View as Webpage



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. <u>Click here for</u> <u>information</u> about the one-day, virtual gathering.

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

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

CAST College Corner

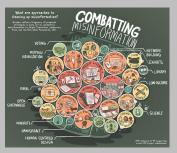
<u>Tuskegee University</u>, a historically Black university in Alabama, played a role in the Page sisters and their success.

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. <u>Vaccine</u> <u>misinformation</u> has spread widely, even though agencies like the <u>CDC provide constant</u> <u>updates</u>. Regarding another example, experts such as Mark



Lynas and Jennifer Kuzma point out that overblown fears have made the public unnecessarily suspicious of <u>genetically modified</u> foods.

CAST's mission statement focuses on communicating sciencebased information, and its <u>Borlaug CAST Communication Award</u> <u>winners</u> 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 <u>Cornell</u> <u>Alliance for Science</u>) uses <u>science communication to combat</u> <u>myths and misperceptions</u>. 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 <u>communicate at the intersection of</u> <u>agriculture and the environment</u>, and the other publication focuses on the <u>public use of social media</u> 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 <u>awards to 176 grantees</u>, 2) relief for <u>timber harvesting and hauling businesses</u> 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 <u>more federal investment is crucial</u>.

Fire and Smoke: <u>Wildfires plague the western United States</u>, and the <u>resulting smoke causes poor air quality</u> and health

Independent Dialogue, *Roadmap* to Climate Neutrality in the Beef and Dairy Sectors.

<u>North Carolina State</u> researchers sent plant biology experiments to the International Space Station.

<u>Cal Poly</u> researchers say the rattlesnake population could climb due to climate change.

CAST Social Media



CAST <u>welcomes ideas</u> for future publications and projects.

concerns across the country.

Water Regulations: The U.S. House approved a bill setting deadlines for the <u>EPA to implement drinking water regulations</u> for so-called forever chemicals.

Far Side of the Barn

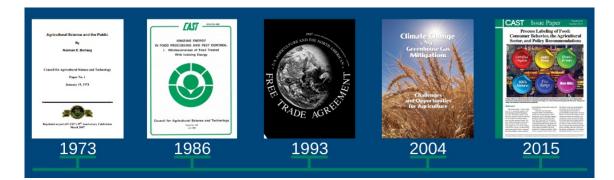
Smallest Cow: This 23 month old cow from Bangladesh is 20 inches tall and <u>weighs 57 pounds</u>.

Tasty or Tragic? (video): Three taste testers review the <u>new Kraft Mac and</u> <u>Cheese Ice Cream</u>—some call it the "ice cream <u>you</u> thought you'd never need."



CAST Updates

Approaching 50 Years of CAST Publications



The year 2022 marks 50 years since CAST was established in 1972as 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 <u>Tomorrow</u>—a joint initiative designed to promote global, sustainable development goals.*

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

Pig Production: This article looks at <u>antimicrobial growth</u> <u>promoters</u> and pig performance.



Dairy Woes: With soaring feed prices and the end of some aid programs, many <u>dairy farmers are facing challenges</u>.

ASF in Germany: A third case of <u>African swine fever</u> (ASF) was confirmed in farm pigs in Germany.

Mammals and Obesity: Iowa State University scientists are finding evidence that <u>obesity alters mammals' reproductive</u> <u>systems</u> in a variety of ways. The 2021 <u>USPOULTRY Financial</u> <u>Management Seminar</u> highlighted sustainability expectations and pandemic impacts.

Food Science and Safety News

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

Meaty Issue: University researchers <u>studied the nutritional</u> <u>differences</u> between meat and plant-based alternatives.

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

Feeding Students: California is launching the country's largest <u>free lunch program for students</u>.

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

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



lowa State Fair food can be healthy or outrageous-on-a-stick. <u>Items this</u> <u>year</u> include Tennessee Twinkies and a Peanut Butter Squealer.

Plant Agriculture and Environmental News

Research Priorities: The United Soybean Board approved <u>projects designed to drive innovation</u>, 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 <u>ultraviolet light system to thwart strawberry pathogens</u>.

CRISPR Banana: African scientists created a CRISPRedited banana that's resistant to a disease ravaging <u>farms</u> <u>across the continent</u>.

Read the Trees: <u>Sequoia tree slabs help researchers</u> 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 <u>effects of sound on grasshoppers</u>.



A Texas A&M study involves a process that <u>improves the making</u> <u>of biodegradable plastics</u> from biological substances rather than from petroleum.

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 <u>developed a smartphone</u> <u>sensor</u> for on-site detection of *E. coli* in milk.

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

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



Deadly and Life-saving: Australian scientists are developing a drug from the <u>venom of the deadly</u> <u>funnel-web spider</u> to prevent damage caused by heart attacks.

General Interest News

Sustainable and Profitable: The U.S. Farmers and Ranchers in Action group looked at <u>sustainable farming</u> <u>practices</u> 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 <u>information about Labor and Automation</u>: Effects on Social Sustainability and Resilience in U.S. Agriculture.

Giving Back: NFL linebacker Avery Williamson gives back to <u>4-H in meaningful ways</u>.

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

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



Hosted by Kansas State University, youth from 41 counties exhibited 261 pigs in the 2021 Dr. Bob Hines Swine Classic.

Photo Credits

Page one moon pic from nasa.gov, information collage from niemanlab.com, and small cow pic from youtube.com.

Animal Sec. chicken pic from morningagclips.com. Food sec. collage from travelandleisure.com, kcci.com, and

abconyourside.com. Plant Sec. bio pic from ritzherals.com and innovationnewsnetwork.com. Inter. Sec. spider pic from

abc.net.au.news. Gen. Sec. pig pic from ksre.k-state.edu. Unless otherwise noted, photos courtesy of the USDA

Agricultural Research Service or CAST.

Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- * 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

- * 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

- * American Meteorological Society, Committee on Agricultural and Forest Meteorology
- Agricultural and Forest Meteorolog
- * 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
- * Aquatic Plant Management Society
- * BASF Corporation
- * Cal Poly State University
- * Corteva Agriscience
- * CropLife America

- * National Pork Board
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * 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

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

Members of CAST's Education Program

- * Cal Poly-San Luis Obispo
- * Cornell University
- * Iowa State University
- * Kansas State University
- * Mississippi State University
- * North Carolina Agricultural and Technical State University
- * North Carolina State University
- * Penn State University
- * Texas A&M University College of Ag & Life Sciences
- * The Ohio State University

- * Tuskegee University
- * University of Arkansas System Division of Agriculture
- * University of California-Davis
- * University of Florida Institute of Food and
- Agricultural Sciences
- * University of Kentucky
- * University of Missouri-Columbia
- * University of Nebraska Agricultural Research
- Division
- * University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

Dan Gogerty (Communications and *Friday Notes* Editor) dgogerty@cast-science.org Dylana Luett (Communications and Social Media Specialist) dluett@cast-science.org The Council for Agricultural Science and Technology 4420 West Lincoln Way Ames, Iowa 50014-3447 Phone: 515-292-2125



The Science Source for Food, Agricultural, and Environmental Issues

** With assistance from Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)

CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Colleen Hamilton at 515-292-2125 or chamilton@cast-science.org, or <u>CLICK HERE</u> for CAST membership information.

Council for Agricultural Science and Technology [www.cast-science.org]

