



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

WE'RE HIRING! **DIRECTOR OF COUNCIL OPERATIONS**

Interested applicants are requested to apply by **September 1**.

CAST
The Science Source for Food, Agricultural, and Environmental Issues
www.cast-science.org

CAST is [seeking a Director of Council Operations](#) with proven project management, communication, systems, and leadership skills—a mid-October start with applications due by September 1.

Proposals for sessions at the [Sustainable Agriculture Summit](#)—hosted by Field to Market and the Innovation Center for U.S. Dairy, November in Las Vegas—must be submitted by August 16.

Frank Mitloehner—UC Davis and [BCCA 2019](#)—will be the featured speaker at the October 11 “[Rethinking Methane: Animal Agriculture’s Path to Climate Neutrality](#)” conference hosted by Kansas State University.

CAST College Corner

[Iowa State and the University of Missouri](#) joined with the U.S. National Science Foundation’s AI Institute for Resilient Agriculture.

[Penn State](#) is awarding COVID-

August 6, 2021

Drought Brings Hard Choices

Livestock, Crops, and Forestry Affected

The [Western Drought](#) has become a widespread event with stark reports about [parched ranches](#) and [dwindling water supplies](#). At the core of each story, individuals are dealing with harsh realities. In this video profile, a California dairy farmer explains the [tough decisions producers face](#). Crops in several upper Midwest states are stunted, pastures are drying up, and trees show [signs of stress](#). For a broader, long-term perspective, the [American Meteorological Society site](#) includes information ranging from tree-ring research to climate health and extreme weather events.



News and Views

USDA: Activities include 1) competitive loans through the [Heirs’ Property Relending Program](#), 2) a study showing that the [biobased products industry](#) supports 5 million jobs and adds \$500 billion to the economy, 3) an announcement of [loan interest rates for farming operations](#), equipment, and structures, and 4) an announcement about [cattle market reports](#) aimed at increasing transparency.

Food Prices: World [food prices eased](#) for a second month in a row in July, according to a United Nations food agency.

Carbon Policy: More than 160 companies, labor unions, and environmental groups are calling on Congressional leaders to [include carbon management policies](#) in any legislative package.

Animal Rescue Team: UC Davis veterinarians joined with a new program to help [rescue animals during disasters](#).

Vaccination Mandate: Tyson Foods announced it will [require its workers](#) to be vaccinated by November.

COVID Research: An Iowa State University scientist published a study looking at a [critical enzyme present in SARS-CoV-2](#).

19 relief grants to help students enrolled during the summer 2021 semester cover costs and emergency expenses that are due to the pandemic.

The [Mississippi State University](#)-led Northern Gulf Institute is receiving up to \$86 million to continue its strategic research in the Gulf of Mexico.

CAST Social Media

Visit our website



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

Far Side of the Barn

Tide Turned for Stranded Whale (video): Although it was not exactly a “Free Willy” moment, humans joined in to [save a stranded Orca](#).



Something in the Air (video): IKEA now has a [candle that smells like Swedish meatballs](#)—the obvious follow up to McDonalds' [Quarter Pounder scent](#) and KFC's [candle with gravy smells](#)

It's a Twister, Auntie Em (video): This amateur storm chaser has a [close encounter with a tornado](#).

CAST Updates

CAST Society Members



Society members are an important component in the effort to fulfill CAST's mission—communicating credible, science-based information to a wide audience. [Society members include](#) those representing medicine, plants, food, animals, and other types of science and agriculture. CAST's society members enjoy several benefits such as access to publications and a weekly newsletter. But just as notable, these groups share information with others through CAST's publications and social media, and their members keep aware of science-based research and information from the many sources available through CAST.

Member societies have a voice on the [CAST Board of Representatives](#), a group made up of the member societies, universities, commercial companies, nonprofit or trade organizations, and the Board of Directors. Each member of the board serves on one of three work groups—Animal Agriculture and Environmental Issues, Food Science and Safety, or Plant Agriculture and Environmental Issues. The work groups meet at an annual board meeting, hold monthly conference calls, and help CAST identify, clarify, and prioritize national issues it should address in its publications to support the science, technology, and innovation of food and agriculture.

Animal Agriculture and Environmental News

Dealing with ASF: The Dominican Republic will slaughter thousands of pigs [after detecting outbreaks](#) of African swine fever. The Pork Checkoff site [offers safety suggestions](#).

Genetic Salmon: AquaBounty's [genetically engineered salmon](#) owners announced a \$200 million expansion in Ohio for the next aquaculture farm location.

Early Insights (see above): A decade ago, Alison Van Eenennaam (UC Davis and [2014 BCCA](#)) chaired a [CAST Commentary](#) about *The Science and Regulation of Food from Genetically Engineered Animals*.

Mega-dairy Effects: This long story looks at many angles of how a mega-dairy in Arizona is [affecting aquifers and farming lifestyles](#).



Most porkers don't need traditional haircuts, but Iowa State University researchers are using [hair samples](#)

Grants for Goats: Faced with ongoing challenges over milk prices, local farms have been making changes, including using [grants to try out new animals](#) like goats.

Poultry Study: Researchers will [study the immune system and intestinal microbiome](#) of broiler chickens with a goal of controlling coccidiosis and associated diseases.

[from pigs](#) to identify genetics related to stress responses.

As a California pig ruling approaches, many are [concerned about pork prices and availability](#).

Food Science and Safety News

COVID and Food Safety: The virus that causes [COVID-19 is not a direct food safety concern](#), according to updated guidance from the United Nations.

Science and Hunger: CAST offers many food-focused publications including [Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger](#).

Gold Medal Food Items (video): This article covers a wide array of amazing [food items at the Tokyo Olympics](#)—from sushi to fast food, from vending machines to pet pig cafes.

Color and Flavor: This study analyzed the pigment molecules in 157 different kinds of tomatoes in order to [figure out the role that colors play in flavor](#).

Healthy Produce: Fruit and vegetable substances are being studied for [anti-cancer properties](#).

Cooking with Butter or Oil: Choosing the right cooking fat for the job is key, and this [article looks at how to decide](#)



Snake River Farms is an [American pioneer of Wagyu](#), a style of meat from Japan famous for its exceptional marbling. Last year, Snake River Farms [donated meat to food banks](#).

Plant Agriculture and Environmental News

Raising a Stink: According to an Ohio State University scientist, [stinkweed could help make a cleaner bio-jet fuel](#)

Green Manure: Researchers at Cornell University are looking at ways to help [breed better cover crops](#).

Crop Talk: Crop farmers from Iowa, Arkansas, and North Carolina comment about [conditions and yield possibilities](#).

Waste Use: A North Carolina State University senior is working to find a way to combine pine bark and hog waste to make an [environmentally sound soil supplement](#).

In the Air: Penn State research looks at [how low-pressure systems transport carbon dioxide](#) in the atmosphere.

Invasion of Armyworms (video): A University of Arkansas expert says the [armyworm outbreak is the worst](#) in years.



A Texas A&M-Galveston marine biologist says the “red tide” [algae bloom can be devastating](#) to marine life and humans.

International News

EU and Biodiesel Tariffs: The European Union will retain its [tariffs on U.S. biodiesel](#) for a further five years.

Dangerous Methane Release: A 2020 [heat wave unleashed methane emissions](#) from prehistoric limestone in two Arctic regions.

Supply Chain Challenges: Food groups in Great Britain warn that labor shortages, including among lorry drivers and growers, will [threaten supply chain supplies](#).

Piglets and Zinc Oxide: Canada joins the EU by implementing a drastic [reduction of pharmacological levels of zinc oxide](#) in baby pig diets.

On Your Doorstep: During a recent festival season in Bangladesh, marketplaces adjusted to the pandemic by delivering [cows, goats, and buffaloes to consumers' doors](#).



Thousands fled coastal towns in [Turkey as wildfires raged](#), and [Greece is also facing wildfires](#).

General Interest News

Why Animals Eat Plastics: This research team reviews the [occurrence of plastic ingestion](#) by wildlife.

Fungi and Plastic Waste: Scientists are working to develop a strain of fungi that will make an even more efficient digester that could potentially help [get rid of plastic waste](#).

WOTUS Discussions: The EPA and the U.S. Department of the Army set up public meetings to hear from farmers and other stakeholders on a [definition for Waters of the U.S.](#)

Robotic Input: A Kansas State University team of researchers will use [robotic machines to collect data](#) that can help farmers make better decisions when planting crops.

Diggin' in the Dirt: These researchers study how [people view and interact with soil](#).

Paradise on Fire: Firefighters battled [wildfires on the Big Island Hawaii](#) that forced thousands of people to evacuate. [Fires in California](#) continue to cause destruction.



This video about astrophysicist [Jocelyn Bell Burnell](#) shows how her determination and intelligence helped her make remarkable science discoveries.

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Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- * 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

- * 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

- * 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

- * 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

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
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