Nelson Institute for Environmental Studies
UNIVERSITY OF WISCONSIN–MADISON

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THE COMMONS

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

Calling from COP28

EDITORIAL STAFF

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STAFF WRITER

Laila Smith, Communications Assistant

CONTRIBUTORS

Abigail Becker
Rachel Carrier
Will Cushman
Lauren Graves
Sarah Graves
Michael Kamp
Dea Larsen Converse
Kristina Levan
Jonathan Patz
Lauren Weitkamp

DEAN'S OFFICE

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Colleen Godfriaux, Interim Director of Budget and Financial Management
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Shelly Strom, Assistant to Paul Robbins
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Jenna Weidner, Associate Dean for Administration

CONTACT US

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Nelson Institute for Environmental Studies
550 Science Hall
Madison, WI 53706
communications@nelson.wisc.edu

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We're reducing our carbon footprint! We hope you enjoy our digitally published magazine, sent monthly to Nelson alumni, students, and friends.

Cover photo courtesy of Jonathan Patz

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From the Dean

Happy New Year!

The year 2024 ... That has a vague science fiction ring to it in my ears, but here we are, having arrived in the future, and at an enormously complicated environmental moment. The good news is that the tools to solve environmental problems and the students demanding to learn them are also both ahead of the curve and bending towards the future. And students are here in record numbers. This past fall, the institute had our highest ever student enrollment — 1175 students decided to pursue our certificate, major, and graduate programs with Nelson. It reinforces that we are teaching things that students want to learn and carry forward. One of those things brings me back to the classroom every spring. I get to help introduce our undergrads to Careers in the Environment with Rob Beattie, Emily Reynolds, and the help of many alumni. There's no better reminder of how Nelson education and research help shape the future.

We are codifying that impact through our renewed strategic plan, which also lays out a path forward. Our Nelson faculty, staff, students, and alumni dedicated nearly a year to examining our current efforts and identifying a plan for the next five years. In the months ahead, you will have an opportunity to see the goals in action. As we embark on what I'm sure will be another outstanding term, we already have several of these new initiatives in the works. These continue to champion excellence in student experience, cutting-edge research, and enhanced service to diverse publics, from businesses to agencies to environmental organizations. You can read more about a few of these efforts in this issue and how they align with our commitment to advancing environmental knowledge and practice, while fostering the next generation of leaders.

On pages 6 and 10, read about two sustainability programs that the Nelson Institute is spearheading. First is the launch of a graduate certificate in sustainability, where students across the campus now have an opportunity to add this critical credential to their degree portfolio. Second, the newly formed Business Sustainability Leadership Forum (BSLF), an initiative to support connecting private organizations with sustainability expertise on campus. For our part, I'm thankful for Anna Gade's and Andrea Hicks' perseverance with the grad certificate and Alyson Fleming's insight with the BSLF. These are only a couple of really exciting things on our horizon. Watch this space.

This issue's cover story is yet another shining example of the reach of the Nelson Institute. A green lawn in December in Wisconsin is a stark reminder that 2023 was the hottest year ever recorded. Last month, Dubai hosted the U.N. Climate Change Conference, also known as COP28. Jonathan Patz, Sumudu Atapattu, and Greg Nemet were among our experts who participated. The first-ever Health Day in COP history included contributions from Patz and Atapattu and addressed climate related topics on health effects and environmental justice. Nemet was available to speak about carbon removal technologies.

Lastly, be sure to take note of our robust list of upcoming events and lectures. Classes will be back in session before we know it, so I encourage you to mark your calendar for a few of our Nelson signature events including this year's Sustainable Success lecture series and a reimagined Earth Day celebration.

As always, if you have feedback to share or topics you'd like to read about, I'd love to hear from you.

Be well,

Paul Robbins
Dean, Nelson Institute

Chilling on Ice

Winter took a slow start in Wisconsin. The end of 2023 saw minimal snow and ice accumulation with temperatures consistently above average. Back in February, the same was true with above average temperatures in the mid-40s allowing UW–Madison alumna Lauryn Gullberg (left) and senior Tyler Lien (right) to throw *W* hand signs as they "chilled" on frozen lake Mendota. During this time, UW–Madison Winter Carnival activities were either canceled or moved indoors due to a lack of snow. Photo by Jeff Miller, University Communications

UW–Madison alum Caitlin Rublee and Jonathan Patz show their Badger pride Dubai. Photo courtesy of Jonathan Patz (2)

Here's to Health and Happiness

COP28 featured first-ever Health Day addressing the major health impacts from climate change.

By Jonathan Patz

This year, the United Nations Climate Change Conference or Conference of the Parties of the UNFCCC, more commonly known as COP28, in collaboration with the World Health Organization (WHO) and other main partners, organized the first-ever Health Day on December 3. I have researched climate change health effects for nearly 30 years and believe that both COP28 and Health Day was were opportunities to shed light on the intersection of climate change and health. Participants included climate and health professionals, civil society organizations, ministers, youth representatives, and business. Health Day had one major objective: to bring the climate-health agenda into the mainstream and help others understand the health challenges many around the world are already experiencing.

Health Day focused on five key topics:

- Showcasing evidence base and clear impact pathways between climate change and human health
- Promoting "health arguments for climate action" and health co-benefits of mitigation
- Highlighting needs, barriers, and best practices for strengthening climate resilience of health systems
- Identifying and scaling adaptation measures to address the impacts of climate change on human health (including through One Health)
- Taking action at the nexus of health and relief, recovery and peace

Climate And Health Conferences

I recently attended a climate and health conference in Kathmandu and was able to visit mountain villages and see firsthand how intensifying rainfall extremes have caused damaging landslides with disruption in water systems and new increases in diarrheal diseases.

For those of us who work in this area, we are aware of the concerns about melting mountain glaciers and threats to water availability for agriculture and hydropower. The COP28 Health Day highlighted other concerning threats, including climate change's risks to human health through water quality, air quality, and temperature effects on biological systems (especially mosquito-borne infectious diseases).

> *"Health Day focused on the huge health improvement opportunities possible by moving away from fossil fuels to cleaner energy sources."*
>
> — Jonathan Patz

While I was in Kathmandu, officials announced that the dengue fever virus is now in all 77 districts in Nepal. As temperatures warm, mosquito-borne diseases like dengue fever and malaria are occurring at higher elevations around the world.

Air pollution impact on health is also a special concern. The World Health Organization (WHO) provides evidence of links between exposure to air pollution and type 2 diabetes, obesity, systemic inflammation, Alzheimer's disease and dementia. The International Agency for Research on Cancer has classified air pollution, in partic-

ular PM2.5, as a leading cause of cancer. A recent global review found that chronic exposure can affect every organ in the body, complicating and exacerbating existing health conditions.

How Does Burning Less Fossil Fuel Benefit Our Health?
Health Day focused on the huge health improvement opportunities possible by moving away from fossil fuels to cleaner energy sources. Here are just a few benefits that will result from decarbonization:

- Phasing out fossil fuels globally will save over 5 million lives per year, according to a new study. Despite repeated government pledges to cut back on fossil fuel subsidies, a report by the International Monetary Fund (IMF) looked at both explicit and implicit subsidies for fossil fuels across 170 countries. It found explicit subsidies alone have more than doubled since the previous IMF assessment, rising from $500 billion in 2020 to $1.3 trillion in 2022.
- According to a recent study of just nine countries, mitigation in the energy, food and agriculture, and transport sectors in line with the Paris Agreement would avoid 1.18 million, 5.86 million, and 1.15 million deaths through improved air quality, healthier diets, and increased physical activity respectively each year by 2040. These reductions in risk factors will lead to decreased burdens of disease, specifically cancer, cardiovascular disease, type 2 diabetes, and chronic respiratory diseases. Nature-based solutions offer physical and mental health benefits, and resilient water and sanitation systems ensure safe and adequate drinking water and hygiene.
- Health and equity are inextricably linked. As climate change severely impacts human health, it also worsens and exacerbates inequities in all societies. This leads low-income, excluded, and marginalized communities to suffer the negative health impacts of climate change much more severely than other social groups.
- Renewable energy jobs outnumber fossil-fuel related jobs and promote more localized employment opportunities that advances health and well-being.

After a one-year dip caused by the COVID-19 pandemic, global CO2 emissions from fossil fuels hit a new high of 37.2 billion tons last year. But one of the few bright spots heading into COP28 is that rates of renewable energy generation are surging, and many energy experts now consider the transition away from fossil fuels all but inevitable.

As leaders gathered in Dubai and participated in the first-ever Health Day this year, I am optimistic that it elevated the conversation about the connection regarding climate change impact on human health and experts provided real-world solutions to move us all closer to decarbonization. This could be a win-win to reduce greenhouse gas emissions and improve human population health.

In addition to Patz' participation at COP28, Nelson Institute affiliate Sumudu Atapattu and environment and resources PhD student Nova Tebbe were also in attendance at the world's biggest climate change conference.

The group focused their efforts on COP28's first-ever Health Day and shared their experience through a virtual discussion entitled "Live from Dubai - Wisconsin Goes to COP28" hosted by the Wisconsin Academy of Sciences, Arts, and Letters in partnership with the Nelson Institute. Attendees were able to ask questions about the health impacts of climate change, as well as other aspects of the discussions at COP28.

Additionally, Lisa Rausch, scientist in the Gibbs Land Use and Environment Lab (GLUE), attended the first four days of COP28, participating in events and networking with policy makers, civil society organizations, and other academics at pavilions dedicated to discussions of environmental issues in South America and the role of food production in driving deforestation. Rausch also represented the GLUE (or Gibbs Lab) at a public presentation of a new project funded by the Bezos Earth Fund to develop an animal level cattle traceability system for the Brazilian state of Pará; GLUE is funded under this project to contribute data analytics and expert insights as the project develops.

Since 2017, Andrea Hicks has incorporated UniverCity projects into the engineering course she teaches. Her course recently finished projects addressing blue green algae in Lake Altoona, pictured here. Photo by Megan Zabel Holmes / Visit Eau Claire

Nelson Institute Launches Graduate Sustainability Certificate

The new certificate includes capstone projects sourced from UniverCity Year community partnerships.

By Abigail Becker, UniverCity Alliance

In spring 2024, the Nelson Institute for Environmental Studies launched a new sustainability certificate that provides graduate students from any degree an extra credential they can take into the working world.

Dean Paul Robbins said the new 12-credit certificate will make graduates "more effective in addressing the challenges and crises of the future."

"Whether you are in sociology researching urban housing shortages or in engineering studying new industrial materials, sustainability concepts and skills will be critical for making your work relevant in a rapidly transformed world," Robbins said.

The certificate aims to prepare graduate students to meet the need that Nelson Institute leaders are hearing from environmental, social, and governance officers at major corporations. These leaders are looking for communicators, chemists, engineers, ethnographers, lawyers, and computer scientists, for example, who speak sustainability and understand systems thinking, life cycle assessment, and carbon accounting.

"Our new certificate empowers grads across all corners of the university to take on new and powerful roles in government, industry, and the not-for-profit sector," Robbins said.

Andrea Hicks, Nelson Institute affiliate, director of Sustainability Education and Research, Hanson Family Fellow in Sustainability, and associate professor of civil and environmental engineering, said this certificate will set students up for success in the future job market.

"Our goal is to provide students with credentials they can take with them that says they know about sustainability,"

Hicks said. "With this certificate, I hope students get credentialing in sustainability to highlight their passion and their hard work."

Future Vision, Present Action

The structure of the graduate sustainability certificate is similar to one offered to undergraduate students through the Nelson Institute. The new certificate also builds off of the Nelson Institute's graduate certificate in energy, analysis and policy, which has a successful academic and administrative model.

Andrea Hicks

Paul Robbins

Gavin Luter

Anna Gade, who was the associate dean for research and education when the certificate was being developed, said both the theory and practice of interdisciplinarity are embedded within the certificate – a "distinctive value" the Nelson Institute brings to academic programs.

The certificate program consists of classes in three thematic areas that consider environmental, economic, and social factors of sustainability. These themes include:

- Economics and development
- Systems analysis, planning, and engineering
- Environmental policy, health, and social studies

Students will take one class in each theme, which allows students to enroll in advanced courses in areas they are familiar with and introductory courses in the areas that are newer to them.

Gade, who is a professor of environmental studies, said the certificate is designed to be flexible and incorporates the history of sustainability, Indigenous knowledge, justice-centered initiatives, and community-based approaches.

While sustainability can be defined in more limited terms, Gade said UW–Madison thinks "more inclusively and even beyond anthropocentric outcomes," interacts with other fields represented in environmental studies like ecology, and partners with Native Nations.

"The whole field is about how to imagine the future, while taking real steps in the present," Gade said. "As the area of sustainability grows in public awareness, certification such as this is increasingly sought by students, and recognized by employers and other stakeholders."

Sustainability and Service

To finish the certificate, students will work in teams to complete a capstone project. The capstone projects will likely begin in spring 2025, with the goal of offering the capstone each following year during the spring semester.

All capstone projects will be community-based projects sourced from UniverCity Year (UCY) – a three-year program that connects Wisconsin local governments with university resources to solve community-identified challenges.

"By integrating this program with UniverCity Year, students will get to work now, not later, while they are here, making a difference in communities around the state," said Robbins, who is also the cochair of the UniverCity Alliance Advisory Board.

UCY is administered by UniverCity Alliance (UCA), which is a network of interdisciplinary leaders across UW–Madison who are inspired to improve local governments and foster innovation in communities of all sizes.

"Wisconsin communities are grappling with the issues of sustainability and coming to UCY for support on projects related to environmental sustainability, climate action plans, and solar projects," UCA managing director Gavin Luter said. "Through this certificate, UW–Madison students can put their learning into action by working with a local community."

Hicks, who is a member of the UCA Advisory Board, has incorporated UCY projects into the engineering course she teaches since 2017. She has heard from her students that working on community-based projects cements the sustainability learning outcomes and provides a broader context of meaning to be serving in communities.

"It's sustainability in action in the context of service," Hicks said.

Solar Powered and Ahead of the Curve

Shaping campus as a living laboratory for sustainable transit.

By Lauren Graves , Office of Sustainability

A contractor places flexible solar panels atop a bus shelter on Engineering Drive. The unique, flexible design of the panels was a student-driven solution developed with support from Professor Arganthaël Berson. Once in place, the panels bend over the shelter's curved roof, with the projected potential to generate more power than flat panels while maintaining shelter aesthetics. Photos courtesy of the Office of Sustainability (4)

As bus riders traverse the University of Wisconsin–Madison campus, they may notice a few enhancements to the transit landscape: screens delivering real-time arrival information and overhead lights that illuminate late-night and early-morning commutes. What they may not immediately recognize are the inconspicuous solar panels integrated onto the curved roofs of 20 campus-managed bus shelters, silently powering these improvements.

These features represent more than just technology advancements; they symbolize a collaborative effort to enhance the safety, convenience, and sustainability of campus transportation. With an additional 17 shelters set to receive these upgrades in spring 2024, followed by 10 more in 2025, the project's positive impacts continue to expand, marking a significant stride toward a greener and more efficient campus transit system.

The journey started in the fall of 2019 when three students from Enactus reached out to the Office of Sustainability to pitch a Green Fund project. Initially, their vision was to add solar panels to a campus parking structure. Following discussions with Transportation Services, they happily shifted their focus to electrifying bus shelters.

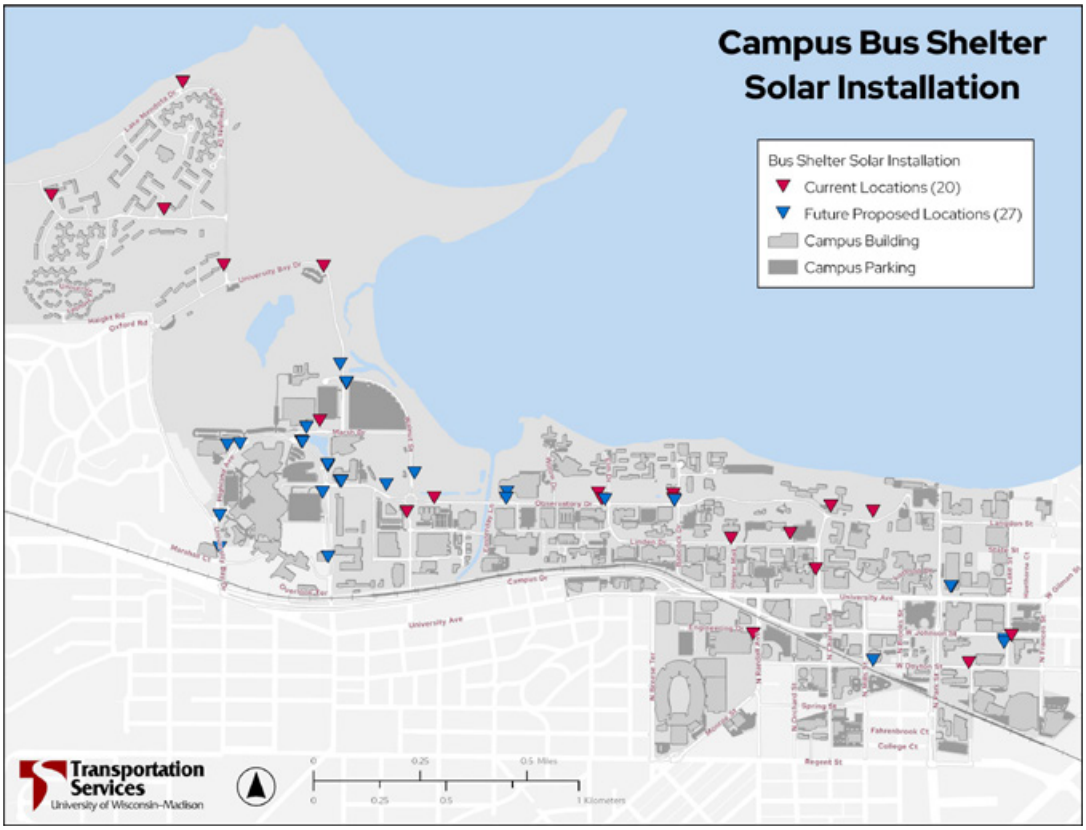
The new focus presented a unique challenge and design stipulation: how to integrate solar panels — which are typically flat and rigid — onto the curved roofs of the bus shelters in a way that preserved their aesthetic. Rather than using flat panels, the team wanted to use flexible, curved panels that would lay flush between the ridges of the roof. In addition, the team needed to know how many solar panels would be required to generate enough electricity to power the screens and lights. The orientation of each shelter and the shading from the surrounding buildings and trees would affect the production of these panels.

To tackle this issue two student organizations united: Enactus, with its background in project management and sustainability, joined forces with Helios, which is proficient in renewable energy engineering and computer science.

The students took to the streets to analyze the solar potential of all 66 bus shelters on campus, using a tool called a

Solar Pathfinder to assess the orientation and shading of each location.

Computer programs exist for estimating the electrical output of flat solar panels. Nothing exists, though, for curved panels. With the support of Professor Arganthaël Berson from the College of Engineering, the students approximated the curvature by modeling a series of flat solar panels, each at a different angle of tilt. By running the shading and orientation data through the curved panel model, the students were able to recommend which of the 66 bus shelters would be appropriate sites for solar panels and how many panels would be needed at each.



Red markers denote the 20 campus bus shelters equipped with solar panels, display screens, and lights in 2023. Blue markers represent the 27 proposed locations of future installations.

After three and a half years of planning and collaboration, UW–Madison installed the first solar bus shelter upgrades in the summer of 2023. Partners from Transportation Services, the Office of Sustainability, Helios, Enactus, and the installer, Urban Solar, came together to celebrate this monumental achievement.

"Inviting all the students who worked on the project over the years, including those who graduated, to observe and celebrate the installation, you could feel the sense of accomplishment and enthusiasm as we gathered under the shelter on a rainy day to geek out with the installer about the technical details of the system," said Ian Aley, program manager for the Green Fund.

The Urban Solar representatives shared that while they have designed and installed solar bus shelters across North America, this was their first time working with curved panels. They learned a great deal through the process and will start offering curved panels as an option for future customers, expanding the project's impact beyond the UW–Madison campus.

Learn more about recent improvements to Madison's public transit system, including real-time bus arrival displays and lighting.

This story was originally published by the Office of Sustainability.

Top: Project partners gather in celebration beneath a newly completed solar bus shelter by the Walnut Street Greenhouse. Bottom: A solar installer mounts a display screen inside a bus shelter on Engineering Drive, marking the completion of the 20th and final solar bus shelter installation of the summer.

The Business Sustainability Leadership Forum with UW–Madison Chancellor Jennifer Mnookin (center) at the inaugural full group meeting on Friday, Nov. 17, 2023. Photo courtesy of University Communications

Business Sustainability Leadership Forum

New initiative connects campus innovators, industry leaders, and state officials to address environmental challenges.

By Kristina Levan, University Communications

The University of Wisconsin–Madison Nelson Institute for Environmental Studies and Office of Business Engagement are teaming up with prominent businesses to ignite important conversations in the environmental sustainability space.

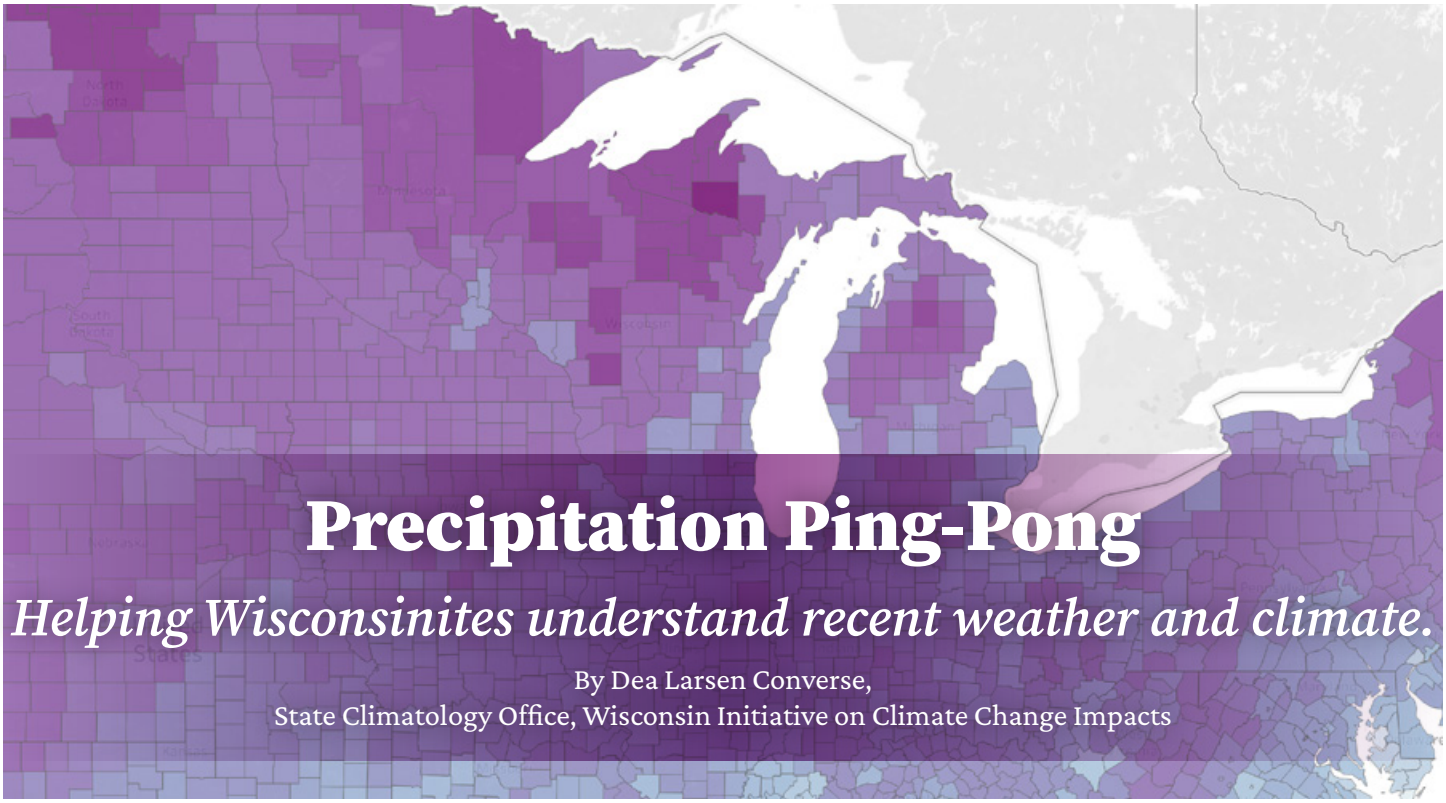
The Business Sustainability Leadership Forum (BSLF), which officially launched on Friday, Nov. 17 in Madison, aims to gain important insight from key university-industry partnerships on the most pressing sustainability challenges facing private businesses today. The network initially launched with 14 regionally and nationally recognized businesses, as well as state officials, and environmental sustainability experts from across campus.

UW–Madison Chancellor Mnookin joined the inaugural meeting to welcome the group and challenge its members to work together to turn ideas into action.

"Addressing truly complex and urgent challenges like building a more sustainable world will take more than partnerships. It will take entire innovation ecosystems," Chancellor Mnookin noted during the forum. "I hope that, together, we will create an innovation ecosystem where we forge new connections and think creatively about how our collective expertise can advance our collective goals."

The Business Sustainability Leadership Forum will meet again as a full group in the spring and will hold smaller gatherings to strengthen network relationships and advance Forum goals. Through collaboration, the forum aims to enhance the economic engine of the state, catalyze job growth, accelerate talent development, and drive innovation in environmental sustainability.

This story was originally published by the Office of Business Engagement.



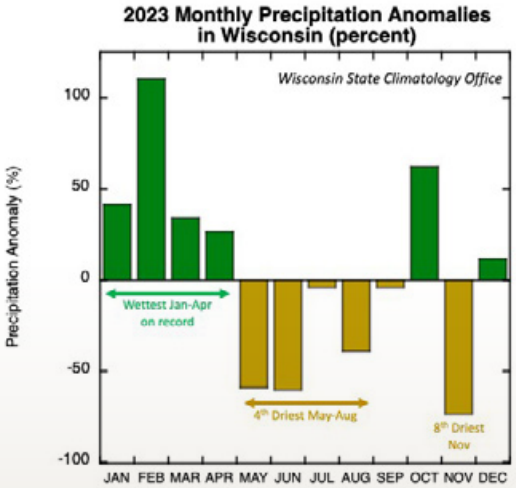
Precipitation Ping-Pong

Helping Wisconsinites understand recent weather and climate.

By Dea Larsen Converse,
State Climatology Office, Wisconsin Initiative on Climate Change Impacts

Freeze data tool, one of the many interactive data visualization tools available from the State Climatology Office website.

The State Climatology Office has launched monthly summaries of weather and climate in Wisconsin to provide local conditions and insight on the state's climate outlook. The recent November summary by Steve Vavrus, Wisconsin state climatologist and WICCI codirector, described the month as very dry, with more than a third of Wisconsin remaining in at least a moderate drought and a sixth of the state continuing in severe or extreme drought. He framed the 2023 climate as a "precipitation ping-pong" — after a record wet start from January to April, May to August were the fourth driest, followed by an exceptionally wet October, then the eighth driest November, and finally a slightly wet December (see graph below). Read the full summary, sign up for monthly reports, and learn more about the additional resources and tools available through the SCO here.



Statewide monthly precipitation departures from the long-term average (1895-2022). Graphic by the State Climatology Office

The State Climatology Office is part of UW–Madison's Rural Partnerships Institute (RPI), an initiative to support Wisconsin's rural and tribal communities. With $9.3 million in funding from the U.S. Department of Agriculture, UW–Madison's RPI represents a combined effort among the Nelson Institute's Center for Climatic Research, the College of Agricultural and Life Sciences (CALS), and the Division of Extension. In addition to the State Climatology Office, the RPI includes the Wisconsin Environmental Mesonet and community projects in support of rural communities and tribal nations of Wisconsin.

For an expanded perspective on climate in Wisconsin, the Wisconsin Initiative on Climate Change Impacts (WICCI) 2021 Assessment Report describes how Wisconsin's climate continues to change, the issues and impacts of our warming climate, and scientific progress made toward solutions. Since publishing the 2021 report, WICCI is continuing to evaluate climate impacts and solutions with a new assessment report anticipated in 2026. 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.

Zapping Manure to Produce Fertilizers

An environmental analysis led by Rebecca Larson leads to a new technique that could help farmers extract useful nutrients.

By Will Cushman, University Communications

This image shows the research team's lab setup providing a proof-of-concept of their ammonia recovery and chemical production strategy with small amounts of manure. The next step will be to develop a larger-scale demonstration of the technique. Photo by Rui Wang / UW–Madison

An interdisciplinary team led by University of Wisconsin–Madison scientists has developed a new technique that could help farmers extract useful nutrients such as ammonia and potassium from livestock manure to efficiently make fertilizer and other useful chemical products.

While the strategy still needs to be scaled up beyond a proof-of-concept stage, the group's preliminary analyses show it could offer considerable benefits by cutting water and air pollution while simultaneously creating products that farmers could use or sell.

Manure stinks in part because it contains ammonia, one of the more than 300 compounds that contribute to its odor. The pungent gas is not only a harmful air pollutant but can turn into the greenhouse gas nitrous oxide and water-polluting nitrate.

Ammonia is also the foundation of many nitrogen fertilizers that have fueled modern crop production. The industrial method for making ammonia for nitrogen-based fertilizers, the Haber-Bosch process, consumes a lot of energy and emits hundreds of millions of tons of greenhouse gasses every year.

Rebecca Larson

Although manure itself can be used as fertilizer, doing so can be costly, logistically challenging and has environmental drawbacks. So, researchers around the world are hunting for strategies

to efficiently recover ammonia from manure, creating more concentrated and valuable fertilizers that are greener and more affordable to transport.

Among these strategies are chemical processes driven by electricity, which is becoming increasingly inexpensive in many rural communities thanks to growing solar and wind power generation. However, most electrochemical techniques in development are not yet practical, mainly because they consume a lot of energy and aren't efficient enough at pulling dissolved ammonia (in the form of ammonium ions) out of manure.

This new technique, described in a Dec. 8 paper published in the journal Nature Sustainability, relies on a specially designed electrode, like those used for batteries, that targets ammonium ions.

The technique involves a nickel-based electrode that is placed directly into the manure wastewater. As organic matter in the manure naturally gets oxidized by the electrode, the ammonium, as well as potassium ions, within the wastewater are selectively driven into and captured by the electrode.

The strategy does not end with simply removing the nutrients from the wastewater.

Song Jin

In an innovative step that could help make the process even more attractive, the nutrient-loaded electrode is then placed into a device that uses electricity to release the recovered ammonium and potassium ions, which can then be used to make nitrogen and potassium-based fertilizers, and simultaneously produce other useful chemical products. These could include hydrogen fuel or hydrogen peroxide, which is commonly used for disinfection.

"We got lucky because nature does a lot of the work for us," says Song Jin, a UW–Madison professor of chemistry who led the work along with doctoral candidate Rui Wang and civil and environmental engineering Professor Mohan Qin.

"Manure has all this stuff in it and we don't have to do too much extra work," Jin says. "The battery material goes in, and ammonia gets sucked out when the organic stuff gets oxidized."

Mohan Qin

Trial runs with small amounts of manure recovered more than half the ammonia in the first pass, with a recovery of about 85 percent after two cycles.

The ability to produce fertilizers and other chemical products together is a key part of why the team believe their strategy could be a winner. An environmental analysis led by Rebecca Larson, a professor in the Nelson Institute for Environmental Studies, indicates that a 1,000-head dairy farm operation could reduce its ammonia emissions by more than 50 percent by deploying the system, while also significantly reducing the amount of nitrate entering nearby waters.

Meanwhile, a preliminary technical economic analysis led by Professor Fikile Brushett, a collaborator at Massachusetts Institute of Technology, shows that a model dairy farm using the system could expect resulting revenues to be higher than operating costs, so long as electricity prices aren't exorbitant.

The next steps include further improving the materials and processes, scaling the system up and studying how it functions at a level more closely resembling a real-world livestock operation. Jin is optimistic that the system's benefits will continue to outweigh potential costs at these larger scales, given the initial analyses.

"It looks indeed to be promising," says Qin. "There's a pathway to see how this might really help in the real world."

This research was supported by the National Science Foundation (NSF, CBET- 2219089). A provisional patent on this technology has also been filed by the Wisconsin Alumni Research Foundation (WARF).

This story was originally published by University Communications.

Nemet to Serve as Interim Director in Spring

By Lauren Weitkamp,
La Follette School of Public Affairs

Professor and Nelson Institute affiliate Greg Nemet will serve as interim director of the La Follette School of Public Affairs while Susan Webb Yackee is on sabbatical. Nemet, whose research focuses on the process of technological change in energy and its interactions with public policy, joined the school in 2007.

Nemet will lead the La Follette School as it begins a year-long celebration of the school's 40th anniversary. As part of the celebration, the school will hold a new La Follette School Spring Spotlight event in April, as well as a number of town halls and events focused on civil discussions and talking across differences in the months leading up to the fall elections.

"I'm excited to have a role in this important moment in the history of the La Follette School," says Nemet.

The La Follette School also plans to hire a total of five new faculty members in 2024, and Nemet will take the lead on several of the faculty recruitments. Recruitment is currently underway for faculty positions focused on social genomics and health, and poverty and public policy. In early 2024, La Follette will hold job talks for a faculty member focused on leadership and two faculty members whose research centers on science and technology.

"I am grateful to Greg for his leadership in moving the critical work of school, including our faculty recruitments, forward while I am on sabbatical," says Yackee. "The school is in excellent hands."

This story was originally published by the La Follette School of Public Affairs.

Christopher Kilgour Honored for Efforts in Environmental Education

Kilgour, community outreach manager, awarded the 2023 Eco-Justice Award.

By Diane Stojanovich

Christopher Kilgour, community outreach manager with the Nelson Institute for Environmental Studies, was recently awarded the 2023 Eco-Justice Award from the Wisconsin Association of Environmental Education (WAEE). The relatively new award was created from a desire to expand the traditional lens of environmental education to more intentionally highlight the work of environmental equity leaders and organizations who would not traditionally label themselves as environmental educators. Recipients are recognized for leadership in developing and implementing programs that are inclusive, culturally relevant, working towards equitable internal practices, and representing the diverse communities in Wisconsin.

Kilgour was honored for his efforts with Color in the Outdoors, an outdoor adventure group that he founded two decades ago that seeks to reduce barriers to outdoor activities among diverse communities.

"I am honored to be recognized for the role I play in further access, inclusion, and equity in outdoor spaces and careers related to the environment," says Kilgour. "I am humbled to join the prior recipients and believe opportunities abound to foster new ways to embrace education across diverse communities."

In the coming year, Kilgour will be leading a statewide assessment for WAEE to identify individuals and organizations in disadvantaged communities or historically marginalized populations. He will conduct conversations and listening sessions to identify barriers, gaps, and needs related to expanding equitable access to environmental education.

Kilgour attends the UW–Madison Leadership Institute's 20th anniversary event. Photo courtesy of UW–Madison

In his role with the Nelson Institute, Kilgour has increased the outreach capacity by supporting efforts to better address diverse access to our programs and services by building deeper relationships with post-secondary institutions, campus partners, and community organizations.

WAEE formally recognized the 2023 award recipients during a virtual event in November.

From the Office of Sustainability

A monthly update from faculty, staff, and students in the Office of Sustainability - Education and Research. This month's column is from Nathan Jandl.

Nathan Jandl

The SustainUW Podcast:
Three Years In and Going Strong

In June of 2020, a recently convened student intern cohort at the Office of Sustainability was faced with a strange reality: they would not be meeting in person for the foreseeable future. Instead, they would assemble as digital faces on so many screens, using what was then the preferred virtual meeting software, Webex, to wade through awkward ice-breakers and figure out how they could make UW–Madison more sustainable from the isolation of their personal spaces.

The incumbent interns in the cohort — mostly rising seniors, who had begun the program in the tantalizingly recent in-person days — were motivated to keep their pre-pandemic momentum, and the new interns were happy to learn from them. But what could they do that was suitable for digital-only life?

In the end, multiple projects emerged from this unprecedented situation; one of the most prominent, however, was the creation of a sustainability podcast. Interns formed up a new team, found specialized remote podcast software, developed a name, and built out episode ideas. Voilà: the Office of Sustainability launched *The SustainUW Podcast* in September of 2020.

Over three years later, *The SustainUW Podcast* has released nearly 40 episodes on topics ranging from PFAS pollution, the Inflation Reduction Act, and American Indian activism to eco-anxiety, Barbie, and fast fashion. Guests have included UW–Madison students, local sustainability professionals, and prominent figures in sustainability-related fields, such as Dekila Chungyalpa, Carolyn Finney, and Tracey Holloway.

As a staff supervisor for the podcast team, I am constantly impressed by the care and skillfulness with which our interns develop episodes, correspond with guests, conduct interviews, and edit episodes. We have been through different visions of the podcast each season — one year there were bonus episodes on newsworthy and/or lighthearted topics; another year, we ran three series: Wicked Problems, Green Paths, and Hot Topics. This year's team has been the most prolific of any, with several episodes published just this fall and several more in the docket for the spring semester.

Since 2020, there has been a small explosion of campus podcasts, from *1050 Bascom* to *The Water We Swim In*. I hope you'll listen to all of them — and I particularly hope you'll consider listening and even subscribing to *The SustainUW Podcast*. You'll find compelling topics, fascinating experts, and inspiring students — and you might even think of an idea to pitch to us. We're always happy to hear from our friends in Nelson!

Director's Cut

A quarterly update from Carol Barford, director of the Center for Sustainability and the Global Environment.

The United Nations Framework Convention on Climate Change 28th Conference of the Parties (COP) took place Nov. 30 – Dec. 12, 2023 in Dubai, United Arab Emirates. Among other things, COP28 made the news for its first-of-a-kind agreement on the need to reduce fossil fuel use around the world. SAGE research assistant and Nelson Institute PhD candidate Nova Tebbe recently returned from attending the entire two weeks of COP28 meetings. We talked a little bit about that experience:

Barford: **How does your research connect to COP28?**
Tebbe: I work at the intersection of climate policy, human health and equity – trying to make climate policy healthier and more equitable. The COP meetings are the premiere climate policy negotiations on an international level. By attending, I can see how diplomacy and negotiation work in terms of climate change, and how health and equity are intertwined. It's a great "case study" on an international level, and it helps me understand better how to advocate for climate, health and equity closer to home.

You've been to other COP meetings. How was this one different?
The most important thing for me was the increased emphasis on health at COP28, with a whole themed "Health Day." Also, there were about 50 ministers of health from different countries, compared to two at COP26 in Glasgow, which I also attended. There was a whole community ready to talk about climate and health. Similarly, the whole COP28 was the biggest ever. There were 100,000 participants by some estimates, compared to around 35,000 at COP27. Another big difference was the presence of oil and gas lobbyists. At COP26 there were about 500 participants from the oil and gas industry, but at COP28 more like 2,500. Their placement at the venue was prominent too, on the first floor as opposed to the Indigenous People's Pavilion on the second floor. This is one reason why the statements by the COP28 president (who is also chief exec of the UAE state oil company) denying the scientific basis for the need to phase-out fossil fuels were not too surprising to other attendees, even though they got a lot of media attention.

Please tell us about the negotiations. In what ways did science and politics play out?
I followed the Global Stocktake negotiation stream which assessed how well countries are living up to their commitments in the Paris Agreement (to limit climate warming to 2 degrees Celsius). This has never been done before! There was a synthesis report, or technical part, finished in October, and then the political part at COP28. The technical part was like a report card and then the negotiations were like the parent-teacher conference where everyone agrees on what to do next. While an agreement was made, it is still not enough to reach the Paris goals. In each subsequent draft of the agreement, the language got watered down and more vague, like starting with a beautiful tree and ending with a stump. So, it was disappointing, but we at least have a starting point.

How have your experiences at COP meetings impacted your work?
At COP28 I learned a lot about how science informs policy. Extensive synthesis of evidence and drafting of agreement text took place at the Pre-COP meetings in Bonn (Germany) in June, to tee up the political negotiations at COP28. I can take that evidence and advocate with certain negotiators, who already have demonstrated interest in climate, health and equity, to give them the tools they need to make a better agreement – to make them champions.

Carol Barford

Valerie Stull (right) and Rachel Bergmans (left) as graduate students in 2015 studying meal worms as source of protein for human consumption. Photos courtesy of Valerie Stull (2)

Creating a More Sustainable and Equitable Food System

Valerie Stull takes a holistic view of food systems investigating how to change them for the betterment of the planet and communities.

By Michael Kamp,
Energy Analysis & Policy, Climate Solutions for Health Lab

The Climate Solutions for Health Lab, or Patz Research Group, is lucky to count Valerie Stull as a member of the team. Stull has dual appointments with the Nelson Institute's Center for Sustainability and the Global Environment as a research scientist, as well as in the Department of Community and Environmental Sociology as a faculty associate. What does Stull research? "I'm really interested in the intersection of climate change, agriculture, and human health, and looking for ways that we can leverage improved, more regenerative, and climate-smart agriculture for the health of both people and ecosystems."

Furthermore, Stull is very passionate about food sovereignty, food security,

and overall community health. "The goal should be social justice and equity, and I see food access and nutrition as a key piece of that. You can't have healthy food and nutrition without a healthy environment and healthy agroecosystems," Stull said. Also, for Stull, ultimately research should translate into tangible action via projects, programs, recommendations, or policy.

Stull has been dedicated to understanding and improving food and nutrition for years now. In undergrad, she majored in both nutritional science and English, and her interest deepened during an internship with the United Nations World Food Program (WFP) in Rome where she focused on breaking the cycle of malnutrition. However, during Stull's time at WFP and work after college, she noticed the need for a more holistic approach and collaboration across disciplines. This led her to complete a master of public health with a focus on food security and nutrition, and then later a PhD from UW–Madison in the Nelson Institute's environment and resources program, emphasizing agriculture, nutrition, and climate change.

"For me, it's about connecting the dots and thinking with the whole picture, the full story in mind. If I can tell the full story, I've found I've been more successful finding collaborators."

— Valerie Stull

"I wanted to be a translator across disciplines so to speak. I was much more interested in being an interdisciplinarian than the world's leading expert in one disease, crop, or one genome, so my work has always been intentionally holistic and applied," Stull said. Since finishing her PhD, Stull has continued her multifaceted research at UW–Madison. Currently, Stull is concentrating on two main research projects, although she wears many different hats.

First, Stull is a coleader of the Soil Health and Agroecological Living Lab (SHALL) at the UW. SHALL is part of the broader Soil Health Collaborative — a partnership between the USDA, UW–Madison, and the Michael Fields Agricultural Institute, that focuses on how to improve soil health and soil health practices in the Midwest, specifically in Wisconsin.

Generally, soil health in the U.S. has greatly deteriorated since the agricultural revolution post World War II. Stull said, "We've been treating [soil] pretty badly since the Green Revolution in the 1950s, since we industrialized agriculture to prioritize monoculture systems where we grow the same crop over and over again, pumping it full of synthetic fertilizer to optimize yields."

Why does soil health matter? "The reason it matters is because soil is a carbon sink: it holds carbon, it filters pollutants that would otherwise go into waterways. Soil is incredibly important for climate change. Moreover, it's incredibly important for the quantity and nutritional quality of our food," Stull said.

SHALL exemplifies applied research and real-world problem solving, both passions for Stull. With a team of social scientists, Stull has been conducting interviews, leading focus groups, and surveying farmers across Wisconsin. The team is studying farmers' perceptions of soil health and farming practices applied to address soil health. The Soil Health Collaborative also includes agronomists and other scientists who can provide the scientific foundation for the best strategies to improve soil health.

Of course, understanding farmer's perceptions of soil health is layered, and complicated. "In a nutshell, we're trying to parse out trends, what are farmers confused by? What messages are they receiving? How does their community network or the message sender impact their receptivity to it?" Stull said. For example, how do farmers receive information from other farmers versus state officials or representatives from the UW–Madison Division of Extension. Furthermore, Stull asked, "What barriers and incentives are impacting farm management?"

The results from SHALL should have a positive impact on soil health around Wisconsin. "From the feedback and the data we collect, we can better advise our colleagues in agronomy, Extension, and other groups about how to have productive conversations and workshops, and also what outreach materials around soil health would be most beneficial. You can talk all day about nitrogen and carbon, but if the farmers can't afford to implement the practices to build up their soil organic matter or whatever the case may be, then it's not productive," Stull said.

Overall, there is a lot to learn about trust, decision making, and potential roadblocks when working with farmers. Even if soil health practices are understood, they won't have an impact unless they're communicated to farmers and then implemented. Farmers are frequently

bombarded with information and face an onslaught of decisions to make, so strategic and relevant communications from the university and the U.S. Department of Agriculture are very important. We are looking forward to learning from Stull on how to best communicate with farmers.

The second main research project Stull leads takes place right on the UW–Madison campus. This food waste reduction project aims to utilize the bioconversion power of insects to help address food waste on campus. About one third of all food produced is wasted globally, but in the United States, this number is closer to 40 percent. Unfortunately, this applies to the Madison campus as well.

Producing food requires energy and contributes to greenhouse gas emissions, while rotting food emits methane. As such, food waste is warming the planet while nourishing no one. Clearly, as a society, we need to be more efficient with our food use, especially given the high rates of malnutrition across the globe. Tackling food waste epitomizes Stull's passion for applied research and real-world problem solving, just like SHALL.

Stull and the team recently received funding to develop an on-campus insect colony to break down food waste and serve as a pilot project for a larger scale model. "Our goal is to use black soldier flies to very quickly compost food waste, resulting in a highly nutritious feed ingredient for poultry or fish as well as the insect frass, or waste, which is also a fertilizer," Stull said.

In addition to establishing an insect colony, Stull is working on messaging to reduce food waste on campus, with a focus on campus dormitories. Olive Dyrbye-Wright, an undergraduate research assistant working for Stull, is leading the effort on what messaging resonates with college students. Recently, Thomas Leffler, a PhD student in the Climate Solutions for Health Lab, has also joined the effort. The goal is for Leffler to quantify and evaluate whether simple messaging makes a relevant impact on student perceptions and behavior. Leffler will quantify any changes in food waste.

The two research projects outlined above address the same challenges as a nonprofit Stull cofounded — the Mission to Improve Global Health through Innovation (MIGHTi). The nonprofit originally started as the Mission to Improve Global Health through *insects* — same acronym — but has morphed into a more holistic organization while still having a component focused on the use of insects for both food and feed. Producing traditional livestock for protein is a large source of greenhouse gas emissions,

Dr. Valerie Stull with members of MIGHTi team.

Through the breadth of Stull's work, she shows the importance of a holistic perspective and interdisciplinary research. Doing this type of research can be challenging because it does not fit neatly into departmental boxes at universities or for certain grants, but Stull remains undeterred. "For me it's about connecting the dots and thinking with the whole picture, the full story in mind. If I can tell the full story, I've found I've been more successful finding collaborators," Stull said.

and insects are generally a much more efficient source of protein for humans.

As a nonprofit, MIGHTi is working to *improve health and wellbeing through innovation, collaboration, and environmental stewardship*. MIGHTi uses a scientific foundation and a spirit of collaboration to work with communities to co-develop solutions benefiting people and the planet.

Currently, MIGHTi is focused on women in rural areas in Zambia. The organization bought a five-hectare farm where they teach workshops on sustainable farming including climate smart and regenerative agricultural practices. The focus also includes microfarming crops such as microgreens, mushrooms, and insects — high-value products that require less land, less water, and fewer resources than larger commodity crops. However, in keeping with the holistic approach, the farm will also work to improve literacy and address menstrual poverty in the area. More projects will likely be chosen as it's not a top-down program but rather a continued collaboration.

"My eventual goal is for MIGHTi to operate in multiple countries, including the United States, because there's certainly a need here as well. But we've started in Zambia because that is where most of my work around these topics has existed, and there is a deep need to address climate change, inequalities, and health challenges simultaneously," Stull said.

Speaking of the story, Stull is invested in compelling storytelling to accompany research and projects. "The story matters, right? Whether it's a poem, or a short story, or an essay, or piece of art. I feel like sometimes in this sustainability science or climate science, we forget about the people at the heart, and actually, their story is the most compelling piece when you're trying to get a policymaker, leader, or scientist to care about something," Stull said.

This focus on people can also be a reminder of the importance of justice in research — and as Stull puts it, "Perhaps by thinking about these issues from many angles and taking a transdisciplinary or interdisciplinary approach, we can avoid neglecting equity, inclusion, and justice within the programs that we're testing or researching."

Truly listening, communicating openly, and understanding people helps with developing holistic research and impactful recommendations. "I think it's really important to understand where people are coming from and try to have a key message that speaks to their real passion or their real interests," Stull said. Stull aims to bridge the gap by speaking to what people care most about — in her own words, a translator across disciplines. With effective communication, Stull is leading the charge on creating a more sustainable and equitable food system.

How Satellites — and People — Saved the Chimps

A remote perspective highlighted the importance of involving humans in the work to protect chimpanzee habitat in Tanzania.

By Sarah Graves

In 1960, Jane Goodall made discoveries about wild chimpanzees by observing them on the ground through binoculars. Today, satellite technology is helping us observe changes in the land and ensuring the protection of chimpanzees where they live.

Highlighting the Jane Goodall Institute's (JGI) people-centered conservation model, "tacare," Dr. Lilian Pintea, vice president of conservation science, presented at the Weston Roundtable lecture series in September. A reflection of his work and on 10 years of environmental conservation at the University of Wisconsin–Madison, Pintea told a story of people, animals, and the power of data that has helped make the JGI so successful.

Satellite image of Gombe National Park, highlighted in the Jane Goodall Institute's story about local conservation. Photo courtesy of NASA/Goddard Scientific Visualization Studio / Cindy Starr

Satellite Data Gives Us a Unique Perspective

A picture is worth a thousand words, and satellites take pictures of every part of our world nearly every moment. For the JGI, the message was shocking and undeniable — that chimps were essentially living on an island of forest surrounded by agriculture. Satellite data showed a clear boundary between Gombe National Park, a primary chimpanzee habitat in western Tanzania, and the surrounding lands where the forest was cut down to provide resources and land for local people.

It was this remote perspective that highlighted the importance of involving humans in the work to protect chimpanzee habitat. Chimps needed more forest habitat, and reforesting the area required working with the local people. Thanks to these efforts — and satellite images to measure the change — forests have been restored and chimpanzee habitat is increasing.

Satellite Data Shows the Human Experience

Any phone mapping app lets you look at a high-resolution satellite photo. The reason for that is simple. We can understand what we see in those photos because they show us familiar objects and features: our house, with its long curvy driveway; the oak tree at the intersection near the school; even the green hue of the lake in the summer because of algae.

Satellite data shows what you can see — the lakes, the trees, the roads. It also shows what you cannot see — the value humans place on specific locations and the patterns of their daily lives. Knowing where and why people value the land is critical for conservation.

The JGI's work to protect and increase chimp habitat was only possible by interacting with the communities. Satellite photos were a powerful tool to work with the community and understand what they valued and why. The satellite photos acted as a common language. The people could point to what they value, and the scientists at the JGI could make a data point of that location. This information allowed JGI and the community to work together on planning chimpanzee conservation.

This lecture was part of the Center for Sustainability and the Global Environment's Weston Roundtable Series. The lecture series features speakers who promote a robust understanding of sustainability science, engineering, and policy.

View Dr. Lilian Pintea's lecture.

At the Nelson Institute, students in the EOI program learn about these technologies and more. Applications are open for the summer 2024 cohort; learn more and apply.

Badgers, Start Your Resumes

Applications for the coveted Corporate Sustainability Internship open next month.

By Chelsea Rademacher

Following the success of its pilot year, the UW–Madison Corporate Sustainability Internship Program will soon be accepting applications for its second cohort. On February 1, current UW–Madison students can apply through the WiSH portal for this one-of-a-kind opportunity to gain real-world sustainability experience in a corporate environment.

Erin Bulson

The program — created by the Nelson Institute and the Office of Sustainability — matches students with companies where they spend the summer completing a project that the company develops specifically for each intern. "This is a real project they can put into their portfolio that will make them incredibly competitive when they enter the workforce," said Erin Bulson, the program's manager. In developing the projects, each company sets at least one quantifiable sustainability metric (like gallons of water saved or tons waste reduced) and defines how the project fits into its business needs.

The hands-on management of the program sets it apart. Not only are the companies hand-picked, but each accepted applicant is purposefully paired with a company and project that matches their interests and career goals. For the inaugural cohort, three students were selected out of 70 applicants to complete projects with Alter Trading, a metal-recycling company; Salas O'Brien, an engineering and technical consultancy; and Ramboll, a consulting company. "I was able to work in a professional environment and manage a large-scale project by myself," said Alter Trading intern Olivia Hench. "These are skills that I plan to take with me in any future career."

To bolster their experience and set them up for success, all interns will also be paired with a mentor at their host organization and participate in a three-day sustainability and corporate-culture bootcamp run by the Office of Sustainability. As a direct-placement internship, students will be paid by their host company. Selected interns may be awarded a small scholarship from the university, as well.

Learn more about the program, then visit the WiSH portal on February 1 to apply.

Nature in the City

Nelson graduate and Board of Visitors member helps connect people to urban green spaces.

By Rachel Carrier

Hidden among the pavement and large buildings of many urban areas are small but sacred green spaces. From a young age Angélica Sánchez-Mora was able to appreciate both urban and rural living. Now, she works to help connect those living in urban spaces to the slices of nature around them.

Sánchez-Mora spent the first 12 years of her life in Guadalajara, Mexico, before moving to Green Bay, Wisconsin. Although she grew up in a large metropolitan area in Mexico, her grandparents owned a farm outside of Guadalajara where Sánchez-Mora had the opportunity to spend time in rural nature at an early age.

"I loved getting to experience what I believed to be the best of both worlds — living in a large city with lots of action, but also getting to spend time outside in such beautiful and secluded nature," she said. "Now, my current role at the Urban Ecology Center is very much so trying to combine those two experiences by bringing green spaces into urban spaces."

Throughout her undergraduate experience at UW–Milwaukee, Sánchez-Mora reflected on what the middle grounds of urban and rural looked like growing up in Guadalajara. She witnessed how these boundary spaces were often forgotten and taken over with high turnover in development, pollution, and litter, and she felt strongly about fostering a connection between urban spaces and nature.

Butterfly landing on Sánchez-Mora's nose.

Sánchez-Mora leading a community education event for children. Photo courtesy of Angelica Sánchez-Mora (3)

"It was normal for me to see spaces like that as a kid, but it wasn't until I was in undergrad that I reflected on those spaces and realized that it was not good and too common, and that something could be done about it," Sánchez-Mora said.

Going into her undergraduate experience undecided on a major, this reflection helped Sánchez-Mora figure out what she wanted to pursue in her academics and career. After taking an introductory level environmental conservation class, Sánchez-Mora knew she wanted to pursue the field of conservation. The next summer, she worked with her professor from that class in a community-based soil productivity research project in Kenya where her interest in conservation work only grew stronger.

Following graduation from UW–Milwaukee, Sánchez-Mora came to the Nelson Institute's environmental conser-

vation MS program. She connected with others in her cohort, many of whom had entered the program with established careers. Being able to not only engage with the program's material, but also to learn from those in her cohort was important to her.

"I was able to tailor the classes I took in the program to fit my needs and what I wanted to get out of it," Sánchez-Mora said. "The flexibility was amazing. When it comes to conservation work, you can focus more on the science and research aspect or the social aspects. I was focused on the social elements of conservation work, and the environmental conservation program really let me dive into that space."

Sánchez-Mora celebrating graduation atop Bascom Hill.

Towards the end of her program, she interned with Conservation International in Washington, DC, for a summer where she had the opportunity to dig deeper into how gender plays a crucial role in conservation projects and contribute to the field.

"It was a great experience to work at an international organization on conservation efforts," she said. "It gave me good perspective on what it would be like to work at a higher level and allowed me to reflect on if I wanted to stay in that space or go work at the local level."

"The mission is very simple here, but it's so important. We want to connect people to nature and each other."
— Angélica Sánchez-Mora

After graduating from the environmental conservation program, Sánchez-Mora joined the Urban Ecology Center as a bilingual environmental educator at their Menomonee Valley Branch. The community she works in is one of the most population-dense areas in Wisconsin and has a large population of Spanish-speaking community members.

"This first opportunity with the Urban Ecology Center combined three things that are all very important to me: conservation, community, and Spanish language and culture," Sánchez-Mora said. "The mission is very simple here, but it's so important. We want to connect people to nature and each other. It's simple, but to actually execute that is really amazing."

The center focuses heavily on environmental education in schools to help connect youth in the community to the outdoors and foster positive experiences in nature. They also manage various parks in the area to ensure that there are healthy and biodiverse spaces in the community. Community engagement also plays an important role in their mission, helping to get people of all ages in the community excited about the outdoors. After three years at the Urban Ecology Center, Sánchez-Mora took on more responsibility and was promoted to the Branch Director of the Menomonee Valley Branch.

Recently, Sánchez-Mora was invited by Dean Paul Robbins to sit as a member on the Board of Visitors for the Nelson Institute, where she hopes to engage with the community and offer a new perspective to the board.

"It's a fairly new position for me, but it's been great to see a broad group of people with different experiences there." she said. "I'm excited to be in the space. We look at both city and state level work, and I'm hoping that this will be an opportunity to contribute on a larger scale."

Alumni Award Nominations Opening Soon

ALUMNI AWARD WINNERS
RISING STAR ALUMNI AWARD

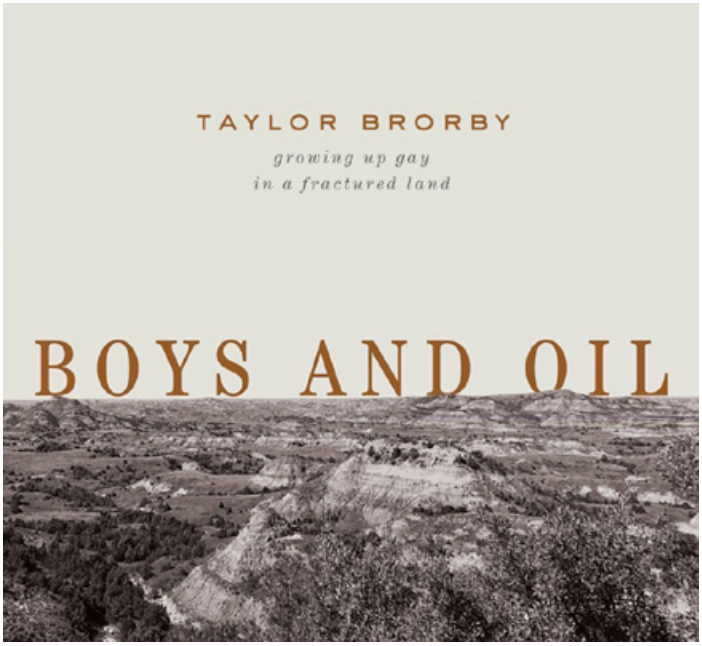
ALUMNI AWARD WINNERS
DISTINGUISHED ALUMNI AWARD

Each year, the Nelson Institute shines a spotlight on alumni who are truly living the Wisconsin Idea and making a difference in the world. The nomination process for next year's awards will begin January 17 and end February 28, 2024.

Cait Williamson (MS'15, environmental conservation) accepts her Rising Star award and shakes hands with Paul Robbins during the Redezvous on the Terrace 2023 event. Photo by Hedi Lamarr Rudd

Award winners are selected by members of the Nelson Institute alumni awards committee and approved by the Nelson Institute senior leadership team. Awards are presented at the Nelson Institute's annual Rendezvous on the Terrace gathering for alumni and friends.

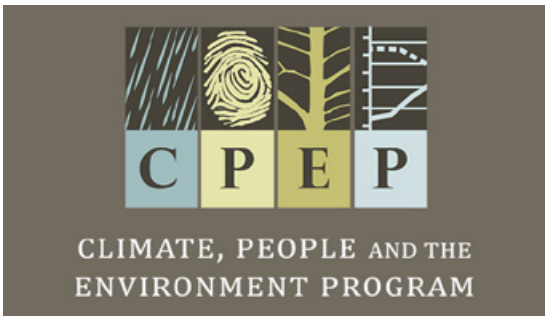
Learn more about the process and read about past awardees.



Boys and Oil: Growing Up Gay in a Fractured Land
Thursday, February 15, 2024 | 12–1 p.m.
Virtual Talk and Q & A
nelson.wisc.edu/boysandoil

SUSTAINABLE SUCCESS
LECTURE SERIES

Supply Chain Sustainability
Making Agriculture Sustainable from Production to Consumption
Thursday, March 14, 2024 | 5:15–6:15 p.m.
1310 Wisconsin School of Business Plenary Room
nelson.wisc.edu/supplychain



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. The presentations are held in conjunction with the Department of Atmospheric and Oceanic Sciences and are open to the public.

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

Weston Roundtable Series

The Weston Roundtable Series promotes 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 are on Thursdays from 4:15–5:15 p.m. at 1163 Mechanical Engineering.

Learn more about this lecture and others in the series.

Center for Culture, History, and Environment: Environmental Colloquia

The Center for Culture, History, and Environment (CHE) invites you to attend the Spring 2024 CHE Environmental Colloquia series on Wednesdays from 12–1 p.m. in 140 Science Hall.

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!

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