

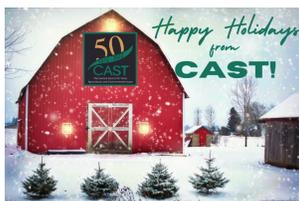


*Friday Notes* is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material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



**Happy Holidays from all of us at CAST!**

There will be no *Friday Notes* December 23rd or 30th. *Friday Notes* will resume January 6th, 2023.

### CAST College Corner

[Iowa State University](#) research shows projecting randomly moving, dot-sized laser lights on the floor of broiler pens stimulates birds' predatory instincts.

### CAST Social Media

Visit our website



CAST [welcomes ideas](#) for

## December 16, 2022

### Agrivoltaics—Opportunities and Challenges

At a test site in Colorado, researchers and farmers are collaborating to figure out what works—and what doesn't—[when it comes to agrivoltaics](#).



A new study from the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois [presents an overview of zoning and taxation](#) regulations that affect agrivoltaics across the United States, identifying challenges and possible solutions. The [study can be viewed here](#).

### News and Views

**USDA Updates:** 1) Vilsack announced the second round of [climate-smart grants](#); the climate-smart funded projects can be [viewed in this map](#), 2) the USDA's [2022 Census of Agriculture](#) is now open, 3) the latest World Agricultural Supply and Demand Estimates ([WASDE](#)) [report](#) is available for viewing, and 4) the USDA's largest annual gathering—the [2023 Agricultural Outlook Forum](#)—will be held February 23-24.

### Far Side of the Barn

**Archway Tree:** This [four-legged archway tree](#) in Iowa was created when a German immigrant tied and slightly spliced four Linden saplings together in 1915.



**Puppy Dog Eyes:** Researchers discovered that dogs have developed a muscle above their eyes that they use to make their eyes look larger and

## CAST Updates

### Nick's Next Chapter



Nick Plaughter has been the communications project coordinator since the spring of 2022 and will finish his term with CAST this month. He will be graduating from the University of Missouri this semester and is planning for a career in communications and leadership. His favorite memories while working with CAST have been managing video projects and connecting with all of CAST's staff. Read more about [his time at CAST](#) and his future plans. We appreciate all of Nick's exceptional contributions and wish him all the best!

### It's Time to Renew Your Membership for 2023!

The year of [CAST's 50th anniversary](#)—commemorating half a century of communicating the science, technology, and innovation so critical to the future of food, agriculture, and natural resources—has been very exciting and productive! We thank you for being a part of CAST's past and present, and now are asking you to continue your support in 2023 and beyond.



Please take a moment to renew your CAST membership for the coming year through the “Renew” button below.

Then along with your membership contribution, would you consider including an additional donation of \$50.00 toward CAST's next 50 years?

Any questions, please reach out to Colleen Hamilton, Membership Specialist, at [chamilton@cast-science.org](mailto:chamilton@cast-science.org). Thank you for continuing your support of CAST's work and mission!

Renew Membership

## Animal Agriculture and Environmental News

**Feral Hogs:** Despite more than \$100 million in federal money, an estimated 6-9 million feral swine still ravage the landscape nationwide, [causing \\$2.5 billion in damage each year](#).

**Antimicrobial Use:** The FDA's Center for Veterinary Medicine published the [2021 Summary Report](#) on *Antimicrobials Sold or Distributed for Use in Food-Producing Animals*.

**Feed Additives:** A bipartisan group of senators wants to know why the Food and Drug Administration has [not approved any feed additives](#) that help lower enteric emissions of carbon dioxide from livestock.



**A University of Nebraska-Lincoln graduate has created a [virtual fencing system](#) that can do more than contain cattle without posts and wire.**

# Food Science and Safety News

**Potato Sales:** Potato retail sales increased in dollar sales by 17.8% but decreased in volume sales by 2.1% from July-September 2022 [compared to the same timeframe](#) a year ago.

**Food Books:** This list of books [encourages young readers' interest in the food](#) they eat and the world around them.

**Third-Party Food Delivery:** The FDA, USDA, and CDC have collaborated with the Conference of Food Protection (CFP) to release [food safety best practices](#) for third-party delivery services.



A study has found dangerously [high levels of heavy metals](#) in chocolate from well-known brands.

## Plant Agriculture and Environmental News

**Cover Crops:** Cover crops, with their ability to reduce erosion and promote soil health, are [being planted across](#) more Midwestern land than ever.

**Products for Peaches:** A university professor is [evaluating a new spray product](#) that will reduce the need for hand-thinning on orchards.

**Self-pollinating Plant:** Without bumble bees, a flowering plant that can self-pollinate lost substantial genetic variation [within only nine generations](#), an experimental study found. Check out the CAST commentary on [why bee health matters](#), released June 2017.



A horticulture specialist from the University of Missouri explains that [mistletoe is quite toxic](#).

## International News

**World's Soil:** For this year's world soil day, the United Nations Food and Agriculture Organization (FAO) reminded us that [95% of the food we eat](#) comes directly or indirectly from our soils.

**Soy:** Argentina's [soy farmers sold 76%](#) of the 2021/2022 harvest as of last week, slightly below the volume sold at the same point during the previous harvest.

**GM Corn:** Mexico has offered to [extend a deadline to ban](#) genetically modified (GM) corn until 2025 and is working on a proposal to overhaul its plan.



Russia's invasion could cause long-term harm to Ukraine's prized soil—physical and chemical damage to farmland [could linger for years](#).

## General Interest News

**Fusion Energy:** Scientists studying fusion announced they had crossed a long-awaited

milestone in [reproducing the power of the sun in a laboratory](#). That sparked public excitement as scientists have for decades talked about how fusion, the nuclear reaction that makes stars shine, could provide a future source of bountiful energy.



**Supply Chain Survey:** A new survey released by the Association of Equipment Manufacturers (AEM) warns that U.S. equipment manufacturers continue to [face supply chain issues](#) and a persistent labor shortage that continue nearly three years after the onset of the pandemic.

**The National Corn Growers Association has partnered with Pheasants Forever and Quail Forever for the second year to help [increase pollinator habitat](#) on agricultural lands.**

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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 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
- \* 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
- \* 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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- \* 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](mailto: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,  
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*\*\* With assistance from Colleen Hamilton (Membership Specialist) and Nick Plaughter (Communications Project Coordinator)*

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