

NAUFRP NEWS

National Association of University Forest Resources Programs

Creating Knowledge – Developing Leaders

President's Message-Janaki Alavalapati

August 2022 Issue 4

Dear NAUFRP members and friends:	In This Issue	
Hope you are off to a great start with your fall semester. I am pleased to inform you that after almost two years, NAUFRP will be holding its Executive Meeting (September 19) and Gen- eral Assembly (September 20) in-person at the upcoming SAF convention site in Baltimore. I look forward to seeing many of you there. Here are few things, I would like to bring to your attention:	 President's Message Washington Update Committee Work 	
• NAUFRP has traditionally held a President's Reception for our mem- bership, partners and friends in conjunction with the NAUFRP meetings in advance of the Society of American Foresters (SAF) Convention. For lo- gistical and high cost reasons, this year, we will be joining with the SAF Leadership Reception on Monday, September 19th at the Baltimore	Regional Corner	
Aquarium from 7:00-9:00. Please let Ms. Terri Bates <u>naufrp@verizon.net</u> know if you and your guest want to join us.	Meetings NAUFRP Executive	
 In addition to several key topics and issues that will be discussed, our Diversity, Equity and Inclusion Committee will hold an hour long discussion at our General Assembly. I am confident that some useful insights will emerge from that session. 	Committee Sept. 19 2022 Baltimore Conven- tion Center Room 332	
 NAUFRP plans to organize our next town hall meeting between late October and early November. We would love to hear your thoughts on possible topics to cover. One sug- gestion we have received is to have an update on the implementation of the recently passed Inflation Reduction Act. 	Reception (jointly with SAF Leadership) Sept. 19, 7:00-9:00 Baltimore	
 Please note my term as President of NAUFRP will end in December and Dr. Katy Ka- vanagh will serve in this role beginning in January 2023. According to NAUFRP bylaws, we have solicited nominations for President-Elect and Secretary/Treasurer. Voting will be by a Qualtrics ballot. Successful candidates will assume these positions starting January, 2023 and serve for two years. Ms. Terri Bates will send a formal announcement about nominations and the election. 	Aquarium NAUFRP General As- sembly Sept. 20, 2022 Baltimore Convention Center, Room 328	
As always, please note that the impact of our association depends on your engagement, your thoughts, and your creativity. We welcome your feedback on making our association more relevant and effective for you. I want to take this opportunity to wish you and your families a healthy and productive autumn season.	SAF Convention Sept. 20-24, 2022 Baltimore Convention Center	
Best regards, J <u>anaki Alavalapati,</u> Dean, School of Forestry and Wildlife Sciences, Auburn University & President of NAUFRP	NAUFRP Winter Execu- tive Committee Meeting 2023—tba Washington, D.C.	

Washington Update—Randy Nuckolls, Washington Counsel

Congress finished its July session before the August recess with a flurry of activity. The Congress finalized the CHIPS and Science Act to bolster the semiconductor industry and provide more federal government support for technology development and research, sending the bill to President Biden for signature. See https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/.

After more than a year of on again, off again negotiations with Senators Joe Manchin and Kyrsten Sinema in regards to the Build Back Better proposal of President Biden, the Senate also passed a significantly reduced reconciliation package entitled the Inflation Reduction Act of 2022 with Vice President Harris breaking the 50-50 tie to allow passage under the

Diversity— Yeonsu Kim

The NAUFRP Diversity Committee has been reconfigured. The members are Yeon-Su Kim (Northern Arizona University), Linda Nagel (Utah State University), Tara Bal (Michigan Technological University), Justin Kunkle (Michigan State University) and Zhu Ning (Southern University and A&M College). The committee is organizing an open forum during the fall General Assembly.

Education—Andrew Storer

The 2022 Biennial Conference on Undergraduate Education in Natural Resources (BCUENR) meeting was hosted by the University of Nebraska-Lincoln School of Natural Resources and College of Agricultural Sciences and Natural Resources on March 23-24, 2022 with the theme '*Inclusive Natural Resources Education'*. Many NAU-FRP institutions were represented at the conference! The 2024 15th BCUENR will be hosted at Oregon State University, and the 2026 16th BCUENR will be hosted at Michigan Technological University.

Fall 2022 Enrollments: In early Fall, the Education Committee plans to send a short survey to find out about early indications of enrollment numbers in Forestry and Forest Resource programs. This provides membership with an early indication of trends within NAUFRP and will be shared with participating programs. Many program leaders are asked questions in the Fall about their enrollments relative to trends at other institutions, and this informal survey is aimed to assist with responding to these questions. The survey will be brief, and suggestions for content can be shared with the Education Committee chair.

APLU Liaison — Linda Nagel

The <u>Budget and Advocacy Committee</u> (BAC) of the <u>Association of Public and</u> <u>Land-Grant Universities</u> (APLU) is actively developing priority areas for the FY 2024 Board on Agriculture Assembly (BAA) Unified Ask. The timeline is structured for sections (i.e., NAUFRP) to develop requests with justification (September), review of proposals with APLU and Lewis-Burke Associates, and for sections to present final recommendations to the BAC in October. The BAC will meet during the APLU Annual Meeting November 6-8, 2022 in Denver, CO, where the BAC will vote on a final draft of the FY2024 requests. A basic tenet of the process is to not finalize future requests until the prior years' budget has passed. Current funding tables with FY2022 enacted compared with APLU BAA priority requests (including McIntire-Stennis), the President's FY2023 Budget Request, and House and Senate FY2023 requests can be found here. Demonstrating the broader impact of the McIntire-Stennis Cooperative Forestry Program and other natural resource capacity funding has never been more important.

Research—Bob Wagner

Progress continued this summer following up on recommendations received from national leaders at the 2020-21 R&D Summit (previously reported). Our team is working on two paths forward: 1) Develop and implement a survey of forest managers (including state foresters, family forest owners, large private forest owners/ managers, forest managers from environmental NGOs, and the USFS National Forest System) to identify highest-priority national and regional forest management problems in the U.S., and 2) Task an existing or develop a new organization with a mission to:

- Communicate, coordinate, and collaboratively advocate for sustained and increased support from research funding agencies to address top national and regional forest management problems,
- Build and maintain a national coalition of forest-based organizations that will contribute to maintaining a strong forestry R&D capacity in the U.S.,
- Monitor and report progress of nation's R&D organizations in addressing top national and regional forest management problems, and
- Continue periodic surveys of highpriority national and regional forest management problems in the U.S.

NAUFRP Executive Committee

Janaki R. Alavalapati, President Auburn University

David Newman, Past-President SUNY-College of Environmental Sciences & Forestry

Kathleen (Katy) Kavanagh, President-Elect Oregon State University

Robert Burns, Secretary-Treasurer West Virginia State University

National Committee Chairs Red Baker, Communications University of Florida

Yeon-Su Kim, Diversity Northern Arizona University

Andrew Storer, Education Michigan Technological University

<u>Jeff Stringer</u>, Extension University of Kentucky

<u>Don Hodges</u>, International University of Tennessee

Dennis Becker, Policy University of Idaho

Bob Wagner, Research Purdue University

Regional Committee Chairs <u>Hans Williams</u>, Southern Stephen F. Austin State University

<u>Bill Hubbard,</u> Northeastern University of Maryland

<u>Charles Goebel</u>, Western University of Idaho

<u>Rich Kobe</u>, North Central Michigan State University

At-Large Myron Floyd North Carolina State University

Dale Greene University of Georgia

Karen Mock Utah State University

BNR/BAC Representative Linda Nagel Utah State University

Alton Thompson 1890 Land Grant Universities Rep

NAUFRP Washington Counsel C. Randall Nuckolls

NAUFRP Executive Liaison Terri Bates

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NAUFRP Executive Committee, May 2022, Washington, D.C.



Left to right back row: Hans Williams (Stephen F. Austin State University), Janaki Alavalapati, NAUFRP President (Auburn University), Jingxin Wang (West Virginia University), Jeff Stringer (University of Kentucky), Andrew Storer (Michigan Tech University), David Newman, NAUFRP Immediate Past President (SUNY), Bill Hubbard (University of Maryland), Katy Kavanagh, NAUFRP President-Elect (Oregon State University), Bob Wagner (Purdue University); Left to right first row:Terri Bates, NAUFRP Executive Liaison, Yeonsu Kim (Northern Arizona University), Dennis Becker (University of Idaho)

Regional Corner

North Central - Rich Kobe- A lot of changes in leadership at North Central institutions: At Michigan Tech, Andrew Storer is serving as Interim Provost with David Flaspohler serving as Interim Dean of the College. At University of Minnesota, Mike Kilgore will be returning to the faculty at the end of the summer and Kristen Nelson will serve as Interim Department Head. At Ohio State, Eric Toman is now serving as Interim Director of SENR, with Jeff Sharp's return to the faculty; Sayeed Mehmood continues as OSU's NAUFRP liaison. Matt Russell, who served on the NAUFRP North Central Committee as Extension Representative, left University of Minnesota to pursue other interests. At Southern Illinois University, Eric Holzmueller has taken over for Karl WIlliard as Program Coordinator of the Forestry program. And Bob Wagner will be stepping down as Department Head at Purdue in January 2023.

Northeast— Bill Hubbard, - Thank you to Janaki and Terri for the warm welcome in the last newsletter. I am

honored and excited to serve as the Northeast NAUFRP Chair. As someone who has worked with Southern NAUFRP for over 25 years, I never thought I'd rise to such an illustrious position! In my previous career I worked as a multi-state Extension forester for the 13 Southern Extension Directors and the USDA Forest Service. My role was multifaceted, but one assignment was to meet regularly with the Southern NAUFRP membership to ensure they were informed with regards to regional forestry issues and initiatives that involved their Extension, and to some extent research faculty; including opportunities related to large regional grant programs like the NIFA AFRI CAP projects, any USDA Forest Service outreach efforts, the Southern Group of State Foresters efforts, and NGO activities in the region. The 25+ years in that position brought me in close contact with many forestry deans and directors and I value many friendships and partnerships to this day. In my new role in Maryland I work with our research dean on various forestry research projects that include Extension or outreach, I also manage the RREA funds, and serve as program leader for our forestry and natural resources Extension team.

I am excited to serve the region and to engage our Northeast membership in a variety of ways. Thanks to Dave Newman for providing some great advice early on. I will be reaching out to our Northeast NAUFRP membership to introduce myself and get an idea of what interests and needs they may have for NAUFRP. A few things Dave mentioned that may or may be plausible is a salary analysis for the region, and a directory or database of forest resources faculty and expertise. Also there may be opportunities to work with the Northern Research Station of the Forest Service and efforts they are involved with such as the Climate Hubs or the Northeastern States Research Cooperative. I will also be



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Regional Corner, cont.

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working extensively to understand the unique nature of our region compared to the others, especially, the Southern region where I lived and worked for the better part of my career.

It is an exciting time to be in our profession and I look forward to making a difference with our organization. I'd love to hear any advice you might have for a newbie member and a newbie regional chair.

South– Hans Williams – The annual summer meeting of the Southern Group of NAUFRP was held in connection



with the 2022 Southern Group of State Foresters Annual Meeting in Greenville, SC on June 6 and 7. The meeting included travelling to Clemson University to tour the Andy Quattlebaum Outdoor

Education Center, a new mass-timber construction building. The tour was led by Dr. Pat Layton, Clemson University. We also met with Dr. Toral Patel-Weynand, the new USFS SRS Director. SNAUFRP members also met with the Southern Group of State Foresters to discuss internship and employment opportunities for forestry students.

News from NC State- Mary Watzin and Jason Delborne, two professors at NC State's Department of Forestry and Environmental Resources, were named 2021 Fellows of the American Association for the Advancement of Science (AAAS), the largest general scientific society in the world.

(Research Continued from page 2)

These ideas are being presented to various organizations to receive feedback on the general direction. Presentations were made this summer to a NCASI working group and SAF's Board of Directors. If you have any questions about this effort, please contact Bob Wagner at rgwagner@purdue.edu.

Women's Forest Congress

The Inaugural Women's Forest Congress will take place October 17-20, 2022 in Minneapolis, Minnesota. We are a movement that envisions a world where there is universal equity and inclusion in our forest community. All women are heard, empowered, and provided a sense of belonging. We urge your institution support the effort. There are opportunities to sponsor at varying levels. And please encourage fellow faculty and students to learn more about the Women's Forest Congress and register to attend the Congress.

Robert Scheller, professor of forestry and environmental resources, was named Associate Dean of Research in the College of Natural Resources.

Ivana Mali joined the Department of Forestry and Environmental Resources as the Ecology Wildlife Foundation Distinguished Scholar for Conservation Biology

The College of Natural Resources at NC State is searching for a new co-director of the Tree Improvement Cooperative Program and assistant/associate professor of forest genetics. We are also searching for a new department head for the Department of Forest Biomaterials.

Western, Charles Goebel -

Colorado State University – Dr. A. Alonso Aguirre selected as the new dean of the Warner College of Natural Resources at Colorado State University. https:// warnercnr.source.colostate.edu/draguirre-to-lead-warner-college/

Oregon State University - Cristina

Eisenberg, an Oregon State University alumna with a background in restoration ecology, wildlife biology and Traditional Ecological Knowledge, has been named the OSU College of Forestry's first associate dean for inclusive excellence and director of tribal initiatives.https:// today.oregonstate.edu/news/osu-college-forestry-hirescristina-eisenberg-director-tribal-initiatives

University of Idaho – The University of Idaho Experimental Forest and College of Natural Resources highlighted in the May 2022 edition of SAF's The Forestry Source as the first university research forest to have a fully digital lidar singletree inventory.https://www.mydigitalpublication.com/



FUTURE Society of American **Foresters** Convention Dates

forests. resources. communities.

2023: Sacramento, CA: October 25-29 2024: Loveland, CO: September 15-19 2025: Hartford, CT: October 23-27 2026: Canada: tba

McIntire-Stennis Projects To Know About

The Interacting Roles of Hydrology and Light in Structuring Regeneration of East Texas Bottomland Hardwood Forests



Clifton Albrecht, currently pursuing a doctorate in forestry from Stephen F. Austin State University's Arthur Temple College of Forestry and Agriculture, is investigating the effects of the difference in flood regime and ground level light, as well heir interactions, on species composition of regeneration in bottomland hardwood forests in East Texas. Currently, more than 60 percent of the region's bottomland hardwood forests have been lost due to widespread modification. His results will inform future restoration and conservation efforts. Albrecht holds a Bachelor of

Science in biology from Texas State University and a Master of Science in botany from the University of Texas Rio Grande Valley.

Whitehill Christmas Tree Genetics Lab

The Whitehill Christmas Tree Genetics Lab at **North Car**olina State University is leading a 4-year <u>McIntire-</u> <u>Stennis funded project called GRO FORTH</u>. The goal of GRO FORTH (Genomic Resource Optimization for FOResT Health) is to train and educate graduate students in the application of the modern genomics toolkit to improve forest health and productivity.



Improving mass timber durability to foster more widespread use of green building practices

Gerald Presley, Assistant Professor, Wood Science & Engineering, Oregon State University

Mass timber building construction is increasing dramatically across North America. First pioneered in northern Europe, mass timber is a sustainable building technology that locks carbon away in the building structure in the form of wood as opposed to using carbon intensive, mined materials such as steel and concrete. However, unlike their counterparts in northern Europe, mass timber structures in the United States face particular challenges.

Large parts of the United States harbor termites which are a scourge for wooded structures and can cause damage and early failure in them. Wood frame buildings can be protected from termites with preservative treatments, and in high termite risk areas such as Hawaii, preservative treatment is actually mandated in the building codes. Existing mass timber building technologies rely solely on moisture exclusion to increase durability and these are are insufficient in termite-prone areas because termites can attack dry wood behind these moisture barriers unlike other wood-destroying agents such as fungi.

The successful expansion of mass timber construction in the United States will require the incorporation of pressure treatments into panel fabrication. However, chemical presence can negate the formation of effective bonds with the resins that hold mass timber panels, effectively leaving them prone to falling apart.

This project, funded by McIntire Stennis funds aims to test different resin-preservative combinations in cross laminated timber panels to measure the ability of the combinations to both make strong, functional wood panels for construction and resist termite attack. We manufactured ex-

perimental-scale cross laminated timber with these preservative resin combinations

Douglas-fir 2 x 6-inch lumber either untreated or treated with one of three preservative systems and one of three different preservative systems; pres-



systems; pressure treatment with borates, pressure treatment with propiconazole, tebuconazole, imidacloprid, permethrin and iodopropyl butyl carbamate (PTIP+IPBC), or

dip treatment with propiconazole, tebuconazole and imidacloprid + borate (PTI) was manufactured into small CLT panels. Panels were glued together with one of two resins, melamine formaldehyde (MF) or Polyurethane (PUR). Once the panels were made they were sub-sectioned into pieces that would be structurally and chemically characterized and those that would be exposed to termites in the field. Delamination tests were done to measure the impact of preservative presence on bondline integrity (Figure 1).

The all-organic preservative treatment passed delamination test standards when pressure treated lumber was used to layup panels, while utilizing borate-treated lumber for panel manufacture resulted in failure. Bondline characterization was done microscopically to measure depth of resin impregnation into the cross section of CLT lami-



reconciliation rules. The new Act will provide additional health insurance support to those utilizing the Affordable Care Act insurance program, will allow the federal government for the first time to negotiate drug prices on certain drugs paid by Medicare/Medicaid, and raises some corporate taxes and increases revenue for the IRS to pursue tax fraud cases. Significantly for NAUFRP membership, the new law provides the greatest federal government investment ever in combating climate change through increased and extended tax credits for solar, wind and other clean and alternative

(\$ millions)	FY 22 Enacted	APLU/ NAUFRP FY 23 Request	Biden Admin FY23	House FY23 Mark	Senate FY23 Mark
McStennis	\$36	\$46	\$43	\$38	\$43
AFRI	\$445	\$500	\$564	\$500	\$455
JFSP	\$8	\$20	\$4	\$4.5	\$10
CRUs	\$26	\$30	\$28.15	\$28.15	\$30

energy sources. A major focus of the bill is on carbon reduction. The bill also provides \$20 billion to support climate-smart agriculture practices, \$5 billion for grants to support healthy, fire resistant forests, forest conservation and urban tree planting, and \$2.6 billion to conserve and restore coastal habitats and protect coastal communities. See <u>https://crsreports.congress.gov/ product/pdf/IN/IN11978</u>. More details on these programs will emerge in the months ahead as federal agencies ramp up activities to implement the programs funded by the Inflation Adjustment Act of 2022. I will provide more information on the initiation of these new programs at the NAUFRP General Assembly in September.

The House also passed several of the FY 23 Appropriations bills in July including key bills that fund research at USDA and the Department of Interior. In late July, the Democratic leadership of the Senate Appropriations Committee released its draft bills for all the 12 Subcommittees, including the Agriculture and Interior bills. No action is anticipated on these bills when Congress returns in September. Rather, the Congress will once again pass a Continuing Resolution prior to October 1 to continue funding of federal agencies at FY 22 levels. The CR will likely run until late November or early December, and could extend into calendar year 2023 depending on the November elections and which party controls the House and Senate. If Republicans gain the majority in the House and/or Senate the new leadership will likely want to revisit FY 23 appropriations in the new Congress after it convenes in January. Our key programs such as the AFRI Competitive Grant Program at USDA, McIntire-Stennis, the Cooperative Research Units at Interior, and the Joint Fire Science Program collaboration at the Forest Service and Interior, all got increases in the House and Senate bills. Stay tuned to see what develops with the FY 23 appropriations after the elections.

Randy Nuckolls

Washington Counsel, NAUFRP



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nae (Figure 2).

Cody Wainscott, a graduate student in the Oregon State Unversity College of Forestry wood science department, is now

using Dynamic mechanical analysis to measure the impact of wood preservatives on resin curing (Figure 3).

This work provides useful information on preservativeresin compatibility for CLT manufacture and will help improve the durability of mass timber structures by identifying compatible preservative-resin combinations. As this work develops, we hope it will inform mass timber manufacturing practices that will result in more durable and relable wooden skyscrapers that can better withstand attack by wood-destroying organisms.

Figure Descriptions

Figure 1: Delamination test specimens of CLT with one of several preservative treatment-resin combinations are vacuumpressure treated in a vessel and rapidly dried. Delamination is *an indicator of reduced bondline integrity due to preservative*

Figure 2: Microscopic investigation of composite bondlines was done using a fluorescence microscope to measure the impact of preservative treatment on resin impregnation. Here is a safranin red-stained section of a bondline between two layers of cross laminated timber showing measurable resin penetration into the wood cellular structure.

Figure 3: Student Cody Wainscott tests ample veneers treated with one of three preservatives using Dynamic Mechanical Analysis (DMA). This test measures the impact of wood preservatives on the viscoelastic properties of resins used for CLT manufacture.



Dean on the Go: John Hayes, retired, Dean, Warner College of Natural Resources, Colorado State University