



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



Going from "Jolene" to vaccine, [Dolly Parton received a dose](#) of Moderna, the vaccine she helped fund. University staff and students are also rolling up sleeves. The University of Arkansas has [vaccinated thousands of employees and students](#), and The Ohio State University hosted the rollout of the Johnson and Johnson vaccine, with [an 84-year-old first in line](#).

This U.S. government site provides information about [internship programs and job opportunities](#) for veterans, students, and other applicants.

The USDA launched its "[Three Sisters Project](#)," an educational outreach effort to ensure a pipeline of fresh ideas, talent, and diversity for tomorrow's scientists.

Tom Vilsack and several Agriculture Committee leaders will headline the [Ag & Food Policy Summit](#)--March 22-24--with the theme "Climate Risks, Rewards, and Uncertainties."

March 5, 2021

A New Crop in the Fields

Along with the usual planting and grazing considerations, farmers and ranchers may soon be measuring "carbon yields." [From Fortune 500 companies to local market providers](#), many are jumping on the carbon-credit train. The current emphasis is promising, but many are interested in how the reality of these climate friendly practices unfolds.



These are just a few of the related links for this "climate change topic": (1) Dr. Frank Mitloehner (UC-Davis and [2019 BCCA](#)) writes many insightful articles about the "[reality of agriculture and carbon emissions](#)." (2) Ag Secretary Vilsack is pledging [farmer input and markets](#) that include methane, converted ag waste, and carbon sequestration. (3) Many [big corporations](#) are making a "climate pledge" regarding carbon. (4) Some tout the environmental practices involved with [regenerative agriculture](#). (5) As an example of the methods used in America and elsewhere to reduce emissions, this article says the carbon footprint for British [pig farms has dropped significantly](#). (6) Many point out that [food waste is a huge contributor](#) to greenhouse gas emissions (click here for the CAST publication [Food Loss and Waste](#)). (7) A new business proposes to store carbon dioxide [emissions from ethanol plants](#).

News and Views

Administration's Trading Goals: The Office of the U.S. Trade Representative explains its goals for a "[fair international trading system](#) that promotes inclusive economic growth."

World Food Prize News: Last week, 24 World Food Prize Laureates presented the Administration with an open letter calling for U.S. leadership in [support of global food security and achieving zero hunger](#), and several will discuss this topic in a March 25 "[Digital Dialogue](#)"--[sign up details here](#). Also, [nominations are now open](#) for the prestigious World Food Prize.

ASABE Special Feature: The American Society of Agricultural and Biological Engineers released a special issue of its

[North Carolina State University](#) announced a seminar series in International Plant Breeding—six sessions during consecutive weeks in April and May.

[The University of Kentucky's](#) 4H/FFA Field Day will actually run eight days—April 12 to 20.

[University of Nebraska–Lincoln](#) researchers received a \$3 million grant to better quantify carbon sequestration and greenhouse gas emissions connected with corn production in the Midwest.

[Tuskegee University's](#) Dr. Ruby L. Perry received the 2021 Iverson Bell Award from the AAVMC.

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.

[Resource magazine](#), with a focus on "[Transforming Food and Agriculture to Circular Systems](#)." See page two below for more about the dynamic societies that are members of CAST.

CAST Administrator Interviewed: An article in the *Fort Dodge Messenger* featured CAST EVP/CEO Kent Schescke explaining how CAST [works to disseminate science-based information](#).

Ag Schools: A new study of public and land-grant universities shows close to \$11.5 billion is [necessary for building repairs and renovations](#) at USDA-funded schools of agriculture.

Far Side of the Barn

Wooly "Mammoth" (video): A wild ram rescued from the Australian Outback yielded a gigantic fleece, and a shearing session took him [from wooly doughboy to svelte sheep](#).



Stampeding Dolphins (video): The surprised boaters were not sure if the large pod of dolphins were [stampeding for fun, food, or escape](#)—but the scene was beautiful.

Crocodile Jailbreak (video): This article includes a report about the many crocodiles that [escaped from a South African reserve](#) and a tense video profile of a real "crocodile hunter."

CAST Updates

A Focus on CAST Society Members



CAST is a member-supported nonprofit organization addressing important issues that impact our planet, such as how to feed the world's population; water and soil conservation; leading land use practices; and animal, food, and environmental science. Society members are a key component in the effort to fulfill CAST's mission—communicating credible, science-based information to a wide audience.

[Society members include](#) those representing medicine, plants, food, animals, and other types of science and agriculture. CAST's society members enjoy several benefits such as access to publications and a weekly newsletter. But just as notable, these

groups share information with others through CAST's publications and social media, and their members keep aware of credible, science-based research and information from the many sources available through CAST.

Member [societies have a voice on the CAST Board of Representatives](#), a group made up of the member societies, universities, commercial companies, nonprofit or trade organizations, and the Board of Directors. Each member of the board serves on one of three work groups—Animal Agriculture and Environmental Issues, Food Science and Safety, or Plant Agriculture and Environmental Issues. The work groups meet at an annual board meeting and hold monthly conference calls.

Note: CAST also [offers individual membership](#) at various levels, including a free student membership for those currently attending an accredited college or university. After graduation, they are encouraged to continue their membership by joining at the young professional level for \$35.00.

Animal Agriculture and Environmental News

Disaster Aid: This National Cattlemen's Beef Association site looks at [relief efforts for ranchers and farmers](#) affected by recent natural disasters, and this USDA site also gives [disaster assistance links](#).

Healthier Pigs: Researchers from Iowa State University and Canada are developing [tools to select for disease resilience in hogs](#).

CRISPR and Poultry: An Israeli ag-tech startup is using the gene editing technique CRISPR to address the financial and poultry welfare [issues involved with hatching male and female chicks](#).

Supporting Swine Veterinarians: Merck Animal Health and the American Association of Swine Veterinarians Foundation sponsored the [2021 recipients of the Veterinary Student Scholarships](#).

A Fish Story: This article discusses the saga of the [genetically engineered, fast-growing salmon](#) that could be sold at U.S. restaurants and grocery stores as soon as April.

Barn Owls: The barn owl population has been increasing in Florida thanks to this [University of Florida project](#).



A Cornell researcher is working to identify mechanisms that control [insulin resistance in lactating cows](#). So far, no indication that brass band music plays any part.

Click here to access [links to recent scholarly articles](#) from the Poultry Science Association's journal.

Food Science and Safety News

Global Food Prices Rise (video): Because of COVID and other factors, [global food prices are rising](#), and many have concerns about hunger and malnutrition.

SHOP—Students Helping Our Peers (video): This Iowa State University [food pantry run by students](#) is working to lessen food insecurity.

Farmer Survey—Plant-based Meat: Jayson Lusk ([2017 BCCA](#) and Purdue) joined with others to compile a survey about what farmers think [the impact of plant-based meats](#) will be on the agricultural economy.

Availability and Flavor (related to above): Some large companies are showing [interest in plant-based meat](#), but a Kansas State University study says consumers [favor the taste of actual ground beef](#).

Genes, Carbs, and Obesity: An ARS study indicates that consuming a certain level of carbohydrates [regulates a gene in the human body](#) that might reduce risks of obesity, Type 2 diabetes, and other metabolic diseases.

Blue-light Special: University of Georgia researchers are [exposing blueberries to blue light](#) during storage in an effort to extend shelf life.



Not everyone accepts the “apple a day keeps the doctor away” jingle, but this research indicates the fruit [might boost brain functions](#).

In this podcast, Kevin Folta ([BCCA 2016](#)) interviews Dr. [Patrick Moore, an advocate for Golden Rice](#).

Plant Agriculture and Environmental News

Corn Used for Ethanol: The USDA says [corn for ethanol use](#) in 2020 was down 10% from 2019.

Cover Crops—General and Specific: USDA research looks

at [cover crop trends](#), and a more specific article explains [how radishes work as a cover crop](#).

Saving Strawberries: UC-Davis researchers are looking for ways to [protect strawberries from soilborne diseases](#).

Basil Booster: A Mississippi State University expert explains that basil can be grown in limited space and is an [excellent addition to homemade dishes](#) and drinks.

Roots and Soil: A Texas A&M expert explains [how different root structures affect soil](#).

Soybean Amino Acids: A Kansas State University study examined the composition of thirteen soybean genotypes released between 1980 and 2014, focusing on the [levels of eighteen amino acids relative to protein and yield](#).

Resources: The University of Kentucky Forestry Extension offers resources for [woodland winter storm damage](#).



Some say [prescribed fires \(planned, deliberate burns\)](#) can reduce the volume of combustible vegetation from parched landscapes and ease the wildfire crisis in the West.

International News

Recovering from a Triple Disaster: This article looks at how researchers and farmers have been working to restore farmland after the 2011 [earthquake/tsunami/nuclear disaster](#) in Japan.

Erosion in a Disaster Zone (related to above): Erosion is affecting the recovery of the Fukushima area that was [devastated by the 2011 earthquake, tsunami, and nuclear meltdown](#).

Testing the Timing for Nitrogen: Researchers conducted 15 [on-farm experiments in soils](#) affected by rising water tables, and an area in Argentina is the focus of the study.

Eyes in the Sky Help Agriculture: From Australia to India and beyond, [satellite imagery is helping global agriculture](#) work smarter and more sustainably.

Oregano Oil: A Brazilian study looked at the use of natural oregano essential oil as a [feed additive for dairy cows](#)



[Europe's most active volcano](#) has been steadily erupting--belching smoke, ash, and red-hot lava.

General Interest News

Ag Tech (podcast): In this episode of "Farms, Food and You," two North Carolina State faculty members discuss [technological innovation for agriculture](#).

Good Samaritan on Wheels: A Texas "highway angel" [rescued scores of drivers](#) during the winter storm—he also drove health-care workers to work and relocated people who didn't have electricity or running water.

A Woman of Many Firsts: This physician assistant was picked to join the crew of the world's first all-civilian space mission. She will be the first bone cancer survivor, first with a prosthetic body part, and [youngest ever to orbit Earth](#).

Rural Hospitals: Due mainly to pandemic factors, some rural hospitals [may be forced to close](#).

Ag Safety: Celebrating Ag Safety Awareness Program Week, you can find safety tips on [links through this site](#).



A young, fourth-generation farmer started featuring his life on YouTube, and he now has a [following twice as large as the population of his home state](#).

Diversity in Agriculture: Agriculture Future of America hosted a virtual experience for [young professionals studying in agriculture](#) and related fields, with a focus on diversity.

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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
- * Aquatic Plant Management Society
- * BASF Corporation
- * Cal Poly State University
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Bayer
- * 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
- * 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
- * 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, science-based information to policymakers, the media, the private sector, and the public.

Members of CAST's Education Program

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The Science Source for Food,
Agricultural, and Environmental Issues

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