

Michigan Society of American Foresters

Spring Conference, 2015

**“Forestry’s Future:
People, Products, and Technology”**

April 9-10, 2015

Marquette, Michigan



“Forestry’s Future: People, Products, and Technology”

Conference Agenda (all times in EST)

April 9-10, 2014

Location: Ramada Inn | 412 W Washington St | Marquette MI 49855

This program has been reviewed and is approved for professional CFE credits by the SAF for 9 Category 1 credits.

Thursday, April 9th “Forestland Management Technology”	8:00 - 8:45	Registration and Breakfast
	8:45 - 9:00	Welcome and Overview- Andy Van Dyke, UP Chapter Chair
	9:00 - 9:45	<i>GIS in Forestry</i> - Peter Eredics, Esri
	9:45 - 10:15	<i>Esri Forestry Group (EFG) – Discovering Resources from a Thriving Forestry GIS Community</i> - Mark Books and Elizabeth Martinez, EFG
	Break	
	10:30 - 11:00	<i>Technologies in Smartphones and Tablets</i> - Donn Downey, Forest Metrix
	11:00 - 11:30	<i>Managing Forest Data</i> - Zack Parisa, SilviaTerra
	11:30 - 12:00	<i>Integrated Solutions in Forest Inventory</i> - Mark Milligan, F4 Tech
	12:00 - 12:45	Lunch
	<i>MI Biomaterials Initiative Update</i> – Mark Rudnicki, Michigan Tech	
	<i>MI SAF Strategic Planning Update</i> – Georgia Peterson, State Chair	
	12:45 - 1:15	UP and LP Chapter Meetings –all are welcome to attend
	1:15 - 2:00	State Society Meeting – all are welcome to attend
	2:00 - 2:30	<i>Hyperspectral Remote Sensing for Forestry</i> – Kamlakant Tripathi and Isabella Mariotto; <i>Using Remote Sensing for Forest Management and Restoration: a case study</i> - Yvette Dickinson, Michigan Technological University
	Break	
	2:45 - 3:10	<i>GIS Solutions</i> - Terry Porter, ForesTech
	3:10 – 3:40	<i>Applications of Forest Technologies in the Field</i> - Brandon Bal, American Forest Management
	Break	
	3:50 - 5:00	Panel Discussion: Forestry’s Future- Technology Mark Books, Esri Forestry Group Peter Eredics, Esri Terry Porter, ForesTech Mark Milligan, F4 Tech
	5:00 - 6:00	Social hour
	6:00 - 9:00	Banquet and raffle
Friday, April 10th “Forestry Future in Michigan”	7.30-8:00am	—Breakfast
	8:00 - 10:00	– Forest Products Industry Presentations: MI Logger Capacity Study- Karen Potter-Witter Marvin Nelson Forest Products- Brian Nelson Verso Corporation- Gordy Mouw Biogenic Reagents- James Mennell Ponsse- Jim Charlier
	Break	
	10:25 – 12:00	- Panel Discussion: Future of Forest Industry- People and Products Michigan Forest Products Council- Charlie Becker Marvin Nelson Forest Products- Brian Nelson Ponsse- Jim Charlier J.M. Longyear- Jake Hayrynen
	12:00 – 2:00	– Break for a Working Lunch, Summary & Closing Statements



Plum Creek



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“Forestry’s Future: People, Products, and Technology”

Forestry is more than just cruising a stand of timber or loading wood onto a truck. There is a value chain from forestland to consumer purchase that makes the whole process sustainable. With rising costs, landowner changes, increased competition, environmental awareness and un-awareness, and dwindling consumption of forest-derived products, the value chain has significantly changed over the years. What are some of the factors that have changed within the total chain? Are there any factors in this chain that foresters can control? How can technology help by creating greater efficiencies and synergies in forest management/operations? What forest management technology is on the market? Does it work? Is it cost-effective? What will the forest products landscape look like today and tomorrow? Do we have enough foresters, skilled trade workers, forest resources, and loggers to keep forestry and forest products systems healthy? We’ve invited people from all sectors of the forestry community to help answer these questions and we need you to help! Join us and learn what they have to say.

Potential Topics for Panel Discussions

(In no particular order)

- How will the forest products industry change over the next 10, 20, 30 years?
- Why are we running out of loggers, truckers, and skilled labor?
- What are the barriers to entry for loggers?
- What role does rail play in the forest products industry and what is its future?
- What is the future of trucking?
- What about the future of the Lake States paper industry?
- What forms of biomaterials are likely to be the most successful in Michigan?
- Wood to liquid fuels?
- What are the new forest management technologies emerging?
- What is the future of drones in forest management?
- What is the future of LIDAR in forest management?



Presenter Biographies

Forestry's Future: People, Products, and Technology

Hosted by the Michigan Society of American Foresters

April 9th-10th, 2015



Brandon Bal, CF

Area Manager, American Forest Management
Atlantic Mine, MI
Brandon.Bal@amforem.biz

Brandon is an Area Manager and GIS Forester for American Forest Management, Inc. in Atlantic Mine, MI. He is responsible for overseeing the management activities on client's properties in the southern Upper Peninsula and is also the AFM Michigan district's technology 'guy' with involvement with inventory projects to managing approximately 450,000 acres of client data. He has been working with AFM for the past 7 years after earning a BS in Forestry from Michigan Tech in 2007. He also earned a Post Baccalaureate Certificate in GIS from Penn State in 2011 and received the Outstanding Young Alumnus Award in 2012 from the Michigan Tech School of Forest Resources and Environmental Science.



Charlie Becker

Plum Creek Timber, Escanaba, MI
charlie.becker@plumcreek.com

Charlie Becker is the Senior Resource Manager for Plum Creek Timber in Escanaba. He is responsible for overseeing the management activities on the companies' 650,000 acres in Michigan and Wisconsin. Upon graduation from Michigan Tech in 1986 with a B.S. and M.S. degree in Forestry, he began his career with the former Mead Corporation in Escanaba. Charlie spent the first 7 years at Mead working in their artificial regeneration and applied research programs. He then moved into the area of forestry operations. He has spent his entire career working on the same land base in the Upper Peninsula.



Mark Books, CF

Colorado State University (CSU) - Center for Environmental Management of
Military Lands (CEMML) at Fort A.P. Hill, VA
mark.a.books.ctr@mail.mil

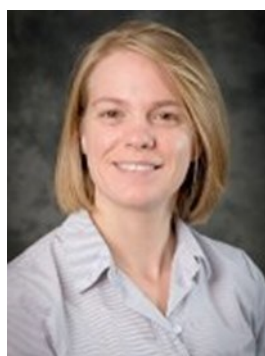
Mark is a Remote Sensing/GIS Forester with CSU's CEMML assigned to a military base in Virginia called Fort A.P. Hill. Since 1999, he has enjoyed the adventure of applying geospatial solutions to help create a sustainable military training environment. Mark received a B.S. in Forestry from Northland College ('92) and Michigan Tech ('93) via the dual degree program. He continued his education at Michigan Tech and received a M.S. in Forestry with emphasis in Remote Sensing and GIS ('95). Upon graduation Mark applied his education at the National Wetlands Research Center in Lafayette, LA assisting with wetlands research. Mark is the President and Cofounder of the Esri Forestry Group (EFG). He serves as the treasure of the Rappahannock Chapter of SAF.



Jim Charlier

Ponsse Michigan Sales
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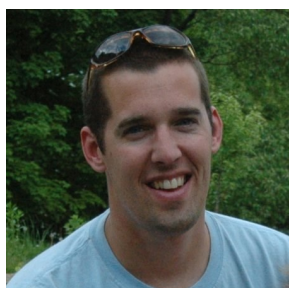
Jim Charlier, Ponsse Sales Representative for Michigan and Ohio, has been working for Ponsse for six years but has been in Forestry Sales for 15 years. Jim specializes in the recommendation of what harvester or Forwarder would best suite the contractors needs for their type of conditions and brings an understanding of production related to owning and operating costs.



Dr. Yvette Dickinson

Assistant Professor, School of Forest Resources and Environmental Science
Michigan Technological University (MTU)
yldickin@mtu.edu

Dr. Yvette Dickinson is an Assistant Professor of Silviculture in the School of Forest Resources and Environmental Science at MTU. She received her B.For.Sc. in Forestry Science and M.Sc. in Environmental Science from the University of Canterbury, New Zealand, and her PhD in Forest Resources from The Pennsylvania State University. She currently teaches classes in silviculture and forest vegetation management at Michigan Tech. Working in a wide range of vegetation types and regions, Dr. Dickinson's research investigates patterns of vegetation structure across spatial scales, and the interactions between these patterns, ecological processes and the full range of ecosystem services. As a forest scientist, she has utilized remote sensing technologies to advance her research.



Donn Downey

Forest Metrix
donn@forestmetrix.com

Donn Downey is a consulting forester based in central Vermont. He cut his teeth with a hip chain and compass before earning a Master's Degree in Conservation Biology with a concentration in silviculture and mensuration. Shortly thereafter, he started experimenting with forestry software that exploited the capabilities of smart phones and tablets. In 2012 he cofounded Forest Metrix, the first timber inventory and analytical software designed for iPhones and iPads. Donn also consults on GIS and GPS apps, assisting foresters to transition to those modern devices from legacy hardware. He still manages to keep one foot in the woods, but yearns to get the other one out there too.



Peter Eredics

Forestry Manager, Esri
peredics@esri.com

Peter lead the global forest products industry team for Esri, the largest geographic information system (GIS) software developer in the world. He has 20 years of leadership experience designing and developing GIS applications for government agencies, top-tier forestry companies and publicly funded research institutes around the world. An accomplished corporate strategist, peter has significant experience working with senior decision makers to find solutions for complex business and land management challenges. Prior to joining Esri, Peter worked in senior and executive management capacities for several enterprise software development and professional services firms. Peter is a member of the Society of American Foresters, the Canadian Institute of Forestry, and the International Forest Products Transportation Association.

Jacob E. Hayrynen

Forest Products Sales and Marketing Manager and Assistant Secretary
JM Longyear LLC & JM Longyear International
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JM Longyear is a fully integrated natural resource company based in Marquette, MI with offices in Sault Ste. Marie & Bancroft, Ontario. Founded in the late 1800's in the Upper Peninsula, Longyear currently owns and manages 165,000 acres of timberland and over 200,000 acres of mineral rights in the Great Lakes Region. Jake is a senior level natural resource professional, with over 31 years of experience in all aspects of the forest industry. He has been instrumental in the growth of Longyear's land base and operations in the US and Canada, their marketing & sales program and their log & stumpage procurement program. Jake graduated 1981 from Michigan Technological University with a Bachelor's Degree in Forestry. He is involved with various industry organizations and is currently a member of the Advisory Board for the School of Forest Resources and Environmental Sciences at Michigan Tech of which he is also a recipient of the Outstanding Alumni Award in 2012 and made a member of the Honors Academy in 2013. He is currently on the Canadian National Railroad Advisory Board for the Great Lakes Region, Co-Chair for the CN Rail Forest Products Committee, a member of the Michigan Biomaterials Initiative Steering Committee and Interim Board, the Michigan Forest Products Council Forest Policy Committee. He is a member of the Lake States Lumber Association and has been a member of SAF for 31 years. Jake and his wife Donna reside in Negaunee, Mi. and have 2 daughters that are off to grad school preparing for their future.



Dr. Isabella Mariotto

Assistant Professor, School of Forest Resources and Environmental Science
Michigan Technological University
imariott@mtu.edu

Dr. Mariotto is an Assistant Professor in Remote Sensing and GIS at Michigan Tech. She has a PhD in Ecology (Remote Sensing and GIS certificate) at New Mexico State University. She has 14 years of experience in remote sensing and GIS and has worked for several federal and state agencies: as a Research Scientist on hyperspectral and multispectral RS of vegetation with the U.S. Geological Survey Western Region and with the NASA hyperspectral team; as a Senior Researcher on RS and GIS of water, soil, and vegetation of the U.S. LTER network stations with the USDA– Jornada Experimental Range, New Mexico; and as a research technician on goshawks satellite tracking and GIS mapping of nest locations in the Utah National Forests with the U.S. Forest Service.



Elizabeth Martinez

Forestland Group, Chapel Hill, South Carolina
elizabeth@forestlandgroup.com

Ms. Martinez is the Senior Director of Geographic Information Systems and Information Technology with management responsibility for TFG's operational plans and data integration for research and reporting. Responsibilities include digital mapping and reporting for fund properties, acquisition due-diligence mapping, mobile mapping, in-house technology training and technical support, and integration of GIS with the FIP system. Her IT responsibilities include maintenance and updating of hardware and software, server integration and remote access, disaster recovery plans, technology purchasing and IT support. Prior to her employment with TFG in 1996, Ms. Martinez was a Research Associate at The Research Triangle Institute (RTI) in Research Triangle Park, North Carolina, focusing on the development and testing of national surveys. Prior to RTI, Ms. Martinez was with the Ministry of Works Head Office in Wellington, New Zealand, and was responsible for resource planning for Northland, New Zealand. Ms. Martinez has a B.A. in Environmental Planning from the University of California Santa Cruz and an M.R.P. (Planning) from the University of North Carolina at Chapel Hill. Ms. Martinez is a Certified Geographic Information Science Professional (GISP) and Vice President of the ESRI Forestry Group.



Jim Mennell

CEO, Biogenic Reagents
jmennell@biogenicreagents.com

James A. Mennell, CEO of Biogenic Reagents, has more than 20 years of experience as a developer, board member, officer, advisor and investor for dozens of bio-based products and renewable and traditional energy companies ranging from start-ups to the largest private companies in the world. Inventor of more than a dozen bio-product technologies, Mennell founded, led, and successfully grew multiple companies from concept through investment and growth to sale or partnerships with publicly traded multinational companies and helped develop billions of dollars of capital projects across North America. He also founded The Environmental Law Group and serves on the Board of Directors of bio-based products, software, and renewable energy companies. He graduated as University Scholar (highest honor) from the University of South Dakota, and received his Juris Doctorate and Masters degrees from Duke University.



Mark Milligan

President, F4 Tech
MMilligan@thinkf4.com

Mark founded F4 Tech (formerly LandMark Systems) in 1998. He has developed and secured a U.S. patent for Real-Time Inventory (RTI) and serves in business development for the Consulting division. He holds an MBA from Florida State University as well as a BS in Forest Management from Louisiana State University.



Gordy Mouw

Verso Corporation, Stevens Point, WI
Gordon.Mouw@Versoco.com

Gordy Mouw is the Fiber Certification and Resource Manager for Verso Corporation Lake States Fiber Supply. He is responsible for all forest certifications, CoC's and overall fiber environmental compliance within Verso. Gordy is a graduate of Michigan Technological University with a Bachelor of Science degree in Forestry. After working in Forest Management Gordy joined Stora Enso in 2004 as a Wood Buyer. A year later became the Environmental Manager for Stora Enso completing certification for 17 mills across the globe. A few companies later he continues to work in his current role. He is a member of several industry associations, including National Operating Committee of American Tree Farm, Wisconsin Forest Sustainability Framework, AF&PA Wood Resource Committee, and NCASI Forest Environment & Sustainability Task Group. He is married to his wife Julie and two kids, Brett and Monty.



Brian Nelson

Marven Nelson Forest Products
nelsonlogging@hotmail.com

Brian is from Cornell, MI where he, along with his brother Dave and his dad (Marvin 9Before his passing) operate Marven Nelson Forest products, Inc. Their company is a full service logging and land clearing company operating tree length, CTL, biomass, and road building crews as well as trucking. Their company primarily works with Plum Creek lands as well as private land, either directly with landowner or through a number of consulting foresters and occasionally on State and Federal timber sales. Brian has been involved in association work since 1998 as a member of the Michigan Association of Timbermen board. He served as their President for two terms and has been on their Executive Committee for most of those years as well as being a member of Great Lakes Timber Professional Association. He has also been on the American Loggers Council board since 2002 serving as the Midwest Delegate for a number of years before becoming President of the group in 2013. Through these affiliations, he spends a considerable amount of time each year in Lansing and Washington D.C. advocating for the timber industry. Brian and his wife of 21 years, Maureen have three children, Samantha, 18, Joshua, 17, and Cody, 10.



Zack Parisa, MFS

President, SilviaTerra
zack@silviaterra.com

Zack Parisa is the founder and president of SilviaTerra - a forestry analytics company that provides remote sensing based data solutions and data management services for forest industry, governments, and forestry consultants. Zack has worked with Lidar, radar, and spectral imagery for over 10 years and developed a patent pending process which uses such imagery to make cruising far more efficient. He has conducted remote sensing projects in the US South, Northeast, Pacific Northwest, South America, Europe, Asia, and Africa. Prior to starting SilviaTerra, Zack worked for the USFS and Plum Creek and studied forestry at Mississippi State University and Yale.



Terry Porter

ForestTech Resource Solutions, LLC
tporter@foresttechresourcesolutions.com

Terry is President of ForestTech Resource Solutions, LLC a forest technology solutions based company headquartered in Nashville TN with offices in Knoxville TN, Elkins WV and Bangor ME with emphasis on land management, forest inventory, GIS, database management and harvest planning. Previously, he served 3 years as the Mid-Atlantic Regional Sales Mgr. for LandMark Systems and 25 years as a Procurement Manager for Grade Hardwood Lumber operations in the Appalachian Mtns of VA, TN, KY, WV and NC. Terry has conducted extensive research, development and implementation of Alternative Harvesting Technology in the Appalachian mountain regions including, cable, helicopter and shovel logging systems. He is a past President of the Tennessee Forestry Association and currently serves on the Executive Committee as well as Chairs the Public Lands Committee of TFA and serves on the USFS Cherokee National Forest Landscape Restoration Initiative.



Dr. Karen Potter-Witter

Professor, Department of Forestry, Michigan State University
karen@msu.edu

Dr. Karen Potter-Witter is a Professor of Forest Economics in the Michigan State University Department of Forestry. Her research and extension work is in timber and woody biomass supply, forestry investment analysis and taxation and private forestland policy analysis. She has published more than 80 articles and extension publications on these topics. She teaches forest economics at the undergraduate and graduate levels. Her experience includes thirty-two years at Michigan State University, seven years as a consultant for government and industry and as a staff forester for Potlatch Corporation. Karen holds forest management, applied statistics and resource economics degrees from Michigan Technological University, the University of Minnesota, and Michigan State University. She is a fellow of the Society of American Foresters, Michigan SAF Past President, 1998 SAF National Convention Program Co-Chair, SAF Science and Technology Board past member, and is currently a Michigan Forest Association Board Member, member of Michigan Technological University President's Council of Alumnae and a lifetime member of Trout Unlimited.



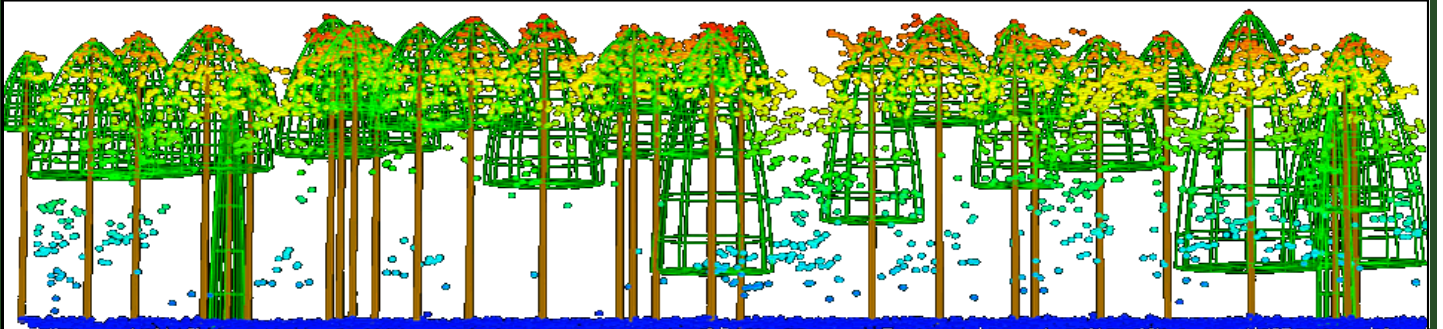
Kamlakant Tripathi

Ph.D. Candidate, School of Forest Resources and Environmental Science
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Kamlakant is a Graduate research assistant and PHD student in the School of Forest Resources and Environmental Science at Michigan Tech. He attended H.N.B. Garhwal University, India as a M.Sc. Student of Remote Sensing & GIS Applications and was a Project Scientists at Forest Resources and Ecology Division of Remote Sensing Application Center—Uttar Pradesh, India. Currently, his research focusses on carbon stock estimation and deforestation by using hyperspectral remote sensing technology.

Notes

Photos from: Tara Bal, Terry Sharik, Michigan Tech, and www.aerometric.com





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