



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](#)
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## Announcements



After 68 years in broadcasting, Orion Samuelson, "[a champion for the American farmer](#)," is retiring. As Orion said, "If you eat, you're involved in agriculture."

Click here to [access nomination information](#) for the 2021 Borlaug CAST Communication Award.

Support CAST and its mission by [renewing your membership](#) or [joining CAST](#).

The virtual [Horizon Conference \(January 9-10\)](#) is offered by the National FFA Organization to cultivate the next generation in production agriculture.

This analytical tool tracks [COVID-19 hospitalization rates](#) for local hospitals.

## CAST College Corner

[North Carolina Agricultural and Technical State University](#) will premiere a celebration video to

**December 11, 2020**

## Universities Shine during Pandemic Fog

Universities have been facing huge challenges in 2020, but with creativity and perseverance, they have maintained valuable education, social, and research programs. The 18 respected ag/science universities that are members of the [CAST Education Program](#) provide good examples:



(1) The University of Kentucky's [support of local farms](#) and food businesses, (2) the University of Nebraska's FDA-approved [miniaturized surgical robot](#), (3) Mississippi State University's [Feed the Future Innovation Lab](#) using fish to "feed the world," and (4) North Carolina State University's extensive [agriculture and agribusiness initiative](#). Check through every Friday Notes edition for links to the varied and inspiring happenings on these college campuses.

## News and Views

**Misinformation and Young Scientists:** COVID-19 vaccinations have begun, but false information is rampant. This [young bioengineer is using social media](#) to counter that, and other scientists are working to spread credible information.

**Vilsack Expected to Lead the USDA:** It appears that [Tom Vilsack will lead the USDA](#) in the new administration. Reactions are coming from various agriculture sectors.

**WASDE Report:** The USDA December [World Agricultural Supply and Demand Estimates](#) report is out.

**Environment:** The USDA is increasing incentive payments to farmers for practices installed on land enrolled in the [Continuous Conservation Reserve Program](#)—designed to provide a tool for landowners to conserve natural resources.

**Identifying Ag Issues:** University of Georgia researchers identified the most pressing [issues for the animal and food industry](#) to address.

honor student achievements  
December 12 at noon.

[Iowa State University's](#) Javelis Marin Castro—a student leader majoring in animal agriculture—received the George Washington Carver Spirit of Innovation and Service Award.

The [University of Arkansas](#) soil judging team qualified for the national event for the tenth consecutive year.

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.

**Economics:** (1) This report looks at “Spending of Economic Stimulus Payments and [Changes in Food Purchasing](#) During the COVID-19 Pandemic,” (2) Jayson Lusk discusses the [outlook for retail food prices](#), and (3) this site from the Agricultural and Applied Economics Association features many [articles from ag/econ experts](#).

## News from the Far Side of the Barn

**Santa Claws (video):** A young koala wandered into an Australian family's home and [climbed their Christmas tree](#).



**Rescue Jaws (video):** A four-month-old Florida puppy—[pulled from an alligator's mouth by its owner](#)—has become a deputy dog in Florida. The authorities hope the puppy will educate children about alligator safety.

**Saving Giraffes (video):** Rescuers saved several giraffes that were [stranded on an island in Kenya](#) after heavy rains caused dangerous flooding.

## CAST Updates

### 2020 Publications

It has been a productive year for CAST publications, so we will feature half of them this week, with the other half listed in next week's newsletter.

- April: [Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply](#)
- April: [Producing Food Products from Cultured Animal Tissues](#)
- May: [Stewardship Challenges for New Pest Management Technologies in Agriculture](#)
- June: [Economic Impacts of COVID-19 on Food and Agricultural Markets](#)
- July: [Impacts on Human Health and Safety of Naturally Occurring and Supplemental Hormones in Food Animals](#)

### Guest Blog--*The Carbon Impact of Food Waste: The Problem With What We're NOT Eating*



This blog was written by [Dr. Frank Mitloehner](#), UC-Davis and 2019 BCCA recipient. According to the FAO, one-third of “food produced for human consumption is lost or wasted globally, which amounts to about 1.3 billion tons per year.” The loss and waste result in a squandering of important and limited resources and contribute to 8 percent of greenhouse gases emitted, more than all U.S. animal agriculture and nearly as much as the total emissions from U.S. agriculture. [Read the blog here](#).

Check out the CAST Issue Paper on [Food Loss and Waste](#) a paper in the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*

**Ag Guide:** The American Dairy Science Association®, the American Society of Animal Science, and the Poultry Science Association released the 4th edition of the [Guide for the Care and Use of Agricultural Animals in Research and Teaching](#).

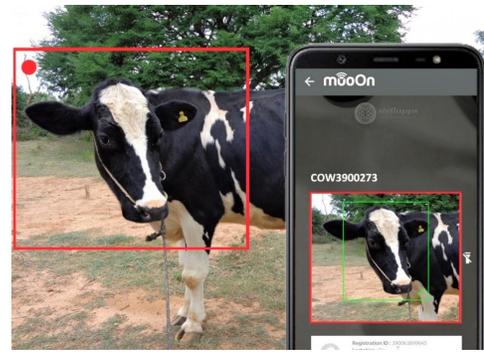
**Students Treat Brisket the Bull:** Tuskegee University veterinary students assisted with the [medical treatment of a social media celebrity patient](#) called “Brisket the Bull.”

**Acid Test:** Some hog producers are trying to promote gut health by [using organic acids as feed additives](#) to replace antibiotic growth promoters.

**Poultry Prices:** Several food service operators have taken legal action in response to a [poultry price-fixing case](#).

**Pork Markets:** The National Pork Board says opportunities may [diversify U.S. pork exports in Vietnam and the Philippines](#)—although they point out that African swine fever outbreaks in Asia could have impacts.

**Avian Flu:** This ACSH article examines some economic, social, and medical [implications of H5N8 Bird Flu](#).



This video looks at Kansas State University technology [using artificial intelligence](#) to build a database of facial recognition technology for the cattle industry.

As these Ohio State University and Texas A&M experts point out, [total beef production](#) is almost the same amount as last year at this time.

## Food Science and Safety News

**World Food Prices:** A UN agency says [world food prices rose for a sixth month running](#) in November, hitting almost a six-year high.

**Labels and Beverages:** University researchers at UC-Davis and Michigan found that [simple warning labels on sugar-sweetened beverages](#) in a college cafeteria helped students reduce their reported consumption.

**Virus Inhibitors:** Chemical compounds in foods or beverages like green tea and dark chocolate can inhibit the function of a [particular enzyme in the SARS-CoV-2 virus](#).

**Dried Fruit:** Penn State researchers found that [people who ate dried fruit were healthier](#) than those who didn't.

**Ugly Produce To Cut Waste:** The world's largest yogurt maker hopes to [appeal to waste-conscious consumers](#) by using “misfit produce” for certain items—for example, “ugly” lemons will be in the first snack.

**White Strawberries:** The University of Florida IFAS is releasing [white strawberries that smell similar to pineapples](#) for the U.S. market.



[Drone deliveries and bacon-scented masks](#) might be trendy, but most connoisseurs just want to prepare and eat it. Cast iron or in the oven? Microwave or air fryer? This bacon lover tested eight methods to “scientifically decide” the [best way to prepare this popular item](#).

## Plant Agriculture and Environmental News

**Soil Diving:** Cornell scientists are developing [worm-like, soil-swimming robots](#) to sense and record soil properties, the soil microbiome, and how roots grow.

**Bill Regarding Grain Inspections:** The U.S. House joined the Senate as they gave approval to the [Grain Standards Reauthorization Act](#). It has been sent to the White House.

**Soil on Fire:** This University of Nevada-Reno specialist writes about the [impact of fire on desert soils](#) of Nevada.

**Canola on the Menu:** The feed ingredient [canola meal](#) has [made strong inroads](#) into the diets of many livestock species, especially dairy cattle and swine.

**Publication about Water Quality:** This [CAST Issue Paper](#) [gives an overview](#) of the processes, conservation practices, and programs that influence the impact of agriculture on surface and groundwater quality.

**Forestry Studies:** The University of Missouri offers interdisciplinary studies focused in areas such as agroforestry, forest management, and more. This article [features three students currently in the program](#)



This final segment of Agri-Pulse's "Agriculture's sustainable future: Feeding more while using less" series focuses on how U.S. farmers are [developing environmental practices that could give them an edge](#) in foreign markets.

## International News

**DNA Fight against Cattle Thieves:** Officials in Argentina hope to [use DNA testing to curb cattle theft](#)—a problem with rustlers either taking the livestock to resell or butchering them on the spot for meat.

**Food Safety in Kenya:** The Ohio State University has been awarded a \$770,000 grant to improve food safety and [prevent foodborne illnesses in Kenya](#).

**More Than Skin Deep?** Australian researchers [created an artificial skin](#) that mimics real skin and even reacts to pain.

**Potato Chips, Beer, and Fertilizer:** A large British crisp (potato chip) manufacturer plans to [cut CO2 emissions by using peelings](#) mixed with CO2 from beer fermentation to make fertilizer.

**Gut Response:** Researchers in Japan hope they can focus people on the [importance of bacterial microbes in the gut](#).



A company in China is raising [more hogs on a single site](#) than any other producer in the world—a risky investment with deadly African swine fever still lingering.

## General Interest News

**Big Wave Beauty (video):** California surfers were [stunned by huge waves](#) and beautiful weather conditions at Mavericks Beach south of San Francisco.

**Living Laboratory (video):** More than 27,000 rural acres of land were donated to the University of Florida for use as a [living classroom for students and faculty members](#).

**Promoting Education:** Texas A&M students and faculty members are working with elementary students to [promote STEM concepts and activities](#).

**Don't Rain on Their Parade:** The Tournament of Roses parade has been cancelled, but organizers will produce a New Year's Day celebration broadcast, and [Cal Poly students will be featured](#) in one segment, with a focus on their award-winning float from last year's event.



**National Geographic** looks at [groundbreaking new science about how dinosaurs looked and lived](#)—

**Pet Friendly Universities:** Kansas State is one of several [universities that provide for pet friendly accommodations](#) or pet friendly communities on campus.

with information about a **Tyrannosaurus Rex, a velociraptor, and new fossils.**

## Photo Credits

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- \* 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 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
- \* American Veterinary Medical Association
- \* Aquatic Plant Management Society
- \* BASF Corporation
- \* Cal Poly State University
- \* Corteva Agriscience
- \* CropLife America
- \* 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
- \* 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
- \* Cornell University
- \* Iowa State University
- \* Kansas State University
- \* Mississippi State University
- \* North Carolina Agricultural and Technical State University
- \* North Carolina State University
- \* Penn State University
- \* Texas A&M University College of Ag & Life Sciences
- \* The Ohio State University
- \* Tuskegee University
- \* University of Arkansas System Division of Agriculture
- \* University of California-Davis
- \* University of Florida Institute of Food and Agricultural Sciences
- \* University of Kentucky
- \* University of Missouri-Columbia
- \* University of Nebraska Agricultural Research Division
- \* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

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The Science Source for Food,  
Agricultural, and Environmental Issues

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*\*\* With assistance from Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)*

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