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Announcements

In a new CAST Commentary and during a lively webinar session, the important topics of science, agriculture, and communication have been in focus. See page two below for more.

The Johns Hopkins site gives current numbers regarding coronavirus infections at the international, national, and U.S. state levels. And this video feature looks at how the pandemic is affecting health care professionals.

ASABE is calling for papers for its April conference: Autonomous Air and Ground Sensing Systems for Agricultural Optimization and Phenotyping VI.

The Agriculture and the Microbiome webinar was on August 25. The Q&A with the panelists is now online.

CAST College Corner

The University of Nevada-Reno

September 25, 2020

CAST Events at the World Food Prize

The flurry of papers and webinars produced by CAST this year will reach a high point during the World Food Prize in October. The 2020 Borlaug Dialogue is going virtual, but CAST will be more involved than ever with a presentation of the 2020 Borlaug CAST Communication Award to Dr. Alexa Lamm on October 13 and a free webinar session on October 15 about CAST’s new Issue Paper, Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger.

News and Views

USDA News: The USDA is providing a website with details about its Coronavirus Food Assistance Program 2. The department is also investing $268 million to modernize rural drinking water and wastewater infrastructure. The total of the administration’s aid to agriculture this year could near the $50 billion mark—a situation that has backers and critics.

EPA and Pesticides: The EPA diminished studies linking a pesticide associated with brain damage in children—a move that could enable years of continued use of chlorpyrifos.

Wildfire Overview: This site includes articles and videos about losses, heroics, and the effects of these raging fires.

The CCC and Funding: The U.S. House passed a continuing resolution that includes funds for the Commodity Credit Corporation—with certain conditions.

Ag and Tech: Editing the genes of plants and animals could help mitigate greenhouse gas emissions from agriculture and other sectors, according to this report.

News from the Far Side of the Barn
recognized the impact of agriculture teachers in a week-long virtual celebration.

North Carolina A&T State students gave highlights of their summer internships with experiences involving veterinary work, environmental concerns, food studies, and more.

A University of Nebraska-Lincoln team has identified a gene essential to fungal infiltration of the rice plant.

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

CAST Social Media

Visit our website

CAST welcomes ideas for future publications and projects.

CAST Updates

Pigs, Robots, and Beethoven: A robot developed in Brazil feeds pigs and plays classical music that has a “positive influence on porcine performance.”

Do I Smell Healthy? Apparently, certain dogs have the ability to sniff out COVID-19. Now, Helsinki, Finland, officials are hiring a team of dogs to smell and screen passengers at its international airport.

Ultimate Web Designers (video): Spiders have a brain the size of a poppy seed and they can barely see, but scientists say their minds “radiate out” through their amazing webs.

The Importance of Communicating Empirically Based Science for Society

The new Commentary was released on Monday and is available for download along with the student study guide and Ag quickCAST. The webinar was recorded and is available on the website for viewing. Dr. Stuart Smyth started the webinar discussing the commentary. The second half of the webinar enabled task force authors to answer questions from the audience regarding misinformation topics.

BCCA Award Presentation

Please join us for the 11th annual Borlaug CAST Communication Award (BCCA) presentation cohosted by CAST and CropLife Foundation, featuring keynote speaker and 2020 award winner Dr. Alexa Lamm. Check here for registration information. This online presentation event—held during World Food Prize week—will occur on Tuesday, October 13, from 12:00 PM to 1:00 PM Central Time.

Other CAST Updates

This week we caught up with our 2015 Borlaug CAST Communication Award winner, Dr. Channa S. Prakash. Read his blog to learn more about his favorite research and how the pandemic has affected his life as the Dean of the College of Arts and Sciences at Tuskegee University.
**Upcoming Publications**

- *Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger*  
  *(October 15 release)*

- *Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges*  
  *(November release)*

**Animal Agriculture and Environmental News**

**Fire and Heartache (video):** Ranchers and beef producers hit by massive wildfires in eastern Washington are helping each other as they face extraordinary losses.

**Healthy Hens:** A United Egg Producers report says that keeping hens healthy is a top priority of egg farmers, with a focus on biosecurity practices and careful monitoring of hen health.

**Bovine Moves:** University of Nebraska-Lincoln researchers are tracking the movement and behavioral patterns of beef cattle to learn about efficient beef production.

**Pig Numbers:** The USDA says the number of pigs in the United States declined slightly as of September 1, but reports indicate U.S. pork exports to China have surged.

**Herbicides and Butterflies:** This Genetic Literacy Project article says the reporting about glyphosate weedkiller and the death of Monarch butterflies were misreported.

**Endangered Species Act:** The Endangered Species Act has been modernized and incentivizes voluntary conservation efforts by ranchers.

**After facing many hog disease situations, some in China are hoping high-rise pig farms can help with health concerns. Others are not convinced the mega facilities will improve pig health and welfare.**

**Food Science and Safety News**

**The Steaks Are High (video):** The wagyu beef market battle involves international trade, traditions, and ag genomics.

**Good News, Bad News:** Meat prices are falling at grocery stores as last spring’s shortages fade, benefitting consumers but hurting meat packers and farmers.

**Federal Food Programs:** While the government announced that the Farmers to Families Food Box program will end October 31, the United Fresh Produce Association says the need isn’t over for federal feeding programs.

**$21m House of Chocolate:** A new chocolate complex is being built in Belgium; it includes a creative workspace for the team of chocolate engineers.

**Big Waste, Big Pledges:** Nearly 200 food suppliers, Pumpkin spice everything comes at this time of year, and a mac & cheese item proves that. Some folks, such as this newscaster,
Plant Agriculture and Environmental News

**Plant Pathology**: A University of Kentucky graduate student is studying *fungus and northern corn leaf blight*, as she works to become an extension plant pathologist.

**A Fungus with Gas**: USDA/ARS announced that a harmless airborne *fungus can dramatically accelerate plant growth* if a germinating plant is near the fungus as it emits volatiles or gases.

**Conservation, Resiliency, and Profitability**: Cargill says it is supporting farmer-led efforts to adopt practices and *systems foundational to regenerative agriculture practices* during the next 10 years.

**Old Is New**: A Cornell scientist is leading a multi-institution team that's helping *turn diverse and ancient grains into staple foods*, thanks to a USDA grant.

**Fiber "Optics"**: A biotech company announced the launch of a product based on novel enzymes and yeast strains to *convert corn fiber into ethanol*.

**Crop Diversity**: Researchers in Brazil found that *intercropping* helps fields stay sustainable.

International News

**A Whale of a Problem (video)**: More than 450 pilot whales are stranded off Tasmania's west coast, with *hundreds feared dead*. Rescuers are *working hard to save trapped whales*, but strong tides are hampering the efforts.

**Efficient Food Chains**: With Africa’s urban population projected to grow at a rate of 3.5% annually, UN officials are advocating a *focus on efficient food value chains* to get rural produce to urban consumers.

**Trees with a Sting**: Scientists are studying *toxins--produced by Australia’s stinging trees*—that bear a strong resemblance to the poison of spiders and scorpions.

**Food Allergy Concerns**: British authorities are looking at various possible *causes for the rise in allergies*—especially food allergies—in recent decades.

**Threat to an Industry**: An *invasive plant disease* is putting the United Kingdom’s gin industry at risk.

**International Trade**: Blueberries from Peru have joined a growing list of certified fair trade products, including bell peppers, grapes, tomatoes, and more.

General Interest News

Some Japanese convenience stores are turning to technology because of labor shortages, as they test a robot that can stack shelves.

A Japanese burger chain is testing a new system where people with disabilities serve customers using remotely controlled robots.
Ag and Internet Connectivity: During a recent National Telecommunications and Information Administration webinar, experts dissected the economic potential of precision agriculture technology in rural America.

Carbon Emissions Inequities: The wealthiest 1% of the world’s population were responsible for the emission of more than twice as much carbon dioxide as the poorer half of the world from 1990 to 2015, according to new research.

Taking a Count: A University of Arkansas biologist is part of an international team of researchers surveying the number of dragonflies and damselflies.

Birds for Pest Control? A study at Penn State is examining the potential for birds to eat spotted lanternfly in a hope to find predators that live in the environment.

Dead Bird Mystery: Thousands of dead migratory birds in the southwestern United States have scientists baffled.

In the Show Ring: The Kansas State Fair had no buzzing crowds or enticing food smells, but nearly 200 4-H members gathered for livestock shows featuring horse, poultry, goat, and dairy cattle entries.

Older male elephants—threatened by poachers—have an important role to play by passing on their skills and knowledge to younger males.

In Botswana, toxins made by microscopic algae in water caused the previously unexplained deaths of hundreds of elephants.

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* Bayer
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* National Corn Growers Association/Iowa Corn Promotion Board
* National Milk Producers Federation
* National Pork Board
* North Carolina Biotechnology Center
* 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
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* United Soybean Board
* University of Nevada-Reno
* U.S. Poultry and Egg Association
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