# MSUFØRESTER

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Department of Forestry MICHIGAN STATE UNIVERSITY

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After a couple years off, the Forestry Alumni Association Tailgate is back on and is bigger and better than ever! Please join us **Saturday, Sept 24** for delicious BBQ, a tour of the award-winning mass timber STEM Facility, connecting with faculty, staff, and current students, catching up with old friends and making new ones.

We can't wait to have alumni, faculty, staff, students, friends, and family join us in celebration of our MSU Forestry community. Thanks to industry sponsors Arborjet, Association of Consulting Foresters, and J.M. Longyear/ Northern Hardwoods, we are providing the tailgate free of charge this year and will be giving away a limited number of game tickets. Stay tuned to email and social media in coming months for more information and to RSVP for this exciting event!

Front cover: Paper birch and white pine seedlings located in a Walters Lab research plot, photo by Evan Farinosi Back cover: Old forestry building on MSU campus, photo by Lauren Noel

## A NOTE FROM THE DEPARTMENT CHAIR

Dear MSU Forestry Alumni and Friends,

Regardless of the pandemic's future course, MSU Forestry is emerging from the uncertainty of the past 2+ years with remarkable strength. The cutting-edge work of our faculty never stopped, as typified by Dr. Emily Huff's research on the human dimensions of forestry.

In fact, our faculty and academic staff had back-to-back record years in 2020 and 2021 for external funding – more than \$4 million each year – funds that are critical to supporting graduate students, operating our research forests and labs, and advancing forestry knowledge.

Many other things are back to 'normal.' Our students continue to make a difference, as shown by Ms. Anna Dunnebacke's alternative spring break. Our alumni are achieving great things and are being recognized, like Mr. Jason Darling (Forestry Alumni Association President) being named Stewardship Forester of the Year by the Michigan Association of Consulting Foresters. And we continue to make the highest quality forestry education available to everyone, as illustrated by our collaboration with Detroit's Ecotek Lab.

In-person events are back, and we hope that you will be joining us for the National SAF Meeting Alumni Reception on 22nd September AND the Annual Alumni Tailgate on 24th September. The tailgate promises to be bigger and better than ever! Thanks to our sponsors, this year's tailgate is free and open to all MSU Forestry alumni, faculty, staff, and students, and includes tours of the internationally recognized mass timber STEM Facility.

Through new and innovative programs, we are emerging as a leading forestry program. Our Hybrid Online M.S. in Forestry has its first cohort of students starting this August.

#### **IN MEMORIAM**

**CHRISTOPHER "CHRIS" DAVE RISBRUDT** 1950 – 2022

**HENRY A. HUBER** 1929 - 2022

**OTTO MAX GEORG SUCHSLAND** 1928 - 2022 Also launching this fall are collaborations with MSU's Institute of Agricultural Technology to provide two-year certificate programs in Forest Technology at Bay College in Escanaba and Urban Forest Management at Muskegon Community College. At the same time, enrollment in our B.S. program is at a 20+ year high, more than doubling over the last decade.

This positive momentum has been empowered by the tremendous generosity of our alumni and supporters. Alumni are giving back in many ways: service on the Department of Forestry's Advisory Board and the Forestry Alumni Association. Recruiting new students as an Alumni Ambassador. Mentoring current students. And generous cash gifts totaling nearly \$300,000 in 2021 – a record year. Thank you for helping to create this positive momentum. Always feel free to contact me if you have any comments or are interested in giving back.

I am looking forward to seeing many of you in September.

Go Green!

Rulad IC Take



## **ALUMNI UPDATES**

#### **BOB GOODMAN | BS '58**

During a discussion this morning about what is learned through a college program, I was reminded of what then Department Head Dr. Terrell D. Stevens told the gathered group of forestry students about to graduate in May or June of 1958.

Dr. Stevens is a man I have admired since the first day I met him. I had the opportunity to work with him during a December break on a logging job in the Experimental Forest. It was so cold we drained the cat of water at the end of the day, and filled it with hot water we carried from campus the next day. I was impressed with his ability to drink scalding hot coffee when we stopped for breakfast. A couple of ice cubes for me, please.

Anyway, at this gathering he told us, "You have earned two letters of the alphabet, a B and S. Now go out into the world and learn the other 24."

This little piece of sage advice has guided my life ever since.

#### **ALAN FOWLER I BS '60**

We are here in Louisville, KY, happily retired for the past 20 years, and have never been bored! Connie and I have ten grandchildren to keep up with, spread from New York City to Seattle, WA, plus we travel – a couple of months in Florida each winter plus time in N. Michigan in the summer. We enjoy reading, good food, the flora and fauna, but despair at watching our investments drop precipitously.

I do some fishing and "manage" a trio of ponds here in our neighborhood (thanks Prof. Wilcox) and as I begin my 84th year, a friend of mine just noted, continue "slowly falling apart." So far the memory is intact so I have many good memories of MSU, Dunbar Camp '59, the notorious "Hardpan Crew" and the very useful forestry education I use every day! All the best to any of my old friends who are still out there! It's been a good life!

#### CARL R. WORKING | BS '72

I owned five forest lots in Santa Claus, IN on a small lake but sold them in retirement to move to Owensboro, KY on a downsized lot next to a farmer's small forest and I have large trees in my back/side yards.

I retired from the UPS Airline in 2005. I had returned to college at UofL in Louisville to gain a computer degree. I worked at the largest urban forest in the country and taught children and adults the love of nature. I even marched in the UofL band and pep band!

Now retired, I'm traveling – trying to see all 50 states and did some travel to Europe, New Zealand, Australia and Figi. A Hawaii trip is planned for this Jan-Feb.

I plan to visit MSU campus this summer as we still vacation up on Lake Huron in July near my home town of Port Huron. I married my friend from MSU and raised two children in Louisville, KY. I'm now an old Forestry major at the age of 72 after the first 10 years; graduating in the field of Aboriculture.

#### EDWARD FISCHER | BS '75

I served two years in the Peace Corps in Honduras after graduating with a B.S. in forest management. I served as a forester and planner with the US Forest Service in Colorado, Southeast Alaska, Idaho and the Black Hills, where Jeannie and I still live. In forty years together, our four children thrived in small towns, now live in much larger places but still love the outdoors. I retired in 2016, and my volunteer activities include a retiree wilderness trail clearing crew using crosscut and handsaws. I love hiking and biking. Remembering Drs. Wright, Manthy, Dickmann and Kielbaso and a great education!

#### PAUL SCHULTZ | BS '89, MS '91

Since graduation, I've worked for the Wisconsin Dept. of Natural Resources for 30 years as a Forester on the NHAL State Forest, the largest state forest in Wisconsin. It's been wonderful, living and working in the Northwoods of Wisconsin. I set up timber and oversaw the regeneration program. I was also involved in developing GIS and GPS technology for the Division of Forestry.

I've recently become the National Forest Specialist, overseeing the GNA (Good Neighbor Authority) program for the Division. GNA is a cooperative agreement between the Division and the Forest Service, whereby State forestry staff conduct management activities (timber sales, planting, inventory, etc.) on Federal lands. It's a tool the FS uses to increase management on National Forest lands beyond what they can perform with their own staff.

Looking forward to retirement in a few years! A big shoutout to the classes of '89 and '91 (and '88 - had a lot of courses with those guys). Hope all are doing well!

#### JACOB SLUSSER | MS '11

I am still serving as the Panama Coordinator with the Yale School of the Environment's ELTI program, and would like to share an exciting new publication. In collaboration with two Panamanian colleagues, I recently published the first ever silvopastoral system (SPS) establishment guide for Panama's Azuero Peninsula (in Spanish). This openaccess guide is based on over a decade of our experience implementing SPS with cattle farmers (and is available via the ELTI website: https://elti.yale.edu/resources). With over 20% of Panama's land use in permanent pasture, it is a publication that will be of great interest to Panamanian authorities, environmental organizations and cattle producers who want to restore tropical forests in cattle ranching landscapes.

Good day fellow foresters! I hope that you are all well and ready for a great summer season! My spring field season has been a busy one, and my summer schedule is packed with work, soccer camps, and a few vacations with the family.

It seems like I've experienced so many emotions already in 2022. A lull in COVID cases, then a rise, all the tragedy and turmoil in Ukraine, now fuel prices and inflation on the climb; it seems like we can't seem to catch a break. On many different fronts, my emotional reserves don't have a whole lot left in the tank. I need a break, a chance to recharge; and I am guessing many of you might feel the same.

I have had a few 'wins' in the last few months. The Association of Consulting Foresters, of which I am a member, were able to hold an in-person meeting this year. It was so great to see so many smiling faces and have a chance to catch up. My family was able to get together with some loved ones that we have not seen for quite some time. We are back to fishing with friends, pool parties, and bowling trips with my girls. There is a lot to be thankful for, and a lot of things and people I took for granted over the vears.

One thing I will say for myself is that the last few years, and Jason Darling other recent events, have refocused my attention to what BS 2008 really matters: family, friends, and guiet evenings on the President, MSU Forestry Alumni Association deck with my wife and kids. It is pretty simple when I think Owner – Darling Forestry, LLC about it. In this overcomplicated world we are surrounded Jason@DarlingForestry.com

#### SAVE THE DATE: NATIONAL SAF CONVENTION ALUMNI RECEPTION

The 2022 SAF Convention is back to in-person this year in Baltimore, MD! We are happy to revamp the traditional MSU Forestry Alumni Night at **Peter's Pour House**. Food and drinks will be provided, but donations are welcome. We look forward to connecting with alumni and friends and can't wait to see you there!

**SEPT 22** 6:30-7:30PM

## A NOTE FROM THE FAA PRESIDENT

by today, I need to focus on the little things to refuel my tanks. The world is not going to be fixed overnight, the news will still be filled with craziness, but my home and friends can fill me with joy.

One special event I know will help lift my spirits is the 2022 FAA Tailgate! After a small break, we are planning to continue our get-together for a fall football game. I am very excited to announce that we have several sponsors for this year's tailgate, which will help cover some costs

and provide us with many free tickets to those who sign up early. Look for a save-the-date and sign-up coming your way soon!

As we continue through these somewhat uncertain times, I hope we continue to have faith and love for each other. I hope we can emerge from these times to treat each other with a little more kindness, understanding, and grow

together as compassionate humans. I hope you stay well and that I get a chance to see your smiling face at the FAA Tailgate!!

Jam

Your friend.

In. May

## **111 MERCER STREET BALTIMORE, MD 21202**

## **HUMAN DIMENSIONS OF FORESTS**

mily Huff, Associate Professor of Human Dimensions General forestry, is hard at work developing solutions to a variety of environmental challenges involving forests and how people interact with them.

To understand the problems and work towards improvement, according to Huff, conflicts over forest resources can be categorized in two ways: conflict over the land use designation itself, i.e. should this be a forest?, and conflict over how the forest should exist, i.e. should it be managed, protected, or something in between?

Individual values, attitudes and beliefs underpin these conflicts and subsequent decisions. Some humans have predominantly biospheric values and feel forests should exist in their own right, while others possess anthropocentric values and believe they exist, at least in part, for the services they provide to humans.

These services includes filtering water, providing habitat for game, and opportunities for recreation. In the U.S., forests are owned and therefore managed by a wide range of people and organizations with an equally wide range of motivations and objectives, further complicating a unified strategy for the nation's forest resource.

"The nation's private forest landowners play such an important role stewarding forests, so I try to understand their decisions and support their conservation and management. I currently serve as the President of the Michigan Forest Association – a membership organization of primarily private forest landowners – which is a wonderful way to see how research can translate directly to practice." Huff also directly integrates research and Extension or outreach. One example focuses on harvested wood products. To utilize wood products more efficiently, Huff, along with a tri-state team of forestry professionals, received a grant from the National Institute for Agriculture RREA (Renewable Resource Extension Act) Program titled "Building Woodshed Maps for Industry, Extension, and Woodland Owners in the Great Lakes States."

These "woodsheds" can be described as the spatial footprint of wood availability and feasibility of transport around primary wood. The RS & GIS center at MSU is a partner, to develop a user-friendly map that will help landowners, professionals, and industries see potential opportunities and effects of a changing marketplace for wood products in Michigan, Wisconsin, and Minnesota.

The hope is that this mapping and modeling effort will be the basis for future research that represents models of new wood products, new facility siting, and changes in landowner willingness to supply certain products and materials.

In addition to modeling the economic reality of wood products, it is important to understand if organizations support new markets for wood products, said Huff. Mass timber has gained traction recently as a long-term carbon storage opportunity in the built environment that is also aesthetically appealing to architects and inhabitants.

In a recent project, Huff interviewed leaders from over twenty non-governmental environmental organizations and discovered that the majority were at least provisionally supportive of mass timber as a concept and as a tool for decarbonizing the built environment.

A few organizations wanted to see additional life cycle data that considered how the wood used in these projects was grown and managed. This information will help policymakers understand where support lies and what potential concerns may prevent this stakeholder community from embracing and advocating for mass timber as a step to combat climate change.

Showcasing the broad range of ways in which human dimensions helps us understand forest management is another newly funded project in the Yukon Territory of Canada. In this "Navigating the New Arctic" planning grant from NSF, Huff and her colleagues are working with tribal

The new Hybrid Online Master's Degree program is welcoming its first cohort, with at least seven students beginning on August 5, 2022. The students will begin in-person with FOR 810, Forestry Field Techniques, where they will develop and apply skills in forest assessment and mensuration, visit multiple forest ecosystem types, see examples of multiple silvicultural systems and meet with forestry professionals representing state agencies, federal agencies, industry and NGOs.

The program then continues with courses online, moving forward with forest measurements, tree biology, and ecosytem processes. After completing all online



leaders and local community members to understand which research questions will help their communities adjust to abrupt environmental changes.

For example, a glacier that used to feed Kluane Lake has receded far enough that it now flows down the other side of a mountain range. There will be a stakeholder workshop that discusses the potential to effectively merge traditional ecological knowledge and western ways of science to

tackle problems like these and questions the community identifies.

Despite all of the challenges Huff studies, forests are receiving more attention with the renewed interest and focus on climate change at both the federal and local levels, providing the opportunity for more policies to be enacted to protect and conserve this critical resource. Moreover with the COVID-19 pandemic, outdoor recreation has been critical to many families as we adjust to a sharp drop off in indoor social activities.

"Now more than ever people are rediscovering how much they value forests, understanding that we must continue to protect them to enjoy them," said Huff.

## HYBRID ONLINE MS UPDATE

components of the program, done at a learner's own pace, students will complete the program with an in-person, intensive face-to-face capstone and examination.

This program has been designed with flexibility in mind, recognizing that many people will have rigid schedules and existing personal and professional commitments.

We are still accepting new students into this program and are excited to watch it grow. If you have any questions about the program or would like to refer anyone, please contact Jim Rivard at rivard12@msu.edu.

#### STEWARDSHIP FORESTER OF THE YEAR: JASON DARLING

## ALTERNATIVE SPARTAN BREAK

**M**SU Forestry alum and current FAA President Jason Darling was recently awarded the Stewardship Forester of the Year by the Michigan Association of Consulting Foresters.

Jason Darling grew up gardening and playing outside, but never really considered finding a job in the field. In high school, he started working for Tannenbaum Farms, a local Christmas tree farm in Mason, Ml. It turned out Mel Koelling at Tannenbaum Farms was a professor for the MSU Department of Forestry. He helped foster Darling's curiosity for the field of Forestry and was an excellent mentor. Originally starting at Lansing Community College, Darling eventually transferred to MSU.

During his time at MSU, Darling worked with the MSU Forestry Wood Science Lab under Dr. Pascal Kamdem, then with the MSU Forestry Biogeochemistry Lab under Dr. David Rothstein. He then worked with Randy Klevickas and Paul Bloese at the Tree Research Center. His first professional job after graduation was with Grossman Forestry, a private consulting company based out of Newberry, MI.

He initially started as an intern with the primary duties tree marking and tree inventory, then moved on to a full-time forester. "I really enjoyed my time with Grossman Forestry. Their staff really took me under their wings and helped create a very solid foundation for my forestry career to build on," said Darling.

Darling currently works as a Consulting Forester. He really enjoys the relationships he has been able to build with the clients he works for. "I've met some interesting and lovely people and truly appreciate the opportunity they provide me," said Darling.





On winning this award, Darling reflects, "as a Consulting Forester, who mainly works alone, it is really cool to have some external validation that I am doing good work. Being a Consulting Forester, anywhere, but specifically in southern Michigan can be challenging at times, so it is great to have this recognition from the greater forestry community."

Looking back on his time at MSU, Darling recalls he feels he developed and fostered a great relationship with MSU Forestry by working within the department. His time spent with Dr. Kamdem, and Dr. Rothstein are some of his most memorable times at MSU.

"The relationships I had while working in the lab and field really set the tone for my overall experience. I learned so much talking with the graduate students and having extra time to talk with my professors while I was working. I think that immersing yourself in the field and seeing many of the various aspects of the field can help you understand what you might want to do when you graduate," said Darling.

Darling would like to thank all the friends, family and professionals that have helped guide him through his education and forestry career. "I wouldn't have achieved what I have today without your guidance and support," he said. Early in March 2022 when many students opted for well-deserved relaxation retreats, Anna Dunnebacke Dunnebacke says she feels so lucky to have been part of this trip because she, too, has a great passion for these had a different plan in mind. The Forestry and Fisheries special and unique ecosystems that contain massive and Wildlife student opted to participate in Michigan State amounts of biodiversity in plant and animal species. University's Alternative Spartan Breaks program. Since "It was so rewarding to physically see the impact we made 1991, Alternative Spartan Breaks has been leading students on this community and hear how grateful they were for our around the world, providing opportunities to create positive help. I have learned so much from this experience, and I change in the world and exposure to a variety of cultures hope that I can apply what I have learned about community and sustainability to my own life," she said. and life experiences. Dunnebacke decided to take a once-in-a-lifetime Dunnebacke is currently double majoring in Forestry

Dunnebacke decided to take a once-in-a-lifetime opportunity to travel to Costa Rica to volunteer with likeminded peers who are passionate about the environment, community service and adventure. Her group stayed at a beautiful community-run lodge called Nacientes Palmichal, which has a mission to educate

Her group stayed at a beautiful community-run lodge
called Nacientes Palmichal, which has a mission to educate
people on the importance of water in forests, nature in
daily life, and environmental education. The goal of the
lodge is to selflessly protect the water quality for the entire
50,000-person region.

Funding is generated at Nacientes Palmichal by providing a beautiful place to stay and enjoy the beauty of Costa Rica, the Cloud Forest, and the local people and food. Unfortunately, since the pandemic, Nacientes Palmichal has lost a lot of visitors and funding from local tourism. While Dunnebacke's group was there, they helped restore a few of their more run-down rooms. They experienced the lodge both as visitors and volunteers so they could provide advice on how to market their assets, and things they could add to appeal to more tourists.

"One thing that really stuck out to me about this place was just how passionate the owners and founders were about their mission," Dunnebacke said.

Everyone she met had great respect for the environment, and they were willing to spend a lot of time running the lodge. Since funding has been so scarce recently, many of them work unpaid.

"It was incredibly refreshing to see so many people from the community come together to work toward a common goal that does not solely benefit them," Dunnebacke said. The entire region benefits by conserving a reliable source of clean water, which also benefits the environment, by preserving this rare type of forest and all the species living inside it. Dunnebacke is grateful to have also benefitted from the experience, having lived a unique experience that she can learn from and share with others.



## ECOTEK LAB AT MSU

SU Forestry is continuing to build its partnership with Detroit-based science research organization Ecotek Lab, now providing hands-on lab experience to high schoolers once a month.

MSU Forestry is a proud collaborator of Ecotek Lab, understanding the importance of diversity in natural resources and providing opportunities and connections through which Detroit youth can pursue higher education careers in natural resources and sustainable bioproducts.

Ecotek Lab, a recruiting partner of MSU Forestry since 2019, is a research and innovation laboratory made up of aspiring student scientists and engineers from major urban centers.

"This partnership provides a unique opportunity to expose Detroit's youth to educational and career development opportunities in natural resources and sustainable bioproducts. This integrated program of experiential learning, academic training and mentoring can increase the likelihood of students applying for, undertaking and completing STEM-based undergraduate degrees," said Justin Kunkle, MSU Forestry Director of Undergraduate Studies.

Ecotek scientists, made up of middle and high school students, explore challenging projects and areas of study, preparing them for college-level advancement and providing a foundation for a rewarding career in the scientific world.

"I started the lab back in 2005 with the expectation that kids in urban communities didn't necessarily get an appreciation for innovation. They would consume what came out of companies and labs but they wouldn't necessarily appreciate what that meant to really do it on their own," said Dr. Keith Young, CEO and Founder of Ecotek Lab.

Dr. Mojgan Nejad, Associate Professor of Green Bioproducts in the Department of Forestry, hosts Ecotek students in her lab once a month, where lessons are taught by her graduate students. "Each time they come to the lab, we teach them how to make different bioproducts . For example, using lignin to replace petroleum-based polyols in rigid and flexible foam applications or making fully biobased adhesive and biocomposite," Nejad said.

MSU Forestry is currently home to three Ecotek alums, with a fourth enrolled for the upcoming Fall 2022 semester. Dyllan Nelson, joining the forestry program in the fall, is grateful for her time at Ecotek.

"Ecotek has really helped me build my opportunities and introduced me to so many people. Without Ecotek, I wouldn't have this opportunity [at MSU], and I'm thankful for it," said Nelson.

Nelson said her favorite part of coming to Dr. Nejad's lab has been learning about natural sciences and how she could apply the lessons to her everyday life. She has taken an interest in bioproducts and potential for different applications of bioproducts.

"I really love the campus and the community I've met so far. I'm just really excited to come here in the fall," said Nelson.

Ecotek alum and forestry senior, Davien Graham, initially explored the program on behalf of his younger brother, Alexander.

"When I heard about [Ecotek], I knew I had my little brother who was, in my eyes, smarter than me, at his age. So, I was thinking it would be a better idea if he was able to do it. So, I initially went to an interview to ask Mr. Young to let my brother be a part of the program," said Graham.

Young instead took a liking to Graham and his scientific background, offering him a position in the lab for his remaining year of high school with his brother joining the lab afterwards.

Kayla Young has been a member of Ecotek Lab since she was in second grade. She saw a lot of students come and go, and as a result was able to learn a wide variety of disciplines.

She has particularly enjoyed learning from the graduate students in the labs and the experiments and equipment they have shared.

"We were going to find the density of [lignin-based] foam, how to make it, cooling, that was really cool," said Young.

Reflecting on her time at Ecotek, Young says she would definitely recommend the program.

"When you go to Ecotek, Dr. (Keith)Young doesn't teach you about what's going on now, he's teaching you about what's going on in the future, and what's going to happen," said Kayla Young.

The Department of Forestry is proud to continue this important partnership with Ecotek, and is continually looking for pathways for students to make connections and to provide learning opportunities in our programs and facilities.

"We really appreciate the partnership with Ecotek," said Dr. Richard Kobe, Chairperson of the Department of Forestry. "While MSU can bring new opportunities to Ecotek students, the students also contribute



greatly to our program with their enthusiasm, curiosity and insight."

"Partnerships are core to who we are in fulfilling our land-grant mission. Meeting people where they are at, providing solutions that face a multicultural society and providing opportunities to develop the next generation of talent," said Dr. Quentin Tyler, Associate Dean and Director for Diversity, Equity and Inclusion. "Our Department of Forestry continues to be a leader in inclusion, equity, diversity, outreach and engagement. We are equally excited and proud to partner with Ecotek Lab in Detroit in providing a space and place for today's dreamers to become tomorrow's leaders."

> TO VIEW A VIDEO OF THE STUDENTS IN THE LAB, SCAN THIS CODE:



MICHIGAN STATE UNIVERSITY DEPARTMENT OF FORESTRY Natural Resources Building 480 Wilson Road, Rm 126 East Lansing, MI 48824-1222

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