

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

The Food Safety Summit to be held May 10 will have a keynote presentation on Risk Culture: How to Balance Risks for the Safety of Consumers, Team Members, and the Environment.

CAST College Corner

The <u>University of Missouri</u> has partnered with another college to create a "women in STEM" research program.

Iowa State University

professors have been awarded grants from the Agricultural Genome to Phenome Initiative.

NC State plant pathologists provide an open-access tool to capture new data on a global plant destroyer, Phytophthora.

CAST Social Media

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April 14, 2023

Avian Influenza: A Zoonotic Disease

Highly Pathogenic
Avian Influenza (HPAI)
has been at the top of
poultry producers'
minds, as the wild bird
migration peaks. Most
recently HPAI has
been detected in a



Minnesota backyard flock, setting many producers on high alert.

HPAI has devastated the poultry industry in recent years, and scientists fear its spread to other animals and humans after <u>Chile reported their first case of HPAI in humans</u> in late March, and <u>China reported a case of human Avian Influenza</u>.

In CAST's most recent paper, Zoonotic Diseases in Animal Agriculture and Beyond: A One Health Perspective, scientists describe and explore preventative measures that can be taken to reduce the risk of spreading zoonotic diseases. These include being aware of infected animals, implementing outbreak plans, and using preventive measures to reduce the spread of the disease.

News and Views

USDA Updates: USDA 1) is in partnership with other organizations to <u>host a series of regional economic development workshops</u> that will provide small businesses, including farmers and ranchers, with the resources and tools they need to grow, and 2) released the latest World Agricultural Supply and Demand Estimates (WASDE) report.

Far Side of the Barn

CAST <u>welcomes ideas</u> for future publications and projects.

Operation Got Milk: Six suspects were arrested after stealing over \$1 million dollars' worth of dairy goods in an organized crime.



CAST Updates

New CAST Members Welcome!

Last week we honored and recognized our current CAST members. Without them, we would not have just celebrated <u>CAST's 50th anniversary</u> in 2022. In order to continue serving as a relevant agricultural source, however, we also need and invite new voices and fresh perspectives to join the discussion around the science, technology, and innovation so important to the future of food, agriculture, and the environment.

What Your Membership Supports

Here is just a recent sampling of what our members and volunteers have helped us accomplish:

- Published the Special Publication, <u>Zoonotic Diseases in Animal Agriculture and Beyond: A One Health Perspective</u>;
- Continuously work with volunteer task force participants on creating <u>new agricultural publications</u> scheduled for release from 2023-2025;
- Presented the annual <u>Borlaug CAST Communication Award</u> to another deserving science communicator;
- Partnered with our university members by offering their students educational opportunities and a chance to apply for a <u>CAST Science Communication Scholarship</u>.

Come Join Us!

If you are an individual interested in joining CAST, please check out the new member application on our website. If you would like to learn how your organization, company, or society can join, reach out to Kent Schescke, EVP/CEO, at kschescke@cast-science.org. We look forward to partnering with you to make credible, balanced, science-based information available to everyone!

Animal Agriculture and Environmental News

mRNA Vaccine: Dr. Kevin Folta (2016 BCCA) gives insight into a livestock vaccine that uses the same technology as the COVID-19 vaccine--which hasn't been approved for use.

Vaccine Webinar (related to above): NCBA's Cattlemen to Cattlemen Webinar titled, "New Vaccine Technologies: An addition to our animal health toolbox" can be found here.

Hemp for Feed: New research analyzes

<u>Cannabinol levels in beef fed hempseed products</u> to determine if hempseed cake could be a viable feed for the future.



An explosion at a Texas

Panhandle dairy killed 18,000

dairy cattle and injured one employee.

World Food Prices: Global food costs fell for a 12th straight month to <u>reach the lowest level</u> since July 2021, though there is still little sign the rout is actually feeding through to grocery shelves.

Cultured Meat: Scientists have <u>successfully bulk-produced cultured fat</u>, which could give cultured protein a texture and taste similar to meat.

CAST Commentary (related to above): Check out the CAST Commentary, <u>Producing Food Products</u> from Cultured Animal Tissues, released April 2020.



Impossible Chicken Nuggets are being recalled because there's a possibility of small pieces of wood in the product.

Plant Agriculture and Environmental News

Pesticide Drift: Researchers explore new ways to reduce pesticide drift and access risk with easy methods and solutions.

Nitrogen Use: New research moves the needle in the right direction as scientists try to uncover how plants use nitrogen and <u>how to use less fertilizer in the future</u>.

Almond Pollination: The impact of adverse weather in this <u>year's almond pollination</u> is discussed in this article.



Water for agriculture faces new challenges as droughts turn to floods, and global views on ownership shift.

International News

India: India, the world's largest milk producer, is now looking to <u>increase dairy imports</u> due to falling domestic supply.

Dispute: Experts are saying that the U.S.-Mexico corn dispute could drag on all year.

Exports: The U.S. and five other ag exporting countries say that India is vastly <u>underreporting its</u> <u>wheat and rice subsidies</u>.



African swine fever is spreading and threatening the Philippines' hog industry, raising concerns it might stall the headway in fighting inflation.

General Interest

Robots: Due to increasing shortages of labor in agriculture, this fruit farmer is looking towards <u>robots</u> for the future of his harvest.

CAST Issue Paper (related to above): Check out the CAST Issue Paper, <u>Ground and Aerial Robots</u> <u>for Agricultural Production: Opportunities and</u> <u>Challenges</u>, released November 2020.



Declining Insects: German researchers recently found that many species of insects, which are considered pests, are <u>declining in native forests</u> and habitats.

Corn planting is now underway in seven states according to the USDA.

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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
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- * 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
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- * Bayer Crop Science
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Global Teach Ag Network
- * 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
- * Rural Sociological Society
- * 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

CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, sciencebased 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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