

Action in Agroforestry

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Dr. Ashley Conway Receives 2020 SARE Grant

This summer, Dr. Ashley Conway and fellow researchers at UMCA, in collaboration with the Missouri Forage and Grasslands Council and other departments across MU, were granted \$249,731 over the next three years from the USDA Sustainable Agriculture Research and Education (SARE) North Central Region for their Research and Education project proposal. This project, titled "Investigating



the Potential of Woodland Silvopasture Systems: Prevalence, Practices, Perceptions and Performance," will work to address this growing area of interest among producers in the Midwest.

A total of 153 preproposals were reviewed for the SARE grant. Only 34 preproposals were invited for development into full proposals and of those, 13 were ultimately funded.

Dr. Ashley Conway, UMCA Assistant Research Professor of silvopasture, has expertise in integrated crop-livestock systems and grazing systems research, and animal science (ruminant nutrition). Dr. Conway will serve as the project's Principal Investigator. Dr. Michael Gold and Dr. Zhen Cai will also act as coprincipal investigators. Faculty partners will include Dr. Dusty Walter, Dr. Harley Naumann, Dr. Allison Meyer, Dr. Eric Bailey, and Hannah Hemmelgarn.

The primary goals of the project aim to address major questions about the current level of silvopasture practiced among Missouri producers, what producers feel the biggest barriers to adopting silvopasture are, and what the ecological and economic impacts of establishing a woodland silvopasture might be for our temperate region. Specifically, the project will:

- Evaluate current livestock grazing practices in wooded areas, perceptions of silvopasture, and potential for adoption among livestock owners.
- Utilize information gathered from the survey to develop a peer-learning network (PLN) among livestock producers in Missouri
- Evaluate a designated research site for baseline ecosystem measurements prior to silvopasture conversion, and monitor metrics for three years during the conversion process.
- Evaluate the economic costs of converting woodland silvopasture and estimate the value of the forage produced.



Over the course of this project, researchers hope to learn more about what livestock producers in Missouri need to improve the long-term sustainability of their land and their operation, and investigate if woodland silvopasture is a viable option here to help reach these goals.

Pictured: Dr. Ashley Conway; Cattle grazing in a silvopasture system at MU's Wurdack Research Center.

Join Us for the Annual Missouri Chestnut Roast!

Each fall, the University of Missouri Horticulture and Agroforestry Research Center (HARC) hosts the Missouri Chestnut Roast, a seasonal celebration and HARC field day. Due to the COVID-19 pandemic, this year's event will take place entirely online, on Saturday, October 3rd.

While we won't have an opportunity to enjoy the smell of freshly roasted chestnuts or the feel of a cool autumn breeze (you can certainly take part in those sensations on your own!), we will still offer a complete line-up of educational seminars, demonstrations, and a virtual field tour. Also included in this year's event is a *virtual* scavenger hunt with fabulous prizes from our Chestnut Roast vendors. Attend the Chestnut Roast live on October 3rd at the MU Horticulture and Agroforestry Research Center Facebook page, or at <u>https://harc.missouri.edu/</u>.

The recorded videos will also be available on the MU College of Agriculture Food and Natural Resources YouTube channel. To participate in the scavenger hunt raffle, submit by the end of the day on October 3rd. Further instructions will be available during the virtual field day.

Dr. Sarah Lovell, UMCA Director, Featured as a Guest Speaker at the Tree of Life Seminar Series

Hosted by the Iranian Society of Landscape Professionals (ISLAP) and the University of Tehran, the first section of the Tree of Life Series focused on the topic of Agricultural Landscape and took place on September 2 & 9, 2020. The webinar series is a joint effort aiming to examine the complex human-natural systems through the lens of landscape approach.

View Dr. Lovell's seminar lecture: https://www.youtube.com/watch?v=_C0kr_llXxA

Read full event details: https://ut.ac.ir/en/news/12401/tree-of-life-landscape-webinar-series



Recent Publications

Revord, R. S., Lovell, S. T., Brown, P., Capik, J., & Molnar, T. J. (2020). Using genotyping-by-sequencing derived SNPs to examine the genetic structure and identify a core set of Corylus americana germplasm. *Tree Genetics & Genomes*, *16*(5), 1-11. https://doi.org/10.1007/s11295-020-01462-y

Bayati, M., Numaan, M., Kadhem, A., Salahshoor, Z., Qasim, S., Deng, H., Lin, J., Yan, Z., Lin, C-Ho, de Cortalezzi, M.F. Adsorption of atrazine by laser induced graphitic material: an efficient, scalable and green alternative for pollution abatement. Journal of Environmental Chemical Engineering (2020). doi: https://doi.org/10.1016/j.jece.2020.104407

Navdeep, S., Kumar, S., Udawatta, R.P., Anderson, S.H., de Jonge, L.W., Katuwal, S. **Grasslands conversion to croplands impacted soil pore parameters measured using x-ray computed tomography.** Soil Science Society of America Journal (2020). doi: https://doi.org/10.1002/saj2.20163

Congratulations to Van Ho, a UMCA PhD student, on her job offer from the MU Department of Chemistry Nuclear Medicine Program. Van will be working as a postdoctoral scientist on theranostics of cancer and inflammation.

Congratulations to Dr. Sarah Lovell and Dr. Zhen Cai for being awarded a USDA National Institute of Food and Agriculture grant, \$186,656, for their proposal "Multifunctional Perennial Cropping Systems for local food and biomass production for small farmers."

Congratulations to Dr. Sarah Lovell for being awarded a USDA National Institute of Food and Agriculture grant, \$151,603, for her proposal "Multifunctional woody polyculture for integrating conservation and production."

UPCOMING EVENTS

Local Food Sustainability: Keeping Your COVID 'Bump' Going

September 17, 2020 | 7:00-8:00pm | Cornell Small Farms Program | Free Webinar

COVID -19 has had a lot of negative impacts on our lives and the economy, but one silver lining has been strong interest in and demand for locally produced foods. How can a local producer sustain growth in revenue even as consumers return to their normal stores, and go online more than ever before? CCE Lewis is partnering with Harvest NY, REBOOT LC and Coughlin to bring local food producers valuable tools and resources they need to enter the world of online sales and marketing.

https://events.cornell.edu/event/keeping_your_covid_bump_going?utm_campaign=widget&utm_medium=widget&utm_so urce=Cornell

Understanding Access to Federal Assistance for Natural Resource Conservation on Working Lands

September 17, 24, & October 8, 2020 | NCAT | Free Webinar Series

This three-part series is supported by the Natural Resources Conservation Service and the National Center for Appropriate Technology. This webinar is intended to give farmers and ranchers a basic understanding and familiarity with the Conservation Assessment Ranking Tool (CART), including how CART can be used to evaluate their operations for conservation assistance and funding consideration, and how they can request an assessment. <u>https://register.gotowebinar.com/register/711289874181944590</u>

Women Caring for the Land Learning Circle

September 21, 2020 | 1:00-3:00pm | Women Food and Ag Network | Free Virtual Discussion

Women landowners are invited to a virtual learning circle discussion to learn more about ways you can make changes to improve the long-term value of your farm while maintaining short-term profitability for your farm tenant. https://wfan.org/events/2020/9/21/women-caring-for-the-land-learning-circle?amp%3Bqid=

Scaling Up Pastured Livestock Production

September 23, 2020 | 12:00-1:00pm | FACT | Free Webinar

Join us to learn more about what it would take to scale up pastured meat production on your operation. Our presenter is Franklin Egan, PhD, Director of Education with Pasa Sustainable Agriculture. He will share the results of a new study called *Scaling Up Pasture Livestock Production* which was produced in partnership with 10 pastured livestock farms in Pennsylvania and explores how much land and feed it takes to produce a pound of grass-finished beef, pastured pork, or pastured chicken. Lessons learned will help farmers to improve their yields and bottom line. <u>https://www.anymeeting.com/AccountManager/RegEv.aspx?PIID=EF52DB8887483C</u>

Establishing a Pecan Orchard

September 24, 2020 | 6:30-8:30pm | Noble Research Institute | Free Webinar

This course will cover all of the necessary details to prepare landowners/managers to start a pecan orchard.

Participants will learn: how to properly select the orchard location for successful pecan production, how to design the appropriate orchard layout for management goals, the importance of variety selection to ensure proper pollination, and important considerations when designing an orchard layout. <u>https://attra.ncat.org/event-calendar/establishing-a-pecan-orchard/</u>

Elderberry Processing and Market Opportunities Webinar

September 29, 2020 | 12:00pm CDT | Savanna Institute | Free Webinar

Join us Terry Durham of River Hills Harvest and Chris Patton of Midwest Elderberry Cooperative as they discuss elderberry processing for commercial and small scale use, food safety compliance with GAP and FSMA, retail direct marketing opportunities for new and existing growers, wholesale/contracted berry and/or flower sales opportunities. <u>http://www.savannainstitute.org/events.html</u>

Women Food & Ag Network: Growing Community Resilience

September 30, 2020 | 4:00-6:00pm | Cornell Small Farms Program | Free Webinar

Growing Community Resilience will take place Wednesday, September 30th from 4-6PM CT on Zoom. This event is an opportunity for community building through anti-racism and food justice work during the time of COVID-19. We will continue our discussions about land reparations and models for collective land ownership. We are all coming to the table with different experiences, expertise, skillsets, insights, and resources, and this will be a space for us to bring what we have to the table in order to continue identifying avenues of collective action.

https://events.cornell.edu/event/wfan_growing_community_reslience?utm_campaign=widget&utm_medium=widget&utm_m_source=Cornell

Virtual Missouri Chestnut Roast

October 3, 2020 | MU Horticulture and Agroforestry Research Center | Free Online Event

This year, the Horticulture and Agroforestry Research Center will host a virtual version of the annual Missouri Chestnut Roast. The event will feature a virtual tour of the research center, informational seminars, agroforestry practice tutorials, and a virtual 'scavenger hunt' with prizes from our Chestnut Roast vendors. https://calendar.missouri.edu/event/missouri_chestnut_roast_894?utm_campaign=widget&utm_medium=widget&utm_source=Mizzou+Events#.XzISbvhKi8p

Scaling Up Pastured Poultry Production

October 7, 2020 | 4:00-5:00pm | FACT | Free Webinar

This interactive webinar that will provide you with the tools necessary to make informed farm scale decisions based on both financial viability and quality of life goals. Topics will include cost-benefit analysis, cash flow analysis, and holistic decision-making. <u>https://www.anymeeting.com/AccountManager/RegEv.aspx?PIID=EF53DA84804731</u>



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