



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](#)
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Events and Announcements



The [Perseid meteor shower](#) peak recently occurred, but sightings happen throughout the year, and this [University of Nevada-Reno](#) article explains how to “[catch a falling star](#)” in your backyard.

Registrants for the [2020 Virtual NAAE Convention](#) are also automatically registered for the Virtual ACTE CareerTech VISION 2020. It all begins November 30.

The USDA's Animal and Plant Health Inspection Service [seeks feedback on its proposed list](#) of pests and diseases.

CAST College Corner

[Kansas State University](#) and the University of Saskatchewan will work to improve the productivity and nutrition of wheat.

FFAR and AAVMC announced the twelve recipients of the [2020 Veterinary Student Research Fellowships](#)—including students

August 14, 2020

Food Assistance--Many Working to Link Up the Food Chain

Pandemic or not, hunger is a problem around the world and in many sectors of society--urban and rural areas experience shortages, and food insecurity affects people of all ages. The USDA continues to fund the [Families Food Box Program](#), and food banks, [such as Feeding America](#), are doing what they can to feed people in their communities.



This site provides [information for college students](#) experiencing food insecurity. For example, links go to programs such as the [Buckeye Food Alliance](#) at The Ohio State University and the [Lion Pantry](#) at Penn State University.

From corporations to societies to community groups, people are working hard to make the food supply chain work for all. Even individual efforts help the cause—these gardeners learned their craft at the University of Missouri, and now they oversee a [vegetable program that donates the produce](#) to local food pantries.

News and Views

WASDE: The USDA's [August WASDE report](#) includes forecasts based on conditions as of August 1. It indicates larger than previously predicted [corn and soybean crops](#) but many are waiting to see the results of recent damaging weather (see the links below about devastating storms).

A Midwest Hurricane (videos and photos): With gusts up to 112 mph, [an intense derecho](#) (hurricane-like storm) caused injuries, damaged homes, and [left immense crop damage](#) across much of the Midwest on August 10. Farmers across a wide swath of Iowa are [dealing with the aftermath of the rare wind storm](#) that turned what was looking like a record corn crop into deep losses for many.

from Mississippi State Univ., the Univ. of Georgia, Kansas State Univ., UC-Davis, and more.

[Cal Poly](#) developed ways to visit virtually—to see the campus, interact with students and faculty, and have questions answered.

Check throughout [Friday Notes](#) to see more featured articles from member universities.

CAST Social Media

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

CFAP Updates: The USDA announced that additional commodities are covered by the [Coronavirus Food Assistance Program](#) in response to public comments and data—and the deadline for applying has been extended.

News from the Far Side of the Barn

The Mary River Turtle (at right): It's a good time to check back with an [endangered turtle sporting an algae Mohawk](#).



Cue the Horror Classic, *The Birds* (video): This woman was enjoying chips (french fries) on a beach in England when a [flock of seagulls](#) had an Alfred Hitchcock moment.

Jaws on Ice: Researchers are hoping to study the [rare megamouth shark](#) at the Smithsonian.

CAST Updates

Agriculture and the Microbiome

CAST Issue Paper 68



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On Monday, August 24, the new CAST Issue Paper, *Agriculture and the Microbiome*, will be released. The webinar will take place noon CDT, Tuesday, August 25. You can [register for the free webinar here](#).

Agriculture is one of the keystones of human civilization, providing a reliable, stationary source of food that allowed ancient populations to grow and eventually build cities. Modern agriculture is successful today because of advances in mechanization, breeding, nutrients (e.g., fertilization), and pest and disease management, all of which enhance crop productivity and provide greater food security. Even with this progress, the amount of cropland per capita has declined, available farmland is being consumed by urban development at unprecedented rates, and crop yields are plateauing. Crop yields must continue to increase and the gap between plant productivity and consumption must be bridged. Expanding the use of crop microbiomes to improve plant production is that next agricultural revolution.

In Memory of Robert "Phil" Phillip Upchurch

Phil Upchurch passed away on May 27, 2020. Before he was president of CAST in 1982-1983, he worked hard to earn B.S. and M.S. degrees at NC-State and

a Ph.D. from UC-Davis. Honorably discharged as a U.S. Air Force Captain, he had served 16 years in the reserves and two years at Elgin Air Force Base in Florida. He was a tenured professor and held various associate dean positions.

Upchurch served as a consultant to Eli Lilly, the U.S. State Department, and the EPA. He helped establish the School of Agriculture in Yemen and founded the Plant Growth Regulation Society of America. You can read more about [his life and many accomplishments here](#).



Norman Borlaug shakes hands with former CAST President Phil Upchurch.

Commentary Update

Two weeks have passed since the rollout of the latest CAST commentary: *Impacts on Human Health and Safety of Naturally Occurring and Supplemental Hormones in Food Animals*.

- 106 media outlets posted the press release
- 1,832 viewed the release
- 100 people watched the recorded webinar on YouTube

Be sure to view the [publication](#), [Ag quickCAST](#), [student study guide](#), [Q&A session](#), and [recorded webinar](#)

Upcoming Publications

- *Agriculture and the Microbiome* (August 24 release, webinar at Noon Central on August 25)
- *The Importance of Communicating Empirically Based Science for Society* (September release)
- *Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger* (October release)
- *Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges* (November release)

Animal Agriculture and Environmental News

A "Good Egg": This NC-State University poultry science professor received an award for the [research-based solutions](#) he has shared with egg producers.

Animal-to-human Disease Prevention (opinion): This editorial states why we must recognize that [zoonotic diseases remain a constant threat](#) to animal health, public health, and the nation's food supply.

Poultry Genetics: This clip from a University of Arkansas expert introduces information about [Advances in Poultry Genetics and Genomics](#). The [book is available here](#).

Rabies Vaccine Bait: USDA-APHIS will be distributing [oral rabies vaccine bait](#) in certain U.S. states.

Beef Cattle Short Course: Texas A&M officials have been adjusting their [popular beef education program](#) as ranchers adjust to new market situations.

Saving Pigs in the Supply Chain: An Iowa State University economist says the number of pigs euthanized because of pandemic problems appears to be lower than anticipated. [Action by producers and the entire supply chain helped](#)



A study finds painting eyes on the [hindquarters of cattle](#) may deter predators from attacking them.

This checkoff-funded [fact sheet](#) and [animated infographic](#) explain how growth-promoting technologies can reduce the environmental impact of beef production.

North Carolina A&T experts are looking at the [sustainability of antibiotic-restricted poultry production](#).

Food Safety Online Training: The University of Missouri Extension has joined others to offer [online training about food safety](#) for Midwest produce growers.

Dietary Guidelines: Commodity, nutrition, and health groups are using public campaigns and scientific evidence in an attempt to shape the [final version of the Dietary Guidelines for Americans](#).

Eating through the Pandemic: This Kansas State University nutrition specialist looks at the [effects the pandemic has had](#) on America's eating habits.

Microwave Processing: North Carolina State's Josip Simunovic's research on continuous-flow microwave processing has led to [19 U.S. patents](#) and dozens of international patents.

Egg Safety: This site looks at various ways egg farmers are committed to [ensuring the safety](#) of their products.



This blog explains how [certain plant diseases](#) affect the food you have for breakfast.

University of Kentucky specialists are helping students make [connections between nutrition and cancer](#).

Plant Agriculture and Environmental News

Plant Breeding: A new University of Florida website helps consumers understand the [importance of plant breeding programs](#).

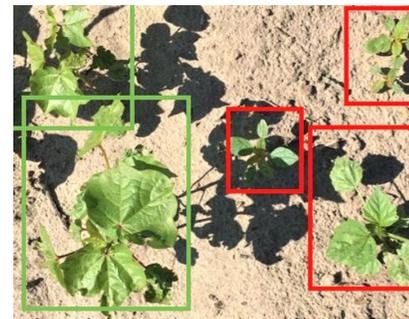
Planting Schemes: With decreasing water supplies, researchers are turning to [innovative crop planting schedules](#) to decrease water use.

Rust Never Sleeps: Researchers are dealing with leaf rust, stem rust, and stripe [rust resistance in wheat](#).

Treating Oil Spills: University of Nebraska-Lincoln experts found a way to [clean soil](#) suffering from oil spills.

A Soil Revolution: A Cornell scientist figured out why there's [more carbon in soil](#) than in the atmosphere and plants combined.

Weed War: A new genetically engineered corn seed could provide growers with more pesticides to [combat weed resistance](#), while many are also looking for non-chemical options to fight weeds (related links at right).



AI weed-control devices integrate cameras, computer vision, and robotics to make an [intelligent sprayer that targets weeds](#), leaving the crops intact.

Note: Watch for a forthcoming CAST publication this fall, *Ground and Arial Robots in Production Agriculture*.

International News

Delivering the Goods: A [Turkish food delivery service](#) promises 13 minutes or less. The Istanbul venture faces challenges in a city adapting to high-tech changes.

Herbicide Ruling: Mexico will gradually [phase out use of the herbicide glyphosate](#) by late 2024, according to government officials.

Adjusting Expiration Dates: British and Australian experts say it is possible to [extend the shelf life of chilled meat](#) without any incidence of botulism or safety issues.

Food Labels and Waste: Two CAST issue papers deal with



Each fall, visitors flock to a "beach" in China that is not comprised of

topics in the link above about expiration dates: (1) [Food Loss and Waste](#) and (2) [Process Labeling of Food](#)

Fermented Soybean Food Craze: The Japanese have long hailed [natto as a superfood](#)--but its ammonia-like smell and mucus-like consistency make it hard to love for many.

sand. The dramatic hues are [caused by the blossoming seepweed](#) that grows on the wetland's massive mudflat.

General Interest News

Community Support (video): At an Ohio livestock show, an [11-year-old sold his hog five times](#), raising \$26,000 to go toward his father's medical bills.

The Need for Safe Water (videos): According to this report, at least [two million Americans suffer from no safe running water](#), or even plumbing, in their homes.

Biomedical Research: Tuskegee University hosted [two virtual research summer programs](#).

Guano Gold: Seabird [poop is valuable](#) for use as agricultural fertilizer, a coral reef enricher, and more.

Concealed Chops: The U.S. CBP uncovered [201 pounds of pork](#) in a truck's engine compartment.

Cork Trees (video): Bark from cork trees is harvested every nine years; [watch this video](#) to see how it's done.



As this update shows, University of Pennsylvania experts are training [dogs to detect coronavirus by scent](#).

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- * National Corn Growers Association/Iowa Corn Promotion Board
- * National Milk Producers Federation
- * National Pork Board
- * North Carolina Biotechnology Center
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Poultry Science Association
- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute

- * American Veterinary Medical Association
- * Aquatic Plant Management Society
- * BASF Corporation
- * Cal Poly State University
- * Corteva Agriscience
- * CropLife America

- * 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

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The Science Source for Food,
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