

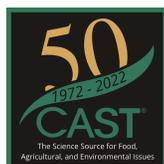


*Friday Notes* is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material 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



*CAST Blast from the Past*  
On August 31, 1971 seven societies voted to become the first members of CAST. See the CAST Updates section for more information.

### CAST College Corner

[University of Nebraska](#) professors believe adoption of precision ag leaves the U.S. vulnerable to cyber attacks.

A [University of Missouri](#) plant scientist discovered a way to measure plant stress.

### CAST Social Media

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## August 19, 2022

### Impacts of Drought Felt by Producers and Consumers

A new survey by the American Farm Bureau Federation captures how [the drought is impacting farmers and ranchers](#) across the West and Plains states, as well as food availability for consumers. The survey also states that nearly three quarters of U.S. farmers say this year's [drought is hurting their harvest](#)—with significant crop and income loss.



The World Agricultural Supply and Demand Estimates ([WASDE](#)) [report](#) states that grain crops are expected to be lower this year. On the east side of the U.S., [Connecticut has also experienced weeks of dry weather](#), forcing farmers to buy extra water and recalibrate their plans for harvest.

USDA scientists are testing new [cloud seeding technology](#), which creates excess water vapor in the cloud that leads to ice particles becoming big enough to precipitate out.

### News and Views

**USDA Updates:** The USDA 1) released a report showing public agricultural R&D's have [declined 30% in recent years](#) and 2) announced new opportunities to [improve nutrient management](#).

### Far Side of the Barn

**Jiminy Cricket:** A family in Minnesota wants to put crickets on your dinner plate, and [in your smoothies](#). Products they offer include a starter cricket snack pack and dark chocolate cricket clusters.



## CAST Updates

### Mosaic Joins CAST as a Board-Level Member



CAST is pleased to welcome a new board-level company member! The Mosaic Company is the world's leading integrated producer of concentrated phosphate and potash—two of the three most important nutrients in agriculture.

This level of support for CAST allows the organization the opportunity to appoint a representative to serve on a work group and network with other professionals to help CAST address agricultural issues through its publications.

Adam Herges—Senior Sustainability Agronomist, The Mosaic Company—says this of the new partnership: “Our 12,000 employees in The Mosaic Company help the world grow the food it needs by providing key nutrients for crop production. We understand the importance of knowledge sharing and using science to guide our next innovations and discoveries. This is why we’ve joined CAST and look forward to supporting policy decisions grounded in science, and highlighting the role that agriculture plays in our society. Mosaic is eager to work with CAST members to advance agricultural solutions.”

### Recognizing CAST's Original Seven Society Members

During a meeting in December 1970, sponsored by the National Academy of Sciences, National Research Council, and including representatives from 12 different societies, it was determined to pursue “the idea of an independent association of the agricultural science societies.” CAST’s name was adopted on May 27, 1971, and seven societies voted to become the first members of the fledgling organization on August 31. They include the [American Society for Horticultural Science](#) (ASHS), the [American Society of Agronomy](#) (ASA), the [American Society of Animal Science](#) (ASAS), the [Crop Science Society of America](#) (CSSA), the [Society of Nematologists](#) (SON), the [Poultry Science Association](#) (PSA), and the [Soil Science Society of America](#) (SSSA). We are humbled to note that most of these societies have continued their support and engagement with CAST since its inception!

## Animal Agriculture and Environmental News

**The Tale of Tails:** Scientists have found fossils of animals with tails dating back hundreds of millions of years. Current research [discusses why animals have tails](#).

**Bipartisan Beef:** In this opinion piece, Sens. John Thune, R-S.D., and Jon Tester, D-Mont., [discuss MCOOL and its current state-of-play](#).

**Salmon:** This could be the year that four Snake River dams in the Northwest get dynamited to [allow salmon a hope of surviving](#).



**A new research and innovation project will develop a feeding concept to [improve pig gut microbiota](#).**

# Food Science and Safety News

**Growing Food:** Researchers from two universities have teamed up to figure out how to [produce food through artificial photosynthesis](#).

**Short Supply:** A growing cost of living crisis, lingering impacts of the coronavirus pandemic, the nearly six-month war in Ukraine, and battered global supply chains are [among the reasons for grocery shortages](#).

**Food Safety Items:** The USDA is recommending to [add food safety items](#) to your back-to-school lists.



University scientists aim to help save the beef industry money through their [research on the discoloration of meat](#).

# Plant Agriculture and Environmental News

**Potato Supply:** It's not unusual for there to be a shortage of Idaho potatoes in August as only one crop is planted per year. This year the [shortage happened a little earlier](#) than previous years.

**Panama Disease:** Decades after decimating banana plants worldwide, Panama disease once again [threatens to wipe out the crop](#) key to economies across Asia, Latin America, and beyond.

**Work on Stream Erosion:** Members of [Penn State Extension's water resources team](#) recently earned national recognition at the Association of Natural Resource Extension Professionals' annual conference.



Scientists are examining the continental-scale drivers of carbon indicators, relationships among indicators, and [effects of soil health practices on indicator values](#).

# International News

**Drought in Kenya:** The drought in Kenya is [driving animals into villages](#) to eat crops and attack cattle.

**Greenhouses:** Over the past two decades, Italy has been [growing more vegetables in greenhouses](#), providing a boom for input suppliers.

**Wheat Varieties:** Genetic analysis of the Afghan wheat landrace KU3067 [reveals resistance to leaf rust and stripe rust](#), which can be used to develop further disease-resistant wheat varieties.



Sinkholes in Turkey are [swallowing up fertile farmland](#) in the nation's breadbasket.

# General Interest News

**Inflation Reduction Act:** The U.S. Senate [passed](#)

[the Inflation Reduction Act](#) with \$40B invested in climate-smart agriculture, rural power and clean energy, and wildfire protections and climate-smart forestry.

**Megadrought:** The decades-long megadrought in the West is [taking a toll on the Grand Canyon](#), shrinking the Colorado River by 20% and impacting fishing and farming industries.

**Legume Alternative:** Through a grant, Texas A&M University scientists are working on ways to use tepary beans to provide [flavor for human foods and forage for livestock](#).



**The 2022 Iowa Governor's State Fair steer show [raised over \\$440,000 for Ronald McDonald House](#) and the Dean's Charity Steer Show at the Ohio State Fair [raised \\$240,000 for the Ronald McDonald House Charities](#).**

## Photo Credits

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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
- \* 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
- \* Corteva Agriscience
- \* CropLife America
- \* Crop Science Society of America
- \* Innovation Center for U.S. Dairy
- \* Iowa State University
- \* Mosaic
- \* 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
- \* Poultry Science Association
- \* Rural Sociological Society
- \* Society for In Vitro Biology
- \* Society for Range Management
- \* 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

- \* Cornell University
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- \* Penn State University
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- \* 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
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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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