

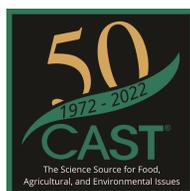


Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained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

Announcements



CAST Blast from the Past:
In June 1977, the Institute of Food Technologists became the 22nd member society.

June is [National Dairy Month](#).

CAST College Corner

The [Ohio State University](#) has conducted a study and found that a diet with an increase in fruit and vegetable consumption may help lower children's ADHD symptoms.

A [University of Nebraska](#) student sets out with their team to conduct tornado research.

A [University of Florida](#) scientist is working with a global research team to help control plants, animals, and fish before they become invasive.

[Iowa State University](#) received grants from the Agricultural Genome-to-Phenome Initiative.

June 3, 2022

Cybersecurity Threats on the Food Supply Chain

Supply chains are being challenged with multiple factors. Wide-ranging use of smart technologies is raising global [agricultural production](#), but international researchers warn this digital-age phenomenon could reap a crop of another kind—cybersecurity attacks.



These attacks can be aimed at food systems and their supply chain as well as at [agricultural cooperatives](#) during planting and harvest seasons. The [water sector](#) can also be a target. Last summer, the world's largest [beef supplier was hacked](#), forcing the company to take systems offline and stop work. There are steps that many companies in these sectors [can take to protect themselves](#) from threats.

News and Views

USDA Updates: 1) The USDA [announced details of a framework](#) to transform the food system to benefit consumers, producers, and rural communities. 2) APHIS will host a virtual [Antimicrobial Resistance Workshop](#) on August 30, 2022.

Gene Editing in Ag: A global agriscience company [has formally endorsed](#) the Framework for Responsible Use of Gene Editing in Agriculture.

HPAI: Secretary Vilsack has [approved additional funds](#) to support the HPAI response. The virus has been confirmed in 35 states, affecting more than 37.9 million domestic birds. The USDA APHIS site shows the [most up-to-date information](#) on the latest HPAI outbreaks.

Visit our website



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

Joshes into Battle: A couple hundred people grabbed their pool noodles and headed to a Nebraska park again this weekend to [battle over the right to the name Josh](#).



Not R2-D2 or WALL-E: A history professor was on his morning bike ride in the woods when he came across a [delivery robot wandering in the woods](#).

CAST Updates

Society Membership Support



Since 1972, [society members](#) have been 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.

Individual Membership Support

As a CAST member, you can help CAST to address some of the most important issues that impact our planet, such as how to feed the world's population; water and soil conservation; leading land use practices; and animal, food, and environmental science. This video shows the [benefits of being a CAST member](#).

Three of the membership options are:

The **Individual** membership, our most common level of support, is available to anyone interested in joining CAST and supporting sound science.

The **Young Professional** membership, which is at a reduced rate and is available to individuals who were enrolled as full-time students at an accredited college or university and have graduated within the last two years.

The **Student** membership, which is free and is available to those currently enrolled as a full-time student at an accredited college or university.

If you are interested in supporting CAST's work through one of the [individual membership](#) options we offer, please contact our membership specialist, [Colleen Hamilton](#).

Summary of Activities

The latest CAST [Summary of Activities](#) covers January-May 2022. You'll find a link to our latest commentary, [Goals, Strengths and Limitations Governing the Use of Life Cycle Assessment](#)

[\(LCA\) in Food and Agriculture](#); an overview of the [2022 Borlaug CAST Communication Award announcement](#); an update on 50th anniversary activities, along with a link to our recently published [commemorative publication](#); and more.

Animal Agriculture and Environmental News

High Tech: China pig breeders are going high tech in [a self-sufficiency push](#).

Water Efficient Chicken: An assistant professor at the University of Arkansas is [working toward developing chickens](#) that can thrive on limited water.

Beef Plant: Plans to build a [state-of-the-art beef and bison processing plant](#) in South Dakota would harvest 8,000-head per day, which would be the world's largest beef packing facility.



Vietnam held a press conference to announce the successful production of a [commercial vaccine for African swine fever](#).

Food Science and Safety News

GM Cowpea: Farmers and university students weighed in with [strong support for GM cowpea](#) approval in Ghana, where a decision is expected in August.

CRISPR Crops: This agriculture podcast series looks at the [cutting advantage of plant technology](#).

Seaweed: Harvested seaweed is [neither a seafood nor a vegetable](#) and is regulated by the Food and Drug Administration--but only as a spice.



The [world's first raspberry picking robot](#) was developed in Britain.

Plant Agriculture and Environmental News

Legume: A university is researching guar, [a drought tolerant legume](#) that may help feed livestock in drought-stricken areas.

Spot Blotch Resistance: Scientists have [identified novel genomic regions associated](#) with spot blotch resistance using a genome-wide association mapping approach to identify new regions with resistance to the disease.

Tariffs: More than 40 agriculture and food groups are calling for the [elimination or reduction](#) of U.S. tariffs being imposed on other countries.



An invasive earthworm native to east Asia that was discovered in Iowa in 2018 has [now spread to at least 11 counties](#).

International News

Wheat vs. Heat: Urgent action is required to

mitigate effects of temperature extremes in South Asia, which [threaten wheat production](#) and human health.

Mango Production: Pakistan, the world's fifth largest mango producer, is experiencing excessive heat and drought and is [expecting a 50% decrease](#) in mango production.

Seed Bank: Ukraine's giant [seed bank is at risk of being lost](#) as the war rages.

Desert Farming Challenges: Qatar has been aiming to [revolutionize solutions](#) to growing crops in its dry environment.



A group of African scientists has launched an ambitious [genome sequencing project](#) to unlock the secrets of plant and animal diversity.

General Interest News

Wind Turbine Blades: A Mississippi River facility [recycles these blades](#) and already has plans to expand, expecting to double its employees over the next couple years.

Smog and Gasoline: The White House is [considering waiving U.S. gasoline environmental](#) rules aimed at reducing summertime smog, hoping the waiver will combat rising pump prices.

COVID-19 Nasal Sprays: Scientists are working on COVID-19 vaccines that [activate the "mucosal" immune system](#) and could be delivered as a spray up your nose.



To remain competitive, producers [must harness and use generated data](#) to their advantage.

Photo Credits

Lead story from Markus Spiske on Unsplash. Far Side from Jaiden Tripi/Lincoln Star. Food from Fieldwork Robotics. Plant Ag from Wisconsin DNR. General from Jesada Wongsa / Successful Farming. 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
- * 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

- * 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

- * 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
- * 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

- * University of Arkansas System Division of Agriculture
- * University of California-Davis
- * University of Florida Institute of Food and Agricultural 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

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The Science Source for Food,
 Agricultural, and Environmental Issues

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