



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](#)
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## Events and Announcements



This picture of a bird fishing in a no-fishing zone is an example of the fun photos from the [2020 Comedy Wildlife Photography winners](#).

The SAFE (Securing Agriculture Food and its Economy) conference October 6-7 will explore an integrated [cyberbiosecurity system for the agriculture and food bioeconomy](#).

The [National Pork Board is conducting a survey](#) about topics influencing the industry.

The [2020 Agri-Pulse Ag & Food Policy Summit](#)--a virtual event on September 21--features several noteworthy speakers.

High school FFA members in the Midwest can enter the [2021 GROWMARK Essay Contest](#) with a theme about agriculture and new technology.

## CAST College Corner

September 18, 2020

## Responding to the Infodemic

"The only way the world can keep up with food production is by the improvement of science and technology." When [Dr. Norman Borlaug](#) said these words, he no doubt also focused on the need for clear science communication, but that was before digital misinformation and disinformation evolved into major societal concerns. Faced with a modern "infodemic," society is saturated with messages about such topics as GMOs, the climate, and COVID-19.

Science isn't finished until it's communicated



In a new CAST Commentary (*The Importance of Communicating Empirically Based Science for Society*), the authors look at how scientists can build trust with those seeking information from credible sources. Check page two below for information about the publication and webinar presentation. As the [Mark Walport quote](#) in the graphic above says, communication is key, and this new paper looks at current issues and possible solutions.

## News and Views

**USDA News:** The USDA (1) announced [additional COVID-19 assistance](#) for agricultural interests--and [aid for residents and ag producers](#) affected by wildfires and by [Hurricane Sally](#), (2) joined other Western Hemisphere countries recognizing the importance of [maintaining agricultural trade flows](#) during the pandemic, and (3) [adjusted crop projections](#) following damaging weather conditions.

**Dealing with Disasters:** This RFD-TV report examines the immense [agricultural damage coming from Hurricane Sally](#), while Hurricane Laura caused about \$1.6 billion in [agriculture and forestry losses](#) in Louisiana. A UC-Davis article provides tips for students [dealing with fire, smoke, a pandemic, and more](#)--and last month, much of [Cal Poly's Swanton Pacific Ranch](#) was destroyed by fire.

**Ag, Science, and Economics:** As Jayson Lusk (Purdue and [2017 BCCA](#) winner) considers the [possible effects of a ban on junk food advertising for kids](#), he notes that policies can have unintended consequences (related link in Inter. Sec. below).

[Kansas State's](#) Purebred Beef Unit helps students study methane and carbon dioxide emissions from beef cattle.

[Penn State](#) received a USDA grant to help researchers study the potential for SARS-CoV-2 to infect livestock.

A [University of Nebraska-Lincoln](#) geologist has had a mineral named after her called priscillagrewite.

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.

**Fight the Flu:** This American Council on Science and Health article explains why it is in your best interest and that of the public health system to [get your seasonal flu vaccination](#)—and the CDC provides these [2020-21 guidelines](#).

## News from the Far Side of the Barn

**Canine Hyperbole (video):** A broadcaster chastises his dogs for [lying on their online dating profiles](#).



**"Bearly" Awake (video):** A man was [awakened by a bear nudging his foot](#) after he fell asleep in a lounge chair by his swimming pool.

**The Office in a Parallel Universe:** Some think COVID-19 might be the death of the common office situation, but others speculate about a new [post-pandemic architecture style](#).

## CAST Updates

### Science, Agriculture, and Communication

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.



### New CAST Blogs

**NEW CAST**  
The Science Source for Food, Agricultural, and Environmental Issues

**BLOGS**

**Catherine Bertini**  
2011 Borlaug CAST Communication Award Winner

**Carl Winter**  
2012 Borlaug CAST Communication Award Winner

This week we caught up with two past BCCA recipients. Catherine Bertini received the award in 2011; [read this blog](#) to learn more about her numerous contributions to global food security.

Carl Winter was the BCCA recipient in 2012. [This blog discusses](#) his favorite research and how he uses his musical skills to teach others about food safety.

### *The Importance of Communicating Empirically Based Science for Society*

This Commentary will be available for download on September 21. There will be a free webinar on September 22--you can [register here](#).

This paper discusses the crucial factors of what we define as empirically based science (rigorous, proven methodologies, and peer reviewed results), emphasizing that whether science is conducted by a private

company, a university, or a government department or agency, it is all the same, requiring that sound methodologies be followed. Scientific research protocols and methodologies have been developed, reviewed, and refined through the application of each scientific method and the peer review of experimental protocols and results, creating global standards on research methods. Empirical science is empirical science--it is not an ice cream flavor; one cannot pick and choose which aspect of the scientific method to support and which to reject. The application of empirical science is consistent, whether applied to climate change, vaccines, or GM crops and foods.

## Upcoming Publications

- *The Importance of Communicating Empirically Based Science for Society*--See above for info.
- *Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger*(October release)
- *Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges*(November release)

## Animal Agriculture and Environmental News

**Scrambling for Eggs (video):** This video gives an overview of the "[best chicken breeds for eggs](#)," and this article provides information from the University of Missouri about how to [keep hens laying eggs](#) during winter.

**Pork Power:** During this tumultuous year, [pork producers have shown agility](#) throughout the unexpected. The National Pork Board explains how pig farmers continue to [make strides in overall sustainability](#) by being more efficient.

**Surrogate Sires:** Using CRISPR-Cas9, scientists created pigs, goats, and cattle that can serve as viable donor animals. This could speed the spread of desirable livestock traits and eventually [improve food production](#).

**Cows and Climate:** This British interview features Frank Mitloehner (UC-Davis and [2019 BCCA](#) winner) about [cows and climate change](#) (spoiler alert: the impact has been exaggerated).

**Honey Bees and Nutrition:** A Texas A&M project seeks to slow population losses among more than 2.6 million managed [honey bee colonies in the United States](#).

**Bee Health:** [Check out the CAST Commentary](#) *Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It*.



Americans are [turning to dairy products at a rate never seen before](#), according to the USDA. Annualized per capita consumption of cheese, butter, and yogurt are driving the growth in a trend that has continued for five decades.

A University of Nebraska-Lincoln report looks at the [early weaning of beef calves](#) as a management practice.

## Food Science and Safety News

**Waste Not, Want Not (video):** "Upcycling" is a new technique of [making food using discarded ingredients](#), and it is gaining momentum with entrepreneurs looking to create new food categories. Check out the CAST publication [Food Loss and Waste](#).

**Food Industry Ranks High with the Public:** The food and grocery industries are now among the most [highly regarded industries](#) according to a consumer survey.

**Know Your Beef:** USDA beef quality grades may seem complicated, but this site explains "[choice, certified, organic](#)," and more.

**Crowing about Their Chicken:** Find out why Cornell Chicken is the "[taste of summer](#)."



During this pandemic year, nearly one in six [restaurants closed either](#)

**Government Food Programs:** Whether in the classroom or at home, [kids can get free school meals](#)—at least for the remainder of this year.

[permanently or long-term](#), and millions of employees have been affected. Also, [online grocery spending](#) is much higher than it was at the same time last year.

## Plant Agriculture and Environmental News

**Soy and Swine Feed:** Soy checkoff-funded research at Kansas State University found that [soybean meal increases the net energy value](#) in swine feed.

**Corn, Ethanol, DDGs, and Quotas:** This [National Corn Growers Association site includes articles](#) about the EPA's denial of many small refinery exemptions (waivers), a look at dried distillers grains with solubles (DDGs), and the issue about a Brazil tariff rate quota for ethanol.

**Sorghum and Beer-brewing Potential:** University of Nevada-Reno researchers are [testing grains for drought-resistance, high yield, and good flavor](#).

**Smart Water Use:** The Iowa Soybean Association is studying a [drainage water recycling system](#) that captures excess water drained from fields that can be used for irrigation later.

**Fighting Citrus Greening Disease:** University of Florida researchers and other scientists are [contacting organic citrus growers for help](#) in developing a holistic approach in battling citrus greening disease.

**Soil Compaction:** University research shows that [compaction can reduce yields](#) anywhere from 10-50%.

**Stopping the Invasion:** This North Carolina State expert explores the use of unmanned aerial systems for [mapping and treating invasive plant species](#).



An indoor farm near Yellowstone National Park employs 40 diverse staff members as [they grow lettuce, microgreens, tomato plants, and more](#) for local restaurants and grocery stores.

An American Society of Agronomy expert and university researchers are [working with farmers to choose the best cover crops](#), and University of Missouri specialists also provide suggestions about [seed selection and best practices](#).

## International News

**ASF Update:** [African swine fever has shown up](#) in several Eastern European countries and possibly Germany.

**Floating Gardens of Bangladesh:** In the lowlands of Bangladesh, people are [turning to a centuries-old, ecofriendly form of hydroponics](#) to keep afloat.

**Innovations Needed for Drought Concerns:** A third consecutive year of [drought in Europe](#) has agriculturalists searching for innovative solutions.

**Junk-food Legislation:** Lawmakers in several Mexican states passed [laws to keep junk food away from children](#) partly in response to the coronavirus pandemic.

**Fiber or Fibre--Either Way, It's Important:** A recent survey shows that 90% of adults in the UK don't [eat enough fiber](#), an aspect of nutrition that has many benefits. This article explains how to get enough.



French farmers produced a [work of art with tractors](#) as they honored agriculture and the Tour de France.

[German biodiesel exports](#) have risen sharply, with the Netherlands as the primary country of destination.

## General Interest News

**Water Quality (video):** University of Kentucky scientists are partnering with Beam Suntory to [study water sustainability](#). They want quality water for the products and the surrounding community.

**Phone-a-Friend (Farmer Style):** A new federally funded project led by Iowa State University researchers will help [farmers share data relevant to their operations](#) with one another and improve production.

**Orchards, the Pandemic, and the Public:** As the pandemic continues into the fall harvest season, [some U-pick farms are in crisis](#). However, others are using web pages and social media to get the public involved.

**Farm Tourism (related to above):** This North Carolina State podcast episode of "[Farms, Food, and You](#)" looks at how farmers and industry leaders are still planning tourism and other events.

**Cancer and Young People:** The death of acclaimed actor and humanitarian Chadwick Boseman at age 43 from colon cancer has put a [spotlight on a disease that's on the rise among young people](#).



**Surf's Way Up:** As this video shows, [Braziian Maya Gabeira set a big-wave world record](#) riding a 73-foot monster off the coast of Portugal.

**Life on Venus? Astronomers found phosphine in the atmosphere of Venus, which means there [might be life on the planet](#).**

## Photo Credits

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- \* 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 for Nutrition Nutritional Sciences Council
- \* American Society of Agricultural and Biological Engineers
- \* American Society of Agronomy
- \* American Society of Animal Science
- \* American Society of Plant Biologists
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- \* Crop Science Society of America
- \* Entomological 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
- \* 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
- \* Tuskegee University
- \* United Soybean Board
- \* University of Nevada-Reno
- \* U.S. Poultry and Egg Association
- \* Weed Science Society of America

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The Science Source for Food,  
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