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

The Council for Agricultural Science and Technology will be celebrating 50 years as the trusted source for credible, balanced, science-based information in 2022. Watch for upcoming information about meetings, presentations, and a commemorative publication.

November 5, 2021
Expert Advice
BCCA winners influence ag and science

For 12 years, the Borlaug CAST Communication Award has recognized outstanding science communicators. They demonstrate the ability to share information with policymakers and the public alike. Friday Notes often features insights from this group, and here are four recent examples: 1) Sarah Evanega (2021 BCCA) looks at why GMOs are gaining more acceptance. 2) Alison Van Eenennaam (BCCA 2014) focuses on animal agriculture biotech angles with “Public Acceptance of Animal Genomics and Biotechnology.” 3) Alexa Lamm (2020 BCCA) joins colleagues to explore public discourse focused on artificial intelligence and precision agriculture. 4) Jayson Lusk (2017 BCCA) looks at food prices and the cost of Thanksgiving dinner.

All 12 BCCA recipients have been active communicators, with research publications, social media influence, presentations, and other outlets. Readers can find information about each of them at this web page.

Note: Nominations are open for the 2022 Borlaug CAST Communication Award, an honor that recognizes professionals working in the agricultural, environmental, or food sectors who are promoting agricultural science in the public policy arena.

News and Views

UN Global Summit and Agriculture

1) The European Union and the United States issued a statement on a transatlantic collaboration platform about agriculture, taking on the global challenges of sustainability and climate change.

2) The United States and the United Arab Emirates launched the Agriculture Innovation Mission for Climate alongside 31
The Phytobiomes Alliance is hosting a free webinar—Borgs: giant extrachromosomal elements with the potential to augment methane oxidation—on November 17.

CAST College Corner

Cornell University graduate students won an international competition to create award-winning food concepts for NASA.

University of Nevada, Reno researchers note the decrease of the quaking aspen tree in many areas, and climate change could be a key culprit.

The University of Missouri will send mobile meat processing training centers throughout the state to help address the labor shortages within the meat processing industry.

CAST Social Media

CAST welcomes ideas for future publications and projects.

CAST Updates

A Focus on the Mission

The CAST Annual Meeting involved board members, scientists, and students

Newly installed CAST President Anna Dilger referred to past accomplishments but kept the focus on the future: "As CAST reflects on the last 50 years, we are proud of our many accomplishments and the value that our stakeholders find in us. In the next 50 years, what won’t change about CAST is our focus on bringing together experts to synthesize scientific findings on new technologies and pressing issues in food and agriculture. But we are excited to expand our efforts into new mediums like education modules, videos, or other formats to better reach a broad audience."

Dilger "received the gavel" from outgoing President David Baltensperger, a long-time CAST member and contributor. He, along with Kent Schescke (CAST EVP-CEO) and the Ohio organizing committee, helped with a full slate of meetings, presentations, and tours during the October 26-28 annual meeting in Columbus, Ohio.

Special sessions, videos, and webinars featured BCCA winners, government officials, and CAST board members, including involvement from Sally Flis, President Elect, and Dirk Drost, Treasurer. Also, staff members
and students from The Ohio State University provided expertise, insights, and hospitality. The university did a wonderful job of hosting the meetings.

**Student Scholarship Winners Join the Meeting**

This year, eight graduate and veterinary medicine students from The Ohio State University received the CAST Science Communication Scholarship on October 27 during the CAST Annual Meeting in Columbus, Ohio. The recipients could choose to submit a short video, infographic, or a micro-podcast, as well as a short essay on how their digital media example communicates a component of their research.

A blog with all the students' infographics and short videos is available here for viewing.

The CAST Science Communications Award is supported by individual donors of CAST.

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**Animal Agriculture and Environmental News**

**Feeder Spacing for Poultry:** Scientists at Mississippi State University and the USDA-ARS Poultry Research Unit looked at increased feeder spacing for chickens.

**Diets for Pregnant Heifers:** On this week's "Cattle Chat," a Kansas State University veterinarian speaks about heifers and proper weight gain.

**Pork Production Practices:** The Pork Checkoff organization encourages producers to request a customized On-Farm Sustainability Report to help document continuous improvement efforts for the pork industry.

**Poultry Production:** A large food company plans to invest $23 million to expand the company's cage-free egg production in Florida.

**Finding Nemo:** University of Florida specialists cite information from global researchers to show that the field of fish-tracking data is opening new and useful avenues.

Scientists on two continents found evidence about the likely birthplace of modern domestic horses.

Two dogs in England helped rescue their owner, and a dog in California protected its owner from a prowling mountain lion.

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**Food Science and Safety News**

**Food, Science, and Innovation:** A Texas A&M agriculture expert advocates for building on the "Borlaug legacy" by innovating throughout the entire food supply chain.

**Pesticides and Food:** The FDA released its Pesticide Data Monitoring program. For related information, see the CAST Issue Paper Interpreting Pesticide Residues in Food, a publication led by Carl Winter (2012 BCCA).

**World Champion Food Marketers:** University of Kentucky students faced real-world marketing challenges and won the Student Food Marketing Challenge.

**Diabetes and Diets:** Although carbohydrate restriction shows promise with diabetes treatment, some are concerned with the high saturated fat content of such diets.

The USDA is picking up the tab for
Heart Health: Lifestyle habits matter, according to the American Heart Association's recent scientific information about cardiovascular health that includes "10 features of heart-healthy eating patterns."

...school meals, but shortages are affecting the program and costs are rising.

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**Plant Agriculture and Environmental News**

**Sweet Crop and Aggressive Pest:** North Carolina State University researchers are countering an aggressive pest that is attacking sweet potatoes, a key crop for the state.

**Soil and Carbon Basics:** The Soil Science Society of America gives us a look at the relationship between soil and carbon in basic terms.

**Biofuels Lawsuit:** The EPA is being sued for its "failure to release biofuel blending requirements on time."

**Forcing a Breakdown:** Root decomposition is a source of soil carbon and important for the ecosystem. This blog looks at management tactics that speed up this process.

**Soybean Research:** Iowa State University received funding from the Iowa Soybean Center for several key projects.

**Dry Farming:** An old practice of dry farming is gaining traction in drought-affected areas of Oregon.

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**International News**

**Synthetic Biology:** Scientists in Africa are calling on the continent’s leaders to enact policies that can facilitate adoption of newer technologies, including synthetic biology, to alleviate hunger, malnutrition, and disease.

**Bat Wins Bird Contest (video):** New Zealand’s annual Bird of the Year competition has been won by the country's only land mammal: the pekapeka-tou-roa, or long-tailed bat.

**U.S. and Mexico Ag Issues:** Agriculture Secretary Vilsack and Mexico’s Agriculture Secretary Villalobos met in October to discuss agricultural trade issues.

**China Watch:** Recent news includes 1) researchers saying they found a way to produce an animal feed protein from carbon monoxide, 2) officials promising efforts to reduce the amount of grain lost at harvest and food wasted in kitchens, and 3) the country reporting problems with the H5N6 subtype of avian influenza.

Agriculture produces a significant amount of carbon dioxide, but it also has the potential to dramatically reduce greenhouse gas emissions.

An international study says global corn yields could fall by 2030 due to shifting weather patterns.

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**General Interest News**

**COVID in the Wild:** A team including Iowa State and Penn State researchers found that many deer tested positive for coronavirus. They say it can’t be passed to humans.

**COVID in Pets? (related to above):** Researchers in Arizona say they’ve found a clear case of human-to-animal COVID-19 transmission—a man and his pet dog and cat.

**Cyberattacks:** According to the FBI, cyberattacks on U.S. businesses have risen, and they could damage the world’s...
Mythbusting: In this “Farmside Chat,” two farmers join AFBF President Zippy Duvall to unpack misconceptions around agriculture—from climate to animal care.

Hybrid Tractor: A Lithuanian Company claims the world’s first hybrid biomethane and electric tractor capable of commercial farm use—it is not yet available for purchase.

Researchers say whales—the biggest animals to have ever lived on Earth—eat millions of calories a day, equal to 80,000 Big Macs!

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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
* 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
* Cal Poly State University
* Corteva Agriscience
* CropLife America
* 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
* National Pork Board
* National Turkey Federation
* 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, science-based information to policymakers, the media, the private sector, and the public.

Members of CAST’s Education Program

* Cal Poly-San Luis Obispo
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* National Milk Producers Federation
* National Pork Board
* National Turkey Federation
* North Central Weed Science Society
* Northeastern Weed Science Society
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* Western Society of Weed Science