SNR MONTHLY READER

Quachita National Forest, Arkansas
**DIRECTOR MARKET – SNR ACTIONS**

- Attended Newly Promoted & Tenured Faculty Reception (recognizing Chung-Ho Lin, Sarah Lovell)
- Attended and presented at the SNR Advisory Council meeting and the Career Panel
- Attended the week-long Food Systems Leadership Institute hosted by North Carolina State University, Raleigh
- Attended and gave remarks at the 30th Anniversary Celebration for the Lakes of Missouri Volunteer Program (LMVP)
- Attended the fall meeting of the Prairie Fork Coordinating Committee at the Prairie Fork Conservation Area
- Met with Amberly Nowak, CAFNR Communications, and SNR Associate Director Sonja Wilhelm Stanis to discuss the redesign of the CAFNR website
- Met with the Director’s Faculty Advisory Council (DFAC) to give the call for reviewing applications for the Preparing Future Faculty – Faculty Diversity Postdoctoral Program (PFFFD)
- Met with the Search Committee for the Director of the Center for Agroforestry Position

**HONORS AND AWARDS**

The MU Collegiate Soil Judging Team competed in the Region V contest in Spirit Lake, Iowa and won 2nd place in team judging. Alex Kalisz, a junior in Environmental Science, scored 2nd place in the individuals contest.

The MU team is made up of students from Environmental Science (Alex Kalisz, Rosie Garza, Isaac Reinwald, Madisyn Branch, Lauren Clasbey, V Marshall, Paige Simpson, Grayson Alexander), along with three plant scientists (Sophia Short, Pierce Taylor, Randi Noel), and one geologist (Wesley Clarkston).

The team is coached by Kerry Clark (pictured right) and assisted by Joey Meinert. The competition included teams from Iowa State, South Dakota State, Kansas State, and the Universities of Minnesota, Nebraska-Lincoln and Nebraska-Omaha.

The students saw a variety of soil types in this glacial region of northwest Iowa, including a rare vertisol and many mollisols over unweathered glacial till. They discovered that this part of Iowa has hundreds to thousands of miles of extremely straight roads with not a single curve to be found anywhere. They saw giant buried glacial erratics and moraines firsthand and learned the importance of corn to the state of Iowa.
The MU soil judging team’s next competition is April 12-17, 2023 in Modesto, California. In fall 2023, the Region V contest will be held in the Black Hills of South Dakota. For students wishing to join the soil judging team, contact Kerry Clark at clarkk@missouri.edu or Alex Kalisz at akalisz@mail.missouri.edu. All academic disciplines are welcome to join and the team is particularly seeking freshmen and sophomores who can build skills over their college careers.

Soil judging skills are vital to careers in agriculture, natural resources and geology. In soil judging, students learn to determine major soil morphological characteristics that affect human usage of soil such as crop growth and road and building construction, along with the support from soil in creating habitats for forests and wildlife. Students with soil judging skills are highly sought after by employers working in natural resource management.

Top Right: Lauren Clasbey (left) determines soil color while Pierce Taylor (right) uses his sense of touch to quantify clay and sand levels. Bottom Right: Alex Kalisz (left) and Isaac Reinwald (right) working on soil morphology, taxonomy, and interpretations at Iowa. Top Left: The MU team competes in a soil pit with the University of Minnesota. Bottom Left: Wesley Clarkson determines site slope while Pierce Taylor sits deep in thought at the edge of a glacial moraine.

PRESENTATIONS/PUBLICATIONS/RESEARCH HIGHLIGHTS

L-R: Dr. Christine Li (Assistant Professor), Cristhian Restrepo (graduate student in Parks, Recreation, and Tourism), and Miles Bradford (undergraduate student in Human Dimensions of Natural Resources Management) presented a poster presentation at the 51st North American Association for Environmental Education in Tucson, Arizona. (Submitted by Dr. Christine Li).


**Sam Carter** (right), PhD student, gave a talk at CAFNR Research Day entitled “Indigenous People, Land, and Resource Rights.” It is also noteworthy that this month she presented on “Legal Narratives Surrounding Cannabis in Indian Country” at the Mercer Law School Symposium on *Legal Narratives and the Law’s Potential for Justice and Injustice*.

Several other SNR graduate students presented posters at the CAFNR Research Symposium: L-R: Angela Catalano, Jessica Wilson, Elizabeth Rodgers.
The Eye of MOFLUX is Always Watching

From dawn to dusk, the “Eye of MOFLUX” is always watching, taking a picture of the forest every half hour. The “Eye of MOFLUX” is actually a CCTV camera configured to monitor canopy phenology—and is known as a “PhenoCam” in the scientific community. Phenology is the study of cyclic biological phenomena, especially in relation to climate. Data are extracted from the images and analyzed to calculate indices of greenness and redness that can in turn be analyzed to determine the timing of green-up and senescence. In 2022, we noted a later than usual spring green-up, and more brilliant than normal fall colors.

Researchers across the globe use this approach and contribute to the PhenoCam network (https://phenocam.nau.edu/webcam/). Every time a PhenoCam takes a picture, the data are transmitted automatically to servers at Northern Arizona University, the home of the PhenoCam Network. Data are available to anyone who registers to be a data user, free-of-charge.

Users can view/download raw images, and data products that report color indices and estimates of start/end of season dates. If you’re interested in learning more, visit the PhenoCam website. The MOFLUX PhenoCam ID is “missouriozarks”.

For more information, contact Jeff Wood (woodjd@missouri.edu)
Dr. Damon Hall, Co-Director of the Missouri Water Center, helped launch its website https://water.missouri.edu/ after starting work on it in January 2022. For the complete story from its beginning: https://showme.missouri.edu/2022/mu-announces-creation-of-the-missouri-water-center/
IN MEMORIUM

Lee Charles Redmond, 1963 SNR graduate of Lohman, Missouri, passed away at the age of 83 due to heart failure, September 20, 2022. He worked for the Missouri Department of Conservation (MDC) for 37 years as a fishery research biologist, fisheries management supervisor, and as an assistant fisheries division chief before his retirement in 2000. He was widely recognized as an expert in the art and science of warmwater fisheries management. He implemented size limits on lakes throughout Missouri, played a major role in establishing one of the first urban fishing programs in the nation, drafted the original Municipal Lakes Program for the state of Missouri, which evolved into the highly successful Community Assistance Program, and worked successfully to provide additional federal funds to states for sport fishing, and used those funds for Missouri to initiate a new stream program that became known as Streams for the Future. Lee authored and co-authored several papers as well as organizing national symposia on the subject, and contributing a chapter in a book entitled, “Reservoir Fisheries Management – Strategies for the 80’s”, a summary of a National Symposium on the Managing of Reservoir Fishery Resources. Meanwhile, he practiced what he preached and went fishing. Lee was also a leader in the American Fisheries Society (AFS). He was one of two SNR graduates who became president of AFS. He joined the Society in 1962, became a certified Fisheries Scientist in 1972, and a lifetime member in 1981. He was a Charter Member of the Missouri Chapter where he served as Secretary-Treasurer for 2 years. He served as President of the North Central Division from 1989-1990 where he established an Urban Fishing Committee. And he was President of AFS from 1994-1995. He served two years as Associate Editor of the North American Journal of Fisheries Management. One of his lasting legacies as President was to establish three new awards to recognize individuals, groups, agencies, or companies that advanced aquatic resource conservation at the national or international level. He was rewarded by the American Fisheries Society for his time and efforts by many awards; including: an Award of Excellence, a Distinguished Service Award, a Meritorious Service Award, the Fisheries Management Section’s Award of Merit, and was elected to the Fisheries Management Hall of Excellence in 2001. In his circle of friends, employees, and cohorts, he became known as “Mr. Fish Management.” In Missouri, the local chapter of AFS renamed their one of their awards the “Lee Redmond Citizen’s Award” which is given annually to persons making substantial contributions to Missouri's aquatic resources. This “pat on the back” echoed Lee’s philosophy of freely dispensing wisdom and encouragement, and giving credit where credit is due. It’s a lasting message to all of us. Lee was a good administrator but was not an advocate of the clean desk group. But, just like me, he stacked his papers high. To the point that a visitor said to him, “Is this a recycling center!??” Lee Redmond was: a good friend to us all, a gentle and kind person, a true, great, and successful conservation warrior, a good example for his employees of service, scientific rigor, and friendly, gentlemanly conduct, a leader in the field of fisheries management in Missouri, throughout the Midwest, and anywhere warmwater fishes swim, and a leader in the American Fisheries Society. And, on top of all that a really fun person to be around. (Submitted by Joe Dillard.)
SNR students and faculty are benefitting from classroom enhancements focusing on health and well-being. In recent weeks, classrooms have been transformed through the addition of plants (including a living wall in Room 123), light covers, sit-stand desks, wobble stools, foot rockers, fidget toys, and framed photographs taken by members of the SNR community. Funding for these enhancements was secured by Robin Rotman and Sonja Wilhelm Stanis and was awarded by the MU Provost’s Office. Many thanks to Sam Carter, Melissa Jones, and other graduate students who helped with the assembly and installation! (Submitted by Robin Rotman.)
The Fisheries and Aquatic Sciences Society (FASS) participated in a stream team biomonitoring. FASS is the student subunit of the American Fisheries Society (MOAFS) at the University of Missouri. As stream team #442, FASS conducts a water quality monitoring event once or twice a year for a section of Grindstone Creek, a tributary of Hinkson Creek. Water quality monitoring included sampling of aquatic macroinvertebrates, stream discharge and water chemistry. Volunteers included Emile Ellingsworth (Senior, Biological Sciences), Caleb Ellingsworth, Jacob Mertes (Senior Natural Resource Science and Management), Ricky Zhau (Freshman Environmental Science), and Emily Tracy-Smith (Graduate Student Fisheries and Wildlife).

Undergraduate students from the MU Fisheries and Aquatic Science Society (FASS), graduate students, post docs, and research staff from SNR volunteered with Missouri River Relief for the “Missouri River Days” program. This year’s program provided experiences on the Missouri River for an estimated 1,000 4th grade students from Columbia, MO, with 250 students per day at Cooper’s Landing Campground & Marina. SNR volunteers presented multiple activities for the Meet a Fisheries Biologist station. Students got up close and personal with live fish and crayfish, learned about fish ecology and some of the equipment and methods used by biologists, and had the opportunity to meet with scientists with a variety of backgrounds. For more information about Missouri River Relief education programs: https://riverrelief.org/programs/river-education/

Left photo: Hunter Weidenborner with Fyke net and Hoop net display.
SNR River Relief volunteers pictured L to R: Wesley Fitzsimmons, Devyn McGregor, Katherine Cullinane, Ashley Hrdina.

The SNR Monthly Reader will be distributed electronically the last working day of the month (except during breaks). Please send announcements (or if you’d like to unsubscribe) to Cindy Greenwood, Editor (greenwoodci@missouri.edu).