"This institution is an equal opportunity provider."

Partners News

January/February 2023

Protecting your wooded land for the future is essential to clean water, clean air, wildlife habitat, sustainable wood supply...all things that are necessary to society and health, and that are gone forever if the land is developed.

Contact Us

Partners in Forestry
Landowner Cooperative

6063 Baker Lake Road
Conover, WI 54519
partnersinforestry@gmail.com

715-479-8528

PIF Board

Have you paid your PIF dues?

Inside this issue:

UNIVERSITY OF WISCONSIN CENTER FOR COOPERATIVES

We are very grateful to the University of Wisconsin Center for Cooperatives, for their continual support. This funding offers the opportunity to serve more people with solid, scientific fact-based management suggestions which benefit the greater good.

****

Northwoods Forest Conservation handbooks.

As a signature work of PIF and NWA, the three-handbook set has recently been updated with several more pages, and reflects things such as the soon to be Headwaters Cedar Community Forest. Colleagues in the north east have convinced us the books should be available to a wider audience, thus we are placing the file in a Print on Demand opportunity to be available to those outside our area through Amazon. The cover title will include Northwoods Forest Conservation: Collector's Edition 2023, A Three Handbook Combination; at 176 pages of 8.5x11 and in full color. An updated file of the interior is available at www.northwoodalliance.org under NFC handbooks and is free for anyone to use as a benefit to conservation and sustainable forestry. We have some updated print pages, and some of the three books still available if anyone would like. We also hope to print the three-book combination locally when funding allows.

****

CARBON PROGRAM

John Schwarzmann is compiling data for the hopeful carbon program entry. At last count we are over 5000 acres of forested land and we think this makes a solid prospectus to all involved. This can be an additional stream of modest revenue to support a family woodland owners long term objective. Admittedly, there are plenty of questions remaining and we will share any answers as this develops.

****

HEADWATERS CEDAR COMMUNITY FOREST (HCCF)

We have shared the data on the Headwaters Cedar project for over a year now and have every expectation this great project will come to fruition by mid-year. The influx of funds from outside the area is especially notable in this effort. We are truly grateful to all who have contributed to this effort, as this will be very complimentary to the Wildcat Falls Community Forest. HCCF will be the first project in Vilas County in the USFS Community Forest registry. And what a great program USFS Community Forest is: Financial and technical assistance to help communities create publicly accessible lands and all the control stay local! IF you are able, we truly appreciate donations to Northwoods Alliance to establish and maintain these great community beneficial properties which will benefit future generations.

These are your community forests, enjoy them and support them.

****

Supporting Authors of These Community Forests

Several local authors are grateful for these community forest efforts, as some of you have seen with a gift following a nice donation. There is a posting on these authors and their work at www.northwoodalliance.org/books

Supporting these folks can help with this overall community conservation effort, as they are backers of this effort. The newest author-book listed here is Joe's memoir, From Barbells to Spruce Grouse, from which all proceeds will go directly to the Community Forests.

****

WATER

Joe Hovel

I was recently asked during a long discussion on natural resource issues, where the water goes--in addressing news of lakes drying up in the west, and talking about the toxic airborne particulates emitted from Great Salt Lake as it dries away.

I back up to an old writing on this topic. "The earths water is a continuous cycle, falling as precipitation on the landscape and slowly moving to rivers and streams, ultimately to the sea, but having been absorbed, filtered and recycled by plants along this journey. Yet human actions have altered even the most basic force of nature by clearing plant cover, draining wetlands, separating rivers from their floodplains and paving over landscapes. The slow natural movement of water across the land is vital for refilling nature's underground reservoirs and aquifers from which we draw the majority of our water. In many places now, water races across the landscape much too fast, causing the extremes of flooding and droughts and failing to recharge aquifers".

An example locally could be the massive oversize storage building increasingly common near our lakes, coupled with increased development in these watersheds. We must attempt to counter these tragedies of responsibility and treat our lands with care.

We can think back to the 2018 Father's Day flood in Houghton County, which washed buildings down hillsides, destroyed bridges and roads and disrupted life for years. Yet the forests on the Pilgrim River Watershed Project, in the very heart of the flood zone, remained unscathed. Admittedly, the river washed out debris and stones were exposed which had been buried for years, but in the woods almost nothing changed. These lands are protected under the Forest Legacy Program as an intact forest, as yet another testimony to the benefits of conservation to communities. Compare this to reports of deforested areas losing over 10 tons of top soil per acre annually. The quality of our water is parallel to the health of the land.

****

Sandra Postel
By John Bates

Sandra Postel offers two things seldom found in environmental literature these days: Hope and proven ways to change hope into reality. She wants everyone to know, "We have the capacity to write a new water story."

A new story – what does that mean?

In part, it means this: "We have barely tapped the innovative ways we can do more with less water – and then give some water back to nature . . . A future of depleted rivers, dried-up wetlands, and toxic dead zones is not inevitable. Yes, the water cycle is broken, but one river, one wetland, one city, one farm at a time, we can begin to fix it."

And then this: "Working with, rather than against, nature, pioneering cities, farmers, businesses, and conservationists are rejuvenating watersheds and floodplains, and replenishing rivers, groundwater, and soils. The result is a smarter way to mitigate flood damages, prepare for droughts, restore habitats, grow food, augment water supplies, and generally strengthen water security . . . Investing in a healthier water cycle, it turns out, may be the best insurance policy money can buy in this century of rapid change."

Her distinguished vitae stretches over 30 years and offers considerable credibility to her vision. Most recently in 2021, Sandra received the prestigious Stockholm Water Prize, often described as the Nobel Prize for water. The nominating committee said about her: "No one has exhibited more commitment, capacity, courage, and perseverance to address far-ranging and critical water issues that affect both human and natural ecosystems."

That's a big statement, and though others might also be elevated to this list, it's well-deserved. Sandra first became widely known in policy and conservation circles in 1992 when she published the book Last Oasis: Facing Water Scarcity. The book, printed in eight languages and made into a TV documentary, was one of the first to warn about our global water crisis and to call for conservation of water-based ecosystems. She later authored two other widely respected books, Pillar of Sand: Can the Irrigation Miracle Last?, and Replenish: The Virtuous Cycle of Water and Prosperity. She is also co-author with Brian Richter of Rivers of Life: Managing Water for People and Nature, and the co-author with Lester Brown and Christopher Flavin of Saving the Planet: How to Shape an Environmentally Sustainable Global Economy. She has additionally written more than 100 articles and 20 guest editorials for popular and scholarly publications, including Science, The New York Times and The Washington Post.

From 2009-2015, she served as Freshwater Fellow of the National Geographic Society, where she co-created "Change the Course," the water stewardship initiative awarded the 2017 U.S. Water Prize for restoring billions of gallons of water to depleted rivers, aquifers and wetlands. Change the Course brings together the public, the business community, and on-the-ground conservation organizations to do the two things necessary to build water security: shrink our human water footprint and restore water to the natural world. As of 2022, 130 water stewardship projects have been supported across 22 U.S. states, Mexico, and Canada.

She's also the founding director of the Global Water Policy Project.

And she's nowhere near done. She continues to clearly describe what is at risk and what we've done wrong via our water policies and foundational beliefs.

But she doesn't wallow in despair, instead providing a wide vision for down-to-earth (or, better said, down-to-water) paths that we can follow to turn it all around.

She refuses to accept the old dichotomy that pits the environment vs. jobs. "By getting smarter about how we use water, we can have healthy rivers, productive agriculture, and vibrant economies side by side. What gives me hope is that we can point to farmers, ranchers, cities, and businesses that are making a difference and showing that we can live more harmoniously with nature and its freshwater ecosystems. The challenge is to learn from these experiences, adapt them to new situations, and scale up these solutions . . . A new mind-set about water is taking shape. It's one that blends engineering, ecology, economics, and related fields into a more holistic approach that recognizes the fundamental value of nature's services."

She continues, "For a couple centuries we've been trading nature's services for engineering services – for example, building levees to control floods rather than letting natural floodplains do that work . . . If we refer to rivers and lakes as 'water resources,' we immediately think of them in a utilitarian way – that they're there for us to use and take as we see fit, much the way we think of oil or coal. It's important that we think of a river as a living, flowing part of nature that sustains life. Yes, a river can be a 'resource' for the generation of energy and the provision of water supplies, but most fundamentally, it's a river."

She is, however, a clear-eyed realist regarding the situation we're in: "The combination of dams, diversions, pollution, and climate change puts more and more species in peril . . . The population of freshwater vertebrates – such as fish and frogs – are down 83 per cent compared to 50 years ago. Try to get your head around that; for every hundred fish and frogs that were around in 1970, there are now only 17. We are only starting to understand how we have impacted ecosystems and what the consequences will be . . . But we can absolutely take action to slow the rate of

extinction and save more species . . . Depletion and dead zones do not have to define our future . . . We live on a finite planet with finite water. As the basis of life, water needs to be shared with all of life."

The time for change is now, she says: "We are at a tipping point . . . The key solution to maintaining freshwater forever is really to grasp our connection to water. The fact that water is the basis of life. And more and more we're starting to think in this concept of one water, that there's only so much there to be shared, not only among ourselves, but among all of terrestrial life. . . . Our choices can make a difference. I remain hopeful that we can turn this around, and that hope is based on realism."

Finally, she says it comes down to ethics and, ultimately, love. "We talk about water as a 'right,' but it is really the planet's greatest gift. A gift to be shared with all of life. I believe we have an ethical responsibility to manage water in such a way that all living beings, human and non-human, receive the water they need to survive . . . That may sound radical, but it's not. It recognizes our interdependence with the rest of life on the planet. . . . If we love water and what it does for the planet, and for other life on the planet, then we [must] change to be part of the solution."

"We will experience climate change largely through the water cycle. There are worsening floods, worsening droughts, and more wildfires that create water quality problems downstream for drinking water systems. With climate change, we are outside historic norms and can no longer have confidence that the dams and levees are going to hold or that the reservoirs are going to fill again.

"So, we need new kinds of solutions. Realizing that climate and water are completely intertwined, we need solutions that build resilience. Ecologists, hydrologists, engineers, economists, social scientists, and urban planners need to work together to face the climate challenges. It's a new day."

See John Bates work at www.manitowishriverpress.com.
His most recent work is Wisconsin's Wild Lakes: A Guide to the Last Undeveloped Natural Lakes

****

The Pelican River Forest Proposal Under Forest Legacy and Knowles Nelson Stewardship Programs

Fact Sheet

The Pelican River Forest Easement project represents opportunity to protect over 68,000 acres of working forestland in Wisconsin. As the property's current owner, The Conservation Fund is partnering with the Wisconsin Department of Natural Resources to use funding from the state-based Knowles-Nelson Stewardship Program (KNSP), federal Forest Legacy Program and private funding via the National Fish and Wildlife Foundation to secure an easement focused on public access and forest conservation. This will protect the state's largest remaining unprotected private working forest. The Pelican River Forest straddles the continental divide between the Great Lakes and Mississippi River watersheds. It contains 68 miles of streams and is located in the headwaters of the Wolf and Wisconsin rivers. The permanent protection the easement will preserve the water quality of these rivers, safeguarding drinking water for over 40,000 people downstream. It also will permanently ***secure public access for outdoor recreation,*** *including hiking, hunting, fishing, trapping, snowmobiling, ATV/UTV access and cross-country skiing. The property, which contains hard maple, oak, aspen, spruce, red pine and jack pine, grows about 25,000 cords of harvestable volume each year for an estimated annual value of $1.1 million. Accounting for 16% of Oneida County's timber output from private forestland, the property helps supply 17 mills in Oneida and adjacent counties, supporting 636 jobs. Additionally, the project's guarantee of permanent public use includes vehicular access to as many as 70 miles of maintained interior roads. These roads will be supported by a $1.5 million perpetual road endowment fund for long-term maintenance.*

Phase 2 Project Funding

- *Forest Legacy Program (federal) = $11,000,000 (awarded)*
- *Gift from NFWF = $600,000 (awarded)*
- *KNSP (state) = $4,028,000 (requested)*

Status

- *The Conservation Fund acquired the Pelican River Forest (nearly 70,000 acres) in 2021*
- *Phase 1 (12,000 acres) easement was conveyed to state DNR in March 2022*
- *Phase 2 (56,000 acres) easement will be sold to state DNR once funds are available.*
- *State DNR Natural Resources Board approved Phase 2 unanimously in November 2022*

Key Features

- *Protects the largest remaining unprotected private working forest in Wisconsin, sustaining hundreds of jobs in the forest products sector*
- *Expands opportunities for hunting, fishing, hiking, snowmobiling and wildlife viewing*
- *Preserves water quality of the Wolf and Wisconsin rivers, which provide drinking water to over 40,000 people downstream*
- *Provides permanent public access to as many as 70 miles of roads*

Phase 2 acreage by Town

These lands have been in the Forest crop Law or Managed Forest Law programs for decades, and open to the public. They will remain as such under this proposal with expanded public uses. There was NO noted opposition from the Joint Committee on Finance to Phase 1, which was completed last year with only state funding. This phase requires only 25% state funding.

County	Township	Acres	% of Easement
Oneida	Monico	24,369.92	43.68%
Oneida	Pelican	312.15	0.56%
Oneida	Piehl	13,653.92	24.47%
Oneida	Pine Lake	4,028.35	7.22%
Oneida	Schoepke	8,757.24	15.70%
Oneida	Stella	2,607.85	4.67%
Oneida	Sugar Camp	184.11	0.33%
Oneida	Three Lakes	552.31	0.99%
Forest	Crandon	683.68	1.23%
Langlade	Elcho	645.04	1.16%
	TOTAL	**55,794.57**	**100%**

These lands were originally a part of the Consolidated Paper Co holdings, commonly called the Monico Block. When the paper company was sold more than 20 years ago, Plum Creek (a timber investment owner) bought this holding. They did sell parts of it through the following years. In about 2008 the Forestland Group purchased this Plum Creek holding. They considered Forest Legacy in 2013 but did not proceed. Two years ago, the Conservation Fund, a nationwide conservation organization active in Wisconsin, bought the holding from Forestland Group, with the express purpose of seeing it protected. They propose to see it conserved with a Forest Legacy conservation easement and most likely will sell the land later to responsible investment owners. The state is to purchase the conservation easement-Not the land.

Yet, there are an abundance of seemingly misrepresentations about these facts.
A memo circulated by Sugar Camp refers to easements, ownership and MFL in misleading context. Note Sugar Camp has only 184 acres or .33% in the easement proposal.

****

BACK TO THE BASICS

What is a Forest Legacy (F.L.) Conservation Easement?

Forest Legacy is a federal program from the USFS, and adopted by states. It was conceived in the 1990 Farm Bill, adopted by WI about 2000.
Some Forest Legacy easements are funded by LWCF, some only by K-N Stewardship, and commonly both are used as a match.

The Easement
Look at land ownership as a bundle of property rights, such as these 5 examples:
Rights to: Post No Trespassing, Subdivide, Develop, Mine, Timber - these 5 are several very obvious property rights.

Under a Forest Legacy easement most of these rights are extinguished (at least in part) for the land owner, except the Timber Rights which are subject to sustainable forestry practices. In other words, the landowner is transferring some of their rights.

It is more complex and sometimes conditional overall but looking at it this way may be helpful.

Conditions of these rights under F.L. easement
Post No Trespassing: Under the easement the landowner must allow the traditional forest uses (foot traffic). This is not necessarily a mandate of the federal program but certainly is with K-N Stewardship. Public funds=Public access.

Subdivide: large easements often allow some splits, but must meet the objectives to maintain significant forest tracts.

Develop: improving gates and roads, no residential, sometimes a storage building is allowed

Mine: mineral rights are extinguished, but many F L easements allow gravel extraction to maintain roads on the land.

Timber: land owner retains timber rights, conditional to proper management practices.

Explain MFL
MFL is the Managed Forest Law. MFL is in Wisconsin, but most states with a **forest products industry** have similar tax law programs.

Using this program offers a substantial property tax reduction in exchange for practicing sustainable forest management and even more when allowing public access (MFL Open).

Without these Tax Law programs, many private land owners would find it impossible to own land and keep it whole, intact and forested.

MFL is set into either 25-year or 50-year entry agreements. Withdrawing early ---there is a penalty, but perhaps not enough as developers often buy and fragment MFL lands.

MFL replaced 2 older tax law programs in the late 80's. The Forest Crop Law was the large owner program, required the land to be open to public. There may be some Forest Crop Law entries still viable, as they were 50-year entries, but there have been no new Forest Crop Law entries since about 1988.

There is much more about Forest Legacy and MFL in the Northwoods Forest Conservation: A Handbook, the first of the three. If anyone does not have these handbooks, they are all at www.northwoodalliance.org under current projects, and we have some print copies available.

Opinion

The opposition and opposition memo to this project leads uninformed viewers to believe this is a preservation effort by a radical environmental group. That is simply false. In fact, some environmentalists say that Forest Legacy is already too much of a compromise, as Tom Goldtooth said in an NPR interview Sept. 21, 2021 "And for many environmental advocates, like Tom Goldtooth, that is not enough. TOM GOLDTOOTH: We have so many concerns that this is just another scam. ROTT: Goldtooth is with the Indigenous Environmental Network.

GOLDTOOTH: It's another scam to give the impression that these lands are going to be protected, set aside, restoring nature. But these lands are a greenwash for polluting industry".

Forest Legacy is common sense, moderate conservation at its very best and on a grander scale than most of us could envision without the program. This proposal recognizes the needs of communities, and respects the economic, social, environmental and intrinsic benefits to society. This is a very sound opportunity for future residents and visitors to enjoy the outdoor experiences we have long enjoyed.

* * * *

There is a rather recent research paper on the Forest Legacy Program and its economic benefits.
First link is the summary Second link is the full report

https://www.fs.usda.gov/sites/default/files/media_wysiwyg/flp-economiccontributionsreportsummary.pdf

https://www.fs.usda.gov/sites/default/files/media_wysiwyg/flp-economiccontributionsreportfullresolution.pdf

****

Have you checked out PIF's website?

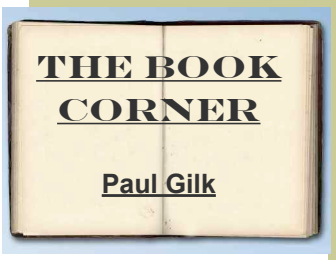
www.partnersinforestry.com

The website is for members to expose your business, service or tree farm, share thoughts, ideas, articles, photos, and links.

This is your COOP, we need your input as much or more than your dues.

As a service to PIF members, contact Joe for special pricing in your needs for:

- **Napoleon wood stoves**
- **wood finishes and preservatives**
- **garden and tree amendments**
- **grass seed for trails**



A REVIEW OF CURT MEINE'S ALDO LEOPOLD: HIS LIFE AND WORK ON THE OCCASION OF ALDO LEOPOLD'S 136TH BIRTHDAY

One could tick off details about Aldo Leopold's life—born January 11, 1887, in Burlington, Iowa; educated as a forester at Yale; worked for the U.S. Forest Service in New Mexico and Arizona for roughly two decades; married Estella Bergere in October of 1912; accepted an appointment to the Forest Products Laboratory in Madison, Wisconsin, in 1924; and, in 1935, came into possession of "the shack," near Baraboo, along the Wisconsin River, a place that figures as a hub in A Sand County Almanac, and on which property he died, of an apparent heart attack, while fighting a grass fire on April 21, 1948. Leopold was 62 years old, famous and revered in some conservation circles, reviled in others. He was buried in Burlington.

Curt Meine's biography—over 500 pages of text, not counting notes, bibliography, and index—is a slow-read page turner. It's slow because it's so packed with vivid information and insights. It's a page turner for the same reasons—not only Leopold's interesting life but also the multifaceted conservation movement in America from the late nineteenth-century until the time of his death.

But I don't want to wander in (or try to tug the reader through) the exquisite wilderness of Meine's exposition. It's too big and gorgeous to summarize. Or, to put it differently, there's a buried perception in Leopold's evolving consciousness that I'd prefer to focus on. It has to do—it's a subtle underground stream—with spirituality. That spirituality lies at the core of Aldo Leopold's accrued perception and congealed convictions. Stated as simply as possible, it's this:

Aldo Leopold's famous compaction— "land as community to which we belong"—could be the epigraph for an emerging theology that's in process of shifting its devotion from sky to earth. That shift from extraterrestrial to terrestrial is—for all the space talk in the media—the defining and decisive feature of spirituality in our time.

Leopold married a woman—Estella Bergere—from a landed family in New Mexico. She had strong Hispanic and Catholic roots, and he vowed never to interfere with his wife's religious convictions or the eventual churching of their children—all five of them. And yet, not long before he died, Aldo's daughter Estella seized an opportunity "to find out what was going on inside her father's mind. She veered the conversation toward religion, a subject about which he still never spoke. Estella asked him point blank whether he believed in God. 'He replied that he believed there was a mystical supreme power that guided the universe,' Estella recalled. 'But to him this power was not a personalized God. It was more akin to the laws of nature. He thought organized religion was all right for many people, but he did not partake of it himself, having left that behind him a long time ago. His religion came from nature, he said.' [Son] Luna gave a similar assessment of his father's spiritual beliefs. 'I think he, like many of the rest of us, was kind of pantheistic.'"

Perhaps the word "pantheism" is a way to build a conceptual bridge from land as community to which we belong to an emerging theology that's in the throes of shedding the halogen glow of the eternal extraterrestrial for the natural radiance of the evolving earthly. Spirituality is coming home to the village and down to Earth. We are still in the early stages of that arrival, but the gravity of its descent is growing.

The thing we mostly don't get—or we get it only in confusing flashes and inadequate glimmers—is that the world we live in, in terms of human inventions and infrastructure, is a world that's been built of psychic materials (both veneration for Civilization and a worshipful religious attitude toward an extraterrestrial god) that we affirm as spiritually superior if not supreme This is worshipfully true as regards religion and

infused with heavenly Platonic Forms as regards the civil state. The globalization of these psychic materials—what Stephen Larsen in The Fundamentalist Mind calls the "crystallization of our pathology"—occurs with the transformation of the bulk of the world's population from rural folk to urban civilized as "pagan" spiritualities are crushed.

Self-sustaining folk culture, for the first time in human evolution, is dead. Or at least severely wounded. When folk culture dies or dries up, the shift in certain qualities of consciousness moves from folk to civilized, from body to head, from rural to urban, from village self-provisioning to atomized consumerism, from the daily arc of the sun and moon to the electronic clock on the wrist. The world Aldo Leopold dreaded—what he called the industrialization of everything—now forces us to engage the necessary steps by which we might learn to live in a community in which we actually feel we belong, moving away from personal salvation and private wealth accumulation and toward the cooperative and communal. The excessively private and religiously personal are psychological restraints on this cultural transformation.

The shift from heaven anticipation to Earth presence (a shift that Global Crisis is forcing on us, irrespective of our convictions) is a hard row to hoe for people whose spiritual sensitivities have been conditioned heavenward by centuries of nearly unassailable religious indoctrination. This crystallizing conditioning is hard to shake. It's both internal disposition and external institutionalization. As our realizations awake—and new understandings can be exhilarating—we are confronted with the need for an urgent downsizing and repurposing of institutions. Spiritual realizations compel political action.

There's another layer here. As Curt Meine repeatedly documents, Aldo Leopold both welcomed and feared big government involvement in land ownership and management. He welcomed it for parks, forests, and big hunks of wilderness: blocks of land so important or immense that they needed protective, overarching governmental jurisdiction in a civilized society intent on the industrialization of everything.

On the other hand, it was precisely this civilized society that had, with astonishing historical speed, already trashed the landscape from sea to shining sea. In such a system, Leopold realized that conservation (in the fullest and broadest sense) could only be a living and cherished impulse if the people recognize, live, and do it. Government could protect; but, insofar as this protection was a shield against not only corporate rapaciousness but common greed and ecological stupidity, he understood that an enlightened citizenry was needed not only to honor and preserve that protection but deepen it in countless local and personal ways. Yes, we need government oversight and regulation; but unless every day, ordinary people love and cherish the land and landscape, government oversight will thin and become increasingly threadbare as it gives way to the impulses of private wealth and corporate appetite. That's the grim trajectory of "democratic" consciousness in a civilized society fully saturated with the private consumption and corporate industrialization of everything. A major shift in conservation consciousness could slow and even reverse this trajectory; but politics without a change in consciousness was bound to be defensive. The older he got, the more Leopold realized the necessity of that shift in common consciousness—its necessity and its frustrating sluggishness.

And that's why land as community to which we belong is the epigraph of an Earth-centered theology that's slowly and even painfully recognizing how civilized it's been—and mostly still is—and what a difficult and even humiliating step it is to kiss the feet and face of the earthy pagus ("country district") we've been conditioned, by both civil and religious authority, to surpass and suppress, and which we treat with technological contempt and political condescension. Turning toward the welcoming embrace of pagus—for pagus does not hate or reject refugees from civis—is both liberating and deeply confessional. Liberation is linked to confession: recognizing the rapacious system

we're part of and whose First World benefits we're so used to that we take our imperial lifestyles as normal and deserved.

Aldo Leopold saw all this. He saw it in his family's life. But he'd vowed to keep his mouth shut about religion. He kept his vow. But a vow of silence did not stifle his perception. Perhaps that vow was even beneficial as a goad to sustained observation and accrued reflection. He saw how the whole structure worked, from top to bottom. He recognized that the necessary shift, while certainly psychological, rested on a spiritual condition with an associated economic ideology operating as a field of commercial ethics. Well, it may be impossible to know how clearly or how fully Leopold discerned the religious role of heaven in diminishing, dulling, and deadening the earthy folk consciousness of the indigenous and peasant. Or how the extraterrestrial model provided a template for skyscraper utopianism as the industrial ideology of the world.

Aldo Leopold not only loved wilderness as a cultural and spiritual necessity for human wholeness, he experienced wilderness in Mexican mountains so devoid of human presence or civilized meddling that, with his decades of ecological perception and spiritual sensitivities, he recognized a self-sustaining organism of coherent ecological evolution. He got to "Gaia" decades before James Lovelock gave our battered earthly organism the name of an old Greek goddess. Leopold actually saw it and felt it and wrote about it. He called it a "vast pulsing harmony."

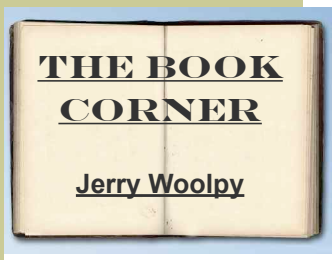
Mutually Assured Destruction and Anthropocene Extinctions should be telling us that civilization—which is not too big to fail—is cracking up simultaneously with its derangement of Earth's ecology and folk cultures. Arnold J. Toynbee, in his Civilization on Trial, said Civilization runs on two diseased, ironclad legs of Class and War, and that no civilization to date has ever chosen to cure those diseases with a steady massage of servanthood and stewardship. Any god that blesses violence and theft—well, that takes us Christians back to Yahweh at Jericho, doesn't it? And that religious model, as the Indigenous scholar Steven Newcomb has shown in Pagans in the Promised Land, is the foundation, the rock-bottom justification, for the Right of Christian Discovery. And the walls came tumbling down. Death to every child, woman, and man who stand in the way of a Chosen People and a Supreme God who authorizes such chosen-ness.

When our religious and civilized walls come tumbling down, will we be able to discern the earthy spirituality in the lifeforce of which we are only a part, one species among many, on an Earth of overwhelming complexity and beauty? We had better be able to, for that's the only way out of our evolutionary predicament. Once we glimpse that immense and immediate wholesomeness, we can learn to recognize it with greater frequency, attention, and commitment—and begin to live it as we work to undo the industrialization of everything.

We're in a critical—and very dangerous—transitional stage, even though things (for those of us in the protected First World) remain in pretty good shape. There may be lots of crises in the world, but we're okay. This is going to change. Things are going to get a lot rougher and tougher in the coming decades. Getting to cooperative—and ecological—economics is crucial. Land as community to which we belong is the mantra. It's time we took Aldo's epigraph to heart personally, cooperatively, politically, and spiritually.

Curt Meine's labor of love shows us a real Aldo Leopold. It is a wonderful revelation.

Paul is a northern Wisconsin writer who lives off grid in Lincoln County. He was a writer for past PIF efforts, and in Northwoods Forest Conservation: A Handbook



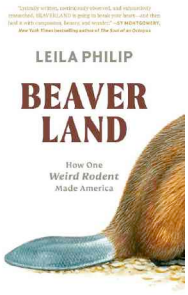
Beaverland: How One Weird Rodent Made America (2022) by Leila Philip

Reviewed by Jerry Woolpy

If history had stopped just before the Europeans came to America, Philip tells us that Beavers were a keystone species that kept the land wet by diverting rivers, slowing their flow enough to prevent erosion. The wet land promoted diversity of all kinds of flora and fauna. So, for thousands of years Native Americans could live off the land by hunting and gathering without exceeding the carrying capacity.

She even takes us back to the megafauna when beavers were as big as bears. And she brings us through to the tragic impact colonization brought to the continent: deep, fast, flowing, and hence eroding rivers first to turn the wheels of sawmills that made lumber out of trees, and then to make navigable highways to transport what was mined and grown in the countryside.

To facilitate the takeover we exterminated the beaver, displaced, and enslaved the Native Americans, depleted the soil, polluted the air, and exceeded the carrying capacity of the conquered land.



Hoping that it is not too late, we are just now recognizing the miracle of beavers who can restore wetlands, soil, trees, and all if only we can manage to share the land with them. Small brain beavers like ants and bees, act collectively to reengineer rivers to replenish the land.

The book is an appreciation of beaver behavior, and about the character of the people who are working to control the great reproductive potential of beavers so that we can enjoy their accomplishments without being overrun by their enthusiasm. It's a justification of regulated trapping that may help reasonable people, who love animals, to go along with it. And it's an American history that few of us have considered.

****

Dynamic Forests for Birds and Wildlife in the Great Lakes

The webinars in this 3-part series will introduce the dynamic forest concept in the Great Lakes region; discuss the benefits of active forest management for forest health, wildlife, and birds, and to share information on cost share funding for private landowner projects in Minnesota, Wisconsin, and Michigan.

Consulting foresters, forestry workers, natural resource managers, landowners, hunters, bird watchers and beyond, are encouraged to virtually-attend!

For more information, and to register for the following webinars and receive a Zoom link please visit: https://forms.gle/RFFiXq1Zpw3MSLNx8

The webinars in this 3-part series include:

- Great Lakes Dynamic Forests
- Benefits of Forest Disturbance & Early Successional Habitat for Deer & Other Wildlife
- Regional Conservation Partnership Program: Improving Forest Habitat for Wildlife Resources in MN, WI, and MI

****

EXTRACTED FROM A STORY IN JOURNAL-SENTINEL 'WHO OWNS WISCONSIN'S 17M ACRES OF FORESTS?'

The majority of Wisconsin's forests are privately owned, and family forest owners make up about 9.7 million acres

Most private forest landowners in Wisconsin bought their property for recreational purposes — to enjoy wildlife, go hunting or to have some privacy — rather than to manage and sell the timber growing on it, according to Wisconsin's 2020 State Forest Action Plan report. Forests span roughly 17 million acres in Wisconsin, covering nearly half of the state and families are responsible for a large portion of those trees.

The majority of Wisconsin's forests are privately owned, and family forest owners make up about 9.7 million acres of those 11.5 million private acres, according to the state report. County forests, meanwhile, account for the largest share — 2.4 million acres — of the 5.2 million acres owned by public entities.

The future of Wisconsin's forests is shaped by who owns them

Multiple products come from each type of tree, such as logs, pulpwood, sawdust and chips, which can be used in different markets.

More than 1,200 wood-using companies produce nearly $25 billion in forest products each year in Wisconsin, according to the state report. "Over 64% of their raw material needs are supplied from private land," the report states, "and over 160,000 jobs in the state rely on the forest products industry."

Who owns these private forest lands will "ultimately drive" how they are managed, according to the report. Generally, the number of landowners is increasing in Wisconsin, as parcel sizes are getting smaller, the report states, adding: "Nationally, millions of acres of privately-owned forest land will change hands in the coming decades as the baby- boom era landowners continue to age."

About half of family forests in the U.S. are owned by people who are older than 65. In Wisconsin, the average age of family forest owners is 61. The ways these people choose to transfer their land to the next generation "will, at least in part, determine the future of Wisconsin's forests and how they are managed," the report states.

Aside from family forests, corporations own about 1.5 million acres of Wisconsin's forests, and other private owners, such as conservation organizations and unincorporated clubs and partnerships, make up approximately another 0.3 million acres.

Wisconsin has a 'unique' county forest system

Most of Wisconsin's 5.2 million acres of public forest lands are in the northern half of the state. Collectively, Wisconsin's county forests are the largest owner of these public lands, covering 2.4 million acres. The first county forest was established in 1928 in Langlade County, while Adams County became the newest, and 30th, county forest in 2020.

The history of Wisconsin's county forest system stems back to the "massive timber cutting and land clearing" in the state in the late 1800s and early 1900s, according to the Wisconsin County Forests Association website. People tried to farm these cutover lands in northern Wisconsin, but were unsuccessful and abandoned them. So, the tax delinquent lands were given to the counties to manage.

Today, the focus of Wisconsin's county forests "is to ensure the long-term health and sustainability of forest ecosystems while providing benefits to the public," the organization says.

Iron County's Forest — the third largest county forest in the state — spans 175,000 acres. While tourism is big there, Iron County's Forest product industry is its "largest economic driver" and its top employer, said Eric Peterson, the county's forest administrator and vice president of the Wisconsin County Forests Association.

Each year, Iron County's Forest brings in a little over $2 million to the county's budget through the sustainable management and sale of forest products, he said.

The county forest also provides a host of recreational activities for people, "right in their backyard," Peterson said, including hiking, camping, fishing, mountain biking, canoeing, snowshoeing and ATV riding, among others. During the COVID-19 pandemic, Peterson said his team saw an uptick in people getting out and exploring.

In general, Wisconsin's county forests provide "an opportunity that a lot of other areas, a lot of other states, just don't have," Peterson said.

Much of the county forests in the U.S. are located in Wisconsin and Minnesota, according to Rebekah Luedtke, executive director of the Wisconsin County Forests Association. What makes the two different, though, is that Minnesota's county forests are owned by the state and managed by the county, while in Wisconsin, the counties own and manage the forests, Luedtke and Peterson said, adding that they do work closely with the Wisconsin Department of Natural Resources.

Wisconsin's other public forest owners include the federal government, which covers about 1.6 million acres, most of which is in the Chequamegon- Nicolet National Forest. The state manages another 1.2 million acres. And Native Americans tribes own 0.4 million acres, but these are generally not classified as public lands, according to the state report.
Reach reporter Becky Jacobs at bjacobs@gannett.com

Also see Partners News Feb. 2016 for interviews with former County Forest Association director Jane Severt
https://partnersinforestry.com/Documents/News%20Letters/02-2016%20PIF%20Newsletter.pdf

****

GOT WOOD?

Paul Hetzler

In Shel Silverstein's captivating book The Giving Tree, a young boy and an apple tree love one another dearly. So much, in fact, that as the lad matures and finally grows old, the tree gifts him on each visit; first its branches in which to play, and then its fruit, and later its very trunk. In the end it is a stump, perfect for a tired elder to rest upon in their final meeting.

I have yet to encounter any similar trees, but they do give us a stunning range of gifts, from the obvious like firewood and lumber to the unexpected such as tires and window-panes. Just to review their better-known perks, trees in our landscape enhance property values while reducing energy costs. Having trees close by helps bolster mental and physical health. Even a view of trees out our window is linked to faster recovery from injury and illness as compared to folks who see only buildings outside. Forests take carbon dioxide out of the air and store it, while filtering out airborne pollution and neutralizing harmful gases.

Beyond these familiar blessings, or "ecosystem services," as they're called, we harvest trees and make them into some pretty cool stuff. For example, there's a birch-based sweetener called xylitol that fights cavities and can actually reverse tooth decay. Xylitol-sweetened gum and candy is now endorsed by most professional dental associations, and that's saying something.

Hawking wooden running sounds like a tough sell, but it works for one California startup. Though footwear made of wood was heavy and bulky in the past, San Francisco-based Allbirds has been making soft, comfortable wood-fiber running shoes since 2014. The sneakers are said to be unusually light and cool.

But that's a pedestrian use of wood compared to what tire-maker Michelin is rolling out. Apparently, this huge, modern business took a page from Fred Flintstone and will soon make wood-based tires. While Fred's tires were tree trunks,

Michelin's new product will look and perform like conventional tires. Michelin engineers found a way to use paper-mill waste to make stretchy elastomer compounds to replace petroleum-derived rubber. These tires give a smoother ride than solid logs – I just hope carmakers don't look to the Flintstones, who stopped the car with their feet, for a braking-system design.

If you think wood-based rubber is a stretch, take a look at fully transparent window panes that come from trees. Researchers from the Universities of Maryland and Colorado teamed up with private industry to make wooden "glass." It is about five times more thermally efficient than regular glass, in addition to being nearly shatter-proof. Plus, it uses less energy to make and is based on a renewable resource. The product is not yet commercially available, but when it hits the market, it will be the clear choice.

Researchers from the University of Maryland have invented "super wood," as they call it; equal in strength to steel, yet lighter than aluminum. The University of Maryland's research team says their low-cost product will rival steel and titanium alloys in construction uses, and they expect it to be used in cars and planes one day.

Some wood applications are truly out of this world: A wood product similar to that of the University of Maryland was used by scientists at Kyoto University to make the first-ever wooden satellites. The team aims to have the first one orbiting the Earth by late 2023. Wood satellites have many advantages. Right now, each time a dead satellite re-enters our atmosphere and burns, it produces alumina particles. These micro-specks stay in the stratosphere for years, eating away at the protective ozone layer. When wood burns it might result in toasted marshmallows, perhaps, but no lumina. And if a wood satellite should break up in space, splinters are less dangerous to the International Space Station than the myriad nuts, bolts and metal shards zipping around up there.

To wrap things up, a research team at the University of Delaware has made packing tape from tree lignin. By volume, the majority of a tree is cellulose. If you think of cellulose as concrete, lignin is analogous to steel bars and mesh used to reinforce it. Trees produce lignin for strength as needed, because it takes a lot of energy to make. On a windy site, trees will use more lignin, but the same trees in a protected location will create much less.

The University of Delaware team has formed low-cost adhesives from natural polymers found in lignin, and claim their transparent tape performs as well as commercial brands. Sticking to its research, the team is testing various kinds of trees to see if lignin from different species could have unique applications.

Considering how generous trees are, let's help the planet – and outer space – by planting a few this year.

Paul Hetzler has been an ISA-certified arborist since 1996. He claims not to have made any of this up. His books Shady Characters and Smart as a Slime Mold can be found at the link www.northwoodalliance.org/books

The Cacao Tree: Better Loving Through Chemistry

Paul Hetzler

It's impossible for a parent to choose a favorite child – or at least that's what I tell my kids – and it's almost as difficult for an arborist to pick a single best-liked tree. For different reasons, I have many pet species. One of the apples of my eye is a species I've never laid eyes on, but it's one I've appreciated since childhood.

Native to Central America, the cacao tree (Theobroma cacao to arborists and other tree-nerds) grows almost exclusively within twenty degrees latitude either side of the equator (in other words, where most of us wish we were about now). The seeds of the cacao tree have

been ground and made into a drink known by its Native American (probably Nahuatl) name, chocolate, for as many as 4,000 years.

The cacao is a small tree, about 15-20 feet tall, bearing 6- to 12-inch-long seed pods. Packed around the 30 to 40 cacao beans in each pod is a sweet, gooey pulp, which historically was also consumed. After harvest, cacao beans go through a fermentation process and are then dried and milled into powder.

In pre- European-contact times, chocolate was a frothy, bitter drink often mixed with chilies and cornmeal. Mayans and Aztecs drank it mainly for its medicinal properties (more on that later). In the late 1500s, a Spanish Jesuit who had been to Mexico described chocolate as being "Loathsome to such as are not acquainted with it, having a scum or froth that is very unpleasant taste." It's understandable, then, that chocolate was initially slow to take off in Europe.

Chocolate became wildly popular, though, after brilliant innovations such as adding sugar and omitting chili peppers. Another reason for its meteoric rise in demand is that it seemed to have pleasant effects. One of these was similar to that of tea or coffee. There isn't much caffeine in chocolate, but it has nearly 400 known constituents, and a number of these compounds are uppers.

Chief among them is theobromine, which has no bromine – go figure. It's a chemical sibling to caffeine, and its name supposedly derives from the Greek for "food of the gods." Even if people knew it more closely translates to "stink of the gods," it's unlikely it would put a damper on chocolate sales.

These days chocolate is recognized as a potent antioxidant, but throughout the ages it's had a reputation for being an aphrodisiac. I assume this gave rise to the tradition of giving chocolate to one's lover on Valentine's Day. Does chocolate live up to its rumored powers? Another stimulant it contains, phenylethylamine (PEA), may account for its repute.

Closely related to amphetamine, PEA facilitates the release of dopamine, the "feel good" chemical in the brain's reward center. Turns out that when you fall in love, your brain is practically dripping with dopamine. Furthermore, at least three compounds in chocolate mimic the effects of marijuana. They bind to the same receptors in our brains as THC, the active ingredient in pot, releasing more dopamine and also serotonin, another brain chemical associated with happiness.

Don't be alarmed at this news; these things are quite minimal compared to what real drugs can do. Consuming chocolate has never impaired my ability to operate heavy machinery. At least not in the way that lack of training and experience have.

Most people would agree that chocolate is no substitute for love, but these natural chemical effects may help explain why romance and chocolate are so intertwined. Well, that and marketing, I suppose.

Dogs can't metabolize theobromine very well, and a modest amount of chocolate, especially the dark variety, can be toxic to them. This is why you shouldn't get your dog a box of chocolates on Valentine's Day, no matter how much you love them. And assuming it's spayed or neutered, your pooch won't benefit from any of chocolate's other potential effects anyway.

Paul is an Arborist, PIF friend and former Cornell University educator who loves trees and many other features of the natural world.

Future Articles

If you have questions that you would like to see addressed in the newsletter, suggestions for, or have articles for, future newsletters, please contact us at partnersinforestry@gmail.com or by mail:

Partners In Forestry
6063 Baker Lake Rd
Conover, WI 54519

Wisconsin Local Use Dimension Lumber Grading Certificate Courses Offered in 2023

The Wisconsin Department of Natural Resources is hosting the Local Use Dimension Lumber Grading (WLUDL) certification course in 2023. Registration is now open for these courses.

The WLUDL certification, open to anyone, allows the use of locally milled dimension lumber in one- and two-family residential construction. By completing the course and passing the associated exam, participants are given the proper training and certification to mill and sell lumber under the local use dimension lumber grading system. Certification is valid for five years, after which recertification is required by completing another course. As part of this course participants will:

- Gain an understanding of basic wood science and material defects
- Obtain hands-on experience grading lumber
- Gain the skills and certification needed to mill and sell for the construction of one- and two-family dwellings

More information on the course and associated certifications is available on the WLUDL website.

Registration Information

Registration Fee: Free

Spots Available in Each Course: 15.

Registration Deadline: One week before each course.

Register HERE

Please **email the Wisconsin Forestry Center** to be added to the course interest list to hear about future offerings.

2023 WLUDL Courses in the north

Thursday, May 11, 9:30 a.m.-3:30 p.m.
Kemp Natural Resources Station,
Woodruff

Tuesday, Aug. 15, 9:30 a.m.-3:30 p.m.
Kemp Natural Resources Station,
Woodruff

Learn More

PIF note: It is fair to say that without PIF these courses would not exist! PIF was the driving force behind this local lumber use law, and worked with a receptive state Senator Roger Breske.

Interested in using local wood? See our Celebrating Local Woods and Alternative Forest Products handbook, part of the Northwoods Forest Conservation series.

GUIDE TO NATIVE PLANTS (A.K.A. LOCAL BEINGS)

Native plant specialist Patrick Goggin has authored a new native plant guide that outdoor managers will find useful for gardening, pollinator support, plant lovers----"Guide to native plants (a.k.a. Local Beings): 112 species that support clean water, wildlife habitat, and a happy soul." This 160 page guide has over 400 photographs and appendices of resources related to native plant gardening and ecological restoration design and installation. The direct link to the free guide is https://healthylakeswi.com/wp-content/uploads/sites/366/2023/02/NativePlantGuide-sm.pdf. See healthylakeswi.com or contact Pat at pgoggin@uwsp.edu

****

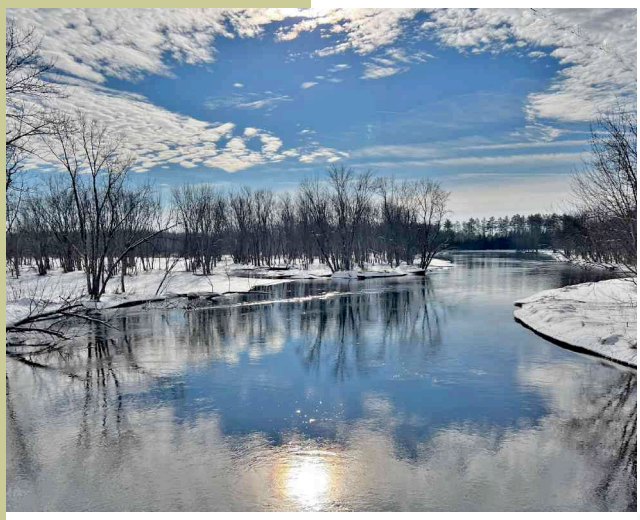
Photos submitted by Myrtle Sharka

A tree standing on its head
Submitted by Myrtle Sharka

Submitted by Myrtle Sharka

John Crumrine Photos

See more photos by John at www.partnersinforestry.com, including a picture book of a spring hike in Sylvania.



Wisconsin River

Brush Lake photo by John Crumrine

Thinning crown in large red pine

****