



Field Notes

Kerr Center for Sustainable Agriculture E-Newsletter

E-Field Notes

August 2020

Fall is around the corner! Are schools near you opening up soon? Or at all? Whatever your local district's situation, there are plenty of opportunities to keep learning about sustainable agriculture. In this issue, we delve into a few:

David Redhage reviews one topic the pandemic has many farmers wanting to learn more about: **automation**.

Karlee Pruitt shares **first observations** from the horticulture program's work this summer with **hydroponics**.

USDA has **extended the application deadline for aid to farms and ranches suffering economic impacts from the pandemic**, and added to the list of eligible commodities.

Just when we thought the **insect apocalypse** was upon us, one group of researchers says **maybe not** - at least for North America. (But don't stop planting those pollinator gardens just yet.)

Whether you're doing your learning in-person or online, we're working to make it deeper, richer and more effective. Appreciate the help? Help us back, by [donating](#). [Thank you!](#)

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Hydroponics: First Observations

by Karlee Pruitt

The Kerr Center horticulture program recently conducted a preliminary test on a home-built hydroponic system called the Kratky method.

This system consists of a wooden frame lined with plastic to create a reservoir filled with water and nutrients. rigid foam insulation board floats along the top, with holes cut for net pots and the plants to sit in.



(See below for a video from the University of Florida/IFAS Extension, explaining the construction method. Another option, instead of using a wooden frame with plastic, is to use pre-made plastic pools.)

It took two of our team members 90 minutes to plan and build the first frame. After the first frame and planning was done, the other frames took approximately 30 minutes each to assemble. This system really was a winner when time is considered.

We only had to water once, when we filled the beds with water and the fertilizer solution. While this took some time at the beginning, we were able to have two more grow sessions without switching out the water. So, for two succession plantings, we spent three hours filling all four of the frames we built. Each frame held between 80-90 gallons of water, with fertilizer added according to the label.

We tried to do two rotations before the summer heat kicked in, but had to end the second grow rotation early. We tested two net pot sizes (1- and 2-inch) and rigid foam insulation board thicknesses (3/4- and 2-inch). In the smaller net pots and thinner insulation board, we grew lettuce and spinach. In the larger net pots and thicker insulation board, we grew Swiss chard, kale, and pak choi.

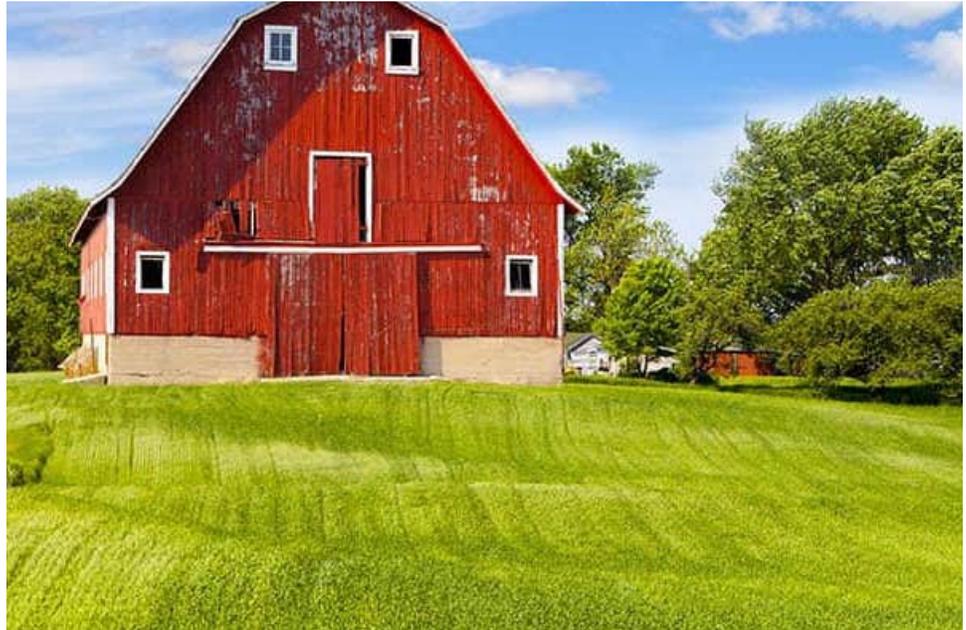
[More details, photos, and video....](#)

USDA COVID-19 Aid to Farmers Extended; Additional Commodities Eligible

The U.S. Department of Agriculture (USDA) announced August 12 that it is **extending the deadline** to apply for the [Coronavirus Food Assistance Program](#) (CFAP) to **September 11**.

Also, in response to public comments and data, **additional commodities are now covered by the program**.

After USDA's review of over 1,700 responses, even more farmers and ranchers will have the opportunity for assistance to help keep operations afloat during these tough times.



USDA collected comments and supporting data for consideration of additional commodities through June 22. Additional crop and livestock commodities that are now eligible for CFAP include all sheep (only lambs and yearlings were previously eligible), microgreens, nectarines, parsley, persimmons, catfish, crawfish, tilapia, trout, nursery crops and cut flowers, and many others.

Full details can be found in the Federal Register in the Notice of Funding Availability and Final Rule Correction, and at www.farmers.gov/cfap.

To ensure availability of funding, producers with approved applications initially received 80 percent of their payments. The Farm Service Agency (FSA) will automatically issue the remaining 20 percent of the calculated payment to eligible producers. Going forward, producers who apply for CFAP will receive 100 percent of their total payment, not to exceed the payment limit, when their applications are approved.

Applying for CFAP:

Producers, especially those who have not worked with FSA previously, are recommended to call 877-508-8364 to begin the application process. An FSA staff member can help producers start their application during the phone call.

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Good News for North American Insect Populations?

We've mentioned articles over the past couple of years detailing how scientists **around the world** have documented **declines in populations of both pollinators specifically as well as [insects generally](#)**, and even arthropods overall.

Surprisingly, of the general studies, none had focused on **North America** specifically. Perhaps even more surprisingly, a new one that did found **no overall decline**.



Researchers from Hendrix College, the University of Georgia, and the USDA collaborated on the study. They compiled datasets up to 40 years in length, from sites around the U.S. that are part of the National Science Foundation's Long-Term Ecological Research (LTER) network.

The [results](#), published earlier this month in Nature Ecology & Evolution, stand in stark contrast to other warnings of an "insect apocalypse." Some species in the study had indeed declined, but others' numbers had increased. The most common pattern was simply no change.

That result held when the data were split out by taxonomic group (say, beetles or butterflies), feeding pattern (herbivore, omnivore, etc.), habitat type, and time period.

What explains the difference between the North American and European data? One possible explanation is that, with a human population density three times higher than North America's, Europe may simply be putting more pressure on insect habitat.

Regardless of the ultimate explanation, [cautions](#) the study's primary author, the study should not be taken as a sign that all is well in the insect world. [Dramatic declines in key pollinator species](#) are indeed occurring, right here in North America.

"As the human population continues to grow and appropriates an ever larger share of the world's land, water, space and biomass, other species can only retreat and survive with fewer resources," says Matthew Moran. "I have no doubt that every time a forest is cut, a prairie is plowed or a field is paved, the world loses some of its animal and plant life."

Late Summer Events: Fall Gardening, Elderberries, Food Safety...

No matter when schools are opening near you, fall has plenty of opportunities for learning about sustainable agriculture. Oklahoma County Extension is getting back to in-person trainings (with appropriate precautions), with a **fall gardening** workshop (Sept. 3) and a **"grow your own"** workshop (Sept. 12), both in Oklahoma City. Online, the Savanna Institute's webinar series continues with sessions on **elderberry harvest** (Sept. 7) and **silvopasture food safety** (Sept. 15).

SEP 3 Thu	Fall Gardening and Landscaping Workshop @ Oklahoma City (Oklahoma County OSU Extension Center) Sep 3 @ 9:00 am – 12:30 pm	Tickets +
SEP 7 Mon	Elderberry Harvest (webinar) @ online Sep 7 @ 5:00 pm	Tickets +
SEP 8 Tue	BY APPOINTMENT ONLY: Tour the Kerr Center @ Kerr Center Edit Sep 8 @ 9:00 am	+
SEP 11 Fri	Application Deadline: Coronavirus Food Assistance Program @ online Sep 11 all-day	+
SEP 12 Sat	"Grow Your Own" Workshop @ Oklahoma City (OSU Extension Conference Center) Sep 12 @ 9:00 am – 4:00 pm	+
SEP 15 Tue	Silvopasture Food Safety (webinar) @ online Sep 15 @ 6:00 pm	Tickets +
SEP 19 Sat	Blue Thumb Volunteer Training – Claremore @ Claremore (Rogers State University) Sep 19 @ 8:30 am – Sep 20 @ 4:30 pm	Tickets +

Don't forget these two major deadlines:

- [Southern SARE's Professional Development Program - August 31](#)
- [USDA's Coronavirus Food Assistance Program - September 11](#)

Tours of the Kerr Center are ongoing, but by appointment only, and only for outdoor areas of the ranch. Please see our [tour page](#) for details.

Full details on these and other sustainable agriculture learning opportunities, as always, can be found on the Kerr Center's online [events calendar](#).

Don't forget that you can also use our online calendar to **keep yourself and your friends up to date** on these and other upcoming events, including our tours:

- **Subscribe to our feed** and receive **updates to your personal calendar** as they are made.
- **Share events on the calendar** via a number of **different social media sites**, including Facebook, Twitter, and Pinterest.

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