



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.

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Winners of the 2019 CAST Scholarship Announced



Ten graduate students from the University of Arkansas have been selected to receive this year's scholarship award.

[View the list of winners here.](#)

World Food Prize Laureate Presentation

[Simon Groot, 2019 World Food Prize laureate](#), will speak at Iowa State University October 14. He has focused on [providing vegetable seeds to millions of smallholder farmers](#) around the world.

Publication Rollout

CAST Issue Paper

Interpreting Pesticide Residues in Food



October 11, 2019

Biotech and Agriculture Regulations, Innovation, and Acceptance

When it comes to biotechnology, agricultural innovators must consider safety, regulations, and consumer acceptance. The possibilities are numerous, but the processes can be challenging.



Administration officials recently declared they are [committed to reducing regulatory barriers](#) to agricultural biotechnology as part of a larger strategy to promote the development of a "bioeconomy" based on far-reaching scientific innovations that could revolutionize medicine, nutrition, and manufacturing--as well as farming. A [recent CAST publication](#) looked at some related topics in the issue paper titled *Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities*.

For several years, gene editing has been a high-profile aspect of bio innovation, and a good example comes from a [UC-Davis project involving dairy cattle](#). During the past two years, researchers--led by [Alison Van Eenennaam](#)--have been studying six offspring of a dairy bull, genome-edited to prevent it from growing horns. This technology has been proposed as an alternative to dehorning, and the scientists recently published their findings in the journal *Nature Biotechnology*. They seem excited about the results, even though [the journey has been challenging](#), and public acceptance is still an issue.

News and Views

WASDE Report: This monthly USDA report projects the latest [world agricultural supply and demand estimates](#).

Trade Deal Involves Agriculture: The [new U.S.-Japan trade deal](#) is expected to provide a staged reduction of Japanese tariffs for U.S. beef and pork, and various ag groups, experts, and officials [applaud the pact](#). However, some ag products [might not benefit](#) from the proposal.

The Farmer's Advocate: This recent *60 Minutes* [profile of Land O'Lakes CEO Beth Ford](#) looks at farm challenges, tech opportunities, and agribusiness leadership.

On October 21, CAST will [present its new issue paper](#), *Interpreting Pesticide Residues in Food*, at three venues in Washington, D.C.

Science Communication

The University of Nevada-Reno will hold a panel discussion titled "[Communicating Science in a Divided Society](#)" October 21.

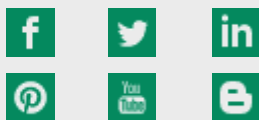
Making a Difference

The Nebraska Farm Bureau Foundation awarded ten teachers with funds [in support of agricultural education and FFA programs](#).

Send in Ideas

CAST [welcomes suggestions](#) for future publications and projects.

CAST Social Media



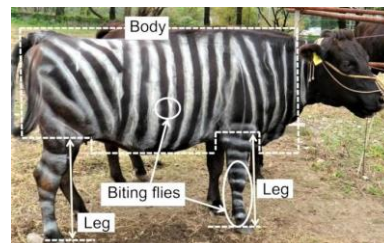
Ethanol Situation: The federal government will add onto future ethanol requirements to counter its waivers that allowed small oil refineries to mix less of the biofuel with gasoline. [Details are not yet finalized](#), and some say the gallons do not make up for what the industry has lost.

Ag-tech Project--FarmBeats: A collaboration between the USDA and Microsoft aims to [harness data and artificial intelligence to help farmers](#) cut costs, increase yields, and sustainably grow crops.

News from the Far Side of the Barn

Do I Look Good in Stripes?

Japanese researchers say cows are less likely to experience damaging horse fly bites [if they are painted to look like zebras](#).



Dog Named Miracle (video):

Weeks after the storm, a [puppy was rescued](#) from the extensive damage left by Hurricane Dorian in the Bahamas.

Will it cause a bovine identity crisis? [Link at left.](#)

The Impact of the Borlaug CAST Communication Award

The Impressive Sculpture Stands for Key Ag-science Principles

The Borlaug CAST Communication Award has become more than a prize--it is an event, a sharing of ideas, and a way to celebrate the extraordinary men and women who excel at research, education, and effective ag-science communication. This year's 10th anniversary BCCA presentation will provide a stimulating setting that showcases the key principles of the award.

At a World Food Prize side [event Wednesday, October 16](#), CAST will officially present Dr. Frank Mitloehner with the 2019 Borlaug CAST Communication Award (sponsored by CropLife Foundation). The animal science specialist from UC-Davis will speak about "Feeding the World Without Wasting It."

Following the address, Julie Borlaug of INARI Agriculture will moderate a panel discussion about the topic of the current state and future role of science communication in food and agriculture. The panel will include five previous BCCA winners: Catherine Bertini, Marty Matlock, Frank Mitloehner, Channapatna Prakash, and Carl Winter.

This event offers a complimentary breakfast at 7:00 a.m., a program (including Dr. Mitloehner's speech) beginning at 7:30 a.m., and a panel discussion starting at 8:30 a.m. [Check here for information about how to register for the program.](#)



BCCA 2019 winner [Frank Mitloehner](#) (top center) and the nine other [highly respected recipients of the award](#).



Check here for [more about the award and the bronze sculpture](#) made by Jerry Palen.

The Borlaug CAST Communication Award is presented annually for outstanding achievement by a scientist, engineer, technologist, or other professional working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena. Primary consideration will be given to candidates who are actively engaged in promoting agriculture through research, teaching, extension, or mass communication; who have made significant contributions to their discipline or field; and who demonstrate a passionate interest in communicating the importance of agriculture to policymakers, the news media, and the public.

Nominees must have demonstrated their ability to communicate by written material; public presentations; and/or the use of television, radio, or other social media. They should be recognized by their peers as scientists who have made significant contributions in their professional fields.

The award is dedicated to Dr. Norman E. Borlaug, "The Man Who Fed the World" and author of CAST publication #1, and to Dr. Charles A. Black, first CAST President, first Executive Vice President, and member of the founding committee of CAST. Former CAST EVP John Bonner initiated the award and the presentation a decade ago, former CAST EVP Linda Chimenti continued the legacy, and current EVP Kent Schescke will preside over the proceedings for the fifth consecutive year.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 lab pic from ropella.com and cow pic from cnn.com. Animal Sec. woman on horse photo from ucdavis.edu and wild horses pic from featureshoot.com. Food Sec. pet pic from petspyjamas.com and sweet potato pic from cityfarmer.info. Plant Sec. cover crop pic from cropwatchunl.edu and hay pic from hay.jpg. Inter. Sec. space pic from farmingUK.com and goat pic from lottery.com. Gen. Sec. tractor pic from agrimarketing.com and butterfly pic from npr.org. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



Animal Agriculture and Environmental News

Women on the Farm: This long-time poultry farmer works to support, educate, and [encourage women in the industry](#), and this [woman veterinarian explains](#) why working in rural areas brings on unique challenges.

Poultry and Sustainability: Many [chicken producers in the United States](#) have reduced the use of water, farmland, electricity, and other valuable natural resources

Animal Welfare: People have strong feelings about how animals should be treated, especially farm animals. CAST addressed the issue in the 2018 publication, [Scientific, Ethical, and Economic Aspects of Farm Animal Welfare](#).

A "Significant Event for Animal Protein": As African swine fever spreads beyond China's borders and throughout Asia, the [global implications of what is happening](#) in the pork market are becoming clearer.



In this CAST Member Spotlight, a UC-Davis [doctoral student discusses her research in beef cattle sustainability](#)--and the importance of science communication. In this YouTube video from last year, she explains [her desire to become a scientist](#).

Place on Beef: *Successful Farming* magazine [interviewed Sara Place](#) of the National Cattleman's Beef Association.



Pork in Court: The USDA's finalized new [swine inspection system is being challenged in court](#) by several unions and other groups.

Wild Horse Dilemma: Congress, animal advocates, conservationists, ranchers, and the Bureau of Land Management [argue about the issue of wild horses](#)--but everyone agrees the current situation is untenable.

A Young Farmer and Livestock Methods: These Kansas farmers raise their hogs in large outdoor lots with deep-bedded sheds, and they use [various sustainable farming practices](#) like rotational cattle grazing.

Food Science and Safety News

Humans, Pets, and Diet Fads (video): The Ohio State University College of Veterinary Medicine [urges people not to assume](#) that human diet and nutrition trends will work for their pets.

Diet and Mental Health: This new study claims it adds to a growing body of research that supports the [connection between diet and mental health](#).

Red Meat and Nutrition Studies: This editorial indicates that the latest pronouncements about red-meat consumption [may be a game changer for conducting nutritional research](#).

Plastic Tea Bags: These tests say that some plastic tea bags [release microplastic and nanoplastic particles](#) in boiling water.



Not Necessarily Sweet, But Definitely Nutritious: This Texas A&M nutrition expert explains that [the sweet potato is full of nutrients](#).

Egg Day: World Egg Day falls on the second Friday of October every year. More than 40 countries around the world celebrate the "[incredible food marvel](#)."



"I'm on the no-grain, gluten-free, feline-funky diet. How about you?"
"I'm on the I-miss-my-left-over-pizza diet."
Related link upper left.

Plant Agriculture and Environmental News

Bean Bin Buster (video): RFD-TV hosts interviewed Randy Dowdy, a Georgia farmer with the [new world record soybean yield](#) at 190 bushels per acre.

Engineered Microbes (podcast): The University of Florida's Kevin Folta spoke with a bio company CEO about engineered microbes and the [impact they could have on agriculture](#).

Rice in the Empire State? With the help of Cornell scientists, a few farmers are [experimenting with rice-growing methods](#) to suit New York's climate.

Shorter Corn, Higher Yields? Research at Purdue University and a new corporate initiative focus on "[short-stature corn](#)." Proponents expect higher yields.



Round Bale or Square? For some farmers, hay is a [high-value crop](#).



The National Corn Growers Association points out that "cover crop" is a buzzword for a good reason. The [practice benefits soil health](#) in many ways. Also, click [here](#) to access the [CAST Issue Paper Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape](#).

Hemp Research: North Carolina State A&T has obtained approval for a [permit to grow industrial hemp](#) for research purposes.

International News

Robots, Cafes, and Jobs for Disabled Workers (video): This Tokyo cafe involves [robots that are remotely operated by bed-ridden patients](#). Together, they serve coffee and even chat with the customers.

Polar Bear-sized Hogs: Because of high pork prices, some Chinese farmers are [raising huge pigs](#) on both small farms and corporate enterprises.

Antibiotic Resistance: Researchers report that the growing appetite for animal protein in various countries has resulted in a smorgasbord of antibiotic consumption for livestock and [affected the occurrence of antibiotic resistance](#).

A Kenyan Go for GMO: Kenya officials intend to lift the ban and [allow the country to use GMO crops](#).

Milky Meeting in Indonesia: USDA representatives, dairy suppliers, Indonesian officials, and others met to discuss how to [facilitate increased U.S. dairy exports](#).



A Glut of Goats: This Greek [island has too many goats](#). Experts and locals are working together to find a 21st-century way to save the island's ecology and economy.

Changes on "Train Street" (video): Authorities are [clamping down on the cafes](#) that line one of Hanoi's most famous roads, citing overtourism and safety concerns.



Israeli and Russian scientists used a process of muscle-tissue regeneration to [produce beef on the International Space Station](#).

General Interest News

Happily Caught in a Web (podcast): Spiders have a special place in Halloween lore, but they're more than just scary, hairy, creepy crawlers. This North Carolina State entomologist [debunks some arachnid myths](#) and shares his love for spidery creatures.

Keeping It from Going Up in Smoke: University of Nevada-Reno [ecologists help firefighters](#) protect the state from devastating wildfires.

Creative Signage: These [top 10 no-trespassing signs](#) include references to rabid squirrels, poison ivy, and toxic waste.

Molecules, Cells, and Diseases: With a National Science Foundation grant, a University of Nebraska-Lincoln researcher is investigating [how a protein molecule's shape determines its function](#).



John Deere revealed a new, [autonomous concept tractor](#) at a meeting in Spain--a cableless machine with tracks, no steering mechanism, and "zero emissions."

Hyperloop Time! The hyperloop competition tests how to efficiently and cheaply build a pod that could [travel in a one-mile vacuum at about 200 mph](#). The Cal Poly team did well for its first-year effort.



Toxic Butterflies: Researchers used CRISPR to understand how butterflies evolved the ability to become "toxic," therefore [avoiding being eaten](#) during their migrations.



CAST Information

Check out CAST's page at the [YouTube site](#) to view highly regarded ag-science videos about probiotics, food safety, and water issues--or the latest video dealing with proposed mandatory labeling of GMO food items.



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- * 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 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
- * Land O'Lakes
- * 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
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- * The Fertilizer Institute
- * Tuskegee University
- * Tyson Foods
- * United Soybean Board
- * University of Nevada-Reno
- * 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.

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