



Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained in linked articles is from the original authors and does not necessarily reflect the views of CAST.

In This Issue....

- [Animal Agriculture News](#)
- [Food Science & Safety News](#)
- [Plant & Environmental News](#)
- [International News](#)
- [General Interest News](#)

Announcements



The “[Celebration of Modern Agriculture](#)” is hosted in collaboration with [National Ag Day](#) activities, along with the Agri-Pulse Ag and Food Summit.

Poultry scientists and students can submit original research, teaching, and extension papers for an in-person [presentation at the 2022 PSA Annual Meeting](#), July 11-14, in San Antonio, Texas.

Researchers across the nation are [developing surveillance, treatment, and prevention](#) methods for the highly infectious hog disease, African swine fever.

CAST College Corner

[University of Kentucky](#) researchers are working with the Salk Institute to develop more resilient plants.

[Mississippi State University](#) students have opportunities to gain prestigious scholarships as the school’s Astronaut Scholarship Foundation expands.

March 18, 2022

Climate-Smart Commodities

According to the USDA, a “climate-smart commodity” is produced by using farming, ranching, or forestry practices that reduce greenhouse gas emissions or sequester carbon.



The new [Partnerships for Climate-Smart Commodities](#) program provides up to \$1 billion for pilot projects that create market opportunities for commodities produced using climate-smart practices. The USDA has [extended the deadline](#) for climate-smart commodities funding. A Texas A&M ag economist says [incorporating climate-smart practices into farm policy is complicated](#) and producers are asking for clarity: “Producers regardless of size, region, or crops planted should have opportunities in any USDA climate program.”

A [report from USDA's Natural Resources Conservation Service](#) demonstrates progress made through voluntary conservation over a 10-year period. Techniques like no-till, crop rotations, more efficient irrigation methods, and advanced technologies have climbed in recent years.

Check out the CAST Commentary titled *The Role of Agricultural Science and Technology in [Climate 21 Project Implementation](#)* (June 2021).

News and Views

USDA Announcements: The USDA will support independent, innovative, and [sustainable American fertilizer production](#) to address rising costs and spur competition.

War and Exports: Russia—a huge exporter of wheat and fertilizer—temporarily [banned grain exports](#) to various countries. India and other countries are [looking for alternative suppliers](#).

HPAI Update: State officials say [highly pathogenic avian influenza was detected on a Wisconsin farm](#)—nearly 3 million laying hens will be culled to prevent further spread of the virus. The USDA APHIS page [provides up-to-date information](#).

Pandemic Tracker: This regularly updated COVID-19 site reports on a [state-by-state basis](#).

Tuskegee University is celebrating this year's Social Work Month with a virtual conference on March 31.

CAST Social Media

Visit our website



CAST [welcomes ideas](#) for future publications and projects.

Far Side of the Barn

Paws for Mental Health (video): A popular mental health therapy [dog program provides comfort to students, faculty, and staff](#) at The Ohio State University.



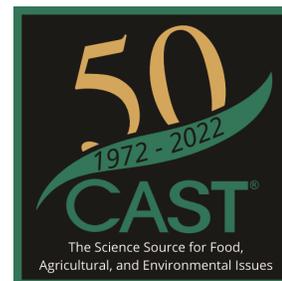
Hornets Dying for Love: Researchers found that [giant hornets can be lured into traps](#) using sex pheromones.

CAST Updates

Top 10 CAST Publications

As CAST celebrates its 50th anniversary in 2022, we wanted to acknowledge the top ten CAST publications that have had the greatest impact. You can view the [top ten on this blog](#) and click on the publication titles to view the individual publications.

[Click here to access](#) the 50th anniversary commemorative publication which offers three sections covering 1) CAST historical highlights, publications, social media, and organizational structure, 2) the impact of CAST, and 3) essays on the future of CAST.



Animal Agriculture and Environmental News

Swine Study: A Kansas State University post-doctoral student [studied how pigs are fed and managed](#) in the United States to help swine producers improve their profits.

Laws and Activists: Iowa's [second "ag-gag" law](#) violates the First Amendment, according to a federal court.

Poultry Litter: This article looks at the possibility of poultry litter [offsetting fertilizer prices](#).

Bio Skeeters: A British biotech firm has permission from U.S. regulators to [release more than 2 million genetically modified mosquitoes](#) in Florida and California as part of an effort to combat diseases.



University of Missouri experts have joined a [partnership to root out feral swine](#).

Food Science and Safety News

Paw Patrol: Dogs are trained at the USDA's National Detector Dog Center to sniff out cargo and baggage for [unauthorized meats, fruits, and vegetables](#) that could transport foreign animal diseases, like African swine fever, into the U.S.

Nordic Diet: Researchers say the Nordic [diet can prevent a range of diseases](#), while lowering blood sugar and

cholesterol levels.

Vertical Farming: These companies are using vertical farming to [provide salad vegetables and now strawberries](#) to various outlets including gourmet grocers in New York City.

Steam Power: Cornell researchers are studying dry, [superheated steam as a tool to thwart deadly pathogens](#) in commercial, dry-food processing plants.



The University of Nevada, Reno has been involved with [wine and grape research](#) for 25 years. Now, they have joined a formal partnership to promote the industry.

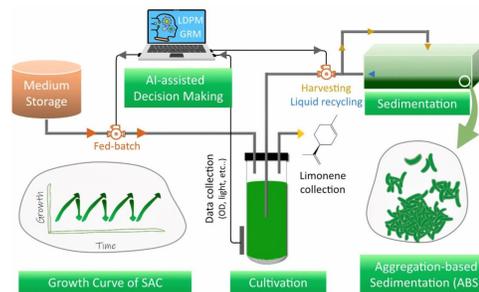
Plant Agriculture and Environmental News

Amazon Rainforest: The Amazon rainforest is likely losing resilience, data analysis from [high-resolution satellite images](#) suggests.

Drought Woes: According to the latest U.S. Drought Monitor, farmers and ranchers are experiencing [the worst drought since 2012](#) in the Western U.S.

Ethanol Advances: At the National Ethanol Conference, this spokesperson said the industry is now producing [more ethanol while also protecting the environment](#).

Soilless Science: Dr. Alexa Lamm ([2020 BCCA](#) and University of Georgia) joined with colleagues to write about a new wave of traditionally soil-based agriculture sectors that have begun the [transition into soilless systems](#).



Texas A&M scientists are [using artificial intelligence for producing algae as a reliable, economic source for biofuel](#).

International News

Transformations in China: Here are [five transformations](#) that are happening in China that will affect your farm.

Pig Latin Not the Only Porcine Language: Researchers in Europe created an algorithm that assesses pigs' emotional states [based on the sound the animals make](#).

Panda Fun: These baby pandas in a French zoo [take their first steps](#) as they explore the outdoors.

You Say Potato, Officials Say Gourd: A New Zealand couple thought they had dug up the world's largest potato, but [Guinness World Record officials](#) decided it is actually a type of gourd.



[National Thai Elephant Day](#) is held on March 13 to draw attention to efforts to save the species and protect its habitat.

General Interest News

Eyes on Mars: A University of Florida astrophysicist and her students are involved with [NASA's Curiosity and Perseverance missions](#) to find out if ancient life forms ever existed on Mars.

Insects Endangered: Habitat loss, pesticides, and climate change are [threatening insect populations](#) according to this study. *Related link in caption at right.*

Adding Value to Waste: North Carolina State University professors and students are [working on ways to use leftover agricultural waste materials](#).

Holes in Seafloor: A new study has documented how the [thawing of permafrost submerged underwater](#) at the edge of the Arctic Ocean is affecting the seafloor.

Parasite Fighters: The Ohio State University College of Medicine is using [CRISPR technology to develop a vaccine](#) targeting a persistent parasite.



[Joro spiders form parachutes out of their webs](#) and can travel on the wind—and they are expected to “invade” the U.S. East Coast. They are harmless to people.

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- * American Seed Trade Association
- * American Society of Agricultural and Biological Engineers
- * American Society of Agronomy
- * American Society of Animal Science
- * American Society of Plant Biologists
- * American Veterinary Medical Association
- * Association of Equipment Manufacturers
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- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Iowa State University
- * Mississippi State University
- * National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- * National Corn Growers Association/Iowa Corn Promotion Board
- * National Milk Producers Federation
- * National Pork Board
- * National Turkey Federation
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Penn State University
- * Poultry Science Association
- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * The Minor Use Foundation
- * Tuskegee University
- * United Soybean Board
- * University of Nevada-Reno
- * U.S. Poultry and Egg Association
- * Weed Science Society of America
- * Western Society of Weed Science
- * Zoetis

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The Science Source for Food,
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