



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



Note: There will not be an issue of *Friday Notes* Friday, October 28 due to CAST's annual meeting being held that week.

The National Academies of Science is holding a webinar on [LCA Methods for Low-Carbon Transportation Fuels](#) on October 19. CAST's Life Cycle Assessment publication [can be accessed here](#).

The National Cattlemen's Beef Association is offering a free virtual [Stockmanship and Stewardship](#) event on November 1.

On November 9-10, the [University of Illinois](#) will hold a workshop on issues relating to new ag technologies.

CAST College Corner

[Iowa State University's](#) Polymer and Food Protection Consortium is working to solve problems in food waste.

October 14, 2022

Mississippi River Level and the Supply Chain

Due to the low water levels in the Mississippi River, about 100 tow boats pulling 1,600 barges were lined up for miles [waiting to pass through a section of the river](#).



To be able to pass through these low river spots, less grain is being loaded onto the barges. If the water level for barge loading is decreased by one foot, a 15-barge tow will be loaded with 75,000 fewer bushels—which is the equivalent of [removing the production from three soybean farms](#) per barge tow.

In order to avoid shipping via barge, companies are paying a premium to move steel, aluminum, and other goods by rail and truck, despite [costs that are up to five times more](#) than what they'd normally pay by barge.

With the river levels so low, a [100-year-old sunken ship was found](#) by a treasure hunter in Louisiana.

News and Views

USDA Updates: The USDA 1) released the latest [World Agricultural Supply and Demand Estimates](#) (WASDE) report, 2) is seeking public comments on a [new provision to provide assistance](#) to agricultural producers who have experienced discrimination, 3) is awarding \$110 million to [improve health care](#) for rural residents, and 4) has proposed regulatory framework to [reduce Salmonella infections](#) linked to poultry products.

Current HPAI Count: More than 47 million birds in domestic flocks, mostly chickens and turkeys, have died or were culled [in efforts to stop the spread](#) of highly pathogenic avian influenza since early February.

Visit our website



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

Far Side of the Barn

The Great Pumpkin: A [pumpkin weighing 2,560 pounds](#), raised by a horticulture teacher from Minnesota, broke the U.S. record.



CAST Updates

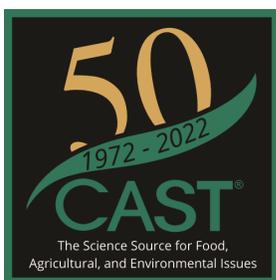
Upcoming Zoonoses Publication Release

Mid-November CAST will release a special publication covering zoonotic diseases in animal agriculture! This paper presents a few short vignettes to serve as examples to help explain zoonoses, emphasize key drivers, better understand the concept of One Health, and learn from these examples with the aim of synthesizing this information, drawing relevant conclusions, and proposing effective recommendations. By looking through the lens of agriculture, we identify the lessons learned in zoonotic disease transmission and explore how agriculture can become an effective partner, leader, and positive influence.



More information will be available in the coming weeks.

Top 10 CAST Publications



As CAST celebrates its 50th anniversary in 2022, we wanted to acknowledge the top ten CAST publications that have had the greatest impact. You can view the [top ten on this blog](#) and click on the publication titles to view the individual publications.

[Click here to access](#) the 50th anniversary commemorative publication which offers three sections covering 1) CAST historical highlights, publications, social media, and organizational structure, 2) the impact of CAST, and 3) essays on the future of CAST from BCCA recipients.

Animal Agriculture and Environmental News

Dairy Cows: Decreasing stress and keeping facilities clean are some of the [best ways to prevent cow disease](#).

Litter Type Important: New research has found that the type of litter broiler chickens are raised on [plays an important role](#) in their pre-harvest health.

Cows on Corn Residue: Studies from the University of Nebraska-Lincoln have shown that [grazing corn residue increases](#) or at least maintains crop yields.



Romania has confirmed an outbreak of [African swine fever](#) at a large pig farm in the western county of Timis.

Food Science and Safety News

Plant-based Meat: According to new research on the recent slow down of consumption of plant-based meat, [there are several factors at play](#)—including questions around the products' perceived health and environmental credentials.

Egg Prices: Eggs have reached an all-time high [for the third time](#) in 2022.

National Egg Day: Today is National Egg Day. This link provides [facts about the incredible, edible egg](#) and this link offers [egg recipes](#).



Dairy consumption is at an all-time high with the [average person consuming 667 pounds](#) per year.

Plant Agriculture and Environmental News

Weeds: An agronomist suggests weeds were very [difficult to control this year](#) as they had the perfect growing conditions with a hot, dry summer.

Avocados: A [Texas A&M University](#) study shows that Mexican avocados brought over \$11 billion to the U.S. economy.

Onshore Algae: A Cornell University paper on fast-growing onshore algae [may help close the gap in nutrition demands](#) while meeting sustainability efforts.



Hurricane Ian impacted [400,000 of Florida's 450,000 acres of citrus](#).

International News

New Zealand Emissions: More than a dozen calves wait at a research farm in New Zealand to be fed Kowbucha, a punnily named [probiotic that studies show reduces burps](#). New Zealand will also [tax agricultural emissions](#) at the farm level.

"Growing" Water: An Australian [startup is "growing" water](#) for drought-parched California. The state is enduring a drought that scientists are calling the worst in 1,200 years.

Ag and the Rainforest: A newly released four-year study by the University of Nebraska-Lincoln and its research partners in Brazil identifies a path forward that would allow Brazil to strengthen its agricultural sector [while safeguarding the rainforest](#).



British shoppers are turning to [wonky-shaped vegetables](#) as food price inflation soars. Offering imperfect fruit and vegetables allows grocers to carry fresh products, but at a cheaper price.

General Interest News

Indigenous Peoples' Day: October 10 was Indigenous Peoples' Day in the United States. Here are [seven Indigenous people involved in STEM](#).

Hurricane-Proof: A solar-powered "hurricane-proof" town in Florida took a direct hit from Hurricane Ian and [never lost electricity](#).

Goldfish: A new university study found that trained goldfish [showed a remarkable ability](#) to accurately estimate the distance that they had swam.



Montana has a dedicated group of winemakers working with unique hybrid grapes resistant to the state's harsh weather in hopes to become [the next "wine country"](#).

Photo Credits

Lead from Successful Farming. Far Side from Travis Gienger. Food from stocksnap pixabay. International from Chris J. Ratcliffe/Bloomberg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service, Constant Contact, or CAST.

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
- * 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
- * Bayer Crop Science
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Iowa State University
- * Minor Use Foundation, Inc.
- * 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
- * Nutrien
- * Penn State University
- * Poultry Science Association
- * Society for In Vitro Biology
- * Society for Range Management
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * The Mosaic Company
- * 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

- * 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
- * Purdue University Libraries and School of Information Studies
- * 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 Illinois College of Agricultural, Consumer and Environmental 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

Dylana Luett (Communications and Social Media Specialist)
 dluett@cast-science.org
 The Council for Agricultural Science and Technology
 4420 West Lincoln Way
 Ames, Iowa 50014-3447
 Phone: 515-292-2125



The Science Source for Food,
 Agricultural, and Environmental Issues

*** With assistance from Colleen Hamilton (Membership Specialist) and Nick Plaughter (Communications Project Coordinator)*

CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST CEO/EVP Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Colleen Hamilton at 515-292-2125 or chamilton@cast-science.org, or [CLICK HERE](#) for CAST membership information.

Council for Agricultural Science and Technology
www.cast-science.org

