

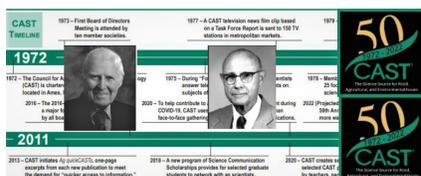


Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained in linked articles is from the original authors and does not necessarily reflect the views of CAST.

In This Issue....

- [Animal Agriculture News](#)
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Announcements



CAST Blast from the Past:
On February 1-2, 1974, a meeting of the CAST board of directors was held at North St. Louis, Missouri. J Ritchie Cowan was installed as president and Cecil E. Howes as the president-elect. Charles A. Black was named the executive vice president, the chief executive officer of the organization. The "Operational Guidelines" were approved. [Click here to access](#) CAST's 50th anniversary commemorative publication.

Dr. Sarah Evanege ([2021 BCCA](#)) was recently [appointed Lead Stakeholder Communications](#) for the Pairwise organization.

The USDA's 98th annual Agricultural Outlook Forum will be [held virtually February 24-25](#).

The 2022 [Animal Agriculture Alliance Stakeholders Summit](#) is set for May 10-12.

CAST College Corner

February 18, 2022

Disease Challenges Facing Animal Health

Chicken and turkey farms [are on high alert](#) after the USDA's Animal and Plant Health Inspection Service confirmed the presence of [highly pathogenic avian influenza](#) in birds in three states. Biosecurity measures, like monitoring vehicle traffic, is [key to preventing](#) poultry disease outbreaks.



As African swine fever (ASF) continues to spread to other countries, the first ASF vaccine is [approaching market](#) readiness. The American Veterinary Medical Association offers information on both [avian influenza](#) and [African swine fever](#).

Health departments are urging community members who are affected by animal health emergencies to be aware of the possible impact on their mental health and to [seek help if needed](#).

Check out these earlier CAST publications:

- [Avian Influenza Vaccination: A Commentary Focusing on H5N1 High Pathogenicity Avian Influenza](#) (Commentary from 2007)
- [Avian Influenza Vaccines: Focusing on H5N1 High Pathogenicity Avian Influenza \(HPAI\)](#) (Special Publication from 2007)

Details on the forthcoming CAST publication, *Zoonotic Diseases in Animal Agriculture and Beyond—A One Health Perspective*, will be available soon.

News and Views

USDA Updates: The department announced 1) millions of dollars in [grants to support seafood processors](#), and 2) members of the [newly established Equity Commission](#) and its Subcommittee on Agriculture.

Prop 12 in California: Jayson Lusk ([2017 BCCA](#)) looks at the effects of [Proposition 12 in California](#). It requires all shell eggs

[Cornell University](#) student, staff, and faculty volunteers report success in educating the public about the safety and effectiveness of vaccines.

[Kansas State University](#) will feature beef cattle research at the annual Cattlemen's Day March 4.

[Iowa State University](#) students are working with the USDA on historic preservation projects at U.S. diplomatic properties around the world.

CAST Social Media

Visit our website



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

sold in the state to come from cage-free production systems.

Ruling about Wolves: A California judge placed [wolves on the Endangered Species List](#). Some disagree with the ruling.

Far Side of the Barn

"Useless Farm" Goes Viral (videos): During the pandemic, this Ontario farmer gathered a menagerie of animals—and with her “useless farm,” she [amassed thousands of social media followers](#).

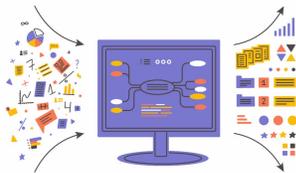


The Sky Is Falling (video): Hundreds of [blackbirds suddenly crashed to the ground](#) in the Mexican city of Chihuahua.

Homeward Bound: A family's cat that disappeared six years ago was [reunited with her family](#) in Maine after being found in Florida.

CAST Updates

Life Cycle Assessment Paper and Webinar Recap



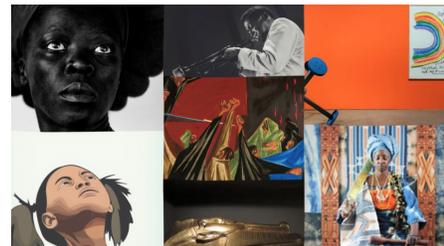
The CAST Commentary, *Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture*, was released on January 24, 2022. On January 25, task force chair, Dr. Marty Matlock, presented highlights of the paper followed by a Q&A session with a panel of two of the authors—Dr. Kurt Rosentrater and Dr. Yuan Yao. The Q&A was moderated by the CAST liaison for the task force, Dr. Juan Tricarico. There were 724 registrants for the webinar with 338 viewers attending on Zoom, and 295 of the attendees staying on to participate in the Q&A session. The

[commentary](#), [Ag quickCAST](#), [webinar video](#), and [Q&A](#) are all available for viewing.

February—Black History Month

As [Black History Month](#) unfolds—and throughout the year—*Friday Notes* includes activities and accomplishments of African Americans through [CAST Education Program](#) university members; the following links are a few examples:

1. [North Carolina A&T State University](#) provides a website with various links and stories regarding Black History Month.
2. Four [Mississippi State University students](#) were among only 30 chosen nationwide to participate in a training conference for students entering the meat science industry.
3. [Tuskegee University](#) is part of the Southeast Organic Consortium that provides organic farmers with valuable research information.
4. A [University of Florida](#) science and engineering graduate became the [first Black American woman](#) to win an individual Olympic speed skating gold medal.



Animal Agriculture and Environmental News

Managing Mycotoxins (podcast): It is important for swine

producers to [understand how mycotoxins](#) affect pigs and how best to manage high concentration in their feed.

Madigan Squeeze: This [squeeze technique](#) is used on "dummy" foals and calves who have gone through a traumatic birth.

California Carbon and Manure: Dairy farms that [capture methane from cows' manure](#) can earn valuable pollution-cutting credits.

Manure as Fertilizer: North Carolina State University researchers are developing a [low-cost method to dry swine sludge](#) for easy transport and fertilizer blending.



Research from Kansas State University shows that [decreasing corn particle](#) size increases metabolizable energy when fed to gestating sows.

Food Science and Safety News

Smarter Food Safety (podcast): This podcast is hosted by the FDA and [features top experts](#) involved in food safety and technology.

Food Safety Tips: Texas A&M AgriLife extension offers some [food safety tips](#) for commercial kitchens.

Diets: New research examines how staple grains can be used as an [effective food group](#) for dietary shifts that can be culturally appropriate.

New Survey: In one of Jayson Lusk's ([2017 BCCA](#)) latest blogs, he discusses the monthly survey, [Consumer Food Insights](#). This survey reveals where, how, and what food U.S. consumers bought and ate, with a focus on the implications for food systems at the national scale.



UC Davis researchers discovered that lactic acid [bacteria use a previously unknown energy metabolism](#) that radically changes the scientific understanding of how they function.

Plant Agriculture and Environmental News

Fusarium: [Cultivated and wild bananas](#) are threatened by this devastating fungal disease.

Fertilizer: A recent paper explores the first commercially available [microbial nitrogen product](#) to replace and reduce the use of synthetic nitrogen fertilizer.

No-tillage Legacy: The University of Kentucky's [legacy of implementing no-tillage](#) continues to help agriculture.

Erosion: This Iowa State University expert explains three [basic principles that lead to erosion](#), and he discusses pertinent data from USDA sources.

Wheat Research: Research has found an accumulation of imbalanced gene homoeologs in [polyploid wheat varieties](#) that impact productivity traits.



Although recent Pacific storms could help, research shows that the [Western U.S. is in a severe drought](#). Officials are trying to plan for an [uncertain time for the nation's largest reservoirs](#).

International News

Food Packaging: A British company launched a [fully recyclable packaging product](#) suitable for food applications.

GM Crops: Genetically modified crops in Europe could

reduce [greenhouse gas emissions](#).

Polluted Rivers: This report says [pollution of the world's rivers](#) from medicines and pharmaceutical products poses a "threat to environmental and global health."

Mathematical Ag: An education project in Scotland aims to engage students on a [mathematics course with agriculture](#)—specifically with the manufacture of milk and ice cream.

Dry Winter: Farmers in both [Portugal and Spain](#), who are growing produce for all of Europe, are worried that their crops for this season will be ruined due to the dry winter.



Australia has listed the [koala as an endangered species](#) across most of its east coast, after a dramatic decline in numbers due to land clearing, bushfires, and disease.

General Interest News

Farm Life on Film: A University of Missouri student successfully uses [YouTube to showcase farm life](#) and technology. [Videos available here.](#)

Fertilizer Costs: These five farmers explain how producers might [deal with skyrocketing fertilizer costs](#).

Biohybrid Fish: Scientists developed a fully [autonomous biohybrid fish](#) from human stem-cell derived cardiac muscle cells, a step toward building an artificial heart.

Lasers: A company just released an autonomous, laserweeding pull-behind robot as a cost-effective [weed control solution](#) for large-scale specialty row crops.

Organizing Memories: Scientists [uncovered how the](#) brain organizes memories in time.



Astrophysicists report how, when tiny galaxies collide with bigger ones, the [bigger galaxies](#) can strip the smaller galaxies of their dark matter.

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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

- * Iowa State University
- * Mississippi State University
- * 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
- * Penn State University

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
- * Bayer
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy

* Poultry Science Association

- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * The Minor Use Foundation
- * 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
- * Zoetis

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

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- * Kansas State University
- * Mississippi State University
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- * 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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The Science Source for Food,
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