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

World Food Prize week included many informative, stimulating sessions. This year’s World Food Prize laureate Dr. Rattan Lal—now a distinguished professor at The Ohio State University—is known for his pioneering research on the restoration of soil health in Africa, Asia, and Latin America. Click here to access a video of the laureate award ceremony.

A presentation during the WFP featured CAST’s new publication Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger. See page two below for more details.

The ASA, CSSA, and SSSA will host their International Annual Meeting, ”Translating Visionary Science to Practice,” Nov. 9-13.

Registration for the 2020 NAAE Virtual Convention is now open—the schedule is here and registration form here.

The National FFA Organization “Agricultural Education for All” roadmap outlines strategies the

October 16, 2020

Effectively Communicating in Times of Crisis

Immediately after receiving the 2020 Borlaug CAST Communication Award, Dr. Alexa Lamm put policy into practice and delivered an insightful presentation regarding the importance of ag/science communication in challenging times. Lamm provided science-based advice about how to consider audiences, messages, channels, and sources. A video of her presentation, informational slides, and the Q&A session is available here.

Kent Schescke (CAST EVP), Barbara Stinson (World Food Prize Foundation President), Julie Borlaug (INARI and CropLife Foundation), and Nick Place (University of Georgia Dean of CAES) all cited Lamm’s accomplishments and her abilities to "make science available for everyone." Schescke explained the BCCA legacy and CAST’s role in communication; Stinson noted CAST’s connection with the wide influence and importance of the World Food Prize; Borlaug used a quote from her grandfather—“Take it to the farmer.”--and added her own twist—"Take it to the public."--to set the stage for Lamm’s presentation; and Place pointed out some of Lamm’a specific skills and accomplishments.

Lamm also used a Norman Borlaug quote during her session--"There are no miracles in agricultural production" turned into "There are no miracles in communicating about science and agriculture." As Lamm demonstrates, it takes hard work, critical thinking, credible information, and a desire to ensure that the science community serves humanity.

News and Views

USDA Updates: Press releases from the department include topics related to trees, broadband, and school meals.

Dealing with Infodemics: With "communication" as a key focus at the World Food Prize and the Borlaug CAST Communication Award presentation, CAST’s recent commentary--The Importance of Communicating Empirically Based Science for Society--continues to be timely.
CAST College Corner

Tuskegee University offers programs in Alabama that prepare students for jobs, careers, and leadership in STEAM (Science, Technology, Engineering, Agriculture, and Mathematics).

This year’s annual Kansas State University Swine Day—November 18-19—will be online with a full slate of presentations.

Three University of Missouri researchers received a grant to purchase a GreenFeed Pasture System that measures the amount of methane, carbon dioxide, and more released by cattle.

Check throughout Friday Notes to see more featured articles from member universities.

CAST Social Media

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CAST welcomes ideas for future publications and projects.

CAST Updates

Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger

CAST’s new Issue Paper, Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger, was released on October 14 as part of the series on The Need for Agricultural Innovation to Sustainably Feed the World by 2050. Click here for a free download of the paper, the one page Ag quickCAST, and the student study guide.

Dr. Howarth Bouis--2016 World Food Prize Laureate and lead author for this publication—and a panel of the task force authors presented highlights from this paper followed by a Q&A. As Dr. Bouis said in his introduction, "Can we get the plants to do the work?" Judging from the insights provided by him and the panel of experts, this field is vibrant now, and the potential is broad. As the authors conclude in the publication, "Biofortification is in the forefront of demonstrating just how resilient, sustainable, and cost-effective agricultural interventions can be for improving nutrition and health."

BCCA Award Presentation

The 11th annual Borlaug CAST Communication
Award (BCCA) presentation was hosted by CAST. CropLife Foundation sponsored the award. It featured keynote speaker and 2020 award winner Dr. Alexa Lamm. Lamm presented on Effectively Communicating Science in Times of Crisis.

You can view the recorded presentation here.

New CAST Blogs

This week we caught up with Kevin Folta, the 2016 BCCA recipient. He discusses his recent research of installing random DNA information into an organism, how he manages his time, and how to deal with criticism.

Upcoming Publications

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges
The paper will be released on November 16, with a webinar on November 17.

Animal Agriculture and Environmental News

Rural Veterinarians (video): Texas A&M faculty members are establishing a rural veterinarian network to provide education and assistance with a goal of making rural veterinary practices sustainable. Also, check out the CAST paper Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply.

Profitable Cattle Production: A veterinarian and a Kansas State researcher explain that the most profitable cattle producers find ways to add value to their animals by selecting good genetics and following health protocols.

Pigs with Heart: The goal of harvesting hearts from pigs to solve the chronic shortage of donor organs appears to be in reach, according to these medical researchers.

Net-Zero: A food company joined the U.S. dairy industry to help make sustainability more accessible to farmers.

Eggs or Chickens–Which Came First? A new study found that broilers that are raised in the barn they are hatched in are healthier than when they are transported elsewhere.

Connecting with Beef Consumers (video): This animal scientist talks about the increasingly consumer-driven beef industry.

Legal Issues: A major processing company reached a plea agreement with the U.S. government over charges of price-fixing in the chicken industry.

Mini Cows: A Kansas woman posted social media videos featuring her miniature cows set to popular songs. She now has a large following, and she has gathered donations for local health services.

Virtual Cows: Dairy Management Inc. partnered with video game influencers to help them build virtual dairy farms to promote dairy sustainability.

Food Science and Safety News
Food Information (video): An app called “Colin the Chicken” allows consumers to access information about a poultry product’s specifications. And yes, the tech is named after a humorous Portlandia skit.

A Disturbing Twinkie That Defies Science: Researchers are studying a “mummified Twinkie” to see if fungi or something else has affected the substance.

Year-round Strawberries: A joint agreement between two companies allows them to grow strawberries year-round in vertical indoor farms.

Bees, Crops, and Food: This insightful study looks at the “apoidea superfamily” influence on crop production through pollination, the diversity of crops in a given area, the area planted by specific crops, and agricultural output.

Composting and Food Safety: The seemingly magical process called composting decomposes organic materials to create nutrient-rich soil material. However, it can cause pathogens, so proper methods—such as high temperatures—are important.

Pink Pineapples: A food production company has released a pink pineapple that is sweeter and juicier than a traditional pineapple.

Plant Agriculture and Environmental News

Carbon and Soil: World Food Prize 2020 laureate Rattan Lal and others discussed how farmers can make money with practices that sequester carbon.

Herbicide News: A large agriculture company will launch a premix soybean pre-emergent herbicide for use next year, and another company has received federal registration from the EPA for a herbicide with possible uses in corn, cotton, soybeans, and wheat.

Drought Problems: A climatologist with the National Drought Mitigation Center says extremely dry conditions—especially in the High Plains and western Corn Belt—are a concern heading into winter.

The Amazon, El Niño, and Climate: University of Arkansas researchers established a link between climate patterns in the Amazon and large parts of North and South America.

Orange Crush (also see story below): Florida oranges are set for a down year as the USDA projects a 15% decrease in the state’s orange production—the “greening” disease continues to cause problems.

Greening Good News (related to story above): University of Florida scientists have developed a citrus greening-resistant tree by sequencing the genome of a fruit plant.

International News

Reef Woes (video): According to this study, Australia’s Great Barrier Reef has lost more than half of its coral since 1995 due to warmer seas driven by climate change.

COVID-19 on Surfaces: Australian scientists published a study about how long the virus that causes COVID can...
survive on surfaces at different temperatures.

The Pandemic and the Food Industry in Africa: This story looks at how the coronavirus pandemic has affected the food industry in Africa.

Glowing--and Deadly for Flies: Japanese scientists developed Venus flytraps that glow in order to study the capturing of prey, digestion, and other flytrap activities.

Seed Systems and Biotech Innovation: Iowa State University’s Seed Science Center received grants to strengthen the capacities of national seed and biosafety authorities in the Philippines and Africa.

Pass the Salt: Led by a startup effort, a farm in Scotland is using the ocean to grow vegetables using saltwater.

Great Scot, Colonel Sanders! While chicken corsages might not be common, millions of Japanese order American-style fried chicken for a Christmas tradition. The U.S. South claims to be the heart of fried chicken culture, but some say the food originated in Scotland.

General Interest News

Fertilizer News: The Fertilizer Institute released an impact study highlighting the economic contributions of the U.S. fertilizer industry. And this site provides profiles of some of the many women who are influencing the fertilizer industry.

Right to Repair Movement (video): Some say electronics makers have made it difficult for consumers to fix their devices—from smartphones to tractors. A “Right to Repair” movement is proposing laws to change the situation.

Clever Solutions (video): This clip features farmer-built inventions that help with practical problems on the farm.

Lifesaving Development: Cal Poly students came up with a concept and design for a device that would treat postpartum hemorrhaging in women, and now the FDA has approved the procedure.

Worker Challenges: Millions of farmworkers in the United States cultivate and harvest crops each year, including many migrant workers. The pandemic has made a hard job even more difficult.

Remote Learning and Artificial Intelligence: Penn State students are involved in exploring pathways in the use of artificial intelligence to test resilience in students who learn remotely during the COVID-19 pandemic.

University of Nevada-Reno students are distributing hundreds of burritos a week to those who are food insecure and homeless.

This Mississippi State University story provides information about snakes in and around homes, with a special look at which ones are venomous.

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