UMCA WELCOMES...
This fall The Center for Agroforestry is welcoming many new faces. Say “hi” to:

*Chris Bobrick, Ph.D. student, Forestry, studying “Spatial modeling of biomass availability.” Advisers are Hong He and Shibu Jose.

*Brandon Casady, Ph.D., Life Sciences/Forestry, studying redcedar phytochemicals. Adviser is Chung-Ho Lin.

*Marissa “Jo” Daniels, M.S., Forestry, studying “Landowner willingness to supply biomass and impacts of public subsidies.” Adviser is Francisco Aguilar.

*Cammy Drost, M.S., Soil, Environmental and Atmospheric Sciences, studying “Role of root exudate compounds for herbicide degradation.” Adviser is Chung-Ho Lin.

*Jie Gao, M.S., Parks, Recreation and Tourism, studying “Assessing agroforestry attributes that enhance the recreational appeal of farmland.” Adviser is Carla Barbieri.

*Shannon Heinze, M.S., Plant Sciences, studying “Propagation of nut trees and woody species.” Adviser is Michele Warmund.

*Dandan Huang, M.S., Forestry, studying “Quantifying aquatic and terrestrial sediment loading in a dynamic urbanizing watershed of the central U.S.” Adviser is Jason Hubbart.

*Michael J. Maw, M.S., Plant Sciences, studying “A comparative analyses among annual and perennial bioenergy production systems.” Advisers are Felix Fritschi and Randy Raper (ARS).

*Phillip Mohebian, M.S., Forestry, studying elderberry marketing and consumer research. Adviser is Francisco Aguilar.

*Jordan Prindle joins UMCA as a research specialist at the Horticulture and Agroforestry Research Center, New Franklin.

SPECIALTY CROPS FIELD DAY AND FESTIVAL SEPT. 24-25
The Center for Agroforestry is co-sponsoring a new field day and festival in western Missouri! The Specialty Crops Field Day and Santa Fe Trail Food and Wine Festival will be Sept. 24-25 at Fahrmeier Farms near Lexington, Mo.

Friday, Sept. 24, is the Field Day, 8:30 a.m. to 2 p.m. Prospective growers are encouraged to attend to learn about agroforestry crops; establishing a vineyard; fruit crops; and market farming. Lunch will be provided; registration is free. Register at: http://iccve.missouri.edu/events/specialty-crops-register.php

Friday a VIP Wine Dinner will begin at 6 p.m. Tickets are now available for purchase online at: http://www.brownpapertickets.com/event/129778

The Festival will be held 11 a.m. to 5:30 p.m. Saturday, Sept. 25. Participants can sample Missouri wines, see local chefs in action, and learn more about wine and local cuisine. UMCA will be roasting fresh, Missouri-grown chestnuts at the event.

Area specialty crop vendors can reserve booth space by going to http://iccve.missouri.edu/events/vendor-brochure.pdf

For more information about the events, go to http://iccve.missouri.edu/events/
OUTREACH
A group of Chinese scientists visited both the MU Southwest Center (July 10) and the MU Horticulture and Agroforestry Research Center (Aug. 2). Tour leaders, including Andy Thomas (SW Center), Gene Garrett and Chung-Ho Lin (HARC), introduced the visitors to research by The Center for Agroforestry. The scientists are from the Vegetable Research Institute of the Shandong Academy of Agricultural Sciences in Jinan.

RESEARCH

Anaerobic soil conditions created during flood events may alter soil chemistry. Increased concentrations of phenolic compounds and decreased soil inorganic nitrogen may occur, with subsequent negative effects on seed germination and seedling growth. We investigated these relationships under greenhouse conditions using simulated floods with stagnant, flowing or intermittent flood waters. Results suggest that flooding may affect subsequent regrowth of floodplain vegetation due to changes in soil chemical properties. However, further study is needed to determine if flooding affects soil polyphenolics and inorganic nitrogen under actual field conditions and to identify the types of polyphenolics formed and their possible effects on seed germination and root growth.

IMPACT

Researchers investigated the effects of agroforestry and grass buffers on removal of nonpoint source pollution using six mini watersheds instrumented with H flumes, water samplers, and flow measuring devices with and without buffers at HARC. The study shows that buffers filter significant quantities of runoff, sediment, and nutrients coming from grazed pasture before the water enters water bodies as compared to watersheds with no buffers. Results of the study indicate that buffers, as a protective measure, can help reduce soil erosion and nutrient losses from pastured land and thereby protect water quality.

The Center for Agroforestry recently signed a formal Memorandum of Understanding with National Sun Yat-sen University, Kaohsiung, Taiwan. Chung-Ho Lin has worked with the Taiwanese university.

COMING SOON...
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>Sept. 24-25</td>
<td>Specialty Crops Field Day &amp; Santa Fe Trail Food and Wine Festival&lt;br&gt;Fahrmeier Farm, Lexington (details, pg. 1)</td>
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<td>Oct. 16</td>
<td>Missouri Chestnut Roast, 10 a.m.-4 p.m.&lt;br&gt;HARC, New Franklin</td>
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<td>Oct. 21</td>
<td>UMCA Faculty/Staff Meeting, 2 p.m.&lt;br&gt;HARC, New Franklin</td>
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<td>Oct. 30</td>
<td>Forrest Keeling Chestnut Roast, 10 a.m.-4 p.m.&lt;br&gt;Elsberry, Mo.</td>
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Farmers and landowners from Howard County toured the MU Horticultural and Agroforestry Research Center the evening of Aug. 5. Ray Glendenning, HARC superintendent, said tour stops and talks included chestnut, walnut, and pecan production; shade- and flood-tolerance testing; pine straw production; buffer strips and water quality; silvopasture and alley-cropping systems; odor abatement and windbreaks; mushrooms; apples, grapes and peaches; biomass for biofuel; and, of course, the Hickman House (photo above).