



Action in Agroforestry

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Michael Gold and Hannah Hemmelgarn, editors

Agroforestry Field Day Honors Doug Allen Legacy

An Agroforestry Field Day "*Entrepreneurship with Native Plants and Specialty Crops*" was held in unseasonably cold weather on Saturday, April 7, 2018 at the Doug Allen project site in Gravois Mills, MO. The event focused on agroforestry, native plants and specialty crops. Sixty five hardy souls attended despite the cool weather.



SNR Director Dr. Shibu Jose spoke on Doug Allen's legacy and the vision for the property as a future research and demonstration site for sustainable land use strategies for farmers and landowners across the Ozark region. Gene Garrett, UMCA founder and former Director, offered some words in remembrance of Mr. Allen.

Patricia Barrett, MU Extension and coordinator of the Grow Your Farm Program, spoke on agribusiness opportunities and business planning. Chef Ben Hamrah of [Peachtree Catering](#)

spoke about his passion for using native plants and specialty crops in many menu creations and his commitment to and experience sourcing from local producers. A delicious lunch of braised pork belly ([Patchwork farms](#)) and beef ([Missouri Legacy Beef](#)), which also incorporated locally harvested nettles, golden glow plant, wild leeks (ramps), pawpaw, black walnuts and pecans, was certainly a highlight of the day.

Phil Wages, [Wages Brew Co](#), West Plains Missouri, spoke about using Missouri grown specialty fruits and nuts, while a freshly tapped batch of chestnut ale was sampled.

Ben Duffield spoke about his experience building a successful business growing and selling native plant seeds. Hannah Hemmelgarn, UMCA, gave an overview of permaculture design principles and offered ideas on applying these design principles and incorporating specialty crops into participant's plans for their own sites.

Producers and entrepreneurs included:

[Forrest Keeling Nurseries](#), [River Hills](#)

[Harvest](#), [Blue Fox Farm](#), [Barnes Roots & Herbs](#)

[LLC](#), [Missouri Herbs](#), [Wood Hat Spirits](#), [Piney River Brewing](#), [Teeter Creek Herbs](#), [Prairie Birthday Farm](#) and [Missouri River Bluff Foods](#).



New Publications

1. Jose, S., Gold, M.A., Zamora, D. 2017. Regional Summaries – Midwest. *In: Agroforestry: Enhancing resiliency in U.S. agricultural landscapes under changing conditions.* M.M. Schoeneberger (Editor); G. Bentrup (Editor); T. Patel-Weynand (Editor). Gen. Tech. Report WO-96. Washington, DC: U.S. Department of Agriculture, Forest Service. <https://doi.org/10.2737/WO-GTR-96>
2. Cercioğlu, M., S.H. Anderson, R.P. Udawatta, and S.I. Haruna. 2017. Effects of cover crop and biofuel crop management on computed tomography-measured pore parameters. *Geoderma* 319:80-88.
3. Dosskey, M.G., Brandle, J., Bentrup, G., Bell, A.C., Brantly, S., Chambers, A., Elevitch, C., Gold, M., Griffin, J., Havens, K., Jose, S., Sauer, T., Udawatta, R., Zamora, D. 2017. Reducing Threats and Enhancing Resiliency. Chapter 2. *In: Agroforestry: Enhancing resiliency in U.S. agricultural landscapes under changing conditions.* M.M. Schoeneberger (Editor); G. Bentrup (Editor); T. Patel-Weynand (Editor). Gen. Tech. Report WO-96. Washington, DC: U.S. Department of Agriculture, Forest Service. <https://doi.org/10.2737/WO-GTR-96>
4. Kadhem, A., Xiang, S., Nagel, S., Lin, C.H., Fidalgo de Cortalezzi, M. 2018. Photonic Molecular Imprinted Polymer Film for the Detection of Testosterone in Aqueous Samples. *Polymers* <https://doi.org/10.3390/polym10040349>
5. Kassotis, C., Vu, D., Lin, C.H., Cornelius-Green, J., Patton, S., Nagel, S. 2018. Endocrine Disrupting Activities and Organic Contaminants Associated with Oil and Gas Operations in Wyoming Groundwater. *Archives of Environmental Contamination and Toxicology* <https://doi.org/10.1007/s00244-018-0521-2>
6. Mori, G.O., M.A. Gold and S. Jose. 2017. Specialty crops in temperate agroforestry systems: Sustainable management, marketing and promotion for the Midwest region of the U.S.A. Montagnini, F. (ed.). *In: Integrating landscapes - Agroforestry for biodiversity conservation and food sovereignty.* Springer.

KUDOS

Congratulations to Mason Schellenberg (Biological Engineering), UMCA student worker, who received two job offers as Research and Development Engineer at Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School. Mason has been working with UMCA scientists and collaborators to develop 3D printing and modeling techniques for development of bioreactors. With his enthusiasm and knowledge of programming (e.g., GCode, MATLAB), material engineering, and 3D printing technologies, the team has successfully developed more than 15 different carbon and polymer based 3D prototypes for its' enzymatic continuous-flow systems that have potential application for biofuel production, conversion of blood types into universal blood, and purification of urine to drinking water.

UMCA students and scientists presented their findings in 14 projects at the **2018 MU Life Sciences Week**, on topics ranging from “Developing phytoremediation technology using *Pseudomonas putida* and Poplar for restoring the petroleum contaminated sites” to “Anti-inflammatory activities of fifteen black walnut cultivars (*Juglans nigra*) in human U937 macrophages”.

UPCOMING EVENTS

2018 Sixth Annual Agroforestry Academy

July 22 - 27, 2018 | University of Missouri campus, Columbia, MO | Univ. of MO Center for Agroforestry

The 6th annual Agroforestry Academy will take place July 22-27 this year in Columbia and surrounding field sites. This is a week-long training that includes integrated classroom workshops, multiple on-farm visits, hands-on demonstrations and content integration into practical on-farm agroforestry planning and design. Full scholarships are available to veterans, women, and minorities. More information at <http://centerforagroforestry.org/academy/2018/RegistrationBrochure.pdf>

More upcoming events!

Managing Forest Resources: TSI, Forest Farming and Mushroom Cultivation Workshop

10:00am – 4:00pm | April 24, 2018 | Wurdack Research Center, Cook Station, MO | MU Extension

This event, presented by The Center for Agroforestry, the University of Missouri Extension's Woodland Steward Program, will feature hands-on learning opportunities for tree identification, crop tree selection, introduction to forest farming, and techniques for growing and marketing shiitake, oyster, and wine-cap stropharia mushrooms. For more information and registration, contact Lindsey Hethcote at HethcoteL@missouri.edu or 573-775-2135.

Comprehensive Elderberry Workshop

June 14 - 16, 2018 | The Carver Center, Jefferson City, MO | Midwest Elderberry Cooperative

The New Growers Workshop will take place on June 14, followed by the Comprehensive Workshop and Field Tour on June 15-16. Terry Durham & the Midwest Elderberry Cooperative team thrive on helping growers learn all they need to know about growing elderberries safely and profitably. The Workshop brings together over a hundred growers annually to share best new-knowledge from horticulture research to marketing, pests, fertilization, and regulations.

More information at <http://www.midwest-elderberry.coop/events.html>

Missouri Society of American Foresters Spring Meeting

April 18 – 19, 2018 | Baskett Research Center, Ashland, MO | Missouri SAF

The theme of the Spring Meeting is Forestry Education at MU: Opportunities for professional engagement. Learn about some of the activities that forestry students are doing at the Baskett Research Center. Interact with the students and assist them with a student-led thinning exercise. Test some maple (MUple) syrup produced by forestry students at the Baskett Research Center and try your hand at axe throwing! For more information and registration, contact John Kabrick at jkabrick@fs.fed.us or 573-875-5341 ext. 229.

Agroforestry in Action Webinar “Economic and Marketing Considerations for Specialty Crops”

Free online webinar at 11:00am CDT | May 2, 2018 | University of Missouri Center for Agroforestry

Presentations in this webinar series explore topics in agroforestry from North America and around the globe, showcasing examples of excellence in practice and research. Live webinars are presented on a monthly basis and are free and open to all. Please see the schedule of upcoming webinars and register in advance to participate on the link provided below. Dr. Zhen Cai, economist with the University of Missouri Center for Agroforestry, will present on “Economic and Marketing Considerations for Specialty Crops in Agroforestry Systems”. <https://agroforestryinaction.wixsite.com/agroforestryinaction>



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