



# Action in Agroforestry

January 2020 Vol. 12, No.1 Michael Gold and Hannah Hemmelgarn, editors

## Searching for Silvopasture Questions & Answers

Previous work done by researchers at UMCA has explored several unique aspects of silvopasture systems, including cattle performance; forage productivity in shade; nutrient content of various fodder species; and ecosystem impacts, such as water quality and insect populations. In August of 2019, Dr. Ashley Conway joined the Center for Agroforestry at the University of Missouri to build on these findings as the new silvopasture faculty researcher.

Dr. Conway quickly observed the substantial interest and opportunity among Missouri landowners to enhance their land utilization with silvopasture, particularly with regards to woodlands. Small farms are the heart and soul of Missouri's agriculture. According to the USDA 2017 census, the average farm size in Missouri was 291 acres, and over 90% of Missouri's farmers are economically "small farms". Cow/calf pairs make up nearly two thirds of the state's 6.5 million cattle. Although not every cattle operation has wooded areas, census data suggest that the majority of Missouri farmers who raise cattle on more than 10 acres will pasture cattle in their wooded areas if these places exist on their farms. Additionally, producers with smaller acreage will be more inclined to graze livestock in wooded areas, likely to maximize their more limited land base to maintain productivity.



Grazing livestock, particularly cattle, in woodlands has been generally discouraged by both forest and livestock advisors due to the potentially damaging effects on the woodlands coupled with (at times) poor animal performance. However, management is the key between a detrimental woodland grazing situation and a productive, holistic and beneficial silvopasture system. The opportunity to promote silvopasture as a solution to unmanaged woodland grazing is substantial in Missouri.



While previous research has shown the potential of silvopasture in a variety of production situations, very little work has been done to understand how best to convert and manage a woodland silvopasture system. This has made it difficult to provide the best recommendations to producers who are interested in adopting this type of system. Producers require useful answers to practical questions with scientific support. The development of a silvopasture research program at UMCA, rooted in trying to answer these questions, is Dr. Conway's top priority. Looking forward to the years ahead at UMCA, conducting applicable and realistic research to meet producer needs is both exciting and critically needed.

*Pictured: left, a silvopasture edge along an existing wooded area; above, cattle have the option to select shaded areas during high heat days.*

## Job Announcements

The Savanna Institute is currently seeking qualified candidates for a variety of positions listed in the table below. All qualified applicants are welcome; farmers and members of under-represented groups are encouraged to apply. Detailed information and application requirements are available at: [www.savannainstitute.org/jobs](http://www.savannainstitute.org/jobs).

Job Title	Application deadline
Farm Intern (Illinois)	February 17 <sup>th</sup> , 2020 (11:59pm CT)
Director of Partnerships	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Business Analyst	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Farm Partnership Broker	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Event Coordinator & Support Specialist	February 17 <sup>th</sup> , 2020 (11:59pm CT)
Tree Crop Germplasm Specialist	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Elderberry Commercialization Lead	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Tree Crop Breeder	March 2 <sup>nd</sup> , 2020 (11:59pm CT)
Postdoctoral Research Associate: Carbon Sequestration & Biochemistry	February 17 <sup>th</sup> , 2020 (11:59pm CT)
Postdoctoral Research Associate: Landscape Analysis & Land Use Planning	February 17 <sup>th</sup> , 2020 (11:59pm CT)

## KUDOS

### Recent Publications

Chowdhary, G., Gazzola, M. Krishnan, G., Soman, S., Lovell, S. 2019. Soft robotics as an enabling technology for agroforestry practice and research. *Sustainability*. 11:6751. doi:10.3390/su11236751

## UPCOMING EVENTS

### 11<sup>th</sup> Annual UMCA Agroforestry Symposium

January 30, 2020 | 8:30am – 6:00pm | University of Missouri Bond Life Sciences Center, Columbia, MO

This year's Agroforestry Symposium will focus on value-added processing for Missouri agriculture and forestry products. The keynote speaker, Lt. Governor Mike Kehoe, will be joined by knowledgeable presenters including Kiruba Krishnaswamy, Assistant Professor of Food Science and Bioengineering at the University of Missouri; Brian Hammons, President of Hammons Black Walnuts; Sara Low, Associate Professor of Regional Economics at MU; Nikola Macpherson of Ozark Forest Mushrooms, and many more. The symposium is free and open to the public, but advanced registration is requested, required for lunch:

<http://www.centerforagroforestry.org/events/symposia.php>

### Food Tank 2020 Summit: The Wisdom of Indigenous Foodways

January 22, 2020 | Swette Center for Sustainable Food Systems | Scottsdale, AZ

Traditional indigenous knowledge is not front and center in most food system transformation conversations, and this needs to be rectified according to Food Tank, with the Swette Center and the Sustainable Community Food Systems Program at the University of Hawaii West O'ahu. The summit will feature native voices in three hours on biodiversity, wild foods, landrace property rights, inspiring models of strength and innovation within indigenous communities, and much more. The summit will be livestreamed free online at

<https://foodtank.com/events>.

## **Agroforestry in Action Webinar: The Appalachian Harvest Herb Hub**

*January 23, 2020 (rescheduled from December 18) | 11:00am CST | Center for Agroforestry | online*

If you missed last month's webinar date, you're in luck; the scheduled date was postponed. Katie Commender will present on the Appalachian Harvest Herb Hub: Empowering Plant Conservation through Profitable Cultivation on January 23<sup>rd</sup>. Register for the webinar at <https://agroforestryinaction.wixsite.com/agroforestryinaction> to receive the login link. Past webinars are also available on this site.

## **Nutshell Webinar with Matt Wilson: Goals and Site Evaluation**

*January 28, 2020 | The Savanna Institute | Online webinar*

Nutshell webinars are live, online discussions with experts on practical topics in agroforestry and perennial agriculture. Limited space is available; registration and more details are available at [www.savannainstitute.org/events.html](http://www.savannainstitute.org/events.html). Matt Wilson is the Small Farm Production Advisor at Grow Appalachia, and will share insights in this webinar about goals and site evaluation for agroforestry planning.

## **Missouri Nut Growers Association Annual Meeting and Nut Show**

*February 7-8, 2020 | Missouri Nut Growers Association | Jefferson City, MO*

The MNGA annual meeting will take place at the Conservation Employees Credit Union (2901 W. Truman Blvd., Jefferson City, MO), with introductions, nut show results and awards, a season harvest report and marketing roundtable, and presentations. Presenters include Ron Revord, detailing hazelnut and pecan research at the Center for Agroforestry; Lupe Rios with a grafting demonstration; Rachel Owen sharing about the MU Soil Team and National Contest; and Doug Wallace, on soil health for nut growers. More information and RSVP at <https://missourinutgrowers.org/news>.

## **Nutshell Webinar with Keefe Keeley: The Power & Opportunity of Agroforestry**

*February 11, 2020 | The Savanna Institute | Online webinar*

Nutshell webinars are live, online discussions with experts on practical topics in agroforestry and perennial agriculture. Limited space is available; registration and more details are available at [www.savannainstitute.org/events.html](http://www.savannainstitute.org/events.html). Keefe Keeley, Co-Executive Director of the Savanna Institute, will share in this Nutshell about the impact and opportunities in agroforestry.

## **Midwest Cover Crops Council Annual Conference**

*February 11-12, 2020 | Midwest Cover Crops Council | KCI Expo Center, Kansas City, MO*

The 2019 Annual MCCC Meeting (Feb. 11) and Conference (Feb. 12) will host numerous workshop sessions on crop production, livestock and grazing, environment and economics. Opportunities for networking and learning include a poster session, panels, seminars, and vendor exhibits. More information is available at <http://mccc.msu.edu/about/meetings/>.

## **Midwest Organic & Sustainable Education Service Farming Conference**

*February 27-29, 2020 | MOSES | La Crosse, WI*

The Midwest Organic Farming Conference brings together farmers of all kinds to learn the latest organic production methods and build a supportive community with resilient sustainable farms. The weekend is packed with informative workshops, organic food, a bookstore and exhibit hall, roundtable sessions, and social gathering. More information and registration at <https://mosesorganic.org/conference/>.

## Great Lakes Indigenous Farming Conference

*March 5-8, 2020 | White Earth Land Recovery Project | Callaway, MN*

The 17<sup>th</sup> Annual Indigenous Farming Conference is focused on “Living the Good Life through Knowledge and Community” *Mino-Bimaadiziwin-Gikendaasowin-Oodenang*. Early bird registration is open until February 7<sup>th</sup> at <https://www.welrp.org/indigenous-farming-conference/>. Included in the program is the 3<sup>rd</sup> Annual Indigenous Hemp Conference, March 4<sup>th</sup>, also at the Maplelag Resort in Callaway, Minnesota. For IFC questions, call 218-375-2600 or email [IFC@welrp.org](mailto:IFC@welrp.org). There are limited scholarships available for elders, locals, tribal members and students.

## Midwest School for Beginning Apple Growers

*March 6-8, 2020 | UW-Madison Center for Integrated Agricultural Systems | Madison, WI*

This is an intensive three-day course demonstrating what it takes to set up and run a successful orchard business. The unique program combines knowledge from experienced growers and UW faculty, with opportunities to understand a holistic approach, and to network and learn from fellow orchardists and entrepreneurs. More information and registration at <https://www.cias.wisc.edu/midwest-school-for-beginning-apple-growers/>.

## Soil Health Innovations Conference

*March 30 – 31, 2020 | National Center for Appropriate Technology | Bozeman, MT*

The National Center for Appropriate Technology (NCAT), with USDA Rural Development, Western Sustainable Agriculture Research and Education (SARE), and Montana State University, are cosponsors of the 2020 Soil Health Innovations Conference. Leading experts and innovative farmers from around the US will share the latest in soil science, best practices, and emerging technologies that are driving sustainable and regenerative agriculture. Topics include connections between soil and human health, large scale management for soil health and water management, regenerative grazing, biology based soil testing, markets for soil carbon sequestration, and much more. Information and registration is available at <https://soilinnovations.ncat.org/>.

## Elderberry Mentoring Workshop

*March 14, 2020 | 8:00 a.m. – 4 p.m. CST | Central Missouri, Location TBD*

The Elderberry Mentoring Workshop is a one day, hands-on workshop led by River Hills Harvest founder Terry Durham. This workshop has a limited class size to ensure individual attention for all participants. Covers elderberry production, past present and future, prune plants, make cuttings, and sample elderberry products. Participants will plant their own flat of 18 plants to take home! Delicious snack and lunch included. More information and registration at <https://www.riverhillsharvest.com/elderberry-mentoring-workshop>