



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.

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Announcements

The California Department of Food and Agriculture and the UC Davis College of Agricultural and Environmental Sciences invite you to participate in a two-day conference: [State of the Science Summit: Feed Strategies to Reduce Enteric Emissions](#).

CAST College Corner

[Iowa State University](#) will host the 2023 Carl and Marjory Hertz Lecture on Emerging Issues in Agriculture on April 11, which will be delivered by Corteva Agriscience's executive vice president.

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

March 31, 2023

New Technology for Animal and Crop Agriculture

Pork producers play a fundamental role in environmental stewardship as they continue to prioritize sustainable production practices. The Iowa Pork Industry Center and Iowa State University Extension and Outreach have developed a new digital tool to help producers understand the relationship between the [environment and production practices](#).



Forage production and harvest are the foundation of the ranching business, and written grazing management plans promise to increase a producer's ability to steward their critical resources more effectively. A company has created a virtual tool that [simplifies the complexities](#) of creating and implementing a grazing management plan.

Penn State researchers developed a multi-parameter soil sensor that can [effectively decouple temperature](#) and nitrogen signals so that each can be measured accurately to help improve efficiency of crop fertilization.

News and Views

USDA Updates: USDA 1) announced [additional assistance](#) for distressed farmers facing financial risk and 2) is seeking nominees to [advisory committee on minority farmers](#).

Far Side of the Barn

Happy the Holstein: A Holstein calf, named Happy, was born with a [smile on his side](#).



CAST Updates

CAST President on Women Scientists in Agriculture



To help wrap up Women's History Month, we asked Dr. Sally Flis, CAST President, to share her experiences as a scientist in agriculture and offer ways to attract young women scientists to the field.

Did you have a role model that influenced your decision to work in your career field of ag sustainability?

For me it was my dad, I still remember going out after school and on school vacation days to take soil samples, check fields, visit farms, and ride around in equipment.

What made you choose your career field?

I have always been interested in the intersection of science and policy—and this has been a part of my work on and off through my career. I enjoy working with producers and in the ag industry to problem solve in ways that are creative, but meet the needs of all the stakeholders in the system, including the end consumer of the products.

In your opinion, which changes, if any, are needed in the scientific system to be more attractive to women in science and possible future scientists?

I find as I interact with young people that a key change to having the new talent we all need coming into science and agriculture is a more accurate depiction of what we do—in ag and ag science we are not all farmers or soil sample takers or selling products—and I think highlighting that dynamic problem solving aspect of the work we all do in science and ag is key to attracting that talent. For young women specifically, I think we all need to just talk more—I don't talk about my work in my social media much because most of my audience/friends won't understand what I do and because I work in industry it is often assumed that I don't have advanced degrees—so as with everything in ag, we need to be better communicators about what we do and who we are.

Animal Agriculture and Environmental News

Orange Corn: This variety of orange corn could [improve poultry health](#) and egg yolk pigmentation.

Managing Mastitis: A new online education module will teach [on-farm and in-clinic milk culturing](#) techniques for identifying mastitis in cows.

Byproduct Feed: Dr. Juan Tricarico, 2020 CAST President, shares research from the Innovation Center for U.S. Dairy on the [importance of cows' byproduct feed](#).



Reliable air quality assessments are critical for understanding the source of swine production particulates and [developing improvement efforts](#).

Food Science and Safety News

Greenhouse Use: The greenhouse vegetable industry has been on a tear over the last two decades, in part due to [rising demand for fresh fruits and vegetables](#).

Food Sector Wages: Jayson Lusk's (2017 BCCA) latest blog discusses [wages in the food sector](#).

Dollar Stores and Food: Dollar stores have rapidly [expanded their food offerings](#) in recent years. These foods tend to be higher in calories and lower in nutrients, raising public health concerns, especially in rural and low-income areas where food-access challenges are often greatest.



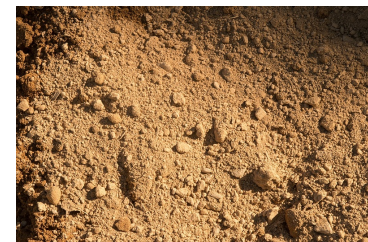
Alaska's [salmon, king crab, and snow crab populations](#) crashed last year, disrupting Native food supplies and traditions—and sending a warning for what's to come for the Lower 48.

Plant Agriculture and Environmental News

Biostimulant Yield: A meta-analysis of biostimulant yield effectiveness, published last year, shows an [average additional yield benefit](#) of about 18 percent, a surprise for many.

Wheat: A new University of Illinois project is using [advanced object recognition technology](#) to keep toxin-contaminated wheat kernels out of the food supply and to help researchers make wheat more resistant to fusarium head blight, or scab disease, the crop's top nemesis.

Pest Problems: An NC State Extension specialist in entomology is [helping growers with pest problems](#).



For farmers and researchers, a field is often like a giant chemistry set. The timing and amounts of different fertilizers to supply nutrients can [interact with each other, the soil, and crops](#).

International News

Biologicals: Chemical residues are strictly monitored in many of its markets, so it comes as no surprise that Kenya is one of the leaders on the African continent in [biological control of crop pests and diseases](#).

Modern Wheat: A rapid modern wheat variety adoption is key to [supply chain security](#) in Malawi.

Grain Exports: A grain company [will halt grain loadings](#) at its Russian export terminal.



A Chinese pork processing company is [processing more chicken than pork](#) to offset competition.

General Interest

Water on the Moon: Glass beads on the moon's surface may hold [billions of tons of water](#).

Reconnecting with Bison: The Yuchi Tribe of Oklahoma has been [reunited with bison](#), which they received from the city of Denver.

Native Seeds: There's rising demand for native plants. These species are genetically adapted to the specific regions where they are used. Unfortunately, [there's a shortage of them](#), which is slowing land restoration across the U.S.



The sun has the [power to give us what we need](#), but it's also powerful enough to disrupt our way of life here on earth.

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