Field Notes

Kerr Center for Sustainable Agriculture E-Newsletter

E-Field Notes
March 2025

Spring has sprung! If you're looking for something unusual to plant this season, David Redhage points you to a **new guide to ethnic vegetables**. Find a food to grow that you may never have heard of!

We're still hoping for those April showers, but if you need to look elsewhere for water - **how about a wetland?** The Oklahoma Conservation Commission has a **new website devoted to these unique ecosystems**.

If you're one of the many poultry keepers anxiously tracking the spread of H5N1 avian influenza, there's a new webpage stocked with **free resources on preventing, containing, and managing bird flu**.

Penn State researchers have started **using QR codes to track honeybee behavior** - revolutionizing our ability to understand these key pollinators.

In This Issue

- **President's Note: Ethnic Vegetable Planting Guide**
- **New Oklahoma Wetlands Website**
- **Free Resources on Bird Flu and Biosecurity**
- **Tracking Honeybee Behavior with QR Codes**
- **Early Spring Events: Produce Safety, Beginning/Organic Farmers, Homemade Food Freedom....**

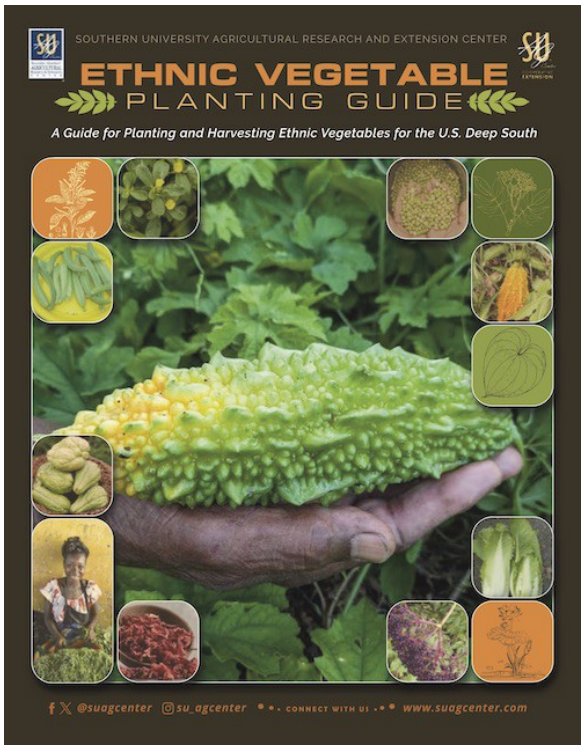
You may not be able to scan bees on our website, but you *can* easily **donate to the Kerr Center** to keep the sustainable agriculture buzz spreading! **We appreciate it!**

President's Note: Ethnic Vegetable Planting Guide

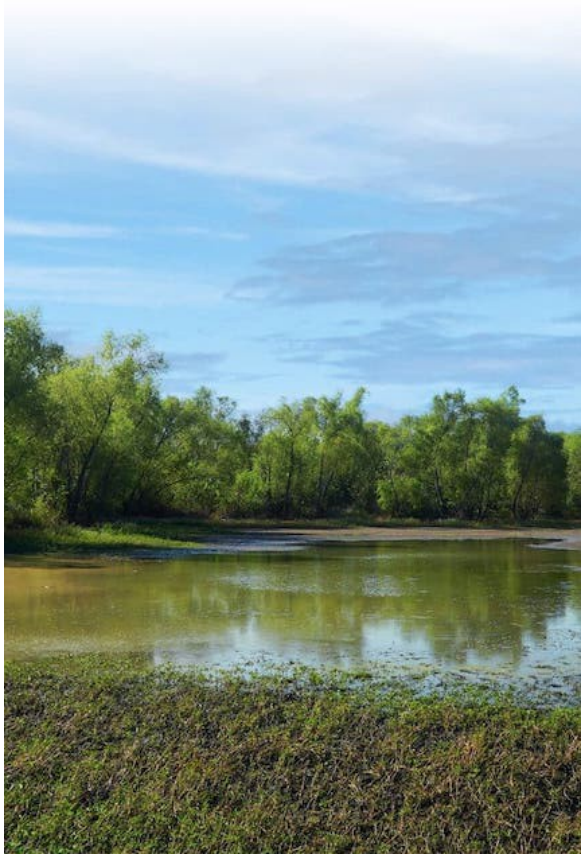
The Kerr Center manages the **Southern SARE PDP program**. Recently, Southern University in Louisiana published a small guide with support from the SARE program.

It is entitled *Ethnic Vegetable Planting Guide: A Guide for Planting and Harvesting Ethnic Vegetables for the U.S. Deep South*. The document is 36 pages, with excellent photography. It is available as a **free pdf**.

While I consider myself to have a basic knowledge of ethnic vegetables, this guide has some I am not familiar with. It provides names for each vegetable, along with **growing zones, planting dates, and how to harvest and eat** each vegetable. I hope everyone enjoys it!



New Oklahoma Wetlands Website



The Oklahoma Conservation Commission's Wetlands Program recently launched a **new Oklahoma wetlands website**, as an in-depth resource to **educate the public on the significance of Oklahoma's wetlands**, as well as **how individuals can help to protect and restore them**.

"**Oklahoma is home to a wide range of unique wetlands, including playa lakes, riparian wetlands, and cypress swamps**," says the OCC.

To preserve these important ecosystems, the state, along with federal partners, put together a Wetlands Management Strategy in the late 1980s and early 1990s.

The Oklahoma Conservation Commission completed that framework in 1996, **focusing on voluntary wetland protection measures instead of regulatory actions**.

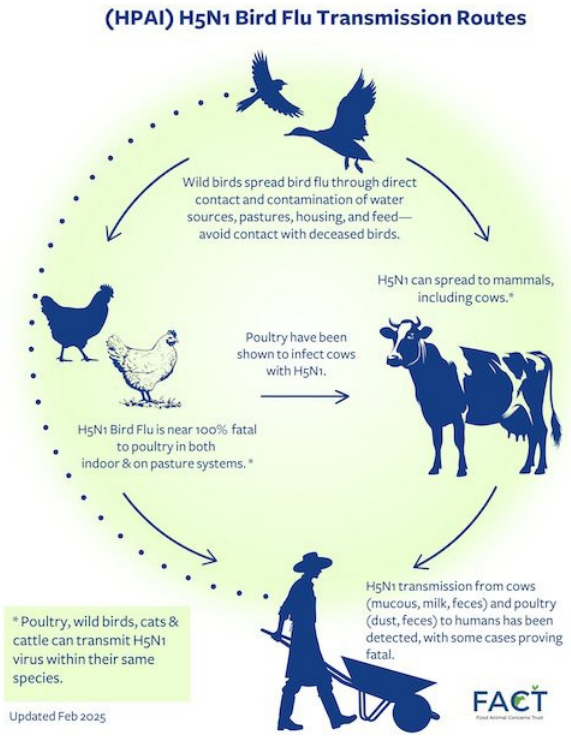
The U.S. Environmental Protection Agency funds the Wetlands Program, conducting different projects to achieve the state's wetland strategy's goals. These include offering **practical guidance to landowners, students, and agency personnel on wetland conservation** through education, demonstration, and restoration.

"The newly enhanced website provides users with up-to-date information on wetland types, current projects, and how Oklahomans can get involved in local conservation efforts," says the Commission's press release. "It features **educational resources, restoration success stories, and tools for landowners** looking to manage and restore wetlands on their property."

Visit the wetlands website.

Free Resources on Bird Flu and Biosecurity

With **avian influenza continuing to spread**, poultry producers of all sizes are casting about for **reliable sources of information on how to prevent, contain, and manage the disease**. Food Animal Concerns Trust has done that job for them, compiling a **one-stop collection of free bird flu resources** that's just a click away.



FACT's "Bird Flu & Biosecurity" page defines avian influenza and describes the **different ways in which it can spread**, both to livestock and to humans. It discusses potential **pathways by which the virus might inadvertently be brought onto a farm**.

The page also discusses **ways farmers and ranchers can protect their animals** from H5N1 bird flu, including making a biosecurity plan, regularly disinfecting equipment, and limiting contact between livestock and wild birds.

Other steps include limiting outside access to properties where livestock are kept, and maintaining livestock health in general.

The FACT page also describes the **signs and symptoms that livestock operators should watch for** to be able to detect an infection if it occurs, as well as steps to take in that situation - including **who to contact**, and how to isolate. (Quick action is essential, as the USDA only compensates livestock owners for animals that died *after* testing for bird flu.)

Finally, the page includes a selection of links to additional information and resources.

Visit Food Animal Concerns Trust's **"Bird Flu & Biosecurity" page**.

Tracking Honeybee Behavior with QR Codes

In today's world, it's hard to think of anything that doesn't have a QR code slapped onto it. A team of researchers at Pennsylvania State University has just made it a little bit harder, by **tagging honeybees with QR codes**.

Scanning these bees with your phone's camera won't take you to a website advertising their honey - or much of anywhere, really. But a **camera mounted on the hive entrance can scan the codes to keep track of when individual bees enter or leave** - giving researchers an **unprecedented view of the bees' foraging behavior**.

The traditional approach to such research required researchers to sit and observe the hives, usually for an hour or so a day for a few weeks, and identifying individual bees was a daunting challenge. The new, QR code-based approach **works 24/7**, during the entire period the bees are active, and **recognizes each individual bee of the tens of thousands tagged** by researchers.

"This technology is opening up opportunities for biologists to study systems in ways that weren't previously possible, especially in relation to organic beekeeping," said Margarita López-Uribe, the study's lead author.

The relevance to organic honey production lies in the uncertainty around how far bees typically travel on foraging flights. The National Organic Standards Board has grappled in the past with how close certified organic beehives could be located to fields where prohibited pesticides were in use.

Since researchers put the QR codes on newly-hatched bees, the study is also yielding insights on how bees' foraging behavior changes over the course of their lives - and even on how long they live. "We're seeing bees foraging for six weeks, and they don't start foraging until they are already about two weeks old, so they live a lot longer than we thought," said Robyn Underwood, a co-author on the study.

In the future, the team hopes to correlate the QR code data with the bees' “dances” to gain a better understanding of how the dance encodes the location information of nectar and pollen sources.

Additionally, they plan to tag other kinds of honeybees - drones and queens - as well as other bee species. The researchers will also conduct workshops for beekeepers interested in deploying the technology to monitor their own operations.

The **study** was published in *HardwareX*.

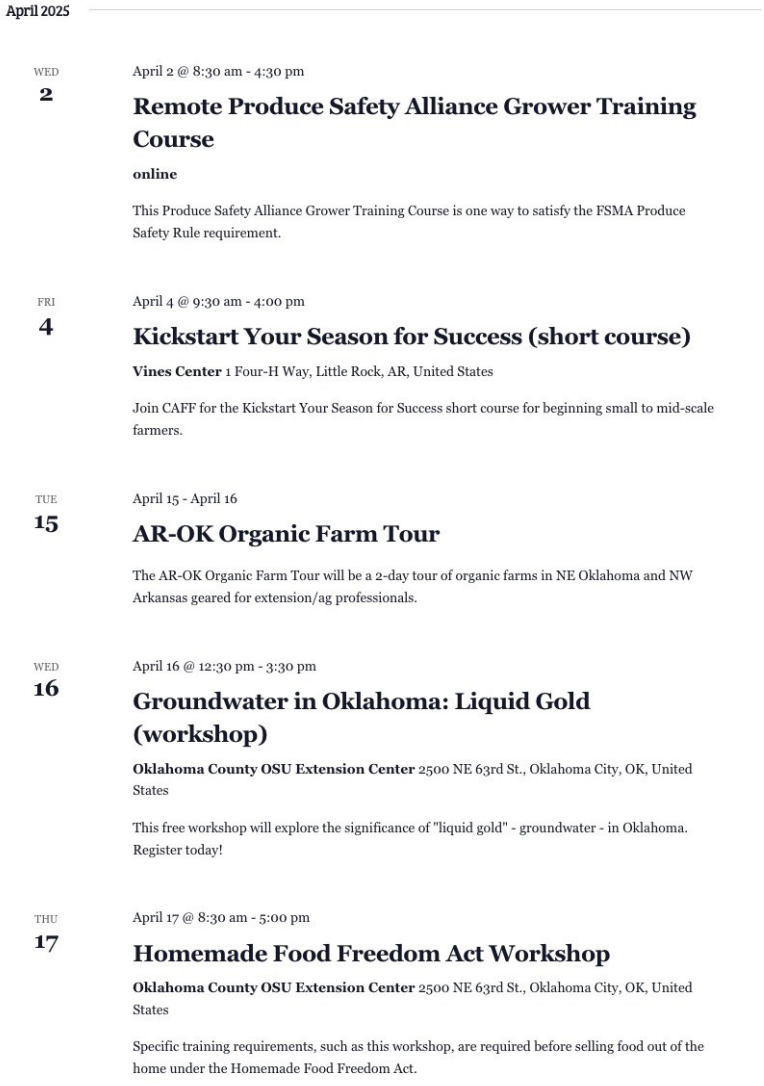
Early Spring Events: Produce Safety, Beginning/Organic Farmers, Homemade Food Freedom....

By way of farmer trainings:
- FAPC is facilitating another **online** Produce Safety Alliance **produce safety training** (Apr. 2).
- CAFF is offering a one-day Kickstart Your Season for Success **short course for beginning farmers** (Apr. 4).

For extension agents and other ag professionals, CAFF is also offering a two-day **tour of organic farms** in northwest Arkansas and northeast Oklahoma (Apr. 15-16).

Learn about **groundwater** in Oklahoma County Extension's "Liquid Gold" **workshop** (Apr. 16, OKC). The OSU Food & Agricultural Products Center will host another of its popular **Homemade Food Freedom Act workshops** (Apr. 17, OKC) - learn the state's legal requirements for selling processed food products from home kitchens.

There are many more sustainable agriculture educational activities going on, and we're adding more to the calendar all the time. Get the latest on our 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.

Support the Kerr Center

Since 1965 the Kerr Center has been reaching out to folks in Oklahoma and beyond. Today, the Friends of the Kerr Center help us continue this vital work! If you enjoy reading this newsletter or visiting our website, please consider making a gift to the Kerr Center today!

Quick Links...

Kerr Center website

Find us on Facebook

Contact Information

The Kerr Center for Sustainable Agriculture
24456 Kerr Road
Poteau, OK 74953
Phone: 918.647.9123
Fax: 918.647.8712
mailbox@kerrcenter.com