



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.

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Announcements



The 47th annual American Association for the Advancement of Science (AAAS) [Science & Technology Policy Forum](#) will gather in person and virtually October 25-26, 2022 to discuss major current challenges affecting science, policy, and society.

CAST is hiring! Please see the CAST Updates section for more information on the two employment opportunities as well as a short-term pro-bono position.

CAST College Corner

A [Penn State University](#) study suggests no-till farming is better for the environment due to decreased emissions of nitrous oxide.

A [University of Missouri](#) co-led study found that 82% of farm household income is coming from off-farm jobs.

September 30, 2022

Accelerating Adoption of Ag Tech and GE Crops

Soaring costs for fertilizer, crop protection, and labor are accelerating farmers' adoption of ag tech, [according to a survey](#) of 1,300 U.S. crop farmers.



The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES) has built [The AgTech Innovation Hub](#) (pictured above). This hub will encourage the development of new solutions that will help the agricultural ecosystem while better understanding, managing, and mitigating climate risk.

Genetically engineered (GE) crops are also becoming more widely adopted, according to this [data obtained by USDA's NASS](#).

News and Views

USDA Updates: The USDA 1) is assisting [farmers, ranchers, and communities](#) affected by Hurricane Fiona and 2) made \$500 million available to increase innovative [American-made fertilizer](#).

New Food Strategy: President Biden calls for research into bolstering the food supply in the face of climate challenges in his [National Strategy on Hunger, Nutrition, and Health](#).

Op-Ed on Ag Climate Markets: Grower acceptance of [soil carbon sequestration programs](#) seems to be lagging, based upon Todd Janzen's "unscientific observations". Janzen was recently an author on CAST's [Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges](#) issue paper released November 2020.

Visit our website



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

Shelter from the Storm:

As Hurricane Ian bears down on Florida, approaching Category 5 strength, the World Equestrian Center-Ocala opened its doors and now [is sheltering 3,000 animals](#)—its maximum capacity—in its sturdy cement-block barns.



CAST Updates

CAST Employment and Pro-Bono Opportunities

CAST is currently hiring for two paid positions and is looking for one volunteer position. More information on all three positions can be [found on the CAST website](#).

Executive Vice President/Chief Executive Officer (EVP/CEO)

CAST is seeking an EVP/CEO to advance CAST's mission as a leader in science communication, maintaining its strong publishing reputation, increasing public visibility and impact, and leading strong fundraising efforts to insure and sustainably manage the organization's financial resources.

Communication Intern

Work with the Communication and Social Media Specialist to deliver credible, science-based news about agricultural science and technology through CAST communications. Develop new communication strategies and evaluating existing strategies. Position is open for an internship or practicum experience and designed to meet academic requirements. Preference will be given to students with an agricultural background, and currently attending a CAST Education Program member institution.

Communications Audit

Interested volunteer(s) would complete a content audit to assist the CAST Board and staff.

Individual CAST Membership

As a CAST member, you can help CAST to address some of the most important issues that impact our planet, such as how to feed the world's population; water and soil conservation; leading land use practices; and animal, food, and environmental science. This video shows the [benefits of being a CAST member](#).

Three of the membership options are:

- The **Individual** membership, our most common level of support, is available to anyone interested in joining CAST and supporting sound science.
- The **Young Professional** membership, which is at a reduced rate and is available to individuals who were enrolled as full-time students at an accredited college or university and have graduated within the last two years.
- The **Student** membership, which is free and is available to those currently enrolled as a fulltime student at an accredited college or university.

If you are interested in supporting CAST's work through one of the [individual membership](#) options we offer, please contact our membership specialist, [Colleen Hamilton](#).

Whiskey and Cow "Slop": A whiskey company will be phasing out access to a product known as slop. Slop is a distiller's spent grains that many farmers use as a [low-cost, nutritious feed source](#) for their cattle.

Feral Hogs in California: The California governor has signed a [new law designed to help reduce](#) the state's estimated 400,000 feral hogs.

Working Farm: A new meat processing facility has given an opportunity to prison residents at a [correction center's working farm](#).



Researchers at Cornell University are [exploring the effects](#) of big data on dairy farms.

Food Science and Safety News

Planting Garlic: This [University of Kentucky podcast](#) discusses planting garlic.

School Curriculum: High schools in Wisconsin will now be able to have a [meat science curriculum](#). The governor hopes to strengthen the state's meat processing supply chain and workforce.

Shrimp Farm: An ag tech startup [has chosen Indiana](#) for its first U.S. large-scale shrimp farm.



American Farm Bureau Federation [economists analyzed Thanksgiving turkey and egg costs](#).

Plant Agriculture and Environmental News

Bumper Crops Needed: Agriculture executives say at least two years of [bumper crops are needed to relieve pressure](#) from the drought and the war in Ukraine.

Nitrogen Prices: [Nitrogen prices averted a major disaster](#) when rail companies and rail unions reached a tentative agreement and avoided a possible strike.

Carbon in Soil: The USDA plans to invest \$8 million to support and expand [monitoring of carbon in soil](#) on working agricultural lands.



Mississippi State University's Future Growers Technology Initiative, an effort to develop a [virtual greenhouse program](#), is in its final stages of development.

International News

Carbon Emissions & Food Prices: New research shows the disruption of crop production after the Russian invasion of Ukraine is [expected to increase carbon emissions and food prices](#) across the globe, without easing food insecurity.

Switzerland: Voters in Switzerland have [rejected a referendum motion](#) that would have put an end to "factory farming" in the country.

Monitoring Groundwater: Successful testing of [phone-based groundwater monitoring](#) in the Nepal Terai was described at World Water Week in Stockholm.



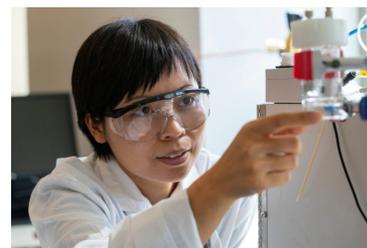
Farmers in the United States are urging their government to [challenge a looming Mexican ban](#) on genetically modified corn under a regional free trade agreement.

General Interest News

Stormwater: This *Soils Matter* blog discusses how "[green stormwater infrastructure](#)" provides planners with a toolbox of practices and approaches to manage water during rain events and snowmelt.

Biodiversity and Human Health: A study from UC Davis [highlights the importance of biodiversity](#) to human health due to finding that the malaria spike was linked to amphibian die-off.

Missing Moon: Scientists propose a lost moon of Saturn, [which they call Chrysalis](#), pulled on the planet until it ripped apart, forming rings and contributing to Saturn's tilt.



Texas A&M University has designed a system to create bioplastics. This method could [reduce nondegradable plastics](#) and greenhouse gas emissions.

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- * Agricultural & Applied Economics Association
- * American Association of Avian Pathologists
- * American Association of Bovine Practitioners
- * American Bar Association, Section of Environment, Energy, & Resources-Agricultural Management
- * American Dairy Science Association
- * American Farm Bureau Federation
- * American Meat Science Association
- * American Meteorological Society, Committee on Agricultural and Forest Meteorology

- * 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

- * 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
- * Aquatic Plant Management Society
- * BASF Corporation
- * Bayer Crop Science
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Iowa State University
- * Minor Use Foundation, Inc.

- * Nutrien
- * Penn State University
- * Poultry Science Association
- * Society for In Vitro Biology
- * Society for Range Management
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * The Mosaic Company
- * 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

CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, science-based information to policymakers, the media, the private sector, and the public.

Members of CAST's Education Program

- * Cornell University
- * Iowa State University
- * Kansas State University
- * Mississippi State University
- * North Carolina Agricultural and Technical State University
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- * Texas A&M University College of Ag & Life Sciences
- * The Ohio State University
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- * University of Kentucky
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- * University of Nebraska Agricultural Research Division
- * University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

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The Science Source for Food,
 Agricultural, and Environmental Issues

*** With assistance from Colleen Hamilton (Membership Specialist) and Nick Plaughter (Communications Project Coordinator)*

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