



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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Announcements



From [Norway](#) to [Texas](#), meteors have illuminated the night sky this summer, and the best might be yet to come with the [annual Perseid Meteor Shower](#).

The USDA will invest more than \$21.8 million for [1890 Land-grant Institutions to support research](#) at Historically Black Colleges and Universities at our nation's Land-grant University System.

President Biden will [nominate Chavonda Jacobs-Young](#) as Under Secretary for Research, Education, and Economics in the Department of Agriculture.

CAST College Corner

A [Texas A&M](#) student promotes the COVID Campus Coalition to combat misinformation. The 20 universities also include [Cornell](#), [Florida](#), The [Ohio State](#), and [North Carolina State](#).

At the [University of Nevada-Reno](#), a fleet of autonomous food delivery robots arrived for duty.

[North Carolina A&T State University](#) will collaborate to help

July 30, 2021

Going to Extremes Weather Events Affect Agriculture

From Texas freeze outs to Canadian heat domes, from German floods to a drought in Mexico, 2021 has been a [year of extreme weather](#). Many say climate change is increasing the frequency of floods, storms, heatwaves and other [catastrophic weather phenomena](#), but whatever the science shows, agriculture and food production are certainly affected. This video presents a gripping [montage of recent weather extremes](#), and this article provides links to stories from around the world [regarding agriculture and weather events](#).



News and Views

USDA News: The USDA will invest \$14 million in [rural economic development](#) projects and more than \$5.4 million in bioprocessing, bioengineering, biofuels, and biobased product [research to support trade initiatives](#).

Pandemic Year Aid: When crop insurance indemnities and unemployment benefits are counted, the [government sent \\$57.7 billion to farm operations and farm households](#) in 2020.

Disaster Bill: The House Agriculture Committee advanced an [\\$8.5 billion disaster bill](#) that would cover a wide range of producers' losses in 2020 and 2021.

Pandemic News: This regularly updated [tracking map looks at coronavirus](#) in each U.S. state, and this article says the [pace of vaccinations is down in rural counties](#).

Credible Information: Two BCCA winners—[Sarah Evanega](#) and [Kevin Folta](#)—are featured in this ACSH article about [experts trying to combat misinformation](#).

Far Side of the Barn

Bikes, Goats, and Yoga:

provide secondary schools with agriculture classes.

CAST Social Media

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

Riders stopped for [morning goat yoga](#) on the week-long [bicycle ride across Iowa](#) that involved more than 20,000 riders.

Feathered Dumpster Divers (video): Australian cockatoos—gregarious, crafty birds—use [teamwork and ingenuity to open garbage bins](#).



Wild Friendship (video): A [cow-leopard relationship](#) attracted attention from farmers, scientists, and the public.

CAST Updates

New CAST Nonprofit Member



The [Association of Equipment Manufacturers](#) (AEM) is the newest addition to the list of CAST Nonprofit Members. CAST is looking forward to this new partnership.

Anita Sennett—Senior Director, Agriculture Services, AEM—says this of the new partnership: "There is a lot of misinformation about agricultural technologies that can lead to negative perception in the general public as well as uninformed decisions among legislators and lawmakers. One of our AEM Ag Sector priorities is to work to dispel that type of misinformation and help to bring awareness to the realities and benefits of modern ag. The work that CAST does is in perfect alignment with that goal. We look forward to collaborating with the other CAST partners to bring focus and educate on key aspects of agricultural technologies."

Climate 21 Q&A Now Available

The Q&A from the June 29th webinar on "The Role of Agricultural Science and Technology in Climate 21 Project Implementation" is now [available to download on the CAST website](#). You can also watch the recorded webinar and read the publication as well as the Ag quickCAST (a one-page summary of the paper).

The [U.S. Sustainability Alliance](#) also shared a quick recap of the publication on their website.



Animal Agriculture and Environmental News

Tech and Pig Production: At the Pig Farm 5.0 Revolution conference, experts shared knowledge about how [new technologies can benefit pig farms](#).

Pork Court Case: A circuit court ended the pork industry challenge to [California's confinement rules](#).

ASF in the Western Hemisphere: The USDA confirms the first detection of [African swine fever in the Western Hemisphere](#)—pigs in the Dominican Republic.

Poultry and Sustainable Goals: The International Poultry Council signed on to a statement aligning with the "[Sustainable Developmental Goals 2030](#)" under discussion at the U.N. Food Systems Summit.

Backyard Chickens: A researcher cautions that [backyard](#)



A University of Missouri expert says the USDA's *Cattle on Feed* report and the biannual *Cattle Inventory* indicate [contraction continues in the cattle herd](#).

Some think a [methane vaccine for](#)

[chickens can pose risks](#) for chickens, wildlife, and people.

[cows](#) being developed in New Zealand could be a game changer for animal emissions globally.

Skeeter Control: Using [“gene drive” technology](#), scientists are trying to control malaria-spreading mosquitoes.

Food Science and Safety News

Protein Preferences: The United Soybean Board released new consumer data shedding light on [consumer perceptions about protein](#).

Hunger at “Critical Juncture”: The [pandemic increased global hunger](#), and as this Chicago Council article points out, the world is at a critical juncture for ending hunger.

Fruit Favorites: USDA information about 2019 [fresh fruit consumption](#) shows the steady growth of clementines, avocados, blueberries, and more.

Omega-3 and Mortality: These researchers say omega-3 levels in blood erythrocytes are [good mortality risk predictors](#), with higher levels increasing life expectancy.

CAST Publication (related to above): [Omega-3 Fatty Acids: Health Benefits and Dietary Recommendations](#)



This photo gallery lists the [fast-food items that were popular every year from 1946 to 2000](#)—from the Big Mac in 1967 to the taco pizza in 1979 and DQ blizzards in 1985.

The [world’s most expensive French fries](#) are blanched in champagne before frying.

Plant Agriculture and Environmental News

Soil Microbes: University researchers at North Carolina State and Kansas show that soil [microbes play a role](#) in the phenomenon of heterosis or “hybrid vigor.” Note: check out the CAST publication [Agriculture and the Microbiome](#).

Techno Irrigation: A Kansas State University engineer explains how farmers are increasingly using [technology to aid in irrigating crops](#).

RNA and Crops: Scientists from the University of Chicago and China show that manipulating RNA can allow plants to [yield more crops and increase drought tolerance](#)

Robot in the Field: This robot is field testing new seeds. With all of its data collection capabilities, the [robot can be a tool in phenotyping](#).

Past to Present: Citrus breeders from the University of Florida look to [ancient varieties for modern-day answers](#).



With drought causing water shortages, California [farmers are exhausting aquifers](#) also.

International News

Environmental Hogs: A South African farmer shows that foraging pigs provide an excellent method of [regenerating the soil back into production](#).

Snow Leopard (video): One of the world's most [elusive cats was caught on camera](#) in this Kazakhstan region.

Biosafe Eggplant: Philippines authorities [approved Bt eggplant](#) for direct use as food or feed.

Golden Rice: A ruling a year ago in the Philippines found



[golden rice to be safe](#), and now they're waiting for it to be approved for planting.

Holy Mackerel! Lithuania is trying to tempt tourists with its specialty cuisine that includes [imaginative ice cream flavors](#) such as smoked mackerel.

A heavy [sandstorm with dust clouds towering](#) in the air caused chaos in an ancient Silk Road city in northwestern China.

General Interest News

Farm Girl, Milk Power: A Vermont dairy farmer—turned [world-renowned track star](#)—is set to compete at the 2021 Summer Olympic Games.

Small Supply, Large Demand: A rural county's only veterinarian is offering to give away his practice, clinic, and pickup to attract a [new vet before he retires](#)

Food Animal Veterinarians (related to above): Check out the [CAST Issue Paper](#), *Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply*.

Found Again: A [rare Hawaiian bird](#) thought to be dead emerges once more on the slopes of a Maui volcano.

The Buzz: Beekeeping is [booming in New York City](#); some [prisons tout the therapeutic nature](#) of beekeeping; and this CAST Commentary looks at [honey bee health](#).



This University of Kentucky podcast explains that not all caterpillars morph into beautiful [butterflies—some sting!](#)

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- * American Meat Science Association
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- * American Society of Animal Science
- * American Society of Plant Biologists
- * American Veterinary Medical Association
- * Aquatic Plant Management Society
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- * Cal Poly State University
- * 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
- * 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

- * Corteva Agriscience
- * CropLife America

- * Weed Science Society of America
- * Western Society of Weed Science

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The Science Source for Food,
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