



**Missouri Forest Resources Advisory Council**  
**Runge Nature Center**  
**Wednesday, March 2, 2016**  
**Meeting Minutes**

**Welcome & Introductions** – Rebecca welcomed everyone to the meeting and the following were in attendance:

Donna Baldwin, Mo. Dept. of Conservation  
Lynn Barnickol, Mo. Consulting Foresters Assoc.  
Kurt Boeckmann, Dept. of Natural Resources  
Brian Brookshire, Mo. Forest Products Assoc.  
Mike Brown, USDA APHIS PPQ  
Scott Brundage, Mo. Consulting For Assoc.  
Gene Brunk, Mo. Community Forestry Council  
Hank Dorst, EOFC Mark Twain Forest Watchers  
Susan Flader, LAD Foundation  
Gene Garrett, Mo. Center for Agroforestry  
Justine Gartner, Mo. Dept. of Conservation  
Nate Goodrich, USDA NRCS

Jason Green, Pioneer Forests  
Mike Hoffmann, Forest & Woodland Assoc. of Mo.  
Luke Holtschneider, Mo. Dept. of Eco. Dev.  
Matt Jones, Missouri Tree Farm  
Shelby Jones, interested party  
Rebecca Landewe, The Nature Conservancy  
Wayne Lovelace, Forrest Keeling Nursery  
Stuart Miller, Mo. Dept. of Conservation  
Kelly Smith, Mo. Farm Bureau  
Hank Stelzer, Univ. of Mo. Dept. of Forestry  
Jerry Van Sambeek, USFS No. Research Ctr.  
Collin Wamsley, Mo. Dept. of Agriculture

**Review & Approve Minutes** – Lynn Barnickol asked if anyone had changes to the minutes from the December 2, 2015, meeting. With no changes noted, Gene Brunk made a motion to approve the minutes as written; the motion was seconded by Nate Goodrich. The minutes were then approved as written.

**Old Business** – the following updates were presented:

**MU SNR Committee** – Jason Green updated everyone on when the letters sent on behalf of MoFRAC to the director of the School of Natural Resources and Dean Payne. He reported he received a response from Dr. Josh Millsbaugh and Dean Payne, and that the letter essentially explained that the College is exploring 3 options of accreditation: Forest Resource Management General Accreditation, Natural Resource and Ecosystems Management, or both. The letter also states that the College is "optimistic (they) can maintain an accredited Forestry program at MU and will continue in this direction".

Hank Stelzer further updated the group on the four positions that the natural resources school has open. He noted that SNR offers a B.S. in Forestry (BSF). National trends in student enrollment in BSF programs have been in decline. Within SNR, forestry students account for about 8% of undergraduate enrollments. Currently 64 students are seeking BSF in one of four emphasis areas: forest resource management, urban forestry, forest resources and entrepreneurship, and individualized studies. He noted that about 1/3 of the BSF students are enrolled in the dual degree program. MU has graduated an average of 16 students with a BSF per year over the past 5 years.

Hank explained that given a heightened research emphasis at MU, faculty departures and challenges with delivering undergraduate curricula, and long term fiscal constraints, SNR has initiated a strategic planning process to strengthen the long term viability, efficiency, and effectiveness of their research, teaching, and extension programs. SNR faculty has approved

restructuring the School to focus on three areas of strength: Environment and Society, Terrestrial Ecosystems, and Water Resources. Within this context, they will streamline their curriculum programs by integrating core course requirements across SNR, while maintaining discipline-specific courses to maintain the standards of the programs. SNR restructuring will allow MU to immediately meet the faculty member standard set forth by SAF by including faculty contributing to the forestry curriculum from across SNR. Further, it offers the potential for accreditation of the Natural Resources and Ecosystem Management (NREM) track, which is similar to the popular dual degree in Forestry and Fisheries/Wildlife Sciences.

Several options are under examination: 1) Maintain general forestry accreditation of the forest resource management emphasis area 2) Seek NREM accreditation 3) Both

Faculty and administrators within SNR leadership are proactively engaging students, alumni, administrators, employers, and other stakeholders in exploring the viability of all three options in preparation for the 2017 SAF program review and renewal. He added that the SNR advisory committee will meet next Friday.

Mike Hoffmann asked about University Forest and facilities. Hank noted that it is up for sale. Marie will be moving June 30<sup>th</sup>. Unfortunately, Hank feels that if left vacant, the buildings will be a target for vandalism. He noted the residence is falling down, would need a lot of work, and the other properties are deteriorating.

MoFRAC member survey - Rebecca Landewe thanked everyone for taking the survey and summarized the results. Overall, everyone was positive about value these meetings provide. Rebecca noted she needs future meeting topic suggestions. She asked the group if they feel the roundtable updates at the end of the meetings are helpful, and if this is the best way to share updates, or would email updates be better? Jerry Van Sambeek noted he prefers to hear updates here as compared to email updates; Shelby asked why not do it both ways? Gene Garret added that updates are good, but should not be a "travel log". Mike Hoffmann suggested they send updates in advance and they can be inserted directly to the minutes.

Rebecca also noted it was suggested that MoFRAC host more workshops and explore partnership opportunities at other events. Rebecca noted it was suggested USFWS come present on bats; Rebecca got an update from them and has summaries available. Also another update on the Clean Water Act – Rebecca has the fact sheets. Can also find on their website.

Job Opportunities Website - Gene Brunk noted that at the last MoFRAC meeting, we recommended to MoSAF that they host a job availability board on their website and they have agreed. Jon Skinner is drafting an internal policy on what will be posted, but SAF didn't see an issue with it. It was approved at the business meeting in February. Job postings will have to be forwarded to Jon.

**Legislative Update** - Brandon Butler provided an update on currently legislative proposals that impact natural resources. He noted you can find the updates on their website at [www.confedmo.org](http://www.confedmo.org) – "Legislative Action Center" shows bills that seem to be gaining momentum. He reviewed several that CFM opposes:

- HB1412 and HB1411 – both have to do with captive cervids. Haven't had a hearing yet; hope they won't have traction to move forward.
- HB1529 – MDC pays \$500 if you hit a deer; hasn't had a hearing. Doesn't seem to have much support.

- HB1374 – MDC responsible to damage done by otters. Doesn't seem to have much support.
- HB1846 – changes the laws regarding resident landowner permits. Expands landowner licenses to include all immediate relatives of the owner or leasee. Hearing completed on Feb 15, hasn't come out yet.
- HB2047 – allows ATV's and golf carts on the Katy Trail for certain individuals on certain days/times. Had a hearing, hasn't come out of Committee.
- HB1790 – allows ATV use on CA's.
- HB2405 – has to do with water rights. So far hasn't moved out of committee.
- Brandon noted that there is controversy with DNR's purchase of land. HB2187 and 1011 requires DNR to sell the property they acquire on the Eleven Point River. Passed the house 117/33. Now it goes to Senate. Will likely pass, Governor will veto it. Legal challenges. Rally this weekend against the park, counter rallies planned. Contentious issue.
- SJR19 – expands the Conservation Commission – this is the fifth time in 6 years it has been filed. Would double the size of the Commission to 8 according to MDC regions. He noted it came out of committee with a proposal of 9; now we're down to 6.

Bills that CFM supports:

- Bill to increase penalties on poaching deer, turkey, elk, bear. Current penalties are just not enough. Went to committee, is being held up. Hope it goes to the floor. If it goes through, Judge will still have final authority to set penalty, but gives them a ceiling.
- Feral hogs – the Senate and House recognizes it's an issue. HB1873 and SB617.
- State Park tax renewal – will be on ballot in November.

**New Membership Organization** – Rebecca noted we have received a request to add a new member group: the Department of Economic Development (DED). Brian Brookshire made a motion to approve the new member group. It was seconded by Scott Brundage, and unanimously approved. Rebecca introduced Luke Holtschneider, the designated representative for DED. Rebecca welcomed Luke to the Council.

**New Forestry Considerations from the Emerging Science of Soil Health** – Stuart Miller gave the following report:

Soil management and farming in particular should model itself on natural systems such as what is found in forests and prairies. Conservation managers are uniquely prepared to understand the importance of keeping soil in place and maintaining healthy soil conditions. Soil and water conservation is the foundation of ecological resiliency and management success.

Aldo Leopold wrote the health of the land is the ultimate goal of conservationists. That health is dependent upon the resiliency and productivity of the soil. In years past, conservationists spoke of protecting the watershed.

Today, we would add maintaining soil health is directly linked to water quantity and quality. Healthy soil is a primary reservoir for water that supplies streams, wetlands and ground water. Water is essential for conservation. Conservation is essential for water. Healthy soil is the tie that binds conservation to everything else.

## **An Ecological Approach to Soils**

### **Hypothesis 1:**

Soils, plants, associated biota and landscapes co-evolve through geologic time.

### **Hypothesis 2:**

Life as we know it depends upon stable, healthy soils in dynamic equilibrium with their environments and uses.

### **Hypothesis 3:**

Healthy soil is a primary reservoir for water that supplies streams, wetlands and ground water.

### **Hypothesis 4:**

We need an ecosystems-based approach to farming to ensure soil health, sustainability, profitability and environmental health.

### **Soil health is based on nine principles of ecology:**

- Acknowledge the physical and chemical limits of an ecosystem, the soil ecosystem
- Population dynamics are at work and there needs to be a minimum number of species and enough biomass in the soil ecosystem for the population to survive and thrive
- Habitat quantity and quality are needed for soil organisms, just as much for wildlife and forest productivity. One leads to the other
- Connecting habitats is essential for movement of organisms and their resources
- The success of landscape conservation is influenced by the quality of the watershed
- Biodiversity enhances ecosystem resilience and productivity. Pull one string of the ecological system and the whole system vibrates.
- Climate and water play a significant role in soil genesis, soil resiliency and soil health
- Human impacts to habitat, such as soil erosion affect future resiliency and productivity of soils
- Soil genesis is critical for ecosystem function and resiliency.

### **Soil Health has 5 rules:**

- Minimize soil erosion
- Maximize organic matter production
- Maximize soil microbial populations and diversity
- Maximize water infiltration, percolation and retention in the soil
- Minimize compaction

### **Barry Commoner's 4 Basic Rules of Natural Systems**

1. Everything is connected to everything else.
2. Everything has got to go someplace.
3. There is no free lunch.
4. Nature bats last.

Donna Brandt, Research Specialist at Soil Health Assessment, also gave the following update on MU's Soil Health Lab:

- Soil health lab grew from the Soil Characterization Lab and has been in operation since 1984. Located now at the South Farm, College of Agriculture, Food, and Natural Resources.
- Soil functions: produce biomass, regulate water flow and storage, filter, buffer, and transform matter; store minerals, organic matter and myriad organisms; support for

plants and structures; provide raw material; provide clue to past climates, vegetation, ecology and civilizations.

- Wet aggregate stability – measure soil's ability to resist erosion, promote water filtration, hold water to reduce drought effects, promote root penetration, cycle nutrients, support traffic on wet soils.
- Bulk density – measures the degree of compaction, evaluates degree of root restriction, allows conversion of soil weight to soil volume
- Soil pH – chemical breakdown
- Phospholipid Fatty Acid Analysis – estimates soil biomass, approximates community composition; indicates stressed organisms, sample must be kept cool or frozen, sensitive to time of year.
- Clientele – researchers, land managers, consultants, etc.
- Why get a soil analysis? Determine soil limitations, evaluate soil properties, etc.
- Cost can be found on website. <https://cafnr.missouri.edu/soil-health/>

**Membership List Review** – Rebecca noted that when reviewing the designated members and alternates list, Donna reported it might be time to review the list. Remember, the official member representatives are entitled to vote on motions, or their alternate votes in their absence. Donna distributed a list of the member organizations with their members and alternates listed, as well as a copy of the MoFRAC bylaws. She reported that Mike Hoffmann was active in creating the original bylaws and may be able to provide insight. Mike noted that the original intent for approving member organizations was meant to be inclusive, not restrictive. Scott Brundage made a motion to assign a committee to review the bylaws. Nate Goodrich seconded the motion, and all were in favor. Rebecca will appoint a committee to review the bylaws.

#### Roundtable Partner Updates, Meetings, Events

- **Dept of Economic Development** – Luke reported he has been with DED for eight years now. Has worked with industry, and is now the rural development liaison. He looks forward to working with MoFRAC and will look for opportunities to assist the group.
- **MU Department of Forestry** – Hank Stelzer noted they will be hosting a couple upcoming events: the Central Hardwoods Conference (March 28-April 1) and the Midwest Forestry Conclave (April 16). He also noted they are looking for internship opportunities for students, and he will visit with Justine Gartner later. He is also working with the Department of Elementary and Secondary Education's agriculture instructors to revamp the curriculum. Foster Bros has sold their harvesting equipment, so 100% of their supply is coming from wood residue. Asks that the MU committee draft a letter of support for the directed hire in environmental and soil chemistry. Scott Brundage also encouraged the member organizations to write a letter to MU voicing their support of MoFRAC's recommendation.
- **Pioneer Forests** – Jason noted they've been selling timber; they have been logging every day unless it gets too wet.
- **Missouri Consulting Foresters Association** – Lynn Barnickol noted they met last week and it was a good meeting. Have a field day set for March 14 at 8:30 AM Pea Ridge Conservation Area.
- **Missouri Department of Conservation** - Justine Gartner reported they have awarded 169 grants to volunteer fire departments to purchase equipment; MDC's match is around \$392,000. We also awarded TRIM grants, funding 43 projects, for both big and small communities. MDC received the Biological Opinion from the US Fish and Wildlife Service on Indiana bats, and can move forward with five timber sales in the Northeast Region that

were put on hold. She also reported on several vacant positions. Justine reported that the revisions to the Forest Crop Land program, to be called Missouri Managed Woods, will go through the MDC regulations process as the rules for managing the program are housed within the Wildlife Code. Forestry took our proposal to the Regulations Committee at the end of January 2016 for their approval. Lisa Allen will meet with Division Chiefs today to look at final changes, and the next step is to take it to Commission, who will vote on the changes. If they vote to accept, it will go for public comment. Hopeful we will move forward in MDC FY17.

- **USFS No Research Station** – Jerry encouraged everyone to attend the Central Hardwoods Conference, where emphasis is on long term research studies. It will include a tour of Missouri Forest Ecosystem Project area.
- **Department of Natural Resources** - Kurt Boeckman reported that on March 1, Gov. Jay Nixon announced that \$750,000 will be made available to landowners to implement conservation practices that improve stream corridors and habitat in five counties in southeast Missouri and five counties in southwest Missouri. The funds for southeast and southwest Missouri are available from a settlement to compensate for natural resources injured by the historical mining activities of ASARCO. In addition, funds from a settlement to compensate for natural resources injured by the release of hazardous substances at the Newton County Wells Site are available in southwest Missouri. Funds will be available to assist with planting trees, shrubs and grasses; fencing livestock away from stream corridors and providing an alternative water supply; stabilizing eroding stream banks; and, in southwest Missouri, improving and protecting karst habitats. Soil and water conservation districts in Barry, Barton, Jasper, Lawrence and Newton counties in southwest Missouri will approve contracts for the settlement funds with landowners through voluntary cost-share conservation practices in designated watersheds.
- **USDA APHIS** - Mike Brown reported the agency continues to work with industry for quarantine for emerald ash borer. They are doing outreach efforts to mills to help them understand how they can work within the regulations. There will also be on-going surveys.
- **Missouri Department of Agriculture** - Collin Wamsley noted they are getting ready for another year of surveys. They are currently advertising for seasonal positions – you can find them on the website at [www.agriculture.mo.gov](http://www.agriculture.mo.gov). He added that the gypsy moth Slow the Spread program has been very successful, looks like they have taking some funding cuts. Just be aware and support where you can. More information on this program can be found at [www.gmsts.org](http://www.gmsts.org).
- **American Tree Farm** – Matt Jones noted that in Missouri, we voted to become a certification program by PEFC. The annual conference will be April 29 & 30.
- **Natural Resources Conservation Service** – Nate Goodrich reported they are hiring a cooperative forester for the Ozark Highlands Restoration Project who will work with the National Wild Turkey Federation. The position was filled but is vacant again. Nate added that he attended the Mid Mo Soil Health Expo yesterday. He added that the real evidence of advantage of cover crops is from the landowner testimonials. However, be aware of quick fixes promoted by some businesses.
- **Forest and Woodland Association of Missouri** - Mike Hoffmann reported he is the new executive director and is excited about leading the organization. He is currently looking for ways to broaden the membership.
- **Eastern Ozarks Forestry Council** - Hank Dorst noted we have all experienced the frequency of extreme weather events. He commented on agreement in Paris to address climate change. He noted observed streambank erosion and questioned the possible link to changes in storm severity and frequency. He commented on the previous soil health

presentations and noted the historical soil loss and more research is needed on the use of prescribed fire as a factor impacting soil development.

- **Missouri Nurseryman's Association** - Wayne Lovelace reported the Missouri Nurserymen are supporting several native plant sales this year with part of the proceeds benefitting Grow Native and the MO Prairie Foundation.
- **The Walnut Council and other Fine Hardwoods** - Scott Brundage reported that on April 1-2 there will be a workshop, which will include a visit to a stave mill and Tree Farm. He will send the information to Donna to distribute.
- **Center for Agroforestry** - Gene Garrett is engaged in doing outreach for the Center for Agroforestry. This year they have worked on several patents, including the Bucks Unlimited oak. Mark your calendar for the following field days and events: July 25 – 29 – Agroforestry Academy, catering to people interested in starting small farm operations; September 16 – Event partnering with Hammons Walnut; September 23 – Specialty crop field day; October 8 – Chestnut Roast – last year the event was attended by 2000 people
- **Missouri Farm Bureau** - Kelly Smith has been working on the Soils and Parks Tax. The citizens committee has been working since August on language for the ballot. The title will be Amendment 1 and they are moving forward on promotional materials. He has been meeting with Soil and Water Conservation Districts around the state about the tax renewal. The vote is anticipated to be on the November ballot, but could possibly be moved to August.

Rebecca noted the next meeting is scheduled for June 8<sup>th</sup> back at Farm Bureau; agenda tentatively includes an NRCS update and an RWOM update. Send Rebecca other agenda items.

With no further business, the meeting was adjourned.