



# Action in Agroforestry

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Hannah Hemmelgarn & Kelsi Stubblefield, editors

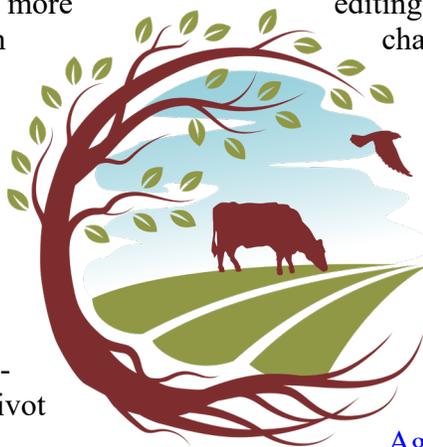
## Welcoming the New Year & Reflecting on 2020: A Review Letter from UMCA Director Dr. Sarah Lovell

We welcome in the new year with fresh optimism and renewed commitments to rigorous scientific inquiry and social justice to guide our efforts. The past year has been a trying one, but I've never felt more inspired and hopeful than I do now, after witnessing the resilience and adaptability of our UMCA team. The global pandemic that created enormous challenges also accelerated transitions to new approaches and technologies that will serve us into the future. Racial injustices brought a new sense of urgency and commitment to prioritizing diversity, equity, and inclusion in our work. We all feel that our efforts have great potential to contribute to positive change, helping to create a more climate resilient agricultural system that contributes to human health and the economic vitality of communities.

Before looking forward, I would like to reflect on just a few of the many accomplishments of the UMCA faculty and staff from the past year. Most notably, Dr. Chung-Ho Lin led his research team in a pivot to pandemic response, through the monitoring of coronavirus in wastewater. The enormous surveillance project they implemented, covering 80 community water sources, is the largest program of its type in the US (and likely the world)! Our two newest faculty members, Dr. Ashley Conway and Dr. Ronald Revord were each awarded substantial competitive grants. Other faculty, Dr. Ranjith Udawatta and Dr. Zhen Cai, committed to teaching new courses that support critical gaps in the curriculum within our academic unit. Dr. Mark Coggeshall rejoined our faculty on a part-time basis to further strengthen our specialty crops breeding

efforts. Dr. Michael Gold coordinated graduate programs that currently serve 18 online MS, 9 online certificate, and 17 on-campus students.

Our staff members have expanded their roles and developed new skills. Hannah Hemmelgarn organized our entire outreach program, covering the duties of what would typically be accomplished by two people. Caroline Todd has provided the administrative support necessary to keep all of our research programs running, even during periods of supply limitations and virtual communication challenges. Cheryl Recker learned new skills in filming and video editing, allowing us to release a new YouTube channel – Mizzou Agroforestry.

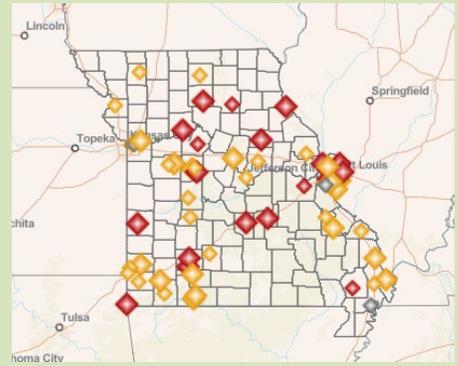


For 2021, we embrace new plans and goals. Guided by our new Strategic Plan "*Pathway to 2030*" new research themes will be emphasized: climate resilience, human health from specialty crops, livestock integration, and others. We will launch a new website with updated content and a user-friendly interface (as well as an entirely new look)! Our [Agroforestry Symposium](#) will be a free 3-day virtual event, January 28-30, with nationally recognized speakers. The Agroforestry Academy will evolve into a hybrid format, adding fresh online content to complement in-person farm visits and discussions. And season two of the Agroforestry Podcast will roll out a new episode each month. You can stay updated on all of our programs and events by subscribing to our monthly e-news at [www.CenterforAgroforestry.org](http://www.CenterforAgroforestry.org). We look forward to seeing you again in this coming year!

~Sarah

# Statewide Dashboard for SARS-COVID2 Wastewater Surveillance Launches on January 5, 2021

Genetic material from the virus that causes COVID-19 can be present in human waste even when individuals display no symptoms. By collecting weekly samples from wastewater treatment plants and other sewer access points, researchers can track the amount of viral genetic material (viral load) in wastewater. Since infected persons may not display symptoms for several days, and some never display any symptoms, this method of testing can provide early awareness of new or worsening outbreaks and is an emerging method of monitoring the virus in communities.



The dashboard is the product of collaboration from The Missouri Department of Health and Senior Services (DHSS), Department of Natural Resources (DNR) and researchers at the University of Missouri – Columbia, including UMCA’s own Dr. Chung Ho Lin.

A news release regarding the dashboard can be found [here](#).

**View the dashboard [here](#).**

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## Extension Specialist Position Available at North Carolina A&T State University

North Carolina Agricultural & Technical State University provided the following description for the Extension Specialist position:

The Extension Specialist will provide educational leadership in the development, implementation, management, and evaluation of research based, integrative statewide Extension programs that meet the needs of limited-resource and socially disadvantaged audiences. Deliver training and educational support materials for ANR agents and their clientele/customers in natural resources, consistent with the philosophy, policy and overall mission, goals and educational objectives of the Cooperative Extension at North Carolina A&T State University. This position works both individually and collaboratively to plan, deliver, and assess the effectiveness of Extension programs relating to production agriculture, *agroforestry*, pond management and small-scale irrigation technologies. Secures external research funding for programs to engage underserved and limited-resource audiences in the revitalization and profitability of small farms and managed woodlands.”

**Learn more about the position and apply [here](#).**

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## Two Grant-Funded Positions Available with MANRRS

MANRRS (Minorities in Agriculture, Natural Resource, and Related Sciences) is expanding their National Office team.

Two positions are currently available: [University Relations Coordinator](#) & [Jr. MANRRS Coordinator](#).

Both positions are *grant-funded positions for 2-years. Although the grant is expected to end in 2022, the hope is that additional funding will be obtained to extend employment.*

Apply for the University Relations Coordinator position [here](#).

Apply for the Jr. MANRRS Coordinator position [here](#).



# KUDOS

## Recent Publications

Lovell, S.T., Garrett, H.E. 2021. **Agroforestry: The North American Perspective**. Annotated Bibliography in the “Environmental Science” module. Oxford University Press: Oxford Bibliographies. DOI: 10.1093/obo/9780199363445-0130. Available online: <https://www.oxfordbibliographies.com> (Subject Environmental Science, access to full article requires subscription).

**Congratulations** to Dr. Chung Ho Lin, Co-PI for the recent award of \$2 million in NIH U01 funding for the project “Determination of the patient and sewershed factors that modulate SARS-COV-2 RNA detection from wastewater” which will take place between 2021 and 2023. You can learn more about this important COVID monitoring project at the [wastewater surveillance dashboard](#).

## UPCOMING EVENTS

### Missouri Woodland Steward Winter Webinars

*January 12-February 16, 2021 | 7:00 - 8:30pm | University of Missouri Extension | \$30-\$40 Webinar Series*  
Occurring every Tuesday evening from mid January to mid February, MU Extension natural resources specialists are providing 6 sessions on various forestry and wildlife topics for landowners. Cost: \$30 for 3 sessions, or \$40 for all 6. Register at <https://extension.missouri.edu/events/missouri-woodland-steward-winter-webinar-series> or contact Havens at [havenss@missouri.edu](mailto:havenss@missouri.edu) or 573-247-3082. ADA accommodations are available.

JAN 12 – Getting to Know ‘The lay of your land’: Online Resources and More!

JAN 19 – Basic Tree Identification

JAN 26 – Right Tree, Right Place: Planting Native Trees & Shrubs

FEB 2 – Selling Timber: What the Landowner Needs to Know

FEB 9 – Have Your Cake and Eat It Too: Managing Your Woodlands for Timber and Wildlife

FEB 16 – Invasive Plants: Real Threats to Tomorrow’s Woodlands

### PASA Sustainable Agriculture Conference

*January 19-February 5, 2021 | PASA Sustainable Agriculture | Annual Conference*

PASA's **Sustainable Agriculture Conference** is one of the largest gatherings of sustainable farmers, food system professionals, and changemakers in the nation. The 2021 conference features more than 90 sessions and more than 100 speakers. The keynote speaker is Robin Wall Kimmerer. The pre-conference over the course of two weeks includes more than 30 live sessions on production-focused topics. The main conference includes 50 live and on-demand sessions, social and networking events, and virtual exhibits.

<https://web.cvent.com/event/091ee4c7-21fc-47fd-9541-07b655656e49/summary>

### EcoFarm Conference

*January 20-23, 2021 | Ecological Farming Association | Annual Conference*

The 41st **EcoFarm Conference**, “ReImagining Our Future,” will feature inspiring keynotes, educational workshops, skill-building pre-conferences, extensive networking, a virtual trade show, and more. The event will be presented on a virtual platform called Hopin, which emulates an in-person conference experience that allows attendees to “hop in” to events throughout each day. <https://eco-farm.org/conference>

## **Annual Agroforestry Symposium: Community Health and Resilient Food Systems**

*January 28-30, 2021 | University of Missouri Center for Agroforestry | Free online event*

In response to the ongoing challenges we collectively face at this time, including the coronavirus pandemic, climate change, and inequities in social, environmental, and economic realms, the University of Missouri Center for Agroforestry seeks to share and support creative solutions. Sustainable food and agriculture systems exemplified by diversified agroforestry practices yield outcomes that can have a positive effect on each of these challenges. From healthy, accessible food that supports disease-resistant bodies, to innovative strategies for strong local economies, and community engagement for improved equity and awareness, the 2021 Agroforestry Symposium will highlight inspiring efforts and leaders who are paving a way to comprehensive community wellness. More details and registration can be found at

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

## **Development of the Agricultural Conservation Planning Framework (ACPF) and Use by NRCS for Watershed Planning**

*January 28, 2021 | 3:00pm | NRCS | Free Webinar*

Nutrient and sediment losses from agricultural watersheds have impacts on U.S. aquatic and marine ecosystems. Improving agricultural water quality requires planning and voluntary installation of new conservation practices through producer engagement. To help meet this challenge, ARS scientists in Ames, Iowa, have developed the Agricultural Conservation Planning Framework (ACPF) to provide watershed databases and software tools that can be used to present realistic options for placement of conservation practices that can improve water quality outcomes. <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/ceap/?cid=nrcseprd1576043>

## **Emerging Farmers Conference**

*January 29-30, 2021 | Annual Conference \*Registration Free for Farmers*

The annual **Emerging Farmers Conference** serves to advance the success and sustainability of farmers who traditionally face barriers to the education and resources necessary to build profitable agricultural businesses. This innovative conference focuses primarily on the needs and interests of farmers of color and immigrant farmers, and supports their contributions to local economic development and building healthy communities. The 16th annual conference will be virtual and free to farmers, with the theme "Reclaiming our Voices: For Farmers, by Farmers, with Farmers." <https://emergingfarmers.org/>

## **Nutshell Conversations: Value-Added Products Webinar**

*February 9, 2021 | 6:00 - 7:00 pm | The Savanna Institute & The Center for Agroforestry | Free Webinar*

This free, live webinar, will feature Michael Gold of the University of Missouri Center for Agroforestry and Jeff Hake of Funks Grove Heritage Fruits & Grains discussing opportunities for value-added agroforestry products.

<https://www.savannainstitute.org/event/webinar-value-added-products/>



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