on climate impacts.

Also, WGF is especially well-prepared to contribute toward one important aspect of climate change mitigation—one that is not well understood, i.e., the contribution of our forests, farms, and conservation lands to storing carbon and offsetting greenhouse gas emissions, often called Natural and Working Lands (NWLs) by the U.S. Climate Alliance.

While the role of plants in turning CO<sub>2</sub> and sunlight into mass and energy has been understood since the 19th

century, the extent of the ecological services that forests, wetlands, grasslands, and some agricultural systems play in soaking up and storing carbon is still in the process of being fully understood.



Natural Working Lands (forests, farms, prairies, and wetlands) store carbon and offset greenhouse gas emissions.

A multi-authored research paper in the *Proceedings of the National Academy of Sciences* (Griscom et al. 2017) predicts that NWLs alone can deliver more than one-third of the mitigation needed by 2030 in order to hold global warming to 2 Centigrade degrees this century (with a likelihood of more than 66 percent). In other words, of all the things we need to do to mitigate climate change through emissions, a healthy part of the solution resides in our farms, forests, prairies, and wetlands, and can be achieved mostly without new technologies. In some places, action could be as simple as a shovel to plant more trees.

Climate Mitigation continued on page 9

# President's Message



#### **Sharing Science in Stories**

By Terry Daulton

We listen to news stories, we tell our own stories during dinner, and spend billions on stories in film and theatre. Scientists often communicate in stories through TED talks, books, and even university courses. Here's a story I find inspiring.

Beginning in spring, amid the dip nets and wader-clad researchers at Trout Lake Limnology Station in Boulder Junction, two artists experimented with numerous natural dyes (e.g., goldenrod) using water from lakes of different chemistry. The artists, Mary Burns (Manitowish) and Debra Jircik (Eagle River), created display boards with strips of dyed wool and silk in hues ranging from a deep yellow to rusty magenta and rich brown. Most striking was the difference in colors rendered from northern lakes and from Lake Mendota (see examples page 10). They analyzed the colors at the local Ace Hardware's paint department.

When Mary Burns displayed the sample boards in her weaving studio last summer, visitors were fascinated and engaged in lengthy conversations on the science of lakes. Scientists at Trout Lake were intrigued—they pondered what chemical reactions were involved and how to chart the fabric "data." They even took the display to "Science in the Northwoods," a conference for 100 researchers working in northern Wisconsin and nearby Upper Peninsula. In another water-art project, Mary Burns is weaving a series of portraits of women involved with water—native water walkers and women in water science and conservation, such as Rachel Carson. These projects create "threads" between the public and water.

At our WGF annual meeting in October, speakers and breakout groups talked about ways to tell our stories. We heard creative readings by WGF members Diane Daulton, Nancy Larson, Curt Meine, Shannon Thielman, and Lucy Tyrrell. Looking ahead, we want to share WGF stories through a speakers bureau, podcasts, and video. To help us explore these storytelling possibilities most effectively, on December 3, WGF will host a workshop at Schmeeckle Reserve in Stevens Point. Holly Kerby, UW-Madison, will share her expertise on science communications including science messaging through story boarding (see page 8).

For me, watching Rachel Carson's likeness emerge on Mary Burns's loom suggests new ideas for partnerships in our work to conserve Wisconsin's conservation heritage. Whether we include artists, writers, younger generations, older generations, people of color, or people from other professional backgrounds, such collaborations will make our stories richer and more meaningful. To help us share science stories, please send us *your* science stories, tell your friends the story of WGF, join a work group or committee, attend the December 3 workshop, and consider an end-of-year donation. Through our collective WGF storytelling, our "work" will seem less like work and more like an adventure in creativity.

# 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**

#### Board

Terry Daulton, President Jim Perry, Vice President Ron Eckstein, Secretary Bob Gurda, Treasurer Michael Cain Thomas Hauge Tom Jerow Paul La Liberte Bob Martini Michael Meyer Kate Reilly Shannon Thielman

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### From the Executive Director

#### What a Difference a Year Makes

By Fred Clark

Wisconsin's Green Fire began this year questioning how new leadership in state government would affect our mission and our work. As we look ahead to 2020, it's clear our work at WGF is more important with more impact than ever.



In contrast to 2018, when it seemed like we had to tack notes to agency staff doors to contact them,

in 2019, WGF members have at times had more invitations to talk with agency staff than we can accept, a refreshing change.

As a result, we're not just doing analysis, we're also advising agency staff and other conservation partners on the critical details of policy and practice on issues such as keeping nitrates out of groundwater, protecting our public trust, property master planning, state energy policy, the science behind wolves, and much more.

The theme unifying all these issues is helping decision-makers get the science right—the same mission we have had since founding. With state agencies now being directed to follow the science, and to engage new partners in their work, WGF members with their experience have found new roles with more impact than ever.

As we look ahead to next year, we're asking what investments we need most to increase our impact and effectiveness. In December, we'll be asking you to help us make those investments with your continued support during our end-of-year appeal.

As the first snows of the year come to Wisconsin, it's a reminder for us to spend time with loved ones and friends, and to renew our ties with the land and water around us. Speaking on behalf of the board and staff at Wisconsin's Green Fire, we are grateful for your support and all you do.



Group photo at the third annual meeting of Wisconsin's Green Fire at Treehaven, October 4-5, 2019.

# Dispatches from the WGF Annual Meeting

About ninety members and friends gathered at Treehaven (near Tomahawk) for the third annual membership meeting of Wisconsin's Green Fire (WGF) on Friday and Saturday, October 4-5, 2019.

#### Friday Keynote: Shared Resource Interests

By Nancy Larson

On Friday, Jonathan Gilbert, Biological Services Director of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and former leader of its Wildlife Section, gave us an overview of this organization, and



Jon Gilbert shares information about GLIFWC and its natural resources interests

suggested some areas where its interests may align with those of WGF.

Many WGF members have worked with GLIFWC staff as they provide natural resource management expertise and assist tribes in the territories ceded by treaties where certain harvest, fishing, and hunting rights have been retained. Nearly the northern third of Wisconsin lies within the ceded territories.

GLIFWC represents eleven Ojibwe tribes in Minnesota, Wisconsin, and Michigan and assists in their off-reservation exercise of treaty rights. GLIFWC works in wildlife, fisheries, forestry, wild rice, invasive species, law enforcement, GIS, water quality, policy analysis, Great Lakes, climate change, mining, traditional ecological knowledge, and public information.



Jon engaged us with his deep knowledge of GLIFWC's work, staff, governance, and his appreciation of Ojibwe culture and values.

He suggested that WGF may find common cause with GLIFWC in issues such as making sure Chronic Wasting Disease (CWD) is kept out of the ceded territories, climate change, updating the state wolf management plan, and maintaining healthy fish and wildlife populations and the ecosystems on which they depend in the ceded territories.

### Saturday Keynote: Is change possible?

By Nancy Larson

Our theme, *Working Together, Working Better*, was highlighted in our Saturday keynote address "Culture and Change" by Dr. Jennifer Slack of Michigan Technological University. Most of us in WGF are motivated by the desire to encourage change, such as environmental protection and science-based natural resource management. But are facts and science enough to effect change?

According to Dr. Slack, communicating the science is usually not enough to change people's minds. She challenged us to consider what we can learn from the humanities and social science. She explained how cultural theorists map the relationships, connections, and articulations that surround an issue to identify points of *intervention*, i.e. where change could occur. Dr. Slack encouraged WGF to do what we do well, and join with other groups on strategies that consider the larger context of an issue. She suggested that scientists can make themselves and their work more accessible to help counter the growing skepticism of science in society.



Keynote speaker, Jennifer Slack, explains that sharing science, without thinking about more than science, might not effect the changes WGF desires.

Dr. Slack acknowledged that people have been studying change forever and it remains a mysterious phenomenon. Her concluding message to WGF was: accept that YOU probably won't change the world, but know that together we ARE changing the world.

#### **Wolf Panel**

By Bruce Neeb

Should the gray wolf in the Midwest remain on the federal Endangered Species List? Or should it be delisted and wolf management be left to the states? Delisting reflects the success of the Endangered Species Act. State experts, Great Lakes Indian Fish and Wildlife Commission staff, and environmental communities shared their thoughts.

Panelists included both the retired and current Large Carnivore Specialists for the Wisconsin DNR. Adrian Wydeven (retired specialist) described the gray wolf's extirpation from Wisconsin in the 1800s and its recovery starting in the 1970s as wolves moved back into the state from Canada and Minnesota. He recounted the state's history of wolf listings and delistings and the resulting impacts on gray wolf and white-tailed deer populations. Scott Walter (current specialist) said the Wisconsin Gray Wolf Management Plan (1999), which calls for a statewide population goal of 350 wolves, needs to be updated to focus on how wolf populations fit the carrying capacities of their habitats and not on a statewide population goal.

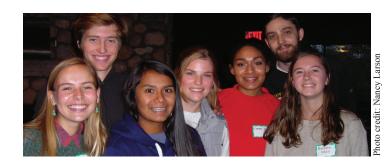
Jonathan Gilbert of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) explained Ojibwe and other native people in the Midwest view the gray wolf as a brother to be treated with respect.

Jodi Habush-Sinykin of Midwest Environmental Advocates (MEA) pointed out that if wolves are delisted, state law calls for immediate resumption of wolf hunting and trapping based on the 1999 populations goals. She called for changes to both the state law, and the Wisconsin policy that uses endangered species funds to reimburse the owners of dogs lost to wolves.

WGF's Wildlife Work Group is on record in support of delisting the gray wolf—and co-chair Tom Hauge suggested an important first step would be a *Wisconsin Gray Wolf Management Plan* update respecting and reflecting the interests of all parties.



Wolf panelists—Habush-Sinykin, Gilbert, Wydeven, Walter.



#### Youth Participation

By Nancy Larson

It's no secret that WGF's membership skews to an older demographic. Many members are retired from government agencies or academia, but we are interested in expanding our perspectives. Thanks to Dolly Ledin, co-chair of the Education Work Group, and to several other work group members, we brought seven college students from around the state to participate in the meeting and to provide ideas on involving youth in our organization. We appreciate all the member donations in support of student participation. Dolly is garnering feedback from the students for the board to consider. Their suggestions include mentoring and paid internships, which WGF has been interested in pursuing.

#### **Saturday Discussion Groups**

By Nancy Larson

The Saturday small group discussions about the future of WGF brought out recurring themes: the idea of needing to grow our members and donors, as well as the desire to retain the personal connections we have in the organization now. As we considered future scenarios for WGF, we were reminded how far we have come in such a short time.



#### **Climate and Energy Policy Sessions**

By Don Behm

Those who attended the Saturday sessions showcasing climate change and energy policy learned about WGF's *Climate Change Work Group Action Plan 2020* and the

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Annual Meeting (continued from page 5)

newly-formed Energy Policy Work Group's goal of boosting the energy literacy of Wisconsin residents.

#### Climate Change

Previously, in Friday's work group session, co-chairs Mike Meyer and Nancy Turyk shared the five goals of the work group's Action Plan 2020: (1) track progress of state government, industry, communities, universities in meeting climate action commitments and report to WGF members and Wisconsin citizens, (2) compare Wisconsin's climate action commitments to those of neighboring states, (3) develop a Climate Change Speakers Bureau (4) participate in the "Climate Fast Forward Conference" in Madison on November 8, and (5) work with partners to develop grant proposals to address key climate needs in Wisconsin. In this Saturday session, the co-chairs focused on the first steps to accomplish the speakers bureau—preparing PowerPoint slides that can be used by speakers for talks on a variety of climate change topics and assembling a catalog of publications and other resources that speakers can use to strengthen or update their own science-based understanding of those topics.

#### Energy Policy

Co-chair Gary Radloff explained the work group will help Wisconsin residents understand and respond to rapid changes and complexities in the energy system—beginning with the message that decisions on the generation and distribution of energy impact water and air quality, land use, and climate change.



Because energy "touches everything," there is a need for science-driven energy policy. Yet, Wisconsin is one of only 10 states without energy planning. Governor Tony Evers will attempt to correct that shortcoming through an executive order creating an Office of Sustainability and Clean Energy that is charged with developing a clean energy plan and ensuring all electricity distributed to Wisconsin consumers is 100 percent carbon-free by 2050.

Co-chair Kerry Beheler jumped into energy policy this year by writing comments on behalf of WGF to the Public Service Commission regarding the proposed Cardinal-Hickory Creek transmission line in southwestern Wisconsin.

#### **Public Trust and Water Quality Sessions**

By Joy Perry

A full classroom on Saturday heard updates on WGF's work group activities regarding Wisconsin's Public Trust Doctrine and threats to water quality.

#### Public Trust Doctrine

Ron Grasshoff and Michael Cain, Public Trust and Wetlands Work Group co-chairs, explained that the Wisconsin Constitution declares that the people forever share common rights to the waters of Wisconsin. Those rights are accompanied by shared responsibility to maintain that public trust, including having a say in setting the types and amounts of shared water usage.

Several Public Trust Work Group members have defended the public trust and wetlands in the legislature and courts during their careers. Recently, WGF testified about the harm expected from state legislation on isolated wetlands and is working with DNR on guidance and follow up monitoring ideas.

WGF also opposed proposals to site private enterprises and homes on public trust-protected lakebeds, enlisting the help of other organizations to do so. Another WGF effort, opposing a bill weakening wetland mitigation, resulted in improved legislation.

Water Resources and Environmental Rules
Paul LaLiberte, chair of the Water Resources and
Environmental Rules Work Group, focused on agriculture
and water quality. The work group has a wealth of water
quality expertise, but recognizes that there are many other
issues associated with Concentrated Animal Feeding
Operations (CAFOs). The work group is focusing on the
bigger picture of agriculture, water quality, and related
health impacts.



To carry out this new focus, the work group is lasering in on local and state decision-makers and management practices. The group has created five foundational current science videos (e.g., *Manure Management and Pathogens*) and management documents on topics of agricultural water pollution and protecting drinking water from that pollution.

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They also produced an issue paper summarizing the science and history of high capacity wells.

The group also commented and sent out a "media statement" on the state budget, testified to the Senate on a bill regarding CAFO permit fees, commented to the Natural Resources Board regarding needed staffing for the CAFO regulation program, commented on several items of legislation, and regularly met with other organizations interested in advancing water quality issues.

# Speaker's Task Force on Water Quality

By Paul Heinen

In January 2019, the Assembly Speaker, Representative Robin Vos, announced the creation of a Speaker's Task Force on Water Quality. His announcement followed on the heels of Governor Evers's proclamation that 2019 would be the "Year of Clean Drinking Water." Clearly, safe drinking water was the issue for 2019!

The Task Force held 13 public hearings throughout the state to listen to invited speakers and public members on water quality issues. The public was invited to all the hearings and Wisconsin Green Fire members attended and spoke at a number of them. At the last hearing, held on September 5, 2019 in Superior, three WGF members, Nancy Larson, Bob Martini, and Jimmy Vandenbrook were invited to speak to the Task Force on issues that Chair Novak thought the committee needed to hear. Here is what WGF speakers said about the three issues:



(1) The Time is Right to Clean up Legacy Pollution to benefit Wisconsin Communities.

Nancy Larson: "Wisconsin's Great Lakes communities have a once-in-a-lifetime opportunity right now to clean

up legacy pollution. Wisconsin has used \$27 million in state bonding to leverage \$153 million from federal agencies, local governments, and private entities for sediment cleanups. The time is now to take full advantage of federal partnerships."



(2) Environmental Regulation Restores Water Quality, Protects Public Rights and Enhances Local Economies.

Bob Martini: "Clean water and a sound economy go hand in hand. The economic impact of degraded water quality is likely greater than the cost of prevention and restoration. Science-based environmental regulation can protect the environment, public rights, and local economies."

(3) Wisconsin Can Have Clean Water.

Jimmy Vanden Brook: "Wisconsin farmers are facing a very challenging financial picture. Because the farm financial crisis and water quality crisis are intertwined, it makes sense to think of solutions that not only protect our waters but sustain the profitability of our farmers...we can have clean water and vibrant farms if we have the will."

Other groups who testified referred to WGF's Opportunities Now report and suggested that the Task Force read it and use its recommendations

The next step in the legislative process is for the Task Force to draft and introduce legislation to address the many problems they heard about from all the testifiers. WGF will be involved. Look for an update in the future.

#### Not receiving WGF e-updates?

Wisconsin's Green Fire sends out monthly updates through our Constant Contact email client. Some mass emails don't always get through because Internet Service Providers may identify them as spam. Here are two techniques to make sure the WGF emails are not blocked. Check your spam or promotions email folder for emails from info@wigreenfire.org and mark them as "not spam." Then future emails from WGF are more likely to arrive safely in your inbox. Another technique is to add info@wigreenfire.org to your email address book or contacts list. We want you to receive all of our communications!



# Communicating Science through Story

By Dolly Ledin

A communications workshop will be held Tuesday, December 3, 2019, from 10:00 am to 3:30 pm at Schmeeckle Reserve, Stevens Point. Holly Walter Kerby will lead this workshop for WGF members who want to use science to help influence policy. The workshop is

appropriate for members with subject expertise as well as communicators and educators. The workshop introduces story elements and principles and engages individuals in building a presentation. A story board template will be used to map out the presentation of scientific content in the form of a story. Participants will work in revolving small groups to get



feedback on and revise their presentations and receive feedback from the whole group on their final version.

Holly Walter Kerby is the founder and Executive Director of Fusion Science Theater, which uses the elements of story to create methods that communicate science to public audiences. She works as an instructor with the Alan Alda Center for Communicating Science and has worked in industry and in science education.

Register at https://wigreenfire.org/events/. The \$25 registration fee includes lunch. Schmeeckle Reserve is located at 2419 North Point Drive, Stevens Point, WI 54482. For more information on the workshop contact Dolly Ledin at daledin3@gmail.com.

# **Key Developments: Opportunities Now**

By Nancy Larson and Paul Heinen

In *Opportunities Now 2019-2021*, Wisconsin's Green Fire (WGF) presented ways to address five priority issues in the next few years, coinciding with the biennial state budget. *Opportunities Now* is available on the web at https://wigreenfire.org/our-work/. WGF recommended actions at the policy, budget, and state agency level. Although the budget proposed by the Governor addressed many WGF recommendations, the final budget fell short.

Key developments since *Opportunities Now* came out in March 2019 include:

#### Agricultural Water Pollution

Impacts to drinking water, lakes, and rivers from agricultural runoff, which are big problems in Wisconsin, have been prominent in the news over the past year. The Speaker's Task Force on Water Quality concluded its hearings around the state in September. Its members are considering legislative approaches, which could come before the legislature in late 2019 to early 2020.

WGF testimony to the Task Force and our policy papers are being used in these deliberations. WGF is part of the team of environmental organizations working together to prioritize our top legislative solutions. Our team of water quality experts is called upon to provide technical input and ideas for solutions in many settings where state actions are being considered.

The budget passed by the Legislature supports modest increases in funding for county conservation departments and grants. Although the Governor's budget would have provided better funding for CAFO regulation, the budget passed by the Legislature did not increase permit fees for that purpose.

#### Groundwater Withdrawals

In *Opportunities Now*, WGF calls for a statewide policy framework through legislation to assure water withdrawals are sustainable and do not impinge on the rights of other water users or cause environmental damage. Although progress on our big idea is not forthcoming, the Wisconsin Supreme Court will decide cases in the next year that will impact the scope of DNR jurisdiction to evaluate cumulative impacts of high-capacity wells.

Climate Mitigation (continued from page 1)

The overall strategy to increase natural carbon storage through NWL comprises three goals:

Protect What We Have. Keeping forests in forests and protecting existing wetlands and grasslands for all their values (i.e., avoided conversion) should always be a top priority because these ecosystems are powerful carbon sinks—they continually sequester and store large amounts of CO<sub>2</sub>. Carbon is gained and lost through natural and human-caused disturbances.

Perennialize. Establishing a permanent vegetation cover is a key strategy. Powerful tools in increasing future carbon sequestration include reforestation in rural lands. planting trees and green spaces in cities, establishing grass-based pasture in livestock operations, and restoring conservation habitats such as prairies and wetlands. Perennializing also reduces farm runoff, contributes to cleaner water, makes systems more climate resilient, and improves the quality of life in our cities.

Use Enhancement Practices. Almost every acre can offset greenhouse gas emissions through enhanced practices. Adding cover crops and modifying farm nutrient management practices will help prevent nitrogen leaching and lessen the escape of N<sub>2</sub>O into the atmosphere. In forests, stewardship activities that help include supplemental planting, longer rotation ages for working forests, or better utilization of solid wood forest products. Use of solid wood, for example, is a powerful mitigation tool because wood is essentially 50 percent stored carbon, and when used to replace steel or concrete in buildings, it creates powerful substitution benefits.

Because Wisconsin's farms, forests, wetlands, prairies, and cities make up so much of the state, we have an opportunity through investment and practices that are all within reach to both (1) reduce our emissions and (2) help make these lands more resilient and better-adapted to climate change impacts.

Carrying out these goals will require leadership and action from state government, policy makers, and citizens. The Evers administration has made a commitment to begin exploring NWL strategies as part of our state's efforts to address climate change. Wisconsin's Green Fire members are now part of that conversation and have an important role to play. I will be leading a strand on carbon sequestration at the "Climate Fast Forward Conference" in Madison on November 8. The need for current science and policy solutions based on real experience will only become greater. I hope that you are ready to help us make change happen.

### **Profiles in Conservation**

#### Wildlife, Forestry, and Ecology Research

By Jerry Bartelt, Wisconsin DNR for 33 years

Conservation projects throughout my research career have been varied, but mostly focused on wildlife, forestry, and ecology. As a graduate student at UW-Madison in the mid-1970s, my research project involved studying the population dynamics of American Coots (or the Greater Northern Ivory Bill



as I prefer to call them). Countless nights in an airboat were spent capturing these birds using a strong headlight and a net to band and color-mark them. It was a great introduction to the conservation field. I still have scars on my forearms from the stiletto-like claws that these pugnacious little birds have. It was easy to become an expert on coots because no one else in the country studied them. As a result, I provided advice to a project at the Savannah River Nuclear Weapons Facility which determined whether coots that wintered on the cooling ponds were becoming radioactive. I set a goal of seeing every species of coot in the world.

After graduating, I found gainful employment at the Wisconsin DNR as a waterfowl research biologist. One of my research projects was to radio-collar Canada Geese at Horicon Marsh to determine if a dispersal program there was disrupting family groups and increasing mortality. The study allowed me to follow these radioed geese to their breeding grounds in the Hudson Bay Lowlands of northern Ontario, back to Horicon Marsh, and then to their wintering grounds in southern Illinois to complete their migration cycle. Many an hour was spent in a small airplane listening to static and an occasional faint beep coming from a radio signal emanating from these birds.

As my career progressed, I became more interested in ecosystem and landscape-scale management and in practices that are ecologically sustainable, economically profitable, and socially acceptable. Although I no longer conducted research in the field, as manager of the Wildlife and Forestry Research Section, I was able to help design, fund, and oversee many research projects on wildlife and forestry issues including research investigating the ecology of old-growth forests, sustainable forestry practices, sustainable agriculture techniques, and grassland and wetland wildlife problems. These projects allowed me to collaborate on a number of large-scale interdisciplinary research projects with university and agency colleagues. In addition, I participated in many multi-scale planning efforts at the state and multi-state level.

Since retiring, I co-authored *Ecological Landscapes of* Wisconsin available on the Wisconsin DNR website at www. dnr.wi.gov and enter the keyword landscapes. I spend as much time as possible outside—on my farm, traveling, and birding.





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### Not a member? Please join Wisconsin's Green Fire

#### Please visit:

https://wigreenfire.org/make-a-difference/ to join or renew on-line or to download a membership form.

Thank you for supporting the conservation legacy of Wisconsin.









Opportunities Now (continued from page 8)

#### Land and Water Legacy

The state budget reauthorized the Knowles-Nelson Stewardship Program at the current levels until 2021-2022. WGF is hopeful that the Governor's Blue Ribbon Task Force on the future of the Stewardship Program will look into how the fund could help protect community water quality and reduce flooding.

#### Chronic Wasting Disease

WGF made specific recommendations to reduce the spread of CWD, including harvest flexibility, incentives, and statewide bans on baiting and feeding. The Legislature is working on bills to fund research, testing, and deer carcass disposal. The budget included \$100,000 for a statewide study. WGF is part of a CWD Initiatives Group advising agencies and legislators.

#### Climate Change

The big news is the re-emphasis of climate change work in state agencies and the new Governor's Task Force with representation across sectors. WGF is encouraged to see this emphasis on climate change science, adaptation, and solutions.

Art credit: Pete Sandker

Art credit: Linda Shannon