



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](#)  
[International News](#)  
[General Interest News](#)

## Announcements



To commemorate the 200<sup>th</sup> anniversary of the [U.S. House Committee on Agriculture](#), [this digital timeline](#) showcases key events, members, and legislation.

The "[Rural Health Information Hub](#)" includes news about vaccinations and more. Pharmacy deserts are hurting efforts to [vaccinate for COVID-19 in rural areas](#). California [farmworkers face vaccination obstacles](#).

Check here for sign-up forms for the [National Ag Day Virtual Celebration](#) on March 23.

This article and podcast look at [recycling, packaging, and efforts to improve](#) their efficiency.

The [World Pork Expo](#) will take place in Des Moines June 9-11.

## CAST College Corner

[University of Missouri](#) researchers applied the science of behavioral ethics to the field of food safety and determined that cognitive biases can create and worsen foodborne disease outbreaks.

**March 12, 2021**

## CRISPR Continues to Shape the World of Gene Editing

Nobel Prize winners [Jennifer Doudna and Emmanuelle Charpentier](#) were instrumental in the discovery of CRISPR/Cas9 technology. The technique elicits praise, wonder, and trepidation, but all agree it is a potential game changer in the world of science. In this video profile, [Doudna discusses the promises and perils of CRISPR](#), and a new book by Walter Isaacson focuses on this issue: [The Code Breaker: Jennifer Doudna, Gene Editing, and the Future of the Human Race](#).



Genome editing [could revolutionize plant breeding](#) and help secure the global food supply, according to a new paper referenced by Cornell's Alliance for Science. For example, a University of Queensland expert reviews techniques that [help crops affected by variable climates](#), and scientists use CRISPR editing techniques to reduce the levels of [toxic cyanogenic glucosides in cassava](#).

Research at UC-Davis is focused on animal livestock such as [Cosmo the calf](#). A new research paper from Dr. Alison Van Eenennaam and others looks at "the potential to produce [targeted gene knock-in calves using CRISPR-Cas9 techniques](#)."

The USDA recently announced an additional 60 days for public comment on a [proposal about regulating livestock and poultry created through genetic editing](#). Opinions vary about how gene editing tools for livestock should be regulated. This recent paper from four UC-Davis scientists explains that regulatory delays in the past have been [costly and harmful for global food security](#).

## News and Views

**Legislation and Agriculture:** Agriculture Secretary Tom Vilsack made the following [statement on passage of the American Rescue Plan Act](#), this [USDA Fact Sheet](#) lists some of the agriculture-related segments, and this article speculates about what [could be in the relief bill for science](#).

At the University of Arkansas: (1) an associate professor was named this year's [Grammy Music Educator of the Year](#), and (2) a specialist was honored with the "[Outstanding Conservationist Award](#)."

The [University of Nebraska-Lincoln](#) is gathering the "Complete Letters of Willa Cather," the American writer known for her novels of life on the Great Plains.

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.

**World Agricultural Supply and Demand Estimates:** Check here for a look at the [March USDA WASDE report](#).

**Government Positions:** The Senate confirmed [Michael Regan as EPA administrator](#), and [Kelliann Blazek was chosen as the special assistant](#) to the president for agriculture and rural policy.

## Far Side of the Barn

**Dance Your PhD Contest (video):** Winners from the annual "[Dance Your Ph.D.](#)" contest include entries for physics, biology, chemistry, and a new COVID category.



**Patrick the Naughty Alpaca (video):** Focused mainly on a [naughty alpaca and other animals](#), this Australian rancher uses humor and a loud voice to maintain a popular TikTok account.

**Clever Dog Gets the Treat (video):** In a real trick and treat scenario, [a Golden Retriever gets sneaky with his snack](#) when the owner walks off to the other room.

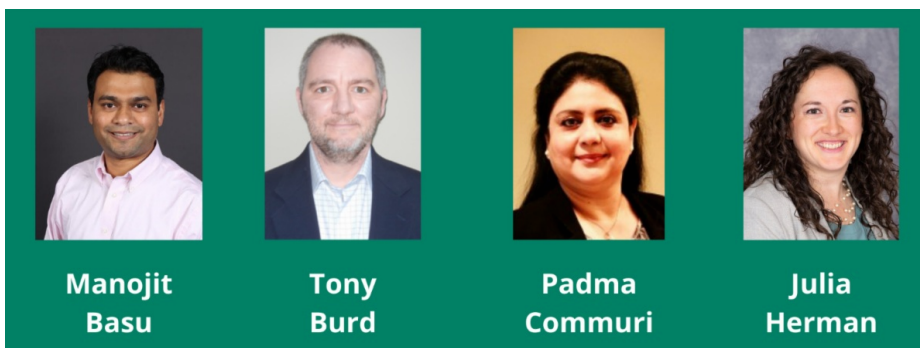
## CAST Updates

### Guest Blog: Recognize Women's Foundational Role In Agriculture



"In all parts of the world, women play an important role in the food system: in crop production, in animal rearing, in post-harvest agro-processing, in food marketing, and in cooking, child feeding and waste disposal. In the policy sphere and in data and research, however, they remain unseen. On this International Women's Day, let us begin by recognizing the foundational role of women in agriculture, food and nutrition security." [Read the rest of the blog](#) written by Dr. Madhura Swaminathan here.

### New Board Reps and Work Group Members



CAST would like to welcome the following people onto the CAST Board of Representatives and into the work groups:

- Tony Burd, representing Syngenta - Plant Work Group, New Board Rep

- Manojit Basu, representing CropLife America - Plant Work Group
- Padma Comurri, representing BASF - Plant Work Group, New Board Rep
- Julia Herman, representing National Cattlemen's Beef Association - Animal Work Group

## Animal Agriculture and Environmental News

**The "Bible of Poultry Diseases" (video):** The latest edition of the [publication \*Diseases of Poultry\*](#) looks at health challenges and emerging trends in the poultry industry.

**Science and Sustainable Livestock Ag (podcast):** Interviews with an agtech CEO and Professor Frank Mitloehner (UC-Davis and [2019 BCCA](#)) delve into the [promises and pitfalls of making livestock sustainable](#).

**Demystifying the Pork Industry:** This university uses [virtual tours of its swine education and research facility](#) to educate audiences about the pork industry.

**Virus and Livestock:** North Carolina A&T State experts are trying to ascertain [whether or not the SARS-CoV-2 virus can infect pigs, chickens, and cattle](#).

**Cow Cuddling Update:** After gaining popularity in Europe, cow cuddling has [emerged as a new pandemic pastime](#) in America, with some paying up to \$75 an hour for a hugging session with the farm animals.

**70+ Year Old Albatross:** The world's oldest known bird has [reared her 40th chick](#) and has been with her current mate since at least 2010.



It's [hatchery season](#), and getting newborn chicks to their owners is a race against time.

This article looks at the ways egg producers are working with scientists, researchers, and engineers in an [effort to improve production practices](#).

## Food Science and Safety News

**Children and Food:** The USDA announced a nationwide extension of waivers allowing all [children to continue to receive meals this summer](#) when schools are out of session.

**Baby Food Safety:** A congressional investigation found several companies sold baby food that contained [high levels of toxic heavy metals](#). The FDA says the [U.S. food supply is among the safest in the world](#), and the agency explains its efforts to limit harmful metals in food products.

**Meat Supply Chains:** Jayson Lusk ([2017 BCCA](#)) and Purdue colleague Meilin Ma published a new working paper called "[Concentration and Resiliency in the U.S. Meat Supply Chains](#)."

**No Need to Panic, But... (video):** [Bacon prices are rising](#), as various supply and demand issues are considered.

**Organics Meeting:** The public comment period is open for the [National Organic Standards](#) Board Spring 2021 Meeting.

**Heart Health and Omega-3s in Fish:** A new study looks at the relationship between adults with heart disease who consume [fish and the risk of serious heart complications](#).

**Publication Related to Above:** Check out the [CAST Special Publication](#), *Omega-3 Fatty Acids: Health Benefits and Dietary Recommendations*.



The cat's meow: UC-Davis experts teamed with the California Milk Advisory Board to explain that milk has been scientifically proven to [help protect bones and muscles](#).

A New Zealand company says its [milk-derived ingredient is effective](#) at protecting cells against COVID.

## Plant Agriculture and Environmental News



**Berry Innovations:** University of Arkansas specialists are involved with the development of [a new primocane-fruiting blackberry](#) that offers growers possibilities of extended growing seasons and higher yields.

**Prickly Promise:** University of Nevada-Reno researchers are looking into [cactus pear as a crop](#) that may be able to provide fuel and food in extremely dry places.

**Hands-on Learning:** The [Cal Poly Organic Farm](#) has a primary mission of providing undergraduate students a place to experience hands-on learning in organic and sustainable farming and gardening practices.

**Fight the Blight (related to above):** ARS scientists are searching for sources of resistance to the [potato's most devastating disease--late blight](#).

**Patch Burning:** Kansas State University studies show that [burning portions of a pasture](#) in a yearly rotation helps control invasive plant species.

**The Birds and the Bees:** Livestock [pastures can be ecosystems](#) that grassland birds and insects rely on.



This video looks at the extensive [damage wrought on Texas crops](#) by the recent winter storms.

A North Carolina State researcher helps farmers [fight outbreaks of diseases devastating crops such as sweet potato](#).

## 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.

**Persistent ASF:** According to this report, a [second wave of African swine fever](#) is estimated to have killed as many as eight million pigs in China since the start of the year.

**Decapitation by Choice:** Scientists are studying [sea slugs that purposefully decapitate themselves](#) in order to grow a new body—possibly to eliminate parasites.

**Poop Power:** In Vietnam, [Asian honeybees use feces to ward off dangerous hornets](#)--a finding that could help protect bees in other countries with invasive wasps.

**Shining a Light on Fresh Milk:** Researchers at a university in Thailand are [using UV light to help keep milk fresh](#) and reduce transportation costs for farmers.

**The Original Surf and Turf:** Many call fish and chips "[the undisputed national dish of Great Britain](#)," but the origins of the food are complex, historical, and non-British.



A new article takes us [on horseback with eagle hunters](#) in Mongolia. Several years ago, a [young Mongolian woman's eagle-handling skills](#) were highlighted in a popular film, and an Oklahoma [woman learned the traditional skills](#) of Mongolian eagle training.

## General Interest News

**Ice, Wind, and Research:** Iowa State University researchers study how [ice can grow on a blade](#) and how much that can reduce the performance of a turbine.

**Farmworker Welfare:** UC-Davis experts launched the COVID-19 [Statewide Agriculture and Farmworker Education Program](#) to help with worker safety and training.

**Protein and COVID:** Penn State researchers are looking at the SARS-CoV-2 Spike protein and its involvement with [mutations, variants, and therapeutic intervention](#)

**Buzz about Robotic Mosquitos (video):** Scientists are trying to [build robots with mosquito agility](#)—to help with dangerous searches, crop pollination, and more.

**Promoting Ag via Sesame Street:** A sixth generation farmer helped Sesame Street plan a feature on [peanut butter to educate viewers about the industry](#).

**Brewing Better Beer:** A North Carolina State University professor wrote a book to [supplement his brewing science course](#).



In this TEDx speech, Temple Grandin uses her background in science, agriculture, and activism to emphasize the need to adapt the education system in order to [help get the best out of every child](#).

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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 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
- \* 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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The Science Source for Food,  
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