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

This NASA article explains celestial happenings including the July 23 summer full moon, named the Buck Moon by the Algonquin tribe. Also, this editorial looks at how NASA technology helps farmers at home and abroad.

The World Food Prize Foundation will host the Iowa Hunger Summit September 1. Click here for information about the one-day, virtual gathering.

The U.S. Poultry & Egg Association sponsors these education programs and upcoming seminars.

The International Conference on Swine Nutrition will be held August 11-12 in Ames, Iowa.

CAST College Corner

Tuskegee University, a historically Black university in Alabama, played a role in the Page sisters and their success.

UC Davis specialists were instrumental in the United Nations Food System Summit.

July 23, 2021

Countering Misinformation

As the common phrase says, science is not finished until it is communicated, and the challenges for modern medicine and agriculture are tougher than ever. Vaccine misinformation has spread widely, even though agencies like the CDC provide constant updates. Regarding another example, experts such as Mark Lynas and Jennifer Kuzma point out that overblown fears have made the public unnecessarily suspicious of genetically modified foods.

CAST's mission statement focuses on communicating science-based information, and its Borlaug CAST Communication Award winners lead the way in promoting clear, credible material. The two most recent recipients exemplify these efforts: 1) This article looks at how Dr. Sarah Evanega (2021 BCCA and the Cornell Alliance for Science) uses science communication to combat myths and misperceptions. 2) Dr. Alexa Lamm (2020 BCCA and the University of Georgia) uses multiple methods to communicate about science including two recent papers she published with colleagues. One manuscript highlights the need for land grant universities to communicate at the intersection of agriculture and the environment, and the other publication focuses on the public use of social media and its impacts on how we use/consume scientific information about agriculture and the environment.

News and Views

USDA News: Recent updates include 1) investments of $12 million in Farm to School Grants with awards to 176 grantees, 2) relief for timber harvesting and hauling businesses that have experienced losses due to COVID-19, and 3) more names of individuals who will hold key staff positions in Washington, D.C.

Ag Research Funding: Ronnie Green (Univ. of Nebraska-Lincoln) and Rebecca Blank (Univ. of Wisconsin-Madison) say the food and agriculture sectors are key contributors to the U.S. economy and more federal investment is crucial.

Fire and Smoke: Wildfires plague the western United States, and the resulting smoke causes poor air quality and health
Independent Dialogue, Roadmap to Climate Neutrality in the Beef and Dairy Sectors.

North Carolina State researchers sent plant biology experiments to the International Space Station.

Cal Poly researchers say the rattlesnake population could climb due to climate change.

CAST Social Media

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CAST welcomes ideas for future publications and projects.

CAST Updates

Approaching 50 Years of CAST Publications

The year 2022 marks 50 years since CAST was established in 1972 as a result of a 1970 meeting sponsored by the National Academy of Sciences, National Research Council. The wording of the mission and vision of CAST has changed slightly through the years, but the purpose remains the same—to have experts assemble, interpret, and communicate credible, unbiased, science-based information to everyone.

A publication detailing 50 years of CAST will be released this fall. It will include historical highlights, outreach, awards and honors, publications, expanded communications, membership and governance, a study on the impact of CAST, and essays on the future of CAST.

Animal Agriculture and Environmental News

Protein Initiative: Twelve prominent organizations unveiled the Protein PACT for the People, Animals, and Climate of Tomorrow—a joint initiative designed to promote global, sustainable development goals.

Cattle Flee Fire (video): Wildfires affect many segments of society, including livestock farmers and ranchers.

Pig Production: This article looks at antimicrobial growth promoters and pig performance.
**Dairy Woes:** With soaring feed prices and the end of some aid programs, many dairy farmers are facing challenges.

**ASF in Germany:** A third case of African swine fever (ASF) was confirmed in farm pigs in Germany.

**Mammals and Obesity:** Iowa State University scientists are finding evidence that obesity alters mammals' reproductive systems in a variety of ways.

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**Food Science and Safety News**

**Research Briefs:** The ARS Research Briefs look at good bacteria, watermelon's health benefits, and more.

**Meaty Issue:** University researchers studied the nutritional differences between meat and plant-based alternatives.

**Food Safety:** A recent conference looked at how companies need to approach food safety concerns when it comes to novel foods such as plant-based meat substitutes.

**Feeding Students:** California is launching the country's largest free lunch program for students.

**Smell and Taste:** Ohio State University researchers are involved with looking at how to use the sense of smell to optimize food for consumption.

**Food Addiction:** Research indicates that some individuals may be more likely to experience addiction to palatable foods such as those that are high in fat and sugar.

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**Plant Agriculture and Environmental News**

**Research Priorities:** The United Soybean Board approved projects designed to drive innovation, increase value, and create additional demand for U.S. soybeans.

**Stimulating Corn:** Seaweed extract is just one class in a growing market of crop biostimulants marketed for corn.

**Seeing the Light:** University of Florida scientists are using an ultraviolet light system to thwart strawberry pathogens.

**CRISPR Banana:** African scientists created a CRISPR-edited banana that's resistant to a disease ravaging farms across the continent.

**Read the Trees:** Sequoia tree slabs help researchers consider a vast timescale that includes everything from fossils of armored amoebas to the great Tyrannosaurus rex.

**Sound and Pest Control:** A Mississippi State University faculty member is using a USDA grant to determine the effects of sound on grasshoppers.

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**International News**

**Farms and Foreign Ownership:** Bipartisan pressure is building to stop foreign nationals from purchasing American
farm operations and receiving taxpayer subsidies.

**Farmers Protest Government Proposals:** Farmer protests continue in Delhi, India.

**Safe Milk:** Chinese researchers developed a smartphone sensor for on-site detection of *E. coli* in milk.

**Rails in the Clouds:** Tibet now features a high-speed, high-altitude scenic train equipped with oxygen.

**Olympian Bear:** Pandemic rules mean spectators are banned from most Olympic events, but one furry fan still tried to sneak into the Fukushima softball venue.

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**General Interest News**

**Sustainable and Profitable:** The U.S. Farmers and Ranchers in Action group looked at sustainable farming practices used to improve the land and increase profits.

**Sustainability and Resilience:** The Board on Agriculture and Natural Resources focused on three key topics including this information about Labor and Automation: Effects on Social Sustainability and Resilience in U.S. Agriculture.

**Giving Back:** NFL linebacker Avery Williamson gives back to 4-H in meaningful ways.

**Research Functions:** The University of Arkansas Agricultural Experiment Stations help with many land-grant research functions, including weather observations.

**Vertical Takeoff:** Penn State researchers are exploring the requirements for electric vertical takeoff and landing vehicles, including a look at battery power sources.

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* American Dairy Science Association
* American Farm Bureau Federation
* American Meat Science Association
* Crop Science Society of America
* Innovation Center for U.S. Dairy
* Bayer
* National Cattlemen’s Beef Association, a Contractor to the Beef Checkoff
* National Corn Growers Association/Iowa Corn Promotion Board
* National Milk Producers Federation
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.

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