

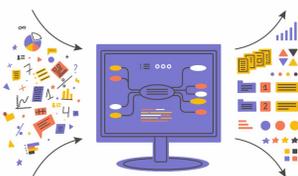


Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained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

In This Issue....

- [Animal Agriculture News](#)
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Announcements



[Click here to register](#) for the free webinar on the upcoming CAST Commentary, *Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture*.

The [USDA Ag Outlook Forum](#) offers free attendance and will be held February 24-25.

The Phytobiomes Alliance offers a free webinar January 26 about [managing pest outbreaks](#) through participatory iterative ecological forecasting—and a free workshop February 2-3 about [“the Future of Microbiology.”](#)

CAST College Corner

The [University of Arkansas](#) has released a digital version of its 2021 Sustainability Report.

[Kansas State University](#) will host the 2022 Swine Profitability Conference on February 8 in Manhattan, Kansas.

The [Tuskegee University](#) College

January 14, 2022

Advances in Gene Editing

Technology continues to advance—whether it's apps that make your day easier, or life-saving medical advancements. In a medical first, doctors [transplanted a gene edited pig heart into a human](#) in a last-ditch effort to save his life. The Maryland hospital said the patient is doing well.



There are also other gene-editing advances that happened in 2021. A few of them include 1) gene editing strawberries to help them keep longer as 35% of the strawberry harvest goes to waste, and using this technology to develop potatoes that are [less likely to brown](#), 2) scientists in Scotland are creating cows that [carry the "slick" gene](#), which helps them stay cooler, 3) scientists using CRISPR-Cas9 to [control mosquitoes](#) from spreading diseases, and 4) it's been predicted that gene editing will [dramatically transform livestock breeding](#) in Africa for the better in the next few years.

News and Views

USDA Partnership: The USDA NRCS announced several new and expanded opportunities for [climate smart agriculture in 2022](#), including a new partnership with Farmers For Soil Health, an initiative of the United Soybean Board, National Corn Growers Association, and National Pork Board.

USDA WASDE: The [latest WASDE report](#) is available for viewing. U.S. farmers produced a [record amount of soybeans](#) in 2021, and corn production increased by 7%.

New Case of ASF: Italy confirmed its first case of African swine fever. The government reiterated the need to [strengthen the surveillance of wild boars](#). New [ASF communication tools](#) have also recently launched.

Cyber Threats in Ag: Experts warn that as an industry, agriculture has a very soft digital underbelly that's easily breached due to [very limited investment](#) in cybersecurity to date.

of Veterinary Medicine offers its 55th Annual Veterinary Medical Symposium March 17-19 in a virtual format.

The IR-4 Project is partnering with the USDA FAS to host four international researchers for a Borlaug fellowship in 2022 at [NC State University](#).

CAST Social Media

Visit our website



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

Far Side of the Barn

Welcome to the Mootrix (video): Reports say [virtual reality can make cows think](#) they are in a summer field, and they appear to produce more milk. Social media is enjoying the *Matrix* nature connections.



Some Like It Hot: A major fast-food chain touts a [new sandwich that is so spicy](#) it comes with a milkshake—one of its key ingredients is ghost pepper jack cheese.

Don't Stop Me-owww: A [cat with a mustache](#) that resembles Freddie Mercury has gone viral.

CAST Updates

Open BCCA Nominations

Nominations are open through February 7, 2022, for the [2022 Borlaug CAST Communication Award](#), an honor that recognizes professionals actively working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena.

Update on the 2021 BCCA Recipient

Dr. Sarah Evanega ([2021 BCCA recipient](#)) stepped down as the director of the Alliance for Science to [assume a new position](#) at a gene editing start-up.

Nominations are open for the 2022 Borlaug CAST Communication Award



CAST [Nominate your candidate by February 7, 2022](#)

New CAST Commentary

The development of *Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture* was led by Dr. Marty Matlock, University of Arkansas and also a past recipient of the 2018 [Borlaug CAST Communication Award](#). The paper will be released early on Monday, January 24, and the webinar, including a panel discussion with the paper's authors, will be at noon central on Tuesday, January 25. This webinar is free and you can [register for it here](#).

Board of Representatives Updates



CAST would like to welcome the following rep on to the CAST [Board of Representatives](#).

- **Patrick Carr** is the incoming rep for the [American Society of Agronomy](#). He is involved with the Plant Agriculture and Environmental Issues work group. Dr. Carr is an Associate Professor of Cropping Systems at Montana State University.

Tracking Remotely: This new technology is designed for rangeland with no cellular connection, and it allows ranchers to [keep a close eye on the location](#) and wellbeing of their animals.

Monitoring Remotely: A researcher from Penn State University takes advantage of [remote technology when monitoring bats](#) and studying the interactions of social and biological processes that underlie human health in relation to infectious disease.

Broodmare Nutrition: Iowa State University released a new publication to help horse breeders determine [dietary needs for broodmares](#).

Supplementing Beef Calves: New research shows that spending money to [supplement calves at a low rate of gain](#) and having that weight advantage lost in subsequent phases is costly to producers.

Meatpackers: This article from UC Davis discusses the [meatpacking industry](#).



U.S. egg producers face an [unpredictable market](#) in 2022. Cage-free mandates are closing in and the industry continues to change.

USDA researchers are using smart [technology to trap feral swine herds](#).

Food Science and Safety News

Reportable Food Registry: The FDA has published a new public data dashboard that [allows anyone to view historical](#) data from the Reportable Food Registry, an essential tool that alerts the FDA of a dangerous food product.

Adults, Kids, and Healthy Food: The Society for Nutrition Education and Behavior says [healthful foods for adults are appropriate for children](#) aged two and older if texture and portion size are carefully considered.

Gruyere Cheese: A court has denied the trademark request for gruyere cheese, which [means all cheesemakers](#) can continue to create and market it.

Olive Oil: This study says that a [certain amount of olive oil](#) per day is associated with a lower risk of cardiovascular disease as well as other benefits.



NASA astronaut Megan McArthur details the different types of [food that are available on the International Space Station](#)—and how they prep meals.

Plant Agriculture and Environmental News

Crop Testing (video): This site provides a short overview of [Texas A&M's Crop Testing Program](#).

Tough Wheat: ARS scientists are practicing "tough love" when it comes to [preparing wheat for the climate challenges](#) by subjecting a dozen varieties to a series of stressors.

Soybean Production Practices: New Penn State research shows that there might be economic [benefits associated with using foliar fungicides](#) in soybeans.

Crop Field Borders: Planting beneficial plants next to gardens and crop fields provides ecosystem services. Doing this attracts pollinators and prevents weeds. There are [different mixes to consider](#) when planting.



The U.S. Supreme Court [rejected an industry group's bid](#) to revive a policy to expand sales of E15 ethanol, but a biofuels group says there [may be alternate ways to increase sales](#) of such blends.

International News

Importing Pork: India has agreed to allow imports of U.S. [pork and pork products into India](#) removing a longstanding barrier to U.S. agricultural trade.

Hero Rat: A landmine-sniffing [rat was awarded a medal for heroism](#), as it located more than 100 explosives and helped farmers in Cambodia avoid injury or death.

Desert Snack Food for 98 Million Viewers: A Turkish chef has made a big social media splash with his extraordinary [cooking feats in the middle of the desert](#)

CRISPR in Japan: A tomato with [blood pressure-lowering GABA](#) is available in Japan, making it the first on the market.



New restaurants in foodie-centric Japan are [featuring meat from the United States](#), including the popular pulled pork dish.

General Interest News

Back on Campus—Pandemic 2.0: As thousands return to college campuses, this example from The Ohio State University shows how they are [dealing with COVID-19 testing](#) and with the [issue of mask requirements](#).

Environment and Sustainability on the Farm: Check out the American Farm Bureau's recent video [Agriculture's Sustainability Story](#): "It's Just What We Do."

Who Owns the Land? The [2021 Land Report 100](#) shows that America's leading landowners added hundreds of thousands of acres to their holdings last year.

One Good Idea Project: The University of Kentucky and Mississippi State University are joining other land-grant institutions to bring an [online platform to assist farmers](#) in improving their on-farm practices.

Better and Safer Batteries: A North Carolina A&T State University professor is studying ways to reduce the risks of [fires in solid-state batteries](#).



The American Farm Bureau Federation announced the [2022 Farm Dog of the Year](#).

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- * 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
- * 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
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * 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
- * 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

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- * The Ohio State University
- * Tuskegee University
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- * University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

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*** With assistance from Colleen Hamilton (Membership Specialist)*

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