

# MISSOURI SOCIETY OF AMERICAN FORESTERS

## 2023 FALL NEWSLETTER

*Vol. 39, No. 2*



### **From the Chair**

*By Michael Bill, MOSAF Chair*

As I am writing this newsletter the fall color which was so vibrant just a couple of weeks ago is dimming, there is frost on my window and the wood furnace next to my basement office, is converting biomass into BTUs. Fall is in full swing, but the deep throws of winter are not far away. The time changes this weekend and when that happens it feels like a giant switch is thrown and although it's not officially winter for another month, it is covertly ushered in with the shorter days and dark evenings. The changing of the seasons for me is a time of reflection and right now my thoughts are on my time serving these past two years as MOSAF Chair.



I have really enjoyed my time as Chair-Elect and Chair and I look forward to continuing to serve as the Past Chair. Serving this great organization has allowed me to grow my leadership skills and network with many of the most innovative forestry professionals in the state. I know that MOSAF is in good hands with Kristen Goodrich now serving as Chair. As I look back over the past four years, I am most proud of the excellent technical tours that have been offered by MOSAF. We have covered many topics, including new technologies for data collection, the state nursery, carbon markets, urban forest challenges, and fully mechanized harvesting equipment. These technical field days are an excellent opportunity for sharing information but also allow foresters to network and get to know each other much better. These technical tours are not possible without the planning assistance of many MOSAF members throughout the state. To everyone who has helped to plan and set up these tours I am very grateful.

This past month I was able to attend the National SAF conference in Sacramento, CA, along with Kristen Goodrich. It was a great conference. I particularly liked the technology sessions where I was able to learn about the new and upcoming data solutions for forest management. I was also able to tour the Sierra Pacific Mill near Sacramento. The mill was very impressive, each day 300 truckloads of logs are delivered to keep it fed. Last year wood source to the mill was 95% salvage timber from wildfires; this year it is still 65%. Some of the sugar pine being delivered to the mill were

old-growth trees over SIX FEET in diameter that were killed during the large wildfires that occurred during 2021. It was interesting to learn about their facility and how they manage their operation in California, which has its own unique regulations.



*Log pile at Sierra Pacific mill near Sacramento. Old growth pine logs in foreground over 6 feet in diameter.*



*One of the two mills on the Sierra Pacific site is this new fully automated cut-to-length system used for making dimensional lumber.*



As we look forward to the future of forestry in Missouri, I am optimistic. We have a new cohort of young professional foresters who are going to lead the way as we look to integrate new tools such as high-resolution LIDAR. The use of LIDAR will provide new data which will allow foresters to be better informed to manage at the stand level but will also provide a better understanding of how individual management prescriptions impact the surrounding forest landscape. As I leave this role, I would like to thank all the members who are actively engaged in MOSAF. I would also like to invite my fellow foresters to look for opportunities to serve in MOSAF, in a committee or in a leadership position.

I think this quote from Gifford Pinchot's book "The Training of a Forester" pretty much sums up what it means to be a forester to me. "Forestry offers a career more attractive, it may be said in all fairness, than any other career whatsoever. I doubt if any other profession can show a membership so uniformly and enthusiastically in love with their work." It is not what I am, but who I am!



*The Sierra mill produces over 400 different products ranging from 3"x3" pencil blanks made of cedar to larger 12"x12" beams.*

## Keeley Receives Presidential Field Forester Award

Congratulations to Mike Keeley for receiving the 2023 District 9 National SAF Presidential Field Forester award. Mike's award nomination is below. Mike was able to travel to the National Conference in Sacramento, CA to receive his award in person. Great job Mike, this award is well deserved!



During the past year Mike has provided leadership to the forestry profession that goes beyond his regular job duties as District Supervisor for the Missouri Department of Conservation. The Scenic Rivers District of the Ozark Region includes several of the largest state-owned lands in Missouri, including Peck Ranch, Angeline, Rocky Creek, and Sunklands Conservation Areas. This District includes some of the most important ecological resources in the State. In addition, the economic context of the Department's forest and recreation programs in this area is significant. Mike's steadfast leadership and dedication to managing these important lands during the Department's reorganization and into the future is critical to its success.

Mike is a true dirt forester grounded in traditional forest management values, but is also ecologically-minded, believing that data and science are the fundamental principles that guide our work. This past year he participated as the primary silvicultural liaison helping guide the development of the interagency “Community Health Index”, a rapid ecological assessment monitoring program being led by the Missouri Department of Conservation, Mark Twain National Forest, and Eastern Region of the U.S. Forest Service. The Community Health Index program seeks to track natural community restoration treatments and their impact to multiple ecological resources, including ground flora, soil disturbance, invasive species, wildlife, and forest resources. In this role, he actively helped the development team craft a program that effectively documents natural community dynamics to support sustainable forest management decisions.

Like many natural resource professions, forestry programs struggle with employee recruitment and retention, often leaving important work left undone. Mike has experienced this issue firsthand and decided to take matters into his own hands. On his own, Mike initiated communications with Universities to develop a workforce development program to recruit undergraduate students for summer positions to help students gain on the ground work experience and build connections between the Missouri Department of Conservation and students studying in the field of forestry. The goal was to provide hands-on forestry experiences and mentorship during their schooling while providing a path for them to compete for permanent positions following graduation. This past year – the first student going through Mike’s program was hired as a permanent team member!

In addition to his dedication to recruit, train and mentor new foresters, Mike accepted several other noteworthy roles in the last year beyond his District. For example: he provides and helps coordinate much-needed on-the-job training for Department foresters not traditionally trained in forestry; is the Forestry Discipline Expert providing quality control of all Forest Management plans in the Ozark Region; and is coordinating the Region’s Continuous Forest Inventory effort which is a cornerstone of Department’s participation in the Sustainable Forestry Initiative.

Mike provides strong direction and advocacy for the wise use of both prescribed and wildfire on his District, supporting fire in the right place, at the right time, and for the right purpose. His calm demeanor, technical acumen, and mutual respect towards others galvanizes the District’s interdisciplinary team toward unified goals. On wildfires, he is quick to make decisions to ensure safe operations which oftentimes requires backing out to utilize existing roads as firebreaks for indirect firefighting operations verses direct. He takes a holistic approach, and when a recent wildfire included several glades (none in an established burn unit), he backed out to the ridges to include those glades, which provided a potentially beneficial outcome to a challenging situation. Mike’s team also pointed out how much he goes above and beyond in his role during a recent wildfire that just wouldn’t die thanks to continuously falling leaves. Mike showed his steadfast

dedication checking on the fire several times late into the night. He wasn't just barking orders; but instead grabbing tools and putting in line. Once the fire was contained, he checked on the site the following Sunday by himself instead of sending his team.

When it comes to prescribed fire, Mike understands the delicate balance between recognizing the benefits of fire in the right place while ensuring we maintain a healthy and thriving forest community. Mike does everything he can to ensure the priority burns get done. He energizes the team to get out and prep lines and sets ambitious goals, supported by the staff, to get high quality and priority burns done. He watches weather windows continuously and ensures good fire days don't slip by. And similar to the wildfire example, a recent situation occurred while checking on an important burn unit on Angeline Conservation Area, which was burned on a Friday. He was the first one there at 7:30am Saturday morning to check the site. He is a considerate leader caring about his team's work-life balance and clearly views his job as a passion, not just a job. Overall, in calendar year 2022 Mike represented the forestry profession in superb fashion. He is a model professional forester that honors the fundamentals of forestry while representing the changing face of our profession in a positive way. He is a holistic manager who promotes management of all biodiversity within the forest matrix. This kind of natural community-based management ensures a diverse ecosystem across some of the highest priority forested landscapes in the state.

## Time to submit nominations for Outstanding Forester and Karkhagne Awards!

It is that time of year again when you get the opportunity to recognize your fellow MOSAF members. The Awards Committee is soliciting nominations for the *Outstanding Forester* and *Karkhagne* awards. Information about the awards can be found on the MOSAF website: <https://www.mosaf.net/awards.html>. Please send your nominations to Jim Barresi our awards committee chair at [jimbo0408@aol.com](mailto:jimbo0408@aol.com). Jim can answer any questions you may have about the awards nomination process. We had some outstanding award winners in the past several years!!





## MOSAF, MCFA Host Joint Fall Technical Tour

*By Lynn Barnickol, MCFA Executive Director*

MOSAF recently partnered with the Missouri Consulting Foresters Association to host a combined two-day long Fall technical tour September 6-7. The meeting covered two different ownerships with widely different management objectives.

Day One convened on Buffalo Ridge Farms LLC near Gerald, MO. We heard from Rich Dreyer, farm owner, who operates a farm-to-table beef operation, and was deep in the process for converting 30 acres of high graded woodland into grassland. Doug Jenkins, owner of Big River Timber Company, showed his fully mechanized Ponzi harvesting system. The objective was to observe the operation and talk with the operators. Doug and his crew made gracious hosts by giving us access to the operation for an afternoon. They liked talking about the operation and demonstrating their skills.

Doug provides a free service to landowners for removal of the merchantable portions of cedars and other low-value trees that many loggers don't typically have markets for. When revenues for the sale of logs exceeds expense and a profit margin the landowner does receive some compensation for the logs. Doug also provides a safe, efficient working environment for his three-person staff. Loggers face long hours in difficult



*MOSAF and MCFA member watch as the Ponzi harvester cuts a cedar tree into logs.*



weather conditions, have a high accident rate and few younger folks want that. Getting employees into protective cabs is a solution. The only chainsaws on site were the saws in the processor heads of two Ponzi harvesters. One Ponzi forwarder followed the two harvesters gathering logs. We also learned about Doug's preferred market of eastern redcedar logs, specifically wood for cedar oils, an essential oil used in expensive fragrances and insect repellents.

Doug's son, Huck, runs the new, \$800,000 Ponzi harvester. Following a two-week training period for becoming familiar with the computer, various controls, and maintenance of the harvester, there is a six-month period of practicing and additional training. Huck likes to demonstrate his skills and a few members rode in the cab with him as he processed both cedar and hardwoods. The Ponzi can process a cedar tree into cut logs ready for loading in a matter of seconds. Hardwood limbs of over three inches in diameter slow the operation considerably. The various trees species processed for stave, grade, tie, pallet, and firewood logs; plus, cedar fragrance, closet lining, and mulch logs are selections the operator makes.

Additionally, the positioning of the processing head that is boom-mounted, evaluating the directing the tree falls, cutting it from the stump, shearing off limbs, and cutting the logs to length are a lot to comprehend. The controls in the cab are a video gamer's paradise. Safety is the goal and having some fun cutting trees in a climate control environment is a way to get younger folks into logging.



*The controls inside the harvester cab are highly computerized.*

Day Two was hosted by Michael Saxton, Manager of Ecological Restoration and Stewardship, at Shaw Nature reserve, near Grays Summit MO. The purpose of the field tour included observing and talk with Michael about his experience in dealing with the Big River Timber Co. mechanized harvesting system, as well as managing native ecological systems.

Shaw Nature Reserve (SNR) is a gift from Henry Shaw, Missouri Botanical Garden, in 1925. Originally the 2,400-acre abandoned farm land was to provide a relief to St. Louis residents to get out of the city's foul air. The tract became an arboretum featuring trees of the world. However, that notion was abandoned and the past 50 years is focused on restoration of healthy ecological systems. There are driving roads and hiking trails that



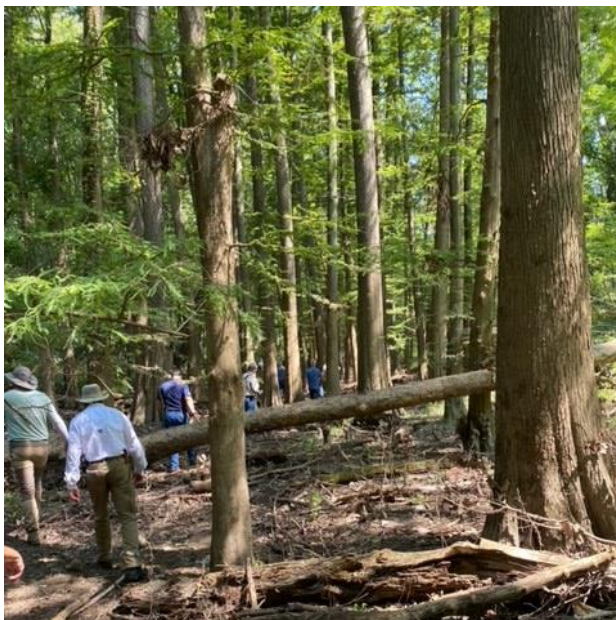
get visitors in touch with area features of prairie, glade, woodlands and bottomland forest.

Matt Arndt, Consulting Forester and owner of Matt's Heathy Woods and Wildlife LLC, was contracted to inventory the 2,400 acres to provide baseline information and qualify the property for cost-share funding. Matt realized that the SNR staff was not the typical landowner who needed considerable advice about their property. Management has been ongoing by experienced staff. Preceding the inventory, a 120-acre area of abandoned farmland that featured steep sided gullies, poorly stocked wooded areas with oaks, hickory, hackberry, bush honeysuckle, and other invasive species had been previously identified as a project area for conversion to savanna and grassland. Large diameter white and red oaks were designated for retention while other oaks and mixed hardwoods were to be removed.

As with the Buffalo Ridge Farm, the landowner is left with the slash. Big River Timber Co. does not shut down operations for wet weather. Rutted roads seemed to be most problematic as insufficient gravel was estimated for road repair. A second issue involved excessively wet soil and getting the harvester stuck. After intense discussion between SNR staff and the company; it was agreed that sufficient gravel and repair of the ruts would be at company expense. Following the harvest, a hi-loader was contracted to pile the slash that was burned. Only a few small piles of charred slash remain.

Now that two years have passed since the harvest, we asked Michael about using the mechanized harvesting system if he had to repeat the process. He admitted that this

was the first time he had contracted and supervised a harvest. He responded that he the learning curve was steep, but would repeat the process.



*Members tour a bottomland forest composed of baldcypress.*

The rest of the tour featured various unique places around the property. The first was a nearly 100-acre upland limestone glade-woodland complex that had been managed with prescribed fire for several years. The complex is situated on a southern aspect but is highly dissected resulting in aspect changes and vegetation type changes. Mapping the complex became a chore of delineating stands, some as small as two and three acres, as required in the inventory contract.



*Members observe a state-champion American sycamore.*

The last tour stop involved a trip to the Meramec River bottoms to see an old air strip, Indiana bat habitat, bottomland forest featuring a baldcypress stand, and potential state Champion sycamore and paw-paw trees. The air strip was made in the late 1930s and remained open for many years but is kept in early successional bottomland species. It was discovered that Indiana bats forage over the air strip. SNR does not manage for specific animal species; the focus is on providing a healthy ecosystem. If animals like the habitat they flourish in it. When given an endangered bat, study it. Sampling bats involved capturing and installing transmitters and use of listening devices to determine the approximate size of the population. A flood on the Meramec River resulted in deposition of a large driftwood pile that later caught fire and partially burned. In addition to the air strip the bats like foraging over the drift pile.

At the end of the day, I asked one member, "What did you think about this tour?" His response was, "It got some folks outside their comfort zone." The tour was a good showing of mechanized harvesting technology and using it for ecological restoration, as well as native ecosystem management.



## 2024 Missouri Natural Resources Conference: “Education: The Key to Conservation Success”

*MNRC to be held Tuesday, February 6 – Thursday, February 8, 2024*

*By Sam Kosark, MNRC 2024 Publicity Chair*

The Missouri Natural Resources Conference (MNRC) is a great example of how innovative research circulates among natural resource professionals. The 2024 MNRC title topic “Education: The Key to Conservation Success” will spotlight the important role that education has in addressing natural resource issues in Missouri and nationwide. As natural resource professionals we are always striving to expand our capacity to make a positive impact and our plenary sessions will focus on meeting that objective. Jody Miles, Co-founder and Co-Executive Director (along with husband Bill Miles) of Earth’s Classroom, Inc. is a leader in natural and cultural resource education in Missouri. Jody will share her perspectives from having worked with over 75,000 participants over the past 23 years. Our second plenary session will be led by Larry Whiteley, the host of Bass Pro Shops Outdoor World Radio for 30 years. His dedication to educating the public about the outdoors is unmatched.

The 2024 conference will have a robust schedule including presentations, workshops, and posters allowing attendees to explore cutting edge research, ask questions, and network with experts in various fields of study. A unique event at this year’s conference will be *The Student and Professional Luncheon* on Wednesday, February 7<sup>th</sup>. This luncheon is designed to help students prepare for a career in natural resources. It will include a panel of professionals that will answer questions gathered from students regarding their work and experiences.

The MNRC steering committee invites all natural resource professionals to not only attend, but to present their efforts at the 2024 conference. Come and participate, educate, and help grow the mission of this conference. Registration is open! Visit [www.mnrc.org](http://www.mnrc.org) to register. See you there!





## MOSAF Fall Business Meeting Minutes (Draft)

**Date:** Tuesday September 6, 2023, 6:15 pm – 7:30 pm

**Location:** Bistro in the Mill Gerald, MO

**Attendees:** MOSAF Members, Guests

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### Purpose

To inform attending members about upcoming events and resolve business items that need to be addressed

### Objectives

- Provide verbal committee reports
- Provide updates from agencies/consulting firms/NGOs/universities
- Discuss Spring technical tour and MNRC
- Discuss bylaws and article of incorporation updates

### Agenda

**1. Welcome:** Michael Bill, MOSAF Chair

**2. Minutes from last meeting:** Angela George read

**3. Treasurers Report:** David Vance

Registration is the only change since February.

Second quarter dues from nationals received.

\$11,159 in checking account

\$121 in savings

Both CDs have about \$19,000 each

Project Learning Tree Account has \$11,500

**4. Announcements**

- Any forestry related upcoming events
  - Tree Farm
  - National SAF
  - Midwest ISA January in St. Louis
  - Walnut Council fall field day Saturday Oct 14 near Richmond.

**5. Committee Reports:** Committee Chairs

- Audit (Megan Buchanan)
- Communications
  - Website (Jon Skinner)
    - Functioning.
    - Can pay registrations online now, which worked well for this tour.
  - Newsletter (Chris Lohman)
    - Deadline for articles is October, always welcome to have content earlier.

- Council, Fellows and Awards (Jim Barresi)
- Education (Mike Goerndt)
- Long Range Planning (John Kabrick)
- Membership (Hank Stelzer)
  - 139 total; 7 new enrollees. Wide range, missing 30–39-year age group.
- Nominating (Sam Kosark)
  - Vote in October.
  - We have one nomination for chair-elect, may have another one on deck
  - Have 1 nomination to run against Angela as secretary.
- Policy and Legislation (Jason Jensen)
  - Supreme court ruled in favor of MDC
  - State fair had a listening session about the upcoming farm bill. MDC had members take a personal tour of the Conservation building, got one on one discussions.
- Program (Kristen Goodrich)
  - MNRC topic needed for the Forestry session (in the afternoon, after the plenary), based on the education theme.
  - MNRC business meeting, then a spring tour. Kristen will not be chair elect at that time, but ideas gathered ahead of time are welcome.
  - Refer to previous suggestions in the Spring 2023 meeting minutes
- Special Funds (David Massengale)
- Tellers (Aaron Moore)
- Forest Science (Lauren Pile)
- MNRC Steering Committee (Jon Skinner)
  - Rates will be \$125 for society early bird, 20 after that.
  - Students are less than cost so they can attend.
  - Encourage SAF members to attend the student lunch.
  - Call for papers will come out soon.
- Historian (Dave Larsen)

## 6. Old Business

- Update on 2023 goals and objectives
  - Michael summarized them, stated we were on track for most. Not much done towards outreach/social media yet.

## 7. New Business

- Planning for Forestry session at MNRC Due in November and the Spring meeting
- Upcoming elections of officers
  - Ballot comes out via email Oct 1, open for 2 months. Electronic voting.
- Upcoming Bylaw and Article of Incorporation update approval process.
  - On Sept 7, a mass email about the changes in the bylaws will come out. The official email Sept 28 will have the vote to accept or reject the proposed update. Vote deadline is Oct 13.

- Michael gave summary of the changes. The board has voted to adopt the bylaws, next step is to be voted on by the membership body. 2/3 of the voting members have to approve.
- Scholarship.
  - Current is \$1,500 and uses the same criteria as the Ed Stegner award.
  - Motion to make it \$3,000. Nate Goodrich moved; Tyler Bradford seconded. Discussion. MOSAF evaluates, so we can give the \$3,000 to the better candidate if the Ed Stegner doesn't go up as well.

## 8. Agency/consulting firm/NGO/university news

- Mark Twain National Forest
- FS Northern Research Station
  - Climate smart project. Study replicates looking at carbon in IN, IL, MO
- Natural Resources Conservation Services
  - Joe Alley, State Forester, took a job in Nebraska as National Agroforester. The State Forester position will be announced soon.
  - 2018 Farm Bill expires Dec 2023. Not a new one in place yet, perhaps spring 2024.
- University of Missouri
- Missouri State University
- Missouri Department of Conservation
  - Community Conservation tiers finalized and approved by admin. CCS approach to focus time and funding on highest priority communities.
  - Applying with partners to use federal grant for ISM and TSI in the priority forest landscapes.
- Missouri Consulting Foresters
- Missouri Forest Products Association
- L-A-D Foundation/Pioneer Forest
  - Jennifer Batson Warren becomes new executive director on October 2nd. Roger Still retired at the end of April.
  - Seeing a lot of red oak mortality; at least 1,000 acres. Aging out. Met with Robbie Doerhoff; ground was covered with "post oak locusts." A native species, they defoliated the canopy, and were especially found around the dying red oaks.
- Missouri Student Chapter of SAF
  - Was mentioned that students may be more able to attend the SAF tours if they fall on a Friday. The spring tour may do a Thursday Friday to accommodate.
- Others?

## 9. Adjourn 7:12pm



***(The following article is for you to share with your local paper. Modify as appropriate for your locality.)***

### **Fallen Tree Leaves – Brown Gold**

Every fall we experience the trees dropping leaves. This is an underused resource. Tree leaves in a forest return biological matter to the soil for use by plants, insects, and animals. In our yards they can also do this. Unfortunately, most leaves in communities are collected by people and disposed of away from the yard or burned. The process eliminates the opportunity of improving your soil with this valuable resource – Brown Gold.



*Fallen tree leaves will return biological matter to the soil for use by plants, insects, and animals..*

Leaves may be used in several ways. You can compost them with other lawn debris and create a great resource for garden beds or newly aerated lawns. You can mow them on the lawn with a mulching mower and allow the fine particles to sift to the soil. Research at Michigan State University in which they used a mulching mower to shred up to about one pound of leaves per square yard of lawn (one pound is equal to approximately 6 inches of leaves piled on the

grass) for five consecutive years, found no long-term effects of the shredded leaves on turf quality, thatch thickness, organic content of the thatch, or soil test results (pH, nutrients, etc.). My favorite thing to do is to rake the leaves around my trees in piles adjacent to the trunk. I let the leaves settle and form my mulch rings. This use simulates the leaf litter in a forest creating a soil environment trees like.

No matter how you use your leaves, using them in your yard will benefit you, and the soil your plants grow in.

The Missouri Society of American Foresters (MOSAF) is a State Society of The Society of American Foresters (SAF). MOSAF and SAF is a professional society dedicated to sound forest management and conservation. To find a forester to help you on your property, contact the Missouri Consulting Foresters Association at [www.missouriforesters.com](http://www.missouriforesters.com) or the Missouri Department of Conservation at 573-522-4115.