



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 latest episode of the "[Farms, Food, and You](#)" podcast from NC-State features growers of "Great Pumpkins," and a companion story looks at [pumpkin patches and roadside stands](#).

Texas A&M recently honored World Food Day by [honoring the food heroes](#) who have brought nourishment to those in need—with a special focus on the work of Norman Borlaug.

Jennifer Doudna--UC-Berkeley scientist and 2020 Nobel Prize in Chemistry winner--will speak October 30 about "CRISPR and Coronavirus." [Event details here](#).

CAST College Corner

The [University of Nebraska-Lincoln's](#) Helen Fagan received the *Inspire Women's Leadership, Excellence in Education* award.

[Cornell University](#) supported a field team dedicated to finding eelgrass disease using AI.

October 23, 2020

Digital Harvest--Webinars Focus on Food Production and Hunger

With respect to Buzz Aldrin, humans haven't completely conquered space, but science and human ingenuity have made impressive strides--see the General Section below for recent examples. Aldrin's quote is powerful--can human innovation and cooperation conquer global hunger? During the past two weeks, digital events have provided fertile ground for ideas and collaborations to blossom. From research rollouts to award ceremonies to interactive symposiums, many dedicated scientists and agriculture stakeholders have been trying to apply the "right stuff" in the war on hunger. In the end, the "moon landings" will come when food lines shrink, nutrition is plentiful, and children don't go to bed hungry.



With the World Food Prize as the common thread, these links lead to a few of the many recent events that focused on how science and agriculture can feed the world: (1) The [World Food Prize official site](#), (2) the [Iowa Hunger Summit](#), (3) a video profile from The Ohio State about [WFP laureate Dr. Rattan Lal](#), (4) the Nobel prize winning [UN World Food Programme](#), and (5) CAST's new publication, [Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger](#).

News and Views

Students and Hunger: A university study looks at some of the implications regarding [college students and food insecurity](#). Many universities are involved with global food programs—for example, the University of Kentucky hosted a [Universities Fighting World Hunger](#) online summit earlier this year.

Rural Health: COVID-19 has recently [spread in rural America at a record-breaking pace](#). This updated map shows the [severity in each state](#) and a university study looks at the COVID-19 [mortality rates for rural working-age residents](#) as compared to those from metro areas. Another site provides many [links dealing with rural health stories](#)—from dentistry to coronavirus testing.

[UC-Davis](#) professor Pamela Ronald was named the 2020 *World Agriculture Prize* laureate by the GCHERA—the first woman to receive this award.

The [University of Nevada-Reno](#) opened a new Great Basin Research & Extension Center, an initiative for rural Nevada.

[NC State University](#) received a NSF grant to continue working on crop DNA replication research.

Check throughout *Friday Notes* to see more featured articles from member universities.

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

Agriculture and Food Policy: A World Food Prize webinar focused on science and trade--[Putting the "Farm" in "Farm to Fork": The U.S. Approach to Sustainable Agriculture Through Innovation](#)--was moderated by Dale Moore (American Farm Bureau Foundation EVP) and featured input from Scott Hutchins (Deputy USDA Under Secretary) and Ted McKinney (USDA Under Secretary).

News from the Far Side of the Barn

Stoked Canine (video):

A [skateboarding French bulldog](#) (right) in Russia can handle half-pipes and "four-paw, goofy-foot moves."



Happy Cows Listen and Hug?

An Austrian university study indicates that [cows enjoy the sound of a human voice](#)—not recordings. And as this video and article show [cow hugging has become a "stress reducer."](#) especially in the Netherlands.

CAST Updates

BCCA Presentation and Recent Publication Release

- The 11th annual Borlaug CAST Communication Award (BCCA) was presented to Dr. Alexa Lamm. She presented on *Effectively Communicating Science in Times of Crisis*. You can view the [recorded presentation here](#). You can read about Lamm's [busy week here](#).
- CAST's new Issue Paper, *Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger*, was released on October 14 as part of the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*. Click here for a free download of [the paper](#), [the one page Ag quickCAST](#), and [the student study guide](#). Dr. Howarth Bouis--2016 World Food Prize Laureate and lead author for this publication--and a [panel of the task force authors](#) presented [highlights from this paper](#) followed by a Q&A.



Upcoming Publications

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges
The paper will be released on November 16, with a webinar on November 17.

Animal Agriculture and Environmental News

Prop 12 Update: The North American Meat Institute lost an appeal of a district court ruling that rejected the organization's request for a preliminary injunction against [Proposition 12—a California law that establishes meat production standards](#).

Production Ideas: Temple Grandin explains [alternative business models for farmers](#), including a “series of small processors that can co-exist with the big companies.”

New Meat Plants: The [Cherokee, Osage, and Creek](#) nations are opening meat processing plants in Oklahoma.

Poultry Research Resources: The Poultry Science Association [launched an initiative](#) to share research from [Poultry Science](#) and [Journal of Applied Poultry Research](#) in a concise, easy-to-read format.

How Pork Exports Can Save Your Bacon: An [October 29 Agri-Pulse webinar about pork](#) will feature insights from Ted McKinney (USDA), Jan Archer (pig producer), and Dermot Hayes (Iowa State University).

Cattle Production News: The National Cattlemen’s Beef Association released its plan to increase [price discovery in the cattle industry](#), and the organization is accepting applications for 2021-2022 [beef industry scholarships](#).



University of Kentucky experts are working to [prevent catastrophic injuries in thoroughbred racehorses](#).

UC-Davis researchers show that [climate neutrality is within reach](#) for the California dairy sector. And this article explains that experts are working on various [ways to reduce livestock emissions](#).

Food Science and Safety News

Food Safety Summit: The Food Safety Summit’s Town Hall Q&A featured FDA, USDA, AFDO, and CDC leaders [talking about food safety](#)--with a focus on pandemic effects.

Blackberry Genetics: Various genetic traits have been melded to [create three new blackberry varieties](#) released by the Agricultural Research Service.

Beef Research: Scientists in Massachusetts [combined beef muscle cells with extracts from plants](#) in what they hope could produce a healthier meat.

Breaking Good? A study led by University of Florida researchers suggests kratom could be a [prime treatment option for opioid dependence](#). Kratom comes from the leaves of a tropical tree originating in Southeast Asia.

What’s Coming--Maybe: Whole Foods released its [trends list for 2021](#), and it includes chickpeas and “fruit jerky’s.”

Munching on Jellyfish (video): Australian scientists say [jellyfish is a “perfect food”](#) and a sustainable option in the goal of saving endangered fish.

Carrot-mania: A company [promotes many “carrot swaps,”](#) including carrot dogs, carrot fettuccine, and riced carrot.



As this video shows, a “Pork Month” contest winner in Illinois [received her bacon prize by drone](#).

Prairie Moon restaurant won the [“best breaded pork tenderloin”](#) title in Iowa—with meat that is soaked for hours in buttermilk before being coated with fine cracker meal and fried to order.

Plant Agriculture and Environmental News

Soybean Roadway: A new soy-based concrete durability enhancer is [protecting roadways in the United States](#)—supporting demand for soybeans and reducing infrastructure maintenance costs.

Award-winning Research: Kansas State University

researchers and a USDA team received the Borlaug Global Rust Initiative Award for working to [stop a virulent strain of stem rust in wheat](#).

Aquafeed: Studies are being conducted on fine-tuning how [alfalfa juice concentrate](#) can be used as aquafeed.

Controlling an Invasive Pest: Led by NC State's Dorith Rotenberg, scientists now have a [complete genetic blueprint](#) to help them better understand the western flower thrip, a destructive invasive insect.

Cotton Research: Mississippi State University experts are planting a variety of trials to evaluate [how different types of cotton perform](#) in various conditions and soils.

Organic Seed Corn: A USDA grant will support Iowa State scientists and collaborators as they develop improved [seed corn tailored to the needs of the organic industry](#).



Farmers are wrapping up the harvest in much of the Corn Belt and finally seeing how much they can get out of [derecho-damaged fields](#).

This video looks at how the National Oceanic and Atmospheric Association [breaks down expensive disasters by types of storm](#)--from droughts, to hurricanes, to wildfires, and severe storms.

International News

Tree Maps (video): A Norwegian satellite dataset on the world's tropical forests provides a high-resolution [image map covering 64 countries regarding how trees are managed](#).

Got Milk--in China: This article looks at current trends and historical backgrounds regarding the [recent surge in demands for milk products](#) in China.

Reaching New Heights in Pesticide Application: Some farmers in Brazil are trying to improve pesticide application—while considering safety and the environment—[by using manned aircraft and drones](#).

Swine Fever Effects in Europe: This hog expert considers how the discovery of [ASF-infected wild boars in Germany](#) is already affecting global pig prices.

Recyclable: A British cheesemaker has developed [recyclable polyethylene packaging](#) for its cheeses.



The nominees for “[Wildlife Photographer of the Year](#)” captured stunning shots of rare creatures--- from a tree-hugging tiger to a colorful fish and sticky frog.

General Interest News

Ancestral Land: This organization has been working since the late 1990s to [support Black farmers and ranchers](#) as they work to “keep their ancestral legacy alive.”

10,000-Year-Old Footprints: Scientists have documented almost [a mile of fossilized footprints](#) in New Mexico.

Are Rodents Winning the Rat Race? Rats do up to \$20 billion in damages to the U.S. economy each year, and [agriculture pays a large cost](#) with damage to field crops, stored grain, equipment, buildings, and more.

Space, Asteroids, and Nematodes

Asteroid Ride (video): NASA made history when a

spacecraft successfully collected [samples from the surface of an asteroid](#) during a carefully orchestrated maneuver in orbit. No sign of Bruce Willis or the *Armageddon* crew.

The Sky Is Not Falling: Some scientists think [a small asteroid could "graze" earth](#) on the day before the U.S. election, but they say it would disintegrate in the atmosphere. Stay calm, Chicken Little.

Nematodes in Space: Research onboard the International Space Station indicates that insect-killing [nematodes can be used to control pests](#) when humans grow crops in space. Matt Damon's potatoes will survive.



Raising children on a farm might sound idyllic, but in a national study led by experts at The Ohio State University, many [farmers outlined child-rearing challenges](#) that arise.

The *Farm Journal* Field Days now offers [special events all year](#) about harvests, equipment, cattle handling, and more.

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Dan Gogerty (Communications and *Friday Notes* Editor)
 dgogerty@cast-science.org
 Dylana Luett (Communications and Social Media Specialist)
 dlzett@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 Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)*

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