



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

Nominations are open for the 2022 Borlaug CAST Communication Award



Nominations are open through February 7, 2022, for the [2022 Borlaug CAST Communication Award](#), an honor that recognizes professionals actively working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena.

The USDA announced that the [Fruit and Vegetable Industry Advisory Committee](#) will hold a virtual meeting on February 1. It is open to the public and registration is required.

The [USDA Ag Outlook Forum](#) will be held February 24-25.

CAST College Corner

The [University of Nevada, Reno](#) will host the annual Cattleman's Update in person and virtually—January 10-14.

A [University of Florida](#) scientist is using artificial intelligence to develop a low-cost, smart tree-

January 7, 2022

Increasing Competition in Meat & Poultry Markets

The Biden administration has released the details of its plan to [increase competition](#) in meat and poultry markets. The National Economic Council Deputy Director says it will benefit farmers and ranchers and notes one of the strategies to increase competition is continued investment and expansion of processing capacity. The president recently [met virtually with farmers](#) and ranchers to discuss ways to reduce food prices by increasing competition in the meat industry. The White House is also offering \$1 billion in aid for [smaller meat industry producers](#).



The Agriculture Department and Justice Department are working together to protect against unfair and anticompetitive practices. They recently [released this statement](#) on their principles and commitments. The USDA's Food Safety and Inspection Service is soliciting [nominations for membership](#) to the National Advisory Committee on Meat and Poultry Inspection.

News and Views

USDA Partnerships: 1) The USDA is investing \$1.2 million into a [climate agriculture project](#) with The Ohio State University. 2) The USDA ARS and Boehringer Ingelheim are joining forces to [offer veterinary students the opportunity](#) to research diseases that could affect livestock and public health.

The Green Revolution: A recent study found that the Green Revolution [saved the world \\$83 trillion](#). Norman Borlaug was often called "the father of the Green Revolution."

Beating Burnout: A social psychologist and professor of organizational behavior at Cornell University says there are [ways to recalibrate](#) after nearly two years of a pandemic-induced, always-on work mindset.

crop sprayer that can make spraying methods more effective and reduce chemical use.

Four [Mississippi State University](#) students were selected to participate in a training conference for college students entering the meat science industry.

CAST Social Media

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website



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

Far Side of the Barn

What's All the Stink About?

Since 2016, North Carolina State University has experienced three bloom cycles of the rare *titan arum*—[the pungent corpse flower](#).



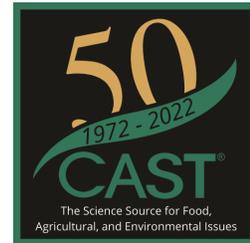
Barreleye Fish: Researchers with the Monterey Bay Aquarium stumbled upon a “once-in-a-lifetime” encounter with a peculiar [deep-sea fish with a transparent head](#).

Guess That Food (video): People try breakfast foods from around the world and guess the [country of origin](#).

CAST Updates

50 Years of CAST

The Council for Agricultural Science and Technology (CAST) is celebrating 50 years as the trusted source for credible, balanced, science-based information in 2022. This [commemorative publication](#) offers three sections covering 1) CAST historical highlights, publications, social media, and organizational structure, 2) an impact of the CAST study report, and 3) essays on the future of CAST.



CAST is planning a year-long celebration of this important milestone. A number of meetings and presentations will take place to share this publication and engage stakeholders to get their ideas, input, and suggestions about how CAST adapts to new challenges to science communications around food, agriculture, and the environment. These events will culminate at the 2022 CAST Annual Meeting which will be held in Iowa, where CAST was formed and still currently operates. Donations to support CAST's mission are [always welcome](#).

New CAST Commentary

The development of *Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture* was led by Dr. Marty Matlock, University of Arkansas and also a past recipient of the [Borlaug CAST Communication Award](#). The paper will be released early on Monday, January 24th and the webinar, including a panel discussion with the paper's authors, will be at noon central on Tuesday, January 25th. A registration link for the webinar will be available soon.



A panel of agricultural economists will present Highlights of CAST's new paper on the impacts of COVID-19 on food and agricultural markets followed by a Q&A session.

Updated Impact Report

The 18-month impact report on the *Economic Impacts of COVID-19 on Food and Agricultural Markets* is [available on the CAST website](#). This

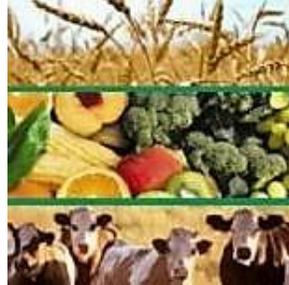
paper examines the many economic factors and impacts of the COVID-19 pandemic, with a focus on the agriculture sector. The authors of this paper discuss the effects this recession has on these topics: macroeconomics; trade; supply chain; consumer behavior; food service/grocery; meat processing; forestry and wood products; local food systems; food waste; food insecurity; major commodity crops; agricultural finance; agricultural labor; rural health care; and research and outreach priorities.

Member Societies Help Promote CAST's Mission

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 body made up of member societies, universities, companies, nonprofit 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 science, technology, and innovation.



Animal Agriculture and Environmental News

Poultry Health: Iowa State University researchers discovered an innovative approach to [fight bacteria and their antimicrobial resistance in poultry](#) by exploiting linkages between the gut neurochemical and immune systems.

Antibiotic Usage: Livestock antibiotic sales [have hit a plateau](#) after experiencing a steep decline over the past few years.

Powered by Manure: Seven pieces of machinery at a port will be [powered by hydrogen fuel cells](#) that will receive energy derived from cow manure.

Not Quite a Hitchcock Situation—Birds and Disease: Concerns over [foodborne risks from birds](#) may not be as severe as once thought by produce farmers, according to research from the University of California, Davis.



An elusive, nocturnal parrot [disappeared for more than a century](#). An unlikely rediscovery led to ornithological scandal—and then hope.

Food Science and Safety News

Saving Lives with Golden Rice: This National Academy of Sciences article says a genetically modified rice variety known as Golden Rice should be [adopted to alleviate Vitamin A deficiency](#), a deadly condition for children in less-developed countries.

Dietary Information: An article from North Carolina State University explores [nutritional half-truths](#).

Fish on the Menu: The USDA will purchase \$25 million in Atlantic groundfish products for [distribution to food banks](#).

Decline in Food Prices: Global [food prices declined](#) from a near-record high at the end of last year, offering some respite to consumers and governments facing a wave of inflationary pressures.

Food Labeling (related to right): On January 1, labels at the grocery store received a [makeover on foods](#) that have been genetically modified.



CAST has released two papers on food labeling—*The [Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#)* and *[Process Labeling of Food](#) Consumer Behavior, the Agricultural Sector, and Policy Recommendations*.

Plant Agriculture and Environmental News

Good Advice: This University of Missouri expert from the Center for Regenerative Agriculture uses a Q&A to discuss [soil health, conservation, and crop diversification](#).

Battling Weeds: A Kansas State University study is using technology developed in Australia as a possible [deterrent to pigweed and other unwanted plants](#) resistant to herbicides.

Stover—It's a Gas! Chopped corn stalks are used to [create renewable natural gas](#) to heat Iowa homes and businesses.

Fruit Genome: Sequencing and analyzing the genomes of [wild and cultivated lychee](#) showed researchers the origin and domestication history of the fruit.

Cover Crops: Off-season [cover crops expand](#) as U.S. growers eye a low-carbon future. Check out the CAST paper on *The Role of Agricultural Science and Technology in Climate 21 Project Implementation*.



Texas A&M AgriLife Research and a biotechnology company started a partnership to [develop and optimize protocols](#) for genetic transformation of industrial hemp for commercial use.

International News

Aflatoxin Puzzle: An Indian agricultural scientist may hold the key to solving a major public health crisis by using [biotechnology to develop groundnut](#) crops resistant to infection by a deadly-toxin-producing fungus.

Mexico and Ag Exports: Mexico now ranks [seventh in global ag exports](#)—beer is its number one agri-food export.

Genome Research: A research team at Göttingen University [developed a method](#) to complete genetic data.

Life-saving Drones (video): A scientist invented a [drone system to deliver medical supplies](#) to the remote communities of his island nation Cape Verde.



Some Japanese—especially elderly—are [turning to "social robots"](#) for solace and mental healing.

General Interest News

Ag Law Issues: This article from the University of Arkansas highlights the [top ten agricultural law issues](#) from 2021.

Light Behavior: University of Nebraska–Lincoln physicists are casting fresh eyes on the universe-birthing fireworks ignited by the [Big Bang nearly 14 billion years ago](#)

Ag Machinery: Because of COVID and other factors, including high demand for replacement machinery and a shortage of manufacturing components, agriculture experienced a [shortage of machinery in 2021](#).

Dark Meat on the Menu: With poultry prices increasing, [restaurants are adding](#) chicken thighs to menus this year.



New [autonomous tractors](#) use artificial intelligence and smartphones to control them in fields. [Opinions vary](#) about the effects of driverless tractors.

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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
- * Association of Equipment Manufacturers
- * 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
- * National Turkey Federation
- * 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.

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- * Kansas State University
- * Mississippi State University
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- * North Carolina State University
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- * The Ohio State University
- * Tuskegee University
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- * 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,
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