



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....

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Announcements



[National Ag Day--March 23](#) (and the entire week) honors American agriculture and includes various community [projects for FFA chapters](#) around the country.

The [Agri-Pulse Ag & Food Policy Summit](#)—March 22-24—will offer a chance to engage with policy makers and industry experts including Tom Vilsack, Marty Matlock, and Frank Mitloehner.

The [World Food Prize Foundation's Digital Dialogue](#) will feature a session called *Building Forward Better: WFP Laureates Mobilizing for Food Systems Action*—March 25.

The next free Pork Checkoff webinar will provide producers with expert insight into the USDA [Quarterly Hogs and Pigs Report](#), released on March 25.

At the 2021 Virtual Summit, Alison Van Eenennaam will explain [how traditional and alternative meats can work together](#) to address global protein demands.

This site features the [Leopold](#)

March 19, 2021

Zoonoses—When Sharing Is Not a Good Thing

Zoonotic diseases involve germs that spread between animals and humans—as [explained by the CDC](#).

Bats, mosquitoes, and livestock animals can be part of this give-and-take, and even though the topic has been under the microscope for years, the pandemic has brought it



into sharper focus. These recent articles are just a sample of the growing interest in what the World Health Organization calls [zoonoses](#): (1) A WHO investigative team says wildlife farms in southern China are the most likely [source of the COVID-19 pandemic](#). (2) As this video shows, Ohio State University veterinarians are working to [keep emerging diseases from jumping to humans](#). (3) A leading researcher in the world of viruses and vaccines in animal disease at Kansas State University looks at the [zoonotic diseases that veterinarians, researchers, and others are battling](#). (4) University of Florida scientists identified a new species of mosquito in the state, and as they contend, ["new mosquitoes can bring new diseases"](#) Note: The CAST Board of Directors recently approved the publication of a new issue paper—*Animal Agriculture and Zoonoses in the Time of COVID: A One Health Perspective*—for later this year.

News and Views

Government Positions: [Deb Haaland was approved as Secretary of the Interior](#), making her the first Native American to become a cabinet secretary, and the Senate unanimously confirmed [Katherine Tai as U.S. Trade Representative](#)—the first Asian American and woman of color in the role.

USDA News: The USDA is requesting public input on its [climate-smart agriculture and forestry strategy](#).

Carbon Markets (video): The [Farm Foundation Forum](#) focused on the current state of ag carbon markets, including a discussion of the opportunity gaps and other challenges.

[Center 2020 annual report](#), a look at the organization's efforts to develop sustainable agriculture.

CAST College Corner

A [University of Nevada-Reno](#) survey looked at child education during the pandemic era, with a focus on distance learning.

[Tuskegee University](#) will help host the "Social Workers are Essential Virtual Conference" March 31.

A [Cornell research professor](#) presents the most effective way to solve complex global problems through international partnerships.

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

CAST Social Media

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

Communicating with the Public: Dr. Alexa Lamm ([2020 BCCA](#)) collaborated with University of Georgia colleagues to look at how audiences differ in their [willingness to pay for sustainable farming practices](#) that protect water resources.

Falling Numbers: New [COVID-19 infections and deaths in rural America](#) dropped for the ninth consecutive week.

Credible Science: Penn State experts give advice about dealing with [misinformation regarding COVID-19 vaccines](#); the ACSH looks at the [difference between misinformation and disinformation](#); check the [CAST Commentary—The Importance of Communicating Empirically Based Science for Society](#).

Far Side of the Barn

A Narrow Escape (video):

Tourists in Antarctica were filming a pod of killer whales when they saw a penguin [fling itself into their boat to make an escape](#).



The Unstung Hero

(video): A Texas bee expert wants viewers to respect and understand bees; this "[protector of the honeycombs](#)" has created a big buzz online.

For Those Who Like to Play with Their Food (video): The square watermelon phenomenon in Japan gave birth to fruit [molds in the shape of hearts, stars, and even skulls](#)

CAST Updates

Universities Continue to Advance Science and Ag



The eighteen university members of the [CAST Education Program](#) continue to cultivate research, resources, and educated graduates who enrich our society. Each week, *Friday Notes* features samples of the many projects occurring at these institutions. From pandemic-related research to community-support programs to ag-science innovation, the schools are constantly making a difference.

Various ranking providers publish lists during the year, and one of the most recognized is the QS World University Rankings. This year, [UC-Davis placed highest in the United States](#), with special recognition for its veterinary science and its agriculture and forestry programs. Cornell is also in the international top ten, and [many other member universities were mentioned](#) in the report. Throughout the year, all eighteen universities have received commendation for various programs and accomplishments.

Note: CAST also offers [free student membership](#) for those enrolled fulltime at an accredited institution.

Pork Production Volatility: This article focuses on the [opportunities and challenges](#) for the U.S. pork industry during a pivotal time.

Trade Protocol: The USDA and Canadian counterparts developed a [protocol to help ensure bilateral trade](#) will continue if African swine fever becomes a concern.

Investigating Pet Deaths (video): Pet owners are blaming [a popular flea collar](#) for their animals' deaths and injuries, and some members of Congress are calling for a recall, but the retailer is pushing back.

Poultry Production: The National Chicken Council provides this information about [myths and realities](#) of welfare, hormones, and other production issues.

Cool Cattle: University of Georgia researchers determined that [dairy cattle cooled with fans and sprinklers](#) respond better to heat stress and produce more milk.

Dairy Digesters: This article from the UC-Davis CLEAR Center explains what dairy digesters are and [how they affect methane emissions](#).



Researchers used scientific analysis to understand how [hummingbirds produce their famous "hummm" sound](#). And this site features ["ten spectacular hummingbirds."](#)

Food Science and Safety News

Food Program: A Harvard study looks at the performance of the USDA's [Farmers to Families Food Box program](#).

Donated Food for Guard Troops: Farmers Union Enterprises donated \$50,000 to provide roughly 5,000 meals from D.C.-based restaurants [to help feed National Guard troops on duty in the nation's capital](#).

Comparing Apples to Apples: A company released a guide called [Flavogram](#) describing the flavor of each apple.

Steaks in the Air Fryer (video): Air fryers are trendy, and steaks have always been on the American menu. This article looks at [how the two can mix](#).

Weight Loss Programs and Health: This article says [long-term rapid weight loss programs](#) can have a negative effect on participants' resting metabolic rates.

Hawaii's "Miracle Food": Some think of taro as a sacred crop—it is [nutritious and cultural](#)—but with fewer farmers producing it, demand is outdoing supply.



In a quest for super smoothies, Texas A&M experts tested 19 vegetables and 3 juicing techniques to discover the [best way to produce nutritious drinks](#).

Plant Agriculture and Environmental News

Farmers and Conservation: The USDA hopes the [Conservation Reserve Program](#) will help with the administration's climate goals.

It's Not Easy Being Green: While some farmers are making climate-friendly shifts, many say [transitioning to greener practices](#) is expensive, more research is necessary, and extra support is needed.

Sustainable Agriculture (video): These short animated videos illustrate how producers can improve the success and health of their farms by [implementing sustainable practices](#).



Grain Boom Possible: Allendale's annual nationwide producer survey indicates this year could post the [largest corn, soybean, and wheat acreage since 2014](#).

Diggin' in the Dirt: North Carolina State University officials explain [what the field of soil science involves](#)

Disease Resistance: Research shared in *Crop Science* found that [chickpeas have natural disease resistance](#).

UC-Davis researchers explore the use of seaweed in feed to [reduce methane emissions from cows](#).

Three bacterial strains discovered on a space station [may help grow plants on Mars](#). Matt Damon is preparing his seed potatoes.

International News

Trade Talks: The [European Union and the United States concluded negotiations](#) to adjust the EU's World Trade Organization agricultural quotas following Brexit.

British Ruling on Gene Editing: The United Kingdom is expected to [lift a ban that forbids the cultivation](#) and sale of genetically edited plants and animals.

A Shroud for the Sun (video): A [massive sandstorm](#) turned Beijing's skies orange, disrupting transport and sending pollution levels soaring.

Potatoes Aired Out and Unwashed: In this video, farmers explain the [advantages of growing potatoes in the air](#) with the help of an aeroponic technique, and this article says [food waste can be cut by selling unwashed potatoes](#) because that doubles the shelf life of the vegetable.

Biofortified Maize: This study shows that eating maize biofortified with vitamin A increased the levels of this important nutrient in the breast milk of Zambian mothers, [thus improving infant nutrition](#).

Fighting Hunger (related to above): Check out the recent [CAST Issue Paper, Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger](#).



As this video shows, the harlequin toad—in danger of extinction—was [bred in captivity for the first time](#) outside its native Panama.

After its hardest year since WWII, the [Irish dairy industry foresees a bright future](#) after the pandemic.

General Interest News

Crisis Help (video): A Mississippi [chicken farm was destroyed](#) by a recent tornado. In times of need, universities help communities. This [Mississippi State extension site](#) is an example of such resources.

Pandemic Affects Plastic Use: The pandemic has complicated efforts for retailers to reduce the [use of non-recyclable plastics](#), but many hope good intents and new business opportunities can renew efforts for solutions.

Drought and Heat: A University of Nebraska climatologist explains how [summer heat and the current drought](#) in the West are related. Many farmers in the Plains are worried about a [lack of moisture for planting](#).

Printed Homes (video): These construction companies say [3D-printed homes are now feasible](#) and in demand.

Ice Shelf Calving: Penn State experts are examining [high-resolution data collected by the Ice, Cloud and Land Elevation Satellite](#) to better predict calving areas in the Antarctic ice shelf region.



University of Kentucky experts focus on the [billions of 17-year periodical cicadas that will emerge](#) from the ground this year—lots of noise, but they are not dangerous.

P. 1 Ag Day collage from agday.org, zoonotic collage from dispatch.com, and penguin pic from today.com. Animal Sec. hummingbird pic from pinterest. Food sec. blender pic from tamu.edu. Plant Sec. cow pic from wsav.com. Inter. Sec. frog pic from bbc.co.uk. Gen. Sec. cicada pic from quickmeme.com. Unless otherwise noted, photos courtesy of the USDA

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- * 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
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- * 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
- * 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

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Dan Gogerty (Communications and *Friday Notes* Editor)
dgogerty@cast-science.org
Dylana Luett (Communications and Social Media Specialist)
dluett@cast-science.org
The Council for Agricultural Science and Technology
4420 West Lincoln Way
Ames, Iowa 50014-3447
Phone: 515-292-2125



The Science Source for Food,
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*** With assistance from Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)*

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