

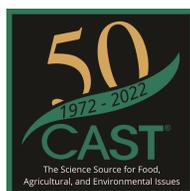


Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained 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:
In May 1982, CAST Report No. 94, *The U.S. Sheep and Goat Industry: Products, Opportunities, and Limitations* was submitted to Congress, the EPA, the U.S. Department of the Interior, and the USDA.

CAST College Corner

A [NC A&T State University](#) professor is helping farmers navigate a new field with hemp research.

[Iowa State University](#) research shows that sorghum has a potential to be the biofuel of the future for northern latitudes.

A [University of Kentucky](#) researcher has earned national recognition for innovative soil research.

A [Penn State](#) researcher was awarded the Research Innovator of the Year Award.

May 27, 2022

Growing Food in Space: The Next Frontier

Figuring out how to feed people in space is a [major part of a larger effort to demonstrate the viability](#) of long-term human habitation of extraterrestrial environments.



Scientists at the University of Florida [grew plants in soil from the Moon](#). They used soil collected during the Apollo 11, 12, and 17 missions.

Astrobiologists, geologists, soil scientists, and others are working together to come up with [ways to grow life-sustaining food](#) on Mars.

News and Views

USDA Updates: The USDA NIFA announced an investment of \$25 million as part of the American Rescue Plan for [meat and poultry agriculture workforce training](#).

Food Security: 1) Food protectionism is on the rise in the developing world as [governments try to safeguard local supplies](#). 2) Several nations have [moved to limit sugar exports](#) since the war in Ukraine started, fearful about food security as global agricultural prices rise. 3) Thailand [looks set to benefit](#) as many of its Asian neighbors limit shipments of agricultural commodities to shelter consumers from surging prices.

HPAI: The USDA APHIS site shows the [most up-to-date information](#) on the latest HPAI outbreaks.

Far Side of the Barn

CAST Social Media

Visit our website



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

Fearless Fan vs. Raccoon (video): A fan watching a baseball game noticed a raccoon that sent the crowd scattering. He [picked it up and carried it out](#) of the stadium.



Cattle Rustling: Law enforcement agents traveled to a Texas county to [arrest the county judge](#), a former sheriff's deputy, and two ranch hands for cattle rustling.

CAST Updates

CAST Board Updates

There have been a few changes and additions to the [CAST Board of Directors](#) and the [CAST Board of Representatives](#)! We would like to give a warm welcome to:

Julia Herman, National Cattlemen's Beef Association, joined the Board of Directors as the Animal Agriculture and Environmental Issues work group liaison and is replacing Sara Crawford who recently left the National Pork Board to become the president of Sustainable Environmental Consultants (SEC). Julia also serves as the chair of the Animal Work Group.

Vara Prasad, Kansas State University, is replacing Beth Guertal as the representative for the Crop Science Society of America in the Plant Agriculture and Environmental Issues work group.

Sharon Clay, South Dakota State University, is replacing Patrick Carr as the representative for the American Society of Agronomy in the Plant Agriculture and Environmental Issues work group.

Brett Kaysen, is serving as the interim representative for the National Pork Board with the Animal Agriculture and Environmental Issues work group.

Animal Agriculture and Environmental News

ASF: Nepal has reported its [first African swine fever outbreak](#), which was due to swill feeding.

Drones and Emissions: Researchers are using [drones to quantify dairy methane emissions](#) at farms in California.

Cold Stress in Laying Hens: A new study shows that a warmed perch system, as a thermal device, [improves hen health and welfare](#) by reducing cold stress-associated adverse effects in laying hens.



A professor shares research on [developing a computer vision method](#) for assessing startle and freeze behavior in domestic pigs.

Food Science and Safety News

Home-Raised Beef: Several states are working hard to get [locally raised beef into their school](#) lunch programs.

Honey Bees: The basic facts of bees are where many people's [understanding of this insect begins and ends](#) when it comes to the food supply chain. Check out the [CAST Commentary from 2017 on bee health](#).

Vertical Farming (video, related to right): Vertical farming is possible because [LED lighting has gotten cheaper](#) and more efficient.



The Omakase Berry is a gourmet strawberry that is [grown indoors vertically](#).

Plant Agriculture and Environmental News

Wheat and Corn: This [article discusses](#) how wheat futures have plunged overnight and how the pace of corn planting shows how far technology has come.

Dam Removal: The [nation's largest dam removal project](#) is about to begin. People are hoping to see a revival of plants and animals because of the removal.

Sprayers: A new sprayer provides in-crop weed control for corn, soybeans, and cotton--using [targeted technologies](#) combined with an option for broadcast spraying.



A food corporation plans to build a new soybean [processing facility to meet rising oilseed demand](#).

International News

Natural Fertilizers: Fearing Russia's invasion of Ukraine will [disrupt its crucial supply of fertilizer imports](#), agricultural powerhouse Brazil is increasingly turning to natural alternatives.

Gene-editing in the UK: The new Genetic Technology Bill, due to be introduced to Parliament, [could pave the way for bird flu-resistant chickens](#), wheat which can withstand climate change, and crops that are more nutritious.

'Real' Steaks: British scientists are aiming to grow 'real' steaks in a [laboratory within 12 months](#) in a breakthrough global first.



France, Europe's biggest grain producer, [has been stricken with drought](#), proving to be devastating for this year's wheat crop.

General Interest News

Trash into Treasure: Conveyor belting, street sweeper brushes, and other discarded materials are [getting a second life on farms](#).

Rise in Costs: Automakers are hiking prices on their electric vehicles [amid changing market](#)

[conditions](#) and rising commodity costs, specifically for key materials needed for EV batteries.

Green Push: A farm products manufacturing company purchased [ten electric vehicles](#) while announcing their new stewardship goals.



A new solar farm is [generating power in two Alaska villages above the Arctic Circle](#), where energy costs are among the highest in the state.

Photo Credits

Lead story from UF IFAS by Tyler Jones. Far side from KATV. Plant from Benson Hill. Food Science from Oishii. 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
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Iowa State University
- * 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

* University of Arkansas System Division of Agriculture

- * 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 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

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

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