

2023 International Society of Forest Resource Economics Symposium

**Where is Timber Going? Trends and Predictions for Timber Supply
and Forest Markets During and After the COVID-19 Pandemic**

May 15-17, 2023
Texas A&M Forest Service
Houston, Texas

Agenda and Schedule



This event is made possible with the support of:



TEXAS A&M UNIVERSITY

Ecology &
Conservation Biology



Southern Regional
Extension Forestry

Host Team @ Texas A&M Forest Service

Dr. Xufang Zhang, Forest Resource Analyst
Xufang.Zhang@tfs.tamu.edu (346)616-8430

Dr. Aaron Stottlemeyer,
Forest Analytics Department Head
astottlemeyer@tfs.tamu.edu

Mickey Merritt, Program Leader
mmerritt@tfs.tamu.edu

Melissa Yeldell, Administrative Associate
Melissa.Yeldell@tfs.tamu.edu



Agenda			
Date	Time	Session	Room
Monday May 15	2:00-7:00 PM	Registration	
Day 1			
Tuesday May 16	6:30-8:00 AM	Breakfast and Poster Setup	Westheimer
	8:00-8:30 AM	Opening Remarks: Al Davis, <i>Interim Director, Texas A&M Forest Service</i> Rob Hughes, <i>Executive Director, Texas Forestry Association</i>	Regency CD
	8:30-9:00 AM	Keynote Presentation 1: Dr. Mo Zhou <i>Associate professor, Purdue University</i>	Regency CD
	9:00-9:30 AM	Keynote Presentation 2: Ryan Jones Partner, Lake Flato	
	9:30-10:00 AM	Break and Poster Presentations	Prefunction
	10:00-12:00 PM	Concurrent Sessions 1A: Forest Management	Regency CD
		Concurrent Sessions 1B: Forest Landowners	Rice
	12:00-1:00 PM	Lunch and Poster Presentations	Westheimer
	1:00-3:00 PM	Concurrent Sessions 2A: Policy Analysis and Trade	Regency CD
		Concurrent Sessions 2B: Bioenergy and Ecosystems	Rice
	3:00-3:30 PM	Break and Poster Presentations	Prefunction
	3:30-6:00 PM	Concurrent Sessions 3A: Economic Development	Regency CD
		Concurrent Sessions 3B: Discussion-Wood Flow	Rice
	6:00 PM	Dinner on your own	
Day 2			
Wednesday May 17	6:30-8:00 AM	Breakfast and Business Meeting	Westheimer
	8:00-10:15 AM	Concurrent Sessions 4A: Carbon and Wildfire	Regency CD
		Concurrent Sessions 4B: Timber and Management	Rice
	10:15-10:30 AM	Break and Students Award	Prefunction
	10:30-12:30 AM	Concurrent Sessions 5A: Supply and Industry	Regency CD
		Concurrent Sessions 5B: Sustainable Investment	Rice
	12:30-5:00 PM	Tour with Light Lunchbox: Mass Timber Building Tour at Rice University Urban Forestry Tour at Houston Arboretum and Natural Center	
Thursday May 18	5:00 PM	Dinner on your own	
		Departure	

Keynote**Room: Regency CD, Time: 8:30 – 9:00 AM****Title:** Are consumers “green” enthusiasts or skeptics? Evidence from nontimber forest products.*Mo Zhou, Purdue University*

Abstract: In recent years, to address consumers’ demand for “greener” products due to growing environmental awareness, eco-labels have been used by more and more businesses to claim the environmental benefits of their products or services. However, it is unclear how consumers’ willingness to pay (WTP) varies with different types of eco-labeling, particularly concerning forest products. Here, we apply discrete choice modeling to elicit consumers’ preferences for “green” maple syrup – syrup made with sap tapped from sustainably managed forests – under three eco-labels: self-claimed, verified by a voluntary conservation program, and certified by a third party. We find that the WTPs for “green” maple syrup are consistently higher than that for the organic label, but the amount is the lowest for the third-party certified label among all three. A plausible explanation is that some consumers may consider sustainability certification as greenwashing thus skeptical of the claimed benefits.

Keywords: Eco-label, sustainable forestry, forest management, green skepticism, choice experiment.

Room: Regency CD, Time: 9:00 – 9:30 AM**Title:** Maa Timber Market in U.S. South*Ryan Jones, Lake | Flato*

The presentation will include mass timber basics, benefits, and potentials for Texas to be a market and producer, from the perspective of resource supply and manufacturing. In particular, the southern yellow pine mass timber, economics involving case studies that Lake|Flato has done will be covered. In addition, opportunities and obstacles to wider adoption specially related to economics and the south would be discussed.

Concurrent Session 1A

Topic: Forest Management

Room: Regency CD, Time: 10:00 AM – 12:00 PM

Moderator: T. Eric McConnell

1. Exploring the Impacts of the COVID-19 Pandemic on Forest Management and Markets in the Southern United States

Sonia R. Bruck and Stephanie Chizmar, US Forest Service Southern Research Station

Rajan Parajuli and Erin Sills, North Carolina State University

2. Assessing Income and Risk of Incorporating Pine Straw Production into Slash Pine Plantations

T. Eric McConnell, Mississippi State University

3. Improving Models of Wood Products Plant Locations with Restricted Access Data

Raju Pokharel and Scott Loveridge, Michigan State University

Anders Van Sandt, University of Wyoming

Craig Wesley Carpenter, Michigan State University Extension

4. Residential fuelwood consumption estimates in County level

Rapeepan Kantavichai and Consuelo Brandeis, USDA FIA-Timber product Output

Marcus Taylor, USDA Wood Innovations Program

5. Economic analyses of growth & yield and thinning decisions on hardwood plantations

Sayon Ghosh and Mo Zhou, Purdue University

Concurrent Session 1B

Topic: Forest Landowners

Room: Rice, Time: 10:00 AM - 12:00 PM

Moderator: Stella Schons

1. Effectiveness of landscape fuel treatments: evidence from simulations for East Texas
Junyeong Choi, Jianbang Gan, Brittany Segundo, Lina Zapata, Katelyn Wilson, Keily Pineda, Oleg Prokopyev and Lewis Ntamo, Texas A&M University

Tomás Lagos, University of Pittsburgh

2. Tree planting decisions on agricultural lands in Andhra Pradesh, India: A multinomial probit analysis

Stella Schons, Gregory Amacher and Kelly Cobourn, Virginia Polytechnic Institute and State University

Haripryia Gundimeda, Indian Institute of Technology Bombay

Nilesh Shinde, University of Massachusetts Amherst

3. Understanding Non-industrial Private Forest Landowners' Characteristics and their Participation in Conservation Cost Sharing Programs

Bindu Paudel and Mo Zhou, Purdue University

4. Heirs' Property Disputes in Forestlands, Partition Actions and the Determinants of Court Verdicts

Mahesh Tiwari, Changyou Sun, Donald L. Grebner, Ayoung Kim and Eric McConnell, Mississippi State University

5. Assessing the Ecological Loss of Mining Areas in Taiwan

Wan-Yu Liu and Dai-Rong Lee, National Chung Hsing University, Taiwan

Concurrent Session 2A

Topic: Policy Analysis and Trade

Room: Regency CD, Time: 1:00-3:00 PM

Moderator: Kurt Niquidet

1. The Impact of Forest Policy Modernization in British Columbia: A Stock Market Perspective

Kurt Niquidet, University of British Columbia

Daowei Zhang, Auburn University

2. Global Forest Product Markets Implications of Increasing Protected Forest Area Worldwide Under the 30x30 Initiative

Prakash Nepal and Richard D. Bergman, USDA Forest Service Forest Products Laboratory

Jeffrey P. Prestemon, USDA Forest Service Southern Research Station

Anthony Waldron, University of Cambridge

Trish Gopalakrishna, University of Oxford

3. US imports of soft lumber: Assessing the significance of spillover effects

Inoussa Boubacar, US Forest Service

Malick Diarrassouba, Nebraska State Legislature

Gibson Nene, University of Minnesota-Duluth

4. Forest-based Employment in the Southern United States amidst the COVID-19 Pandemic: A Causal Inference Analysis

Stephanie Chizmar, Gregory Frey and Sonia Bruck, US Forest Service Southern Research Station

Rajan Parajuli and Erin Sills, North Carolina State University

5. Economic impact of the Trade War and Covid-19 on Tennessee Export of Forest Products

Noel Perceval Assogba, Andrew Muhammad, and Chad M. Hellwinckel, University of Tennessee

Concurrent Session 2B

Topic: Bioenergy and Ecosystems

Room: Rice, Time: 1:00-3:00 PM

Moderator: Jianbang Gan

1. Optimal contract arrangements for conservation on working forests

Changyou Sun, Mississippi State University

Bin Mei and Yanshu Li, University of Georgia

2. What factors drive the presence of invasive plants in coastal Mississippi?

Robert K. Grala, Kate Grala and John Cartwright, Mississippi State University

3. Assessing the environmental impacts of proposed biochar production facilities using forest biomass in Michigan

Nafisa Nowshin Ahmed, Raju Pokharel, Christopher Saffron and Jessica Miesel, Michigan State University

4. Identifying optimal locations for biochar production facilities to reduce wildfire risk and bolster rural economies: A New Mexico case study

Ram Adhikari, Tomasz Falkowski and Joshua Sloan, New Mexico Highlands University

5. A proposed carbon dioxide sequestration methodology for planted forests that increase additionality and permanence

Stella Z. Schons, Pedro Junqueira Sartori, Gregory S. Amacher and Harold Burkhart, Virginia Polytechnic Institute and State University

Concurrent Session 3A

Topic: Economic Development

Room: Regency CD, Time: 3:30-6:00 PM

Moderator: Raju Pokharel

1. Decomposing the Economic Contributions of Natural Resource based Industries to Illustrate Economic Effects Along the Value Chain

Raju Pokharel, Shivan Gc and Ichchha Thapa, Michigan State University

Greg Alward, University of Idaho

2. Analysis of location, feedstock availability, and economic contributions of a mass timber manufacturing plant in Michigan

Naresh Khanal, Raju Pokharel, Andrew Finley, Emily Huff and Jagdish Poudel, Michigan State University

3. Economic Impacts of Maple Syrup Production in Kentucky: Input-output Analysis

Bobby Thapa and Thomas O. Ochuodho, University of Kentucky

4. Economic Contribution Analysis of the Logging Sector in East Texas

Pooja Chhetri, Anusha Shrestha and Matthew W. McBroom, Stephen F. Austin State University

5. Chronic Wasting Disease: Economic impacts and management

Sushma Bhattarai and Robert K. Grala, Mississippi State University

6. Feedstock availability and economic contribution of increased bioenergy production in a Michigan facility for the next 15 years

Tara Allohverdi, Raju Pokharel and Jagdish Poudel, Michigan State University

Greg Latta, University of Idaho

Concurrent Session 3B

Discussion - Wood Flow

Room: Regency D, Time: 3:30-6:00 PM

Moderator: Leslie Bobby

1. Power to the Pollinators: A Stated Preference Study of Florida Residents to Protect Pollinators

Tyler Carney, Damian Adams, Rachel Mallinger and Lillian Hendrick, University of Florida
Melissa Kreye, Penn State University
Andres Susaeta, Oregon State University

2. Developing and harnessing climate-smart commodities from hardwood restoration for small and underserved landowners in the Southern Bottomland Region

Nana Tian, University of Arkansas at Monticello
Jianbang Gan, Texas A&M University

3. Creating New Markets is a Team Effort: Knowledge-Sharing & Connections Amongst Diverse Stakeholders

Leslie Bobby, Southern Regional Extension Forestry

4. Where is all the timber going? Analysis of the timber supply chain in the U.S. South

Xufang Zhang, Texas A&M Forest Service
Tim Adams, South Carolina Forestry Commission
Jinggang Guo, Louisiana State University
Eric McConnell, Mississippi State University
Andres Susaeta, Oregon State University

5. Beyond the Peer-reviewed Article: Sharing Your Findings in a Catchy Way with Diverse Audiences

Leslie Bobby, Southern Regional Extension Forestry

Concurrent Session 4A

Topic: Carbon and Wildfire

Room: Regency CD, Time: 8:00-10:15 AM

Moderator: Shaun M. Tanger

1. Economic Tradeoffs in Timber Products Under Various Carbon Management Strategies for Maryland and Pennsylvania

Shivan Gc, Raju Pokharel, Kylie Clay and Chad Papa, Michigan State University

2. Economics of forestland carbon credit: Does income matter?

Sofwaan Ademonla Bakary and Noel Perceval Assogba, University of Tennessee

3. Quantifying additionality of forest carbon

Bin Mei, University of Georgia

4. Does supply competition affect forest carbon outcomes? Some initial results from a harvest scheduling simulation

Shaun M. Tanger, University of Arkansas at Monticello

Bruno Kanieski da Silva, Mississippi State University

Jesse Henderson and Andrew Tilman, USDA Forest Service, Northern Research Station

5. Incorporating Spectral Unmixing to Determine the Carbon Sequestration Potential of an Urban Forest Canopy

Michael K. Crosby and Jason J. Holderieath, Louisiana Tech University

T. Eric McConnell, Mississippi State University

Shaun M. Tanger, University of Arkansas at Monticello

6. Wildfire Suppression Expenditures Drivers and long-term behavior

Bruno Kanieski da Silva, Mississippi State University

Jeffrey P. Prestemon, USDA Forest Service

Concurrent Session 4B

Topic: Timber and Management

Room: Rice, Time: 8:00-10:15 AM

Moderator: Thomas Ochuodho

1. Understanding Causes and Solutions of No-Bid Timber Sales: Insights from open-ended responses from a National Forest System Personnel Survey

Jaana Korhonen, Oak Ridge Institute for Science and Education

Sonia Bruck and Greg Frey, USDA Forest Service, Southern Research Station

2. Analyzing the Game of Bidding on Timber Sales in Michigan

Jagdish Poudel, Michigan State University

3. Forest succession, management and the economy under a changing climate: Coupling economic and forest management models to assess impacts and adaptation options

Thomas Ochuodho, University of Kentucky

Van Lantz, Galen McMonagle, Chris Hennigar and Chinmay Sharma, University of New Brunswick

Patrick Withey, St. Francis Xavier University

4. Market-based feedstock supply analysis for mass timber manufacturing in Michigan

Ichchha Thapa, Raju Pokharel, Emily Huff, Greg Latta and Jagdish Poudel, Michigan State University

George Berghorn, University of Idaho

5. Optimal Routing for Softwood Sawmill Supply Chain: Strategic Repair of Roads and Bridges

Swagat Attreya and Eric McConnell, Mississippi State University

Michael Crosby, Louisiana Tech University

Shaun M. Tanger, University of Arkansas at Monticello

6. Climate Change or COVID-19? Uncovering the Main Catalyst of Lumber Price Surge

Jameson Augustin and Berna Karali, University of Georgia

Concurrent Session 5A

Topic: Supply and Industry

Room: Regency CD, Time: 10:30 AM - 12:30 PM

Moderator: Sagar Godar Chhetri

1. Examining Variance in U.S. Silvicultural Costs

Shawn Baker, Amanda Lang and Brooks Mendell, Forisk Consulting

2. Indicators of North American Forest Products Mill Capacity

Jesse D. Henderson, USDA Forest Service, Southern Research Station

3. Current Timber Supply Condition to Forest Industries in Arkansas

Sagar Godar Chhetri, Pradip Saud and Matthew Pelkki, University of Arkansas at Monticello

4. Available Work Days for Forest Operations in Northeast Mississippi

T. Eric McConnell, Mississippi State University

Michael K. Crosby, Louisiana Tech University

5. Inflation Hedging Effectiveness of Farmland and Timberland Assets in the United States

Srijana Baral, Colorado State University

Bin Mei, University of Georgia

Concurrent Session 5B

Topic: Sustainable Investment

Room: Rice, Time: 10:30 AM - 12:30 PM

Moderator: Ram Dahal

1. Fanning the Flames of Cooperation: A Collective Action Approach to Prescribed Fire Agreements

Tyler Carney, Tenney Kapellusch, Raelene Crandall and Damian Adams, University of Florida

Andres Susaeta, Oregon State University

Rebecca Williams, Grand Valley State University

2. A Multi-Criteria, Multi-Stakeholder Approach to Conservation Conflict Resolution in Public Forest Management: The Case of Yellowwood State Forest

Katelyn Jeffries and Mo Zhou, Purdue University

3. Stand-Level Variable-Density Yield Equations for Oak-Gum-Cypress Bottomland Hardwood Forests

Suchana Aryal and Eric McConnell, Mississippi State University

4. Developing a Forest Management Activity Cost Guide and Dashboard for Small-Scale Family Forest Owners in the Lake States

Jeremy K. Natzke, Paul Doruska and Melinda Vokoun, University of Wisconsin-Stevens Point

5. Implication of Mississippi's Forest Resource Development Program in forest investment

Sakar Nepal and T. Eric McConnell, Mississippi State University

Posters

Date: Tuesday, May 16, 2023

Location: Hyatt Prefunction

Presentation Time: 9:30-10:00 AM 12:30-1:00 PM 3:00-3:30 PM

1. Economics of forestland carbon credit: Does income matter?

Sofwaan Ademonla Bakary and Noel Perceval Assogba, University of Tennessee

2. Assessing the environmental impacts of proposed biochar production facilities using forest biomass in Michigan

Nafisa Nowshin Ahmed, Raju Pokharel, Christopher Saffron and Jessica Miesel, Michigan State University

3. Estimating Aboveground Carbon Stock and Sequestration Potential of Oak-Gum-Cypress Forests in Bottomland Hardwood Sites

Suchana Aryal and T. Eric McConnell, Mississippi State University

4. Assessing the Impacts of Climate Change on Forest Based Employment in the US South

Austin Lamica, Rajan Parajuli and Christopher Mihlar, North Carolina State University

5. A Multi-Criteria, Multi-Stakeholder Approach to Conservation Conflict Resolution in Public Forest Management: The Case of Yellowwood State Forest

Katelyn Jeffries and Mo Zhou, Purdue University

6. Chronic Wasting Disease: Economic impacts and management

Sushma Bhattarai and Robert K. Grala, Mississippi State University

7. Factors affecting prescribed burn costs in the southern Great Plains

Maddie Watts, Aaron Russell and Omkar Joshi, Oklahoma State University

8. Lumber futures and its development: A review and some prospects

Nan Zhangn and Bin Mei, University of Georgia

9. The impact of rapid fuel costs inflation on Arkansas' logging sector

Ana Gutierrez-Castillo, Nana Tian and Matthew Pelkki, University of Arkansas at Monticello

Posters

10. The logging Sector in East Texas: Current Status, Issues, and the Future Outlook

Pooja Chhetri, Anusha Shrestha and Matthew W. McBroom, Stephen F. Austin State University

11. Wood Products Market and Competition in the Lakes States

Tara Allohverdi, Raju Pokharel and Emily Huff, Michigan State University

12. Prospects of Mass Timber Manufacturing: Feedstock Supply Analysis in Michigan and the Great Lakes Demand Survey

Ichchha Thapa, Emily Huff, Raju Pokharel, George Berghorn and Sandra Lupien, Michigan State University

13. Historical trend of market coverage and competition of various wood products in Michigan

Naresh Khanal, Raju Pokharel, Andrew Finley, Emily Huff and Jagdish Poudel, Michigan State University

14. Socio-economic Analysis of Wood Charcoal Production as a Significant Output of Forest Bioeconomy in Africa

Isaac Nyarko, Chukwudi Nwaogu, Hajek Miroslav and Prince Opoku Peseu, Czech University of Life Sciences

15. Legal Environment of Prescribed Fire on Forestland: An Analysis of the Evolving Legislative Trends

Kalani G. Perera, Changyou Sun, Gregory E. Frey, Bruno K. da Silva and Xiaofei Li, Mississippi State University

16. Stepping into the shoes of landowners: insights from the Cross-Timbers forested region

Chamali Rodrigo, Aaron Russell, Maddie Watts and Omkar Joshi, Oklahoma State University

17. Assessment of Factors Driving Spatiotemporal Variation in Timber Products Output (TPO) Trends

Olakunle E. Sodiya and Justin S. Baker, North Carolina State University

Abstracts

Scan me to see the
Abstracts



Information

Breakfast: 1.5 hours (6:30-8:00 AM), May 16 and 17: Westheimer

Lunch: 1 hour, May 16 (12:00-1:00 PM): Westheimer

Keynotes: 1.5 hours (8:00-9:30 AM): Regency CD

Concurrent sessions: May 16-17: Regency CD and Rice

Poster presentations: May 16 during breaks and lunch: Prefunction

Breaks: 30 min, May 16 and 17, Prefunction

Awards: 15 min, May 17 (10:15-10:30 AM): Prefunction

Tour: 4.5 hours, May 17 (12:30-5:00 PM): Memorial Park and Rice University

Meeting Room Locations

