October 2022

Nelson Institute for Environmental Studies
UNIVERSITY OF WISCONSIN–MADISON

THE COMMONS

For alumni and friends of the Nelson Institute for Environmental Studies at the University of Wisconsin–Madison

Sifting and Reckoning

A new campus exhibit confronts the UW's troubled histories.

Plants are stressed about climate change, too
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FROM THE DEAN

October is always a vibrant time here in Madison. We're lucky to call Science Hall home, but I find myself particularly grateful this time of year as I watch the trees lining Langdon Street change from lush green to hues of orange. It's an interesting exercise to think of all the interpretations of change — a concept that can be both good and bad, both informative and perplexing. As you read through this issue of *The Commons*, I invite you to look for the change reflected in each story and what it means to you.

The lead story in this issue is one that I believe deserves its prime placement — and one that embraces the idea of change. At the start of the semester, an exhibit opened at the Chazen Museum of Art: *Sifting and Reckoning*. The exhibit is the culmination of the Public History Project, a multiyear exploration to uncover and understand the problematic parts of the university's past. Nelson's further commitment to partnerships with the Native Nations of the state now known as Wisconsin makes this even more poignant. I am proud that many Nelson faculty members lent their time and expertise to support this project, including Professor Noah Weeth Feinstein (community and environmental sociology), who shares his experience on page 5.

Several miles east of campus, a worrisome change in creek health united Sun Prairie citizens, businesspeople, and policymakers to search for solutions. Alongside the Koshkonong Creek Collaborative, UniverCity Year has engaged with numerous Nelson faculty and students who are leading projects from developing conservation targets to creating a 50-year improvement plan.

Heading back over campus and to the western portion of the state, some exciting changes are underway to restore 100 acres of land to its ecosystem. As the story on page 12 describes them, "UW environmental power couple" Susan and Steve Carpenter are pooling their professional expertise and personal passions to revive their piece of the Driftless Area.

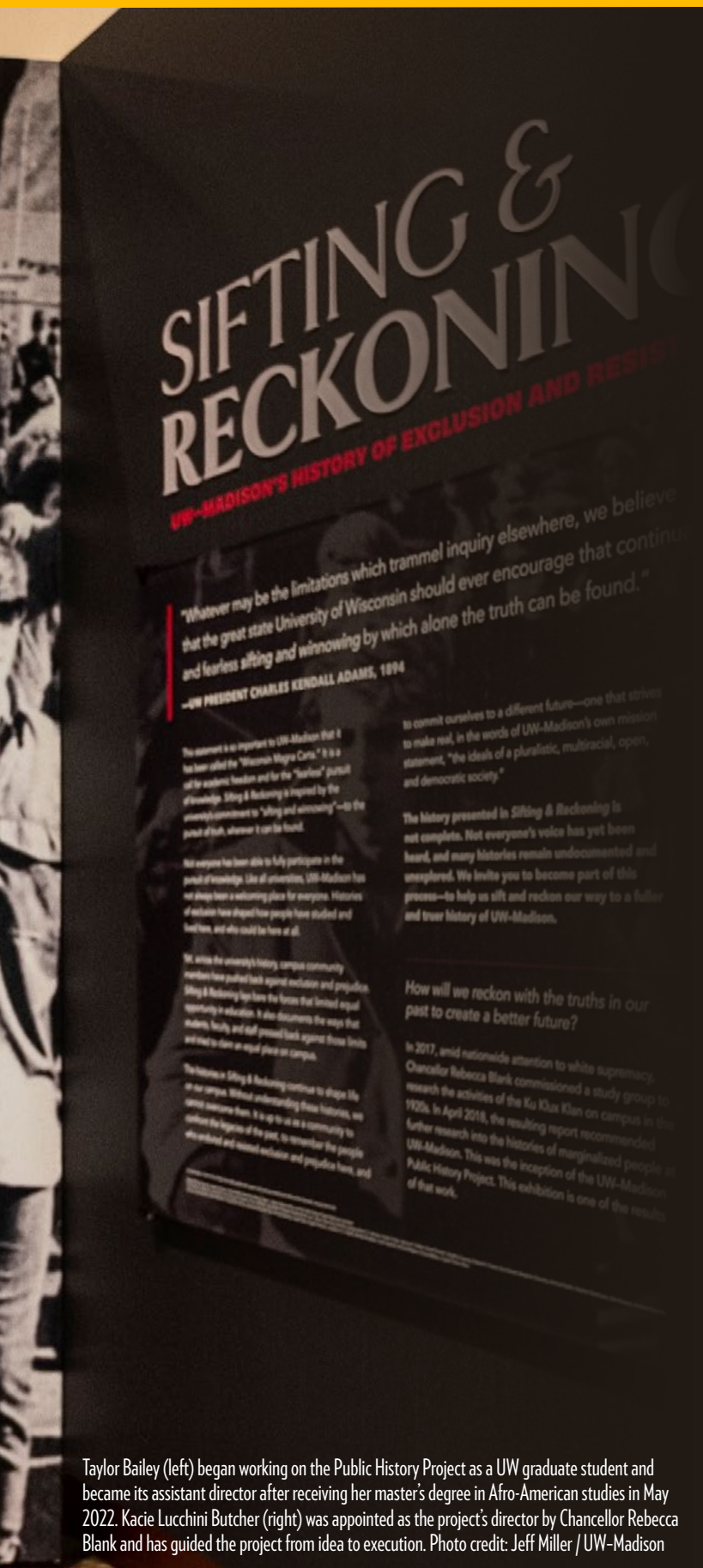
And further afield in the tropical rainforests near the Panama Canal, Nelson environment and resources PhD alumna Jeannine Richards is doing important research on how lightning strikes change the make-up of forests. Her postdoctoral research here on campus has highlighted how lightning isn't just a cause of forest loss, but also a cause of forest growth. This is amazing work on disturbance, adaptation, and evolution.

As alumni will remember and current Badgers can confirm, October is a busy time of year for the UW campus. I'm continuously inspired by the breadth of events that our Nelson research centers and departments host, and I hope you are all able to participate (look for great virtual options!). To name a few, coming up on October 26 is the first annual UW–Madison Sustainability Symposium, led by Andrea Hicks. Our CPEP seminars, CHE Environmental Colloquia, and the Weston Lecture Series continue to present relevant and timely discussions (learn about the history of Weston on page 28). In this issue, you can also see a recap of the 2022 Rendezvous on the Terrace alumni gathering and our Day of Giving — two annual events that showcase how passionate and engaged our Nelson community is. Thank you to those who participated this year!

Paul Robbins
Dean, Nelson Institute

SIFTING AND **RECKONING**

The Public History Project is part of a broader collection of efforts to create a more welcoming and inclusive campus.



Taylor Bailey (left) began working on the Public History Project as a UW graduate student and became its assistant director after receiving her master's degree in Afro-American studies in May 2022. Kacie Lucchini Butcher (right) was appointed as the project's director by Chancellor Rebecca Blank and has guided the project from idea to execution. Photo credit: Jeff Miller / UW-Madison

By Doug Erickson, University Communications

An exhibit that uncovers and gives voice to those who experienced and challenged bigotry and exclusion at the University of Wisconsin–Madison opened Sept. 12 on the university's campus.

Spanning nearly 175 years of history, "Sifting and Reckoning: UW–Madison's History of Exclusion and Resistance" brings to light stories of struggle, perseverance and resilience on campus. Archival materials, photographs, and oral histories illuminate unseen and under-recognized histories in the exhibit, which will run through Dec. 23 at the Chazen Museum of Art.

"This is an important and historic day for UW–Madison," said LaVar Charleston, deputy vice chancellor for diversity and inclusion and chief diversity officer, at an opening-day event for media. "With the opening of the 'Sifting and Reckoning' exhibit, we are taking a significant step toward a fuller understanding of who we are as an institution."

The exhibit encompasses three years of work by the Public History Project. The project grew out of a campus study group — commissioned in response to the 2017 white supremacist rally in Charlottesville, Virginia — that looked into the history of two UW–Madison student organizations in the early 1920s that bore the name of the Ku Klux Klan.

In compiling its report, the study group identified a broader pattern of exclusion. It concluded that the history the UW needed to confront was not the aberrant work of a few individuals or groups but a pervasive campus culture of racism and religious bigotry that went largely unchallenged in the early 1900s and was a defining feature of American life in general at that time.

The study group recommended that an effort be made "to recover the voices of campus community members, in the era of the Klan and since, who struggled and endured in a climate of hostility and who sought to change it." Rebecca Blank, chancellor at the time, commissioned the Public History Project as one of several responses to the findings.

Visitors enter the exhibit during its opening celebration. The exhibit is on public display at the Chazen until December 23, 2022. Photos by Jeff Miller / UW-Madison (4)

"Public history, at its simplest, is history written and made accessible for the public, for the people of our community."

— Kacie Lucchini Butcher,
Public History Project director

The university hired Kacie Lucchini Butcher, a public historian and award-winning museum curator from La Crosse, Wisconsin, to lead the project.

"Public history, at its simplest, is history written and made accessible for the public, for the people of our community," Lucchini Butcher said at the opening event. "While many other universities have looked into their histories, no others have made public engagement the center of their work. This project has. All of our work, including this exhibition, was focused on the public, on our community, and how best to make this work accessible to them."

John Zumbrunnen, a political science professor who serves as vice provost for teaching and learning, said the Public History Project will provide instructors with more material and more ways to engage students critically and honestly with questions of fundamental importance to UW–Madison, our communities and the nation.

"That kind of critical, honest engagement brings personal growth and intellectual growth," said Zumbrunnen, who also spoke at the opening. "It isn't always easy — in fact, it is often quite challenging — but asking hard questions, including hard questions about ourselves and this university that we love, is what great universities do, and what the foundational commitments of this university in particular call for from faculty, staff and students."

The Public History Project is part of a broader collection of efforts to

create a more welcoming and inclusive campus, Charleston said. He expects the project will intensify and deepen discussions that already are happening on campus around issues of diversity and inclusion. And he hopes the project will inspire new ideas for how students, employees, alumni and the broader community can take active roles in creating change and achieving a more equitable UW–Madison.

"I hope people will come away with a renewed sense of pride in UW–Madison for being transparent and honest about its past and for making significant strides in many areas," Charleston said. "I hope people will have a greater sense of ownership in UW–Madison and a greater sense of belonging, and that they will be inspired to continue working toward our vision and our goals for every Badger."

The exhibit combines immersive photos, stories and quotes, historical artifacts, and interactive displays.

A companion website provides viewers with an immersive online experience, including materials that expand on the physical exhibit. The Fall 2022 Campus Climate Progress Report details some of the most recent ways UW–Madison is working to make sure all students feel safe, welcome and respected on campus.

Behind the Scenes

Nelson affiliate Noah Weeth Feinstein helped bring the exhibit to life.

By Chelsea Rademacher

Noah Weeth Feinstein, a Nelson faculty affiliate and professor in the School of Education's Department of Curriculum and Instruction, was part of the Public History Project's steering committee. Here are some of his experiences in working on the project, and what it was like to see the exhibit open. Read the full interview online.

The exhibit opened in September; what was it like seeing it come together?

It's very satisfying. This exhibition does a really good job of honoring the full range of experiences of people who've passed through this place: the hard ones and the triumphant ones. Kacie [and her team] made a really deliberate decision to tell this from the perspective of people who wanted this place to be better — to be a better version of itself — and worked to make it better. That, to me, is such a valuable way of approaching this task.

Is that a unique approach?

A much easier thing to do is to tell a triumphant story. This project has been fearless about saying, "We still have problems. There are still things which need to be better." It honors what's been accomplished without saying, "Look, it's all better now!" When institutions tell stories about this, they tend to either be really lacerating or triumphalist. Too many institutional exhibitions about racism and discrimination have been about the past. This is not just a story about the past. Although other folks try to do that, I think this exhibition does a really good job.

What's been one of the best parts of the process?

Students were very deeply involved in the process of gathering the stories, of putting together the stories, of making it as compelling as it is. That is one of the best parts of it. The students, especially students of color, who were willing to give this project the benefit of the doubt and to use it to constantly challenge the stories that the university was willing to tell about itself, they did some of the bravest and best work. They deserve a lot of praise and thanks for the work that they did.

Plants under Stress

Wisconsin plants and natural communities are stressed by climate change

By Dea Larson, Wisconsin Initiative on Climate Change Impacts

Storm damage is becoming more frequent on Ice Age Trail properties. Photo credit: Ice Age Trail Alliance

A focus on climate impacts on native plant communities from the Wisconsin Initiative on Climate Change Impacts (WICCI) shows that warmer winters, more extreme storms, and competition from non-native species are impacting Wisconsin's plants and natural communities. The last two decades have been the warmest on record in Wisconsin, and the past decade has been the wettest.

"Healthy and diverse habitats can better absorb the stresses of a rapidly changing climate. Increasing efforts to restore and protect vulnerable native habitats can help them adapt while also helping maintain outdoor recreational opportunities that are important for our economy," says Amy Staffen, co-chair of WICCI's Plants and Natural Communities Working Group.

Wisconsin's native habitats are already under stress from urban development, cultivation, and competition with non-native invasive species. Climate change is amplifying these non-climate stressors. Increasingly frequent and intense storms are bringing more nutrient-laden stormwater runoff and sediment into aquatic and wetland communities, promoting the growth of invasive species. Milder winters, longer growing seasons, and increased atmospheric carbon dioxide are favoring the germination and spread of both non-native invasive species and aggressive

native species. Droughts are drying soils and wetlands and lowering groundwater. Windows for prescribed fire are changing, diminishing the habitats and the species that rely on them. With less severe winters in Wisconsin, larger numbers of deer are browsing on understory plants, including sensitive species, and impacting forest regeneration.

The warming climate is also impacting iconic tree species important to both wildlife and the timber industry, such as red pine and white pine, and culturally important species, such as wild rice, ginseng, and blueberries. As native habitats become further degraded, pollinators that rely on them, like bees and butterflies, may also diminish, with cascading impacts on plant-based industries such as agriculture, forestry, and food systems.

WICCI working group hikes to an overlook along the Mississippi River valley. Photo courtesy of WICCI Working Group

"Healthy and diverse habitats can better absorb the stresses of a rapidly changing climate. Increasing efforts to restore and protect vulnerable native habitats can help them adapt."

— Amy Staffen, WICCI Plants and Natural Communities Working Group co-chair

But there is hope. The WICCI Plants and Natural Communities Working Group recommends science-based, climate adaptation-focused management approaches to help native habitats in Wisconsin and offers workshops for property managers and stakeholders to help translate concepts relating to climate change impacts into tangible, real-world actions. There is hope for the future — but it's up to us.

Support WICCI

The Wisconsin Initiative on Climate Change Impacts (WICCI) is a statewide collaboration of scientists and stakeholders formed as a partnership between UW–Madison's Nelson Institute for Environmental Studies and the Wisconsin Department of Natural Resources. WICCI's goals are to evaluate climate change impacts on Wisconsin and foster solutions. Gifts to the WICCI Program Fund provide general, discretionary program support and enhance and expand WICCI's teaching, research, and public service roles. Gifts also support partnership-building activities, including faculty, staff, and student recruitment, retention, and morale.

This article is part of a series highlighting the contribution from each WICCI Working Group for the 2021 WICCI Assessment Report. Next month, hear from the wildlife working group.

Plants and Natural Communities Group

Managing the Ice Age Trail in a changing climate

Rush Creek State Natural Area – providing refuge from a rapidly changing climate

The Nature Conservancy climate resiliency mapping tool – helping to prioritize conservation efforts

Rising Waters

UniverCity Year partners with local stakeholders to help alleviate flooding issues in the Koshkonong Creek

Story and photos by Anica Graney

Dave Muehl at the Koshkonong Creek near Badger Farms.

Wisconsin's Koshkonong Creek and its communities have been in deep water in recent years due to increased flooding. In an effort to improve the health of the waterway, UniverCity Year is partnering with the City of Sun Prairie, Towns of Deerfield and Cottage Grove, and the nonprofit Friends of Koshkonong Creek with support from Badger Farms to deliver an inventory and plan for the long-term flow of the creek.

Located east of Madison, the Koshkonong Creek is a 36-mile waterway that runs from the City of Sun Prairie to Lake Koshkonong near Fort Atkinson. The project looks to combine local constituents and businesses with the minds of University of Wisconsin–Madison faculty and students to create class projects that will aid the creek in both present and future health.

From the Nelson Institute, adjunct professor Arlyne Johnson and professional programs director Nathan Schulfer will focus their class on evaluating the long-term conservation goals of Koshkonong Creek in Environmental Studies 972: Conservation Planning, a graduate level course for students who are interested in designing and managing conservation projects and programs.

"The focus of this project is to help the cities of Sun Prairie and Cottage Grove, along with a number of interested citizens groups, begin developing a plan for how Koshkonong Creek can be restored and better managed so the creek can be taken off the state of Wisconsin's imperiled waterways list," Johnson commented.

A team of five environmental conservation students will draft a long-term strategic plan that focuses on improving water quality, identifying potential strategies to achieve desired results, and detailing how to track progress and evaluate effectiveness all while staying within a time frame and budget. The plan will then be handed off to Professor Anita Thompson's water resources management (WRM) capstone class where WRM graduate students will then work to create a watershed management plan over the 2023 spring and summer semesters.

> ***"In 2008, the water was up to my chest. We went waterskiing out there."***
>
> — Dave Muehl, Badger Farms

Additionally, Jan Kuchar and Mark Oleinik, College of Engineering adjunct professors, are leading an engineering capstone course that is looking at the drainage issues of the creek. Associate Professor Andrea Hicks is teaching a sustainability and green engineering course that will review the economic and social implications of changes to the creek.

To introduce and begin collaboration on the project, leaders from engineering, governance, and planning aspects of the project gathered at Badger Farms, a hay farm and wedding venue located near the Koshkonong Creek in Cottage Grove on Wednesday, Aug. 24. Owners Dave and Betsy

Muehl moved to the farm in 1997 and have watched their land flood on and off over the past 25 years.

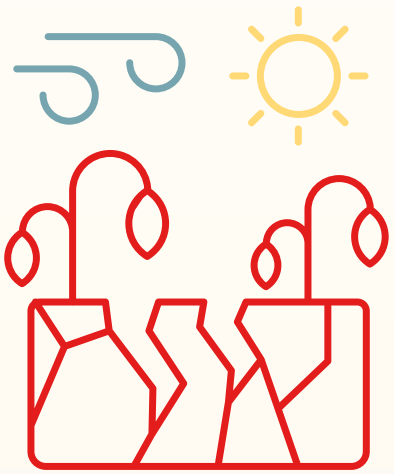
"When we first moved out here, it never flooded, and then in 2017, '18, '19, it was flooding quite a bit and we started to help clean out the creek to alleviate the flooding," Dave Muehl said. The Koshkonong Creek has fluctuated over the years depending on weather cycles. "In 2008, the water was up to my chest, and we went waterskiing out there. In 2012, it was the driest it's ever been."

Participants working on UniverCity Year's Koshkonong Creek project met at Badger Farms to make introductions and begin collaboration.

Muehl and other farmers in the area estimate that the creek's water level has increased 18 inches over the past 25-30 years due to multiple factors, including climate change and an increase in the release of treated water into the creek. He hopes that the partnership with UniverCity Year will bring the consistency and knowledgeable action that the creek needs. "The projects will be studying what's needed for the next 50 years to modify and improve the creek," Muehl said. "But it's not all going to happen at one time. Certain things have to happen now, and other things have to happen in the next five, 10, 15 years."

Learn more about UniverCity Year's Koshkonong Creek project.

The planning group discussed conservation and data collection.



Nelson Issue Brief – Extreme Heat and Drought

The Nelson Institute Issue Brief is a quarterly publication that shares up-to-date research from across the UW–Madison campus on key issues of environmental concern. The latest edition focuses on extreme heat and drought. As the Earth's climate changes, so do occurrences of extreme heat events: in the next 50 years, the state of Wisconsin is projected to see 20-30 more days of 90-plus degrees Fahrenheit. In the current Nelson Issue Brief, learn how heat events disproportionately affect marginalized groups; how technology can prevent heat-related deaths; how droughts are changing Wisconsin's agriculture; and how to manage local water resources to maintain the state's position as an agricultural leader.

Featured Nelson Institute affiliates in this issue are:

- Elizabeth Berg, environment and resources PhD student
- Christopher Kucharik, agronomy and environmental studies professor
- Gavin Luter, UniverCity Alliance managing director
- Ankur Desai, atmospheric and oceanic sciences professor
- David J. Lorenz, Center for Climatic Research associate scientist

Read the full issue.

Joy Trip Reading Project

Four environmental books by BIPOC authors to add to your bookshelf.

By Chelsea Rademacher

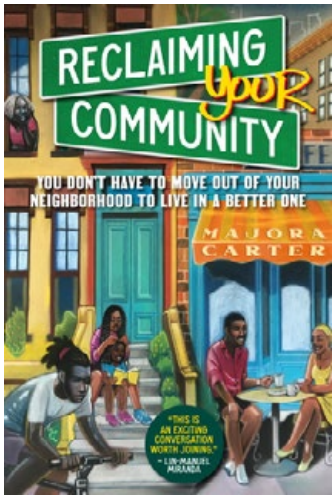
"Who gets to use our nation's wild places? Who is welcome in the parks? Who feels safe hiking in the wilderness? How do we change the status quo to make an 'outdoors for all?' " These are questions posed to students of Environmental Studies 308: Outdoors for All, a four-week summer-term class taught by Nelson Institute's community partnership liaison, James Edward Mills. In addition to his work as a faculty member, Mills is a journalist, author, and founder of the Joy Trip Project, a platform that shares stories and resources for those interested in a sustainable, active lifestyle.

In Outdoors for All, Mills teaches students about the existing disparities to outdoor recreation and the sociocultural circumstances that have created barriers to access. "Outdoor recreation has a lot of presumptive privilege people aren't aware of," Mills told *Madison Magazine*. "I hear people say, 'Why can't people of color just go outside?' These authors have written books that illustrate why it's not that simple."

Each year, Mills shares some of the assigned readings for his class with the Joy Trip Reading Project, a book club hosted through the online platform Goodreads. "There is no better path toward self-improvement than through the pages of a good book," Mills wrote when introducing the project. Mills chooses books by BIPOC authors and educators who explore the intersection of the natural world and the cultural identities by sharing experiences marginalization, racial discrimination, and lack of access to the outdoors. Here are four of this year's titles.

Waste: One Woman's Fight Against America's Dirty Secret by Catherine Coleman Flowers with a forward by Bryan Stevenson

It can be challenging to make one's personal life story relatable to the masses, but in her debut book, Catherine Coleman Flowers brings readers on a journey so vivid and inspiring you can't help but feel like you were right there with her. The 2020 MacArthur genius and environmental justice advocate grew up in Lowndes County, Alabama, a town whose history is riddled with violence and racism, which as readers will learn, is directly tied to the lack of access to basic sanitation. In *Waste*, Flowers shows how climate change and sanitation are interwoven, and how the ramifications of ignoring that affect all communities.

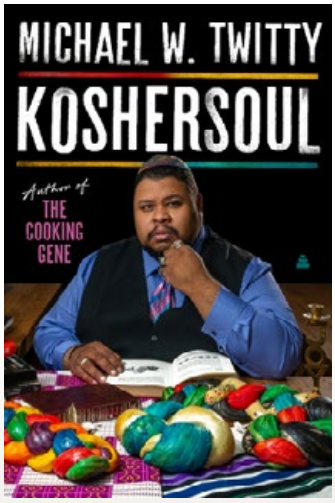


Reclaiming Your Community: You Don't Have to Move Out of Your Neighborhood to Live in a Better One by Majora Carter

Gentrification is a long-standing problem that has seen myriad "solutions," but Majora Carter has a simple, effective idea: stay. In *Reclaiming Your Community*, Carter draws on corporate talent-retention practices to reduce "brain drain" in low-status communities. She offers an alternative view of success for people in those communities — rather than defining success by "getting out," could it instead mean staying and giving back to your community? While the cover evokes an updated *Do the Right Thing*, the idea parallels Lin-Manuel Miranda's *In the Heights*. Of the book, Miranda said, "Majora Carter [asks] us to re-examine our notions of what community development is and how we invest in the futures of our hometowns. This is an exciting conversation worth joining."

Due North: A Collection of Travel Observations, Reflections, And Snapshots Across Colo by Lola Akinmade Åkerström

From award-winning photographer and writer Lola Akinmade Åkerström comes a new coffee-table book filled with "colors, cultures, and continents." Born in Nigeria but settled in Stockholm, Sweden, Åkerström is on a mission to create opportunities and representation for Black women in travel photography. "I didn't see Black women travel photographers who looked like me experiencing various cultures and places, and reporting for high profile publications," Åkerström said of starting off. "That became one of my missions – to open up the space for the next generation of travel photographers." Travel alongside Åkerström through *Due North* — a book that reviewers suggest is best enjoyed in physical form.



Koshersoul: The Faith and Food Journey of an African American Jew by Michael W. Twitty

Any foodie will know the name Michael Twitty. In his latest book, *Koshersoul*, the James Beard award-winner dives into the intersection of traditional African and Jewish cuisine — and how those cuisines reflect identity. "This is a book about Jewish food that's also Black food because it's a book about Black people who are Jewish and Jewish people who are Black," Twitty said to Eater.com. In addition to exploring these diasporic traditions, Twitty also poses the question: how does food make a people? Within the pages of *Koshersoul*, readers will get a personal look into how Twitty views the intersections of his identities and walk away with dozens of recipes to try.

Sunny Days and Mondays

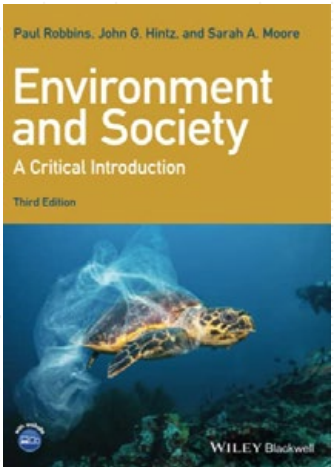
UW environmental power couple Susan and Steve Carpenter spend their free time restoring 100 acres of prairie in Wisconsin's Driftless Area. The married duo met on campus as graduate students, and both went on to work for the university: Susan as the Arboretum's native plant garden curator, and Steve as a (now emeritus) professor of limnology and integrative biology. Take a tour of their slice of paradise and learn more about their restoration efforts.

SOLUTIONS, NOT PROBLEMS

The latest edition of Environment and Society: A Critical Introduction *gives readers explanations, questions, and hope.*

By Chelsea Rademacher

If he's being honest, Paul Robbins isn't in love with the cover of his newest book. The top half is fine — *Environment and Society: A Critical Introduction (Third Edition)* by Paul Robbins, John G. Hintz, and Sarah A. Moore — it's the bottom half that gives him pause. A sea turtle floats along a reef, towing behind it a clear plastic sheet that dances in the current. The book is about the intersections of the environment and society: two categories that the book says are "interlaced and impossible to separate." The cover's sea turtle represents the environment, but what represents society? "Plastic," Robbins says pointedly. "Kind of a downer."



It was important for Robbins and his coauthors that this book not be a downer; in fact, it was the book's raison d'être. "The first step [of the process] is to become dissatisfied with what exists. We've all taught this class in one form or another: Environmental Issues or Intro to Environmental Studies," Robbins says. Hintz is a professor at Bloomsburg University and Moore is an associate professor here at the UW. What the three of them found was that the book they *wanted* to teach simply didn't exist. Too many textbooks focused on problems, not solutions; hows, not whys. "It's just a litany of misery," he recounts. "Not that these aren't important problems that people need to understand. I totally agree. I taught that book for a long time. But it doesn't really say anything about solutions."

"I think that it will give you some optimism that there's ways to solve these problems."

— Paul Robbins

Since its first edition, *Environment and Society* operates in two parts: "approaches and perspectives" and "objects of concern." Or, as Robbins puts it, *whys and things:* "Trees and wolves and bottled water and e-waste. Not problems," he explains. "Things." Other *things* include lawns, uranium, and French fries. On the quest to not write a downer, Robbins, Hintz, and Moore intentionally moved away from a problem-first view. "This is intended as an opportunity to break away from the

environment as an undifferentiated generic problem, one universally characterized by a state of immediate and unique crisis," the book reads. "We do indeed face enormous environmental problems, but we believe them to be best solved by exploring the specificities and differences, as well as commonalities, of both people and things."

Two of the *whys* that are new to the third edition of *Environment and Society* are "Feminism and the Environment" and "Racialized Environments." "I can't believe those two were not in the first edition," Robbins says, reflective. "It is with great embarrassment that I tell you that those chapters were not in the [first] book." While the first edition took less than a year to complete, the third edition took much longer; Robbins and his coauthors took great care in crafting the two new chapters. "We wanted to get those right," he emphasizes.

Talking to Robbins about the new edition feels different than you'd expect talking to a professor about their textbook might feel. He and his coauthors have taken an enormous subject that is often charged with doom-and-gloom and turned it into an accessible, hopeful book. Perhaps that comes from Robbins' go-to imaginary audience: a retired Air Force colonel. "Somebody who, one, may or may not be politically sympathetic to my views. Two, super smart, but not an academic," Robbins says.

Academics and non-academic readers alike are encouraged to think of the chapters as individual modules, rather than a start-to-finish read. Curious about COVID-19 and the political economy's implications on the environment and society? Start with chapter seven. Craving a brief history of the French fry? Dig into chapter 18. *Environment and Society* is a toolkit, not a lesson plan, which allows teachers to customize their class experience.

Robbins doesn't get the chance to teach his book — "because I'm sitting here *dean*-ing," he half jokes — but he hopes readers will walk away with new ways of thinking about environmental problems. "I think that it will give you some optimism that there's ways to solve these problems," Robbins says. "I think it'll empower people to think about the environmental problems as social problems that can be addressed. They're solvable. It's not too late."

Environmental Solution?

Throughout *Environment and Society*'s third edition, the authors include boxed discussions called "Environmental Solution?" "Our use of the question mark is both intentional and provocative," the books introduction says, "We invite readers to consider whether these solutions make sense but also to interrogate the theoretical assumptions that underpin each solution." Consider these sample topics; we'd love to hear your thoughts! To get the full discussion, be sure to pick up a copy of *Environment and Society: A Critical Introduction (Third Edition)*.

- **Environmental Solution? Endangered Species Act**
- **Environmental Solution? Shade-Grown Coffee**
- **Environmental Solution? Plant-Based Meat**

Director's Cut

Meet Michael Notaro, the new director for the Center for Climatic Research

Notaro (center) and students at The Sky's the Limit summer camp tinker with a terra rover. Photos courtesy of Michael Notaro

I would like to introduce myself as the new director of the Nelson Institute Center for Climatic Research (CCR). As a background, I received a PhD in atmospheric sciences from the University at Albany in 2002 and have since worked at CCR for 20 years. As a scientist III, I am the first academic staff member to hold the position of CCR director in its six-decade history.

Over those 20 years, I have worked on a diverse set of research and outreach topics, including: regional climate modeling in the Midwest and Great Lakes Basin in support of dynamically downscaled climate change projections, land-atmosphere interactions including vegetation feedbacks on global monsoons, lake-effect snow, climate change impacts on aquatic and terrestrial ecosystems and wildlife, Middle Eastern dust storms, and K-12 climate education.

My 20 years at CCR stretched across a third of CCR's history, giving me the honor to get to know and collaborate with all of CCR's prior directors, namely Reid Bryson, John Kutzbach, Zhengyu Liu, Jack Williams, and Dan Vimont. As we finally pull out of this dreadful pandemic and return to

Notaro (second from left) celebrates a successful camp with two students and their parents.

in-person center activities, I strive as CCR director to work relentlessly towards the following achievements:

1. I want CCR to grow, not just in the number of members and grants, but in the diversity of our faculty, staff, student, and administrative body and the breadth of our expertise to best support our state through the Wisconsin Idea.
2. I want CCR to become increasingly visible and known by the local to international communities as a premier leader in climate research, applications, education, and outreach.
3. I want CCR to increasingly become a close-knit family in an inviting, welcoming environment that embraces unique perspectives, backgrounds, and cultures.

CCR is currently developing its five-year strategic plan, making this an optimal time to pave the way for our center's future direction. As the director, I welcome all feedback and insights in the development of this critical document to ensure that we prioritize the most important goals for our center and successfully achieve these goals. I look forward to the upcoming years as I have the honor to direct CCR and shape its growing legacy.

Michael Notaro

Michael Notaro
Director, Center for Climatic Research

Meet Michael Notaro

Climate Educator
As the principal investigator on a National Science Foundation GEOPAths grant, Notaro has expanded his work in the area of climate education — particularly in encouraging diversity and supporting underrepresented K–12 and undergraduate students. He's a Wisconsin partner/trainer for NASA's Global Learning and Observations to Benefit the Environment (GLOBE) Program, which teaches students how to be citizen scientists and engage with their local environments. The grant also helped him support a one-of-a-kind internship for students in Beloit, Wisconsin, through the Welty Environment Center. This summer, Notaro also taught a course through UW–Madison's Summer Collegiate Experience program, a six-week, on-campus program for incoming first-generation students from underrepresented groups.

All Are Welcome Here
On campus, you can find Notaro at the corner of Dayton and Orchard Streets, in the Atmospheric, Oceanic and Space Sciences Building. He's currently working with SSEC and AOS to develop a code of conduct — "which hasn't existed before," he notes. The code of conduct will establish building policies aimed at "creating a welcoming environment that's free of harassment and bullying."

Embracing Neurodiversity
Much of Notaro's work can be traced back to a common theme: demolishing barriers to STEM. Most recently, he established a summer camp to encourage autistic youth to participate in the field. The camp — which is free for autistic youth — was held in Beloit this summer, with plans to expand to UW–Extension's Upham Woods next summer. "I think a lot of people see autism as a disorder or a disease you try to fix. That's not the case," Notaro says. "Neurodiversity is something we want to support." As a population, he explains, autistic students have a higher interest in STEM than neurotypical students. "But the number that actually get STEM degrees or jobs is much lower. There's a barrier there; they're not able to take the next step," Notaro says. "I'm trying to help facilitate that."

Q & A: Meet Zac Freedman

The principal investigator of the Freedman Lab gives us the dirt on soil science.

By Chelsea Rademacher

"Can I just start by saying, I mean, this is a dream job for me!" Zac Freedman's excitement and inquisitive nature is palpable, even through a computer screen. Freedman, the O.N. Allen Professor of Soil Microbiology and principal investigator of the Freedman Lab, has had his eye on the UW for quite some time. He grew up one block from Northwestern University's football stadium; "They weren't very good," he says, so it was easy to sneak into games. "It was always a fun weekend when Wisconsin was in town." After postdoctoral work at the University of Michigan and a few years as an assistant professor at West Virginia University, Freedman finally found his ticket to Madison.

Unfortunately, that ticket was issued in June 2020, so the campus that Freedman came to was far from typical. "To start a new lab during the pandemic was difficult," he says, "specifically managing recruitment and different student needs during this time." Global supply chain issues didn't make it any easier — the lab is still receiving boxes of plastics that Freedman ordered last year. Their mailroom may be running behind, but the research is certainly looking to the future.

Tell me about some of the research happening in your lab this semester.

My first PhD student in the lab, Brooke Propson, is doing work that is in continuation of my postdoc work ... to better understand how forest systems will respond to increased rates of atmospheric nitrogen deposition — one consequence of the burning of fossil fuels. Forests, especially across this region, are limited by nitrogen. If you give them more nitrogen, that's going to stimulate the forest productivity, so there'll be more tree growth and ultimately more carbon stored in forest ecosystems. What my postdoc work found is that increased nitrogen also suppressed the decomposition of organic matter by the microbial community, which led to more carbon being stored in the forest soils due to this agent of climate change.

So, is that good or bad?

It's ultimately a good thing, because if that carbon wasn't accumulating in soil, it would be in the atmosphere. The Clean Air Act amendments in 1990 legislated controls on nitrogen pollution from industry, which is now reducing the rate of atmospheric nitrogen deposition — which is a good thing in theory. The only question is, what's going to happen to all this extra carbon that's built up in the forests from decades of elevated N deposition? What we hypothesize is going to happen with less nitrogen is that microbial decomposition is going to speed up ... it may lead to a loss of all of that built up carbon in soil to the atmosphere and could be an unintended negative consequence of the Clean Air Act amendments.

Freedman and his two children explore a stream.

What are some of the outstanding research questions you haven't explored yet?

In the sustainability area, I want to build a research avenue to better understand plant microbe interactions of alternative crops. I've been collaborating with Shelby Ellison in the Department of Horticulture here; she's the state hemp specialist. There's just nothing known about plant microbe interactions in hemp, and it just seems like such a clear growth area. The sustainability of hemp production is a ripe research area of the future. Then more in the forest side, I've been collaborating with some researchers out of the University of Michigan Biological Station, thinking about projects related to better understanding what happens when forests die. As a consequence of the state of the world right now, there's a lot of forest death and loss of mature trees. Mature trees store tons of carbon, and they bring in lots of carbon into soil from the atmosphere. What does enhanced forest death mean for the balance of carbon in our atmosphere?

"What we hypothesize is going to happen is that microbial decomposition is going to speed up … it could be an unintended negative consequence of the Clean Air Act amendments."

— Zac Freedman

You're teaching Soil Science 323 this fall and Environmental Studies 101 in spring. What's it like working with such different levels of students?

At the 100 level, it's more about getting the students engaged in the university and excited about the environmental studies. That class is organized with a series of guest lecturers, so I'm more like a tour guide through the environmental studies at UW–Madison. Whereas the upper-level course is meant to enhance the depth of students' understanding in a particular field. It's pretty cool because all the students that take it (in theory) want to be there, so it makes the class a lot of fun. Then in teaching graduate students, that's just one-on-one for the most part, just trying to get inside each other's brains and try to better understand somebody — their strengths and areas for improvement — to try and bring out the best version of themselves. It's just completely different, but a lot of fun.

Read an extended interview with Freedman.

Freedman and two of his graduate researchers are looking into ways to grow bioproduct crops in low-fertility soils. Photos courtesy of Zac Freedman

Ask Andrea

A monthly column from Andrea Hicks, director of sustainability education and research, an associate professor in the Department of Civil and Environmental Engineering, and the Hanson Family Fellow in Sustainability

I've been thinking about my school supplies and the best way to take notes in class. From a sustainability standpoint, is it better to use a paper and pen or an iPad?

This is a very relevant question to campus life, particularly with the proliferation of portable electronic devices. In 2020, there was a life cycle assessment published that investigated this very question. The authors focused on a paper notebook, an Apple iPad, and a reMarkable tablet. Even when only allocating a portion of the life cycle environmental impacts for the iPad and tablet to note taking, both devices had a greater environmental impact than a paper notebook. This assessment is also a function of other considerations, such as how big you write in your notebook and the mix of renewable and non-renewable electricity sources used to charge the digital devices. But in general, a paper notebook is the less environmentally impactful way to take notes.

Speaking of comparing electronics with print options, there has been a push in recent years to consider e-textbooks instead of paper texts. One often cited reason is that the e-texts can be more affordable for students than the equivalent paper version. Some studies have pondered this same question with respect to comparing reading e-books on a digital device versus with reading a physical book. The results are a bit more complicated because they depend on how many e-books can be read on a device during its lifetime, and also conversely how many times a physical book will be read. Regardless, there is a thriving market for used textbooks on any college campus and they present a potential option for reducing one's environmental impact.

To submit a question for future columns, please email me at info@sustainability.wisc.edu.

P.S. Please consider joining me on Wednesday, Oct. 26, for the first annual UW–Madison Sustainability Symposium. From 1–5:30 p.m. at the Discovery Building, enjoy lightning talks, posters, a keynote address, and a reception. Learn more and register to attend.

Ramos on a beach in Tofino, British Columbia, Canada. Photos courtesy of Alex Ramos

The Business of Forests

Nelson grad blends forestry and business in post-grad career.

By Rachel Carrier

It was hard to keep Nelson Institute environmental observation informatics (EOI) MS grad Alex Ramos away from his hometown of Fredericton, New Brunswick, Canada when the opportunity to turn his passion into a full-time career came knocking.

Ramos currently works at Remsoft, an optimization software provider based in Fredericton, as a client manager for Northern America. The company focuses on software for forestry, infrastructure, and vegetation management. Ramos works on the sales team, where his role is to communicate with people all over the world ranging from forest industry companies to investment firms who have a stake in the environmental sector. Ramos looks to help these institutions work through optimization.

In early high school, Ramos knew that he wanted to pursue work in forestry and the environment. He grew up on a farm in New Brunswick working on his family's woodland property — hunting, fishing, and appreciating the outdoors. For him to pursue these passions, though, Ramos needed to transition to English speaking institutions. Ramos grew up in a francophone family and attended primarily French institutions. The transition took dedication to improving his English and making a slight cultural transition, but Ramos believes it was more than worth it.

"Though my job isn't as analytical as the work that I did in the EOI program, you find some interesting similarities in terms of AI, machine learning, and the programming we used at the Nelson Institute" Ramos said.

Ramos began the EOI program virtually in May of 2020 after graduating from the University of New Brunswick with a degree in forestry. After the last three months of his undergraduate transitioning to a virtual format, Ramos was not only comfortable with virtual learning, but learned to embrace it.

"Virtual learning allowed me to connect with people all over the world," he said. "My peers in the EOI program were located in different regions so it allowed me to communicate and work with people around the globe with vastly different backgrounds."

"We'd go from working with Indigenous land groups in northern Wisconsin one week to speaking with people located in Africa the next week."

— Alex Ramos

"We'd go from working with Indigenous land groups in northern Wisconsin one week to speaking with people located in Africa the next week," Ramos reflected. "I'm not sure we'd have that capability to communicate with a range of people and expertise had things not shifted remote."

Ramos was particularly drawn to his remote sensing class with Assistant Professor Mutlu Ozdogon due to the vast number of tools he learned how to use. Through this class, Ramos was exposed to tools such as Python, Java, and R studio.

"Learning how to use these tools has provided me with a core understanding of using data in a way that is transferable across many disciplines."

Over the past year and a half working with Remsoft, Ramos has mixed his technical and analytical learning in the EOI program with business and his passion for forestry at Remsoft.

"I think there's a lot to learn from this opportunity with Remsoft," Ramos said. "Obviously my background is in forestry and remote sensing, but this sales aspect is new and interesting to me, and I want to use it to grow my knowledge of how I can help people and the environment."

Learn more about the environmental observation and informatics MS and how you can support the program.

Spring Atlantic salmon caught and released in New Brunswick.

Waterfowl banding for the Canadian Wildlife Service in Atlantic Canada.

Enlightening Lightning

Nelson alumna studies how lightning strikes shape tropical forests.

By Elise Mahon, University Communications

Jeannine Richards, a post-doctoral research fellow in botany, loved watching lightning storms as a kid. Now, she's excited to continue studying its effect on tropical trees.
Photos courtesy of Jeannine Richards

It's easy to see how droughts, fires and other features of the environment alter and determine the shape of a forest, from the trees that compose it, to where and which trees grow and live together.

But another happenstance of nature plays an under-appreciated role in the overall make-up and health of forests: Lightning.

"Forests, globally, are getting younger. In general, we're seeing the oldest trees in forests are dying for a variety of reasons and not being replaced," says Jeannine Richards, a post-doctoral researcher in the botany department at the University of Wisconsin–Madison. "Lightning is one of these hazards that's contributing to loss of large trees over time, and we're just now realizing that it needs to be part of that list of drivers."

Richards, in the lab of Professor Kate McCulloh, is co-author of a new study in Nature Plants that helps establish lightning as an environmental driver that may dictate what trees will make up tropical forests in the future.

Taking lightning seriously is important as some evidence shows the number of lightning strikes is increasing with climate change, meaning it could play a bigger role in forest disturbances and turnover of trees in the future. Better understanding lightning can also lead to the creation of improved climate models that help researchers study how the world's forests may respond to changes in their environment.

For years, scientists have observed that tree species seem to respond differently to lightning strikes, but the effects of those strikes on forest composition had not been measured because lightning is hard to track and document.

Enter the specialized lightning monitor-

"Lightning is one of these hazards that's contributing to loss of large trees over time, and we're just now realizing that it needs to be part of that list of drivers."

— Jeannine Richards

ing system located in the Panama Canal-adjacent forests of the Barro Colorado Nature Monument. During storms, the monitoring system records images and timestamps of lightning strikes from four different towers located in the forest. Researchers, including Richards, are using photos of the same strike from multiple towers to triangulate the strike's location and go out to document the damage.

An image of a lightning strike captured by the Barro Colorado Nature Monument's monitoring system.

When a strike occurs, the tallest trees sticking up from the canopy are the ones that are most likely to be directly hit. Unlike in a temperate forest like those typical in Wisconsin, however, it isn't just a few trees that are damaged by a single strike. Up to 100 trees that are connected or close enough to the struck tree can be exposed to the electrical current, causing some to die instantly, others to die slowly, and still others to … carry on with business as usual.

The scientists expected each tree to have a different response to lightning based on an endless number of possible individual differences. While they did find this, they were surprised to also find a consistent pattern in which trees within the same species were responding similarly to one another.

They also found that tree species that are struck most often by lightning are usually the most tolerant, meaning they are less likely to die or have severe damage after a strike. Species that had denser wood also tended to be more tolerant of lightning strikes, especially if they had relatively larger vessels, a system of cells that help move water throughout a tree.

Palms were some of the most susceptible species in the study, almost always dying when exposed to lightning. Richards says that could be because of differences between some functional traits of palms and those of other trees, such as the way they grow and the architecture of their fronds. Their location in the understory of the forest means that they were not often exposed to lightning strikes, though.

The tree species struck by lightning most frequently are also usually the most tolerant to lightning strikes.

Richards says more studies need to be conducted to better determine which traits cause a tree species to be more or less tolerant of lightning, but she says this is an inspiring start.

For example, researchers already know that in places that experience regular droughts, species that need less water survive better than their counterparts. Similarly, where fire is frequent, species with thick bark can better withstand fire damage, and those that can resprout quickly after fire will tend to be more dominant in the community of species. Richards envisions the same kind of understanding with lightning.

For her, joining the project was exciting not only because it was understudied, but also because everyone has some sort of connection or reaction to lightning.

"Lightning is such a charismatic phenomenon. I remember going out as a kid and watching lightning storms with my dad on our front porch," says Richards.

With this partnership between the Smithsonian Tropical Research Center's Barro Colorado Nature Monument scientists, researchers from the University of Louisville and from the University of Alabama at Huntsville, scientists have only scratched the surface, she explains.

"There's just so much that we don't know about lightning," says Richards, adding she hopes this research inspires other ecologists to join in the investigation.

The research was supported by grants from the National Science Foundation (DEB-1354060, DEB-1655346, DEB-1354510, DEB-1655554, GRF-2015188266 and DBI-2010942) and the National Geographic Society (9703-15).

A Rendezvous to Remember

The Nelson Institute community came out in full force to celebrate the 2022 alumni award winners at the annual Rendezvous event.

Dean Paul Robbins and Emily Reynolds, director of community engagement and alumni relations, pose with the alumni award winners. L-R: Robbins, Patricia O'Kane, Keefe Keeley, Robert Ribe, Margaret Krome, Breana Nehls, and Reynolds. (Not pictured is Distinguished Alumni Award winner Ashok Sarkar.) Photo credits: Ingrid Laas

By Chelsea Rademacher

It was a night to remember as the Nelson community gathered for the first in-person Rendezvous event since the COVID-19 pandemic began. More than 250 alumni, donors, and friends registered to attend the event, held at the Pyle Center's Alumni Lounge. As guests enjoyed hors d'oeuvres and sipped on the "Rendezvous Radiance" signature cocktail, Nelson Institute Dean Paul Robbins kicked off the main event: recognizing this year's alumni award winners.

Rising Star awardees Keefe Keeley, Breana Nehls, and Trish O'Kane accepted their award in person, along with Distinguished Alumni Awardees Margaret Krome and Robert Ribe. Robbins also acknowledged Steve Ventura and John Francis (2020 Distinguished Alumni) and Linda Vakunta (2021 Rising Star) who, due to the pandemic, weren't able to accept their awards in person.

After celebrating the Nelson Institute's outstanding alumni, Robbins recognized the faculty members who are holding honorary positions this academic year. "Over the years," Robbins said, "the Nelson Institute has been fortunate to receive philanthropy from generous donors to establish numerous endowed professorships, chairs, and faculty fellowships."

The current group of honorees included several inaugural positions: the John P. Holton Chair of Health and

The event was well attended by alumni and students alike. Pictured here are Patricia Fraley, Abby Tekiela, and Jing Ling Tan with Colleen Godfriaux, associate dean for administration.

Nelson alumnus John Francis (left) helps Paul Robbins celebrate his honorary position.

Jonathan Patz (left), who was honored as the John P. Holton Chair in Health and the Environment, and Emily Reynolds, director of community engagement and alumni relations, enjoy the lake view from the Pyle Center's outdoor terrace.

With members of the Hanson family there to celebrate, Andrea Hicks was honored as the Hanson Family Fellow in Sustainability. L-R: Hicks, Julie Hanson-Kelley, Gwendolyn Kelley, Paul Robbins

the Environment, held by Professor Jonathan Patz; and the Ken Potter Professor of Water Resources, held by Professor Anita Thompson. Robbins then acknowledged the two inaugural Gaylord Nelson Distinguished Chairs in Integrated Environmental Studies: Professors Tracey Holloway (held from 2017–21) and Monica White (currently holding through 2025). Holloway was also recognized with the Jeff Rudd and Jeanne Bissell Professor of Energy Analysis and Policy professorship.

Robbins also acknowledged Professor Anna Andrzejewski, former director of the Nelson Institute Center for Culture, History, and Environment (2019–22) who held the Bradshaw Knight Professor of the Environmental Humanities title, and awarded her successor in both directorship and professorship, Professor Will Brockliss.

During the Nelson Institute's 50-year anniversary in 2020, two new honorary titles were established, which were also honored: the Hanson Family Fellow in Sustainability, held by Professor Andrea Hicks, and the Nelson-Hanson Chair in Environmental Studies, held by Robbins. After awarding Hicks, the room filled with chuckles as Robbins awarded himself.

Rounding out the remarks, Robbins acknowledged the retirement of Professors Cathy Middlecamp and Steve Ventura, both of whom retired during the pandemic. While celebrating Middlecamp and Ventura, with great enthusiasm from the audience, Robbins also acknowledged a retiree in attendance whom many Nelson alumni will recall: Barbara Borns, former academic program advisor. "These three are servant leaders like none other that I have ever encountered," said Robbins. "Through their efforts, they changed the Nelson Institute for the better."

Check out photos from the 2022 Rendezvous event.

Support NELSON

Interested in supporting the Nelson Institute? There are many ways to contribute to the Nelson Institute — participating in our events, mentoring our students, providing connections to your personal networks, and making financial gifts. All of these are necessary and important to us, and we invite you to invest in our community in the way that makes the most sense to you. Learn more about all of the great academic programs, research centers, and public programs we offer.

Gifts in any amount are needed and appreciated!

Looking Back: Nelson Institute Day of Giving

On September 23, alumni, students, and friends came together to #CelebrateNelson.

We did it — together!

Thank you to everyone who participated in the 2022 Nelson Institute Day of Giving on Friday, Sept. 23. Together, we raised $7,175 from 50 donors in support of the Nelson Institute during our third annual Day of Giving. We are so grateful for the incredible dedication and commitment of the global Nelson family. Thank you for investing in our future!

Thank you, Nelson community!

James Addis • George Affeldt • Jean Bahr • Travis Blomberg • Peter Boger • Barbara Borns • William Brockliss • Benjamin Callan • Daniel Cloutier • Mary Crist • Ankur Desai • Marshall Deters • Daniel Fallon • Susan Frett • Antony Gelberg • Katherine Gensler • Warren Hite • Steven Ibric • Thomas Jasmin • Julie Kelley • Steven Lawry • Diane Mayerfeld • Thomas McClintock • John McCorkle • Brian McInnes • Catherine Middlecamp • Michael Miller • Edward Murray • Geraldine Nicholson • Andrew Ortman • Jonathan Patz • Emily Reynolds • James Rink • Paul Robbins • Jeff Rudd • Arthur Sacks • Nathan Schulfer • David Siebert • Robert Sigrist • Andrew Stevens • Michael Strigel • Shelly Strom • Ann Swenson • Vaishnavi Tripuraneni • Douglas Van Vreede • Alberto Vargas • Caitlin Williamson • Wisconsin Environmental Initiative • Dan York • John Ziehr

Engineering Sustainability

Roy Weston '33's legacy changed the field of sustainable engineering.

By Chelsea Rademacher

Larry Bove, president and CEO of Weston Solutions

If you were part of the Nelson Institute anytime in the past decade or so, chances are you've heard of — or perhaps attended — a Weston Roundtable Series lecture. But do you know who put the *Weston* in Weston Roundtable?

"Roy Weston was a true visionary," says Larry Bove, president and CEO of Weston Solutions, Inc. (pictured above). "He was one of the first people who realized that making environmental choices was more than just fixing a problem; it was a societal issue. He truly merged the sciences into the engineering to create what we know today as the overall environmental practice." Nelson's Weston Roundtable Series is so named to honor Weston's UW connection and environmental legacy.

Weston got his start at the UW, where he earned his degree in civil engineering in 1933. After completing graduate work at the University of Minnesota and New York University, he entered the workforce as an industrial pollution control engineer. At the time, this sort of work was uncharted territory as the U.S. hadn't yet realized the importance of environmental responsibility. In 1957, Weston took matters into his own hands and founded Roy F. Weston, Inc. (now Weston Solutions).

Roy Weston. Photos courtesy of Weston Solutions

The company started with a focus on industrial wastewater treatment, and as environmentalism boomed over the 1970s, so did Weston's company. "Our company has evolved in many ways," says Bove. Weston Solutions is a federal contractor for the Department of Defense, doing work like identifying and removing explosive materials, as well as the Environmental Protection Agency, where they provide emergency response to events like oil spills or hurricanes, and more.

Weston and Bove's tenures overlapped; Bove started his career as a project engineer in 1983; Weston was with his company until his retirement in 1991. Bove recently began exploring Weston's trove of writings and presentations, which altogether, tell the story of an industry's journey toward sustainable development — and how industry and academia worked together to turn sustainability from a concept to a curriculum. On October 20, Bove and Weston's connection will come full circle as Bove comes to campus to present his own Weston Roundtable Series lecture, Sustainable Development: From Concept to Curriculum.

Weston Roundtable Series

The Weston Roundtable Series is designed to promote a robust understanding of sustainability science, engineering, and policy through weekly lectures co-sponsored by the Center for Sustainability and the Global Environment (SAGE), the Department of Civil and Environmental Engineering, and the Office of Sustainability. Lectures take place from 4:15–5:15 p.m. every Thursday at 1163 Mechanical Engineering Building.

Everyone's Earth: The Way to Freedom

Learn about the intersections of the social, political, and economic costs of escape into the wilderness in search of freedom.

The Material Elements of Enslaved People's Mobility —The Way to Freedom
Wednesday, Nov. 2 | 5:30–6:30 p.m
H.F. DeLuca Forum, Wisconsin Institute for Discovery
Register today

The Everyone's Earth: Conversations on Race and Environment lecture series showcases and promotes voices of color, highlighting the issues at the intersection of diversity and environmental justice. It is designed to raise public awareness around issues and opportunities related to diversity and inclusion across the environmental spectrum. This year, hear from Christy Hyman, assistant professor of human geography at Mississippi State University, who will present "The Material Elements of Enslaved People's Mobility —The Way to Freedom."


Christy Hyman. Photo by Chastity Hyman

For enslaved freedom seekers near the Great Dismal Swamp, there were numerous environmental convergences that arose in areas that could have been potential sites of refuge and reconnaissance. The intersections of these paths in terms of social, political, and economic costs of escape into the wilderness is the subject of this talk. Interspecies encounters transformed into interspecies cooperation for those liberation seekers who developed a committed yearning to survive. It was The Way to Freedom. The Way is a metaphor for the mysteries, possibilities, yearnings, and receiving of surviving turbulent terrain in search of freedom. Attendees of this talk will receive a multilayered discussion of historical Black geographies, the natural world past and present, and contemporary issues of ecological sustainability as it pertains to these elements.

This event is presented in partnership with Nelson Institute's Office of Environmental Justice, Community Environmental Scholars Program, and Center for Culture, History and Environment; and the UW–Madison Center for Humanities and the Departments of Geography, GeoSciences, and African American Studies.

CPEP Series

Each semester the Climate, People, and the Environment Program (CPEP) hosts a weekly seminar featuring lectures by visiting speakers as well as presentations by CPEP faculty, scientists, and students. CPEP seminars take place from 4–5 p.m. on Tuesdays at 811 Atmospheric, Oceanic, and Space Sciences Building, starting September 27. The presentations are held in conjunction with the Department of Atmospheric and Oceanic Sciences and are open to the public.

Featured Seminar:
October 18: From Plants to Planets: Land Surface Effects on Global Climate
Marysa Laguë, adjunct assistant professor, University of Utah; James S. McDonnell Foundation Postdoctoral Fellow in Dynamic and Multiscale Systems, University of Saskatchewan

Learn more about this lecture and others in the series. Past lecture recordings are available for viewing.

Info Sessions: UW Environmental Professional MS Programs

Fridays | 10 a.m. | Virtual (Zoom)
Your Nelson career doesn't have to end after undergrad! Learn about the Nelson Institute's environmental conservation (EC) and environmental observation and informatics (EOI) programs. Sessions are structured as an open question-and-answer format. After a short presentation, the hosts will be online and available to answer questions from attendees. Prior registration is required to receive the link to join. Sessions will not be recorded, but frequently asked questions will be posted on our website FAQ page. Register here.

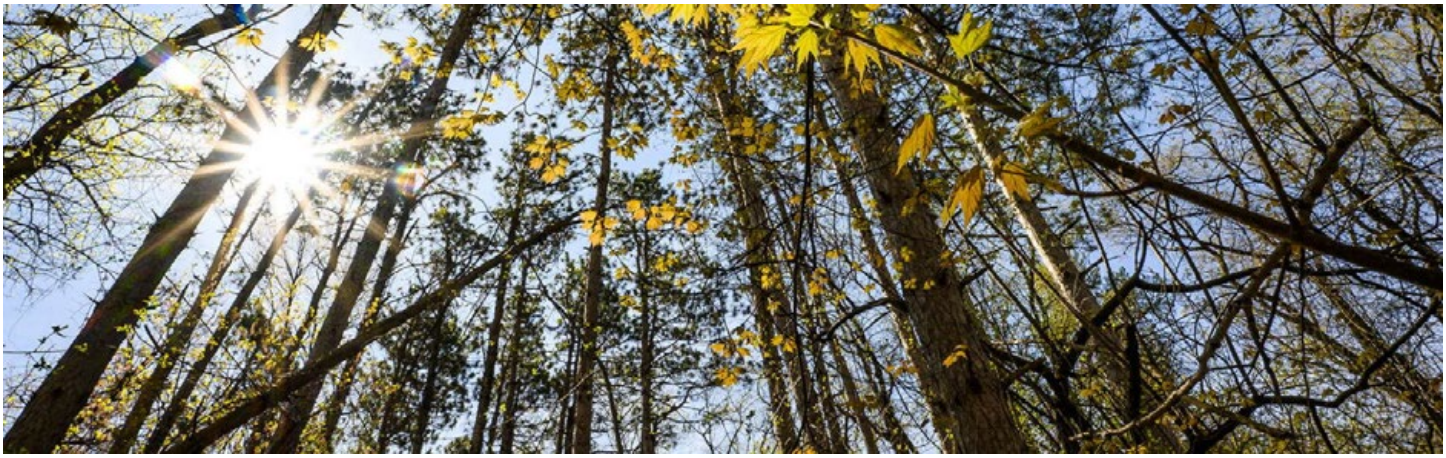
Fall 2022 CHE Environmental Colloquia

The Center for Culture, History, and Environment (CHE) invites you to attend the Fall 2022 CHE Environmental Colloquia series on Wednesdays from 12–1 p.m. in 140 Science Hall.

Mining and the Genocide-Ecocide Nexus
Alexander Dunlap, Postdoctoral Research Fellow, University of Oslo
Wednesday, Oct. 26

Hurricanes Amidst the Great Depression: Agrarian Reform and Reconstruction in Puerto Rico, 1928-1940
Adrian Bermudez Perez, UW Master's Degree Student, Latin American, Caribbean, and Iberian Studies; Graduate Associate, Center for Culture, History and Environment
Wednesday, Nov. 16

Viral Markets: Economics, the Environment, and Emerging Disease in the Twentieth Century
Richard Keller, UW Professor of History and Medical History
Wednesday, Dec. 14



Save the Date: CEE Fall Symposium

Monday, Nov. 28 | 3–5 p.m.
Orchard View Room, Wisconsin Institute for Discovery

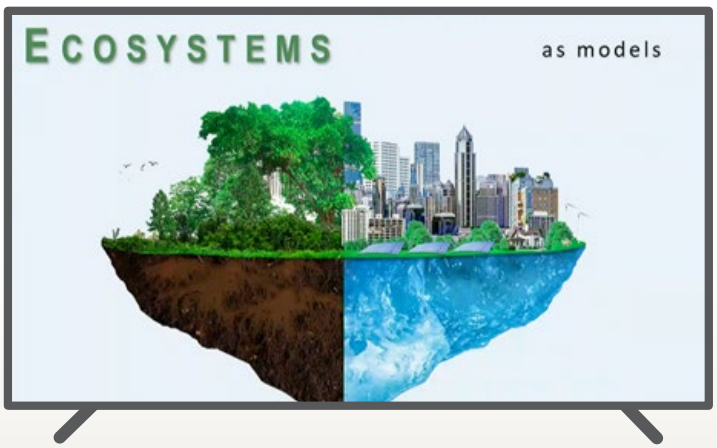
Join the Center for Ecology and the Environment for the annual fall symposium. The keynote address will be given by Mercedes Pascual, professor of ecology and evolution at the University of Chicago. A theoretical ecologist interested in the intersection of numbers and nature, Pascual studies complex systems in ecology and epidemiology to understand and predict patterns of variability and their connection to structure and scale.

Watch for more information coming soon.

KEEP UP TO DATE ABOUT UPCOMING ENVIRONMENTAL EVENTS

Nelson Video Library

If you missed a Nelson Institute hosted event or lecture, you can view recordings on demand in our video library.



LEVELING UP

TIPS + ASSISTS FOR YOUR POST-COLLEGE GAME PLAN

nelson.wisc.edu/leveling-up

Join us

in celebrating the Nelson Institute year-round by purchasing branded merchandise, shirts, sweatshirts, jackets, bags, and more!