



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 "World Food Prize week" starting October 12 includes a [CAST BCCA event](#) honoring Alexa Lamm and CAST's [release of a new publication](#) about biofortification. See page two below for details. Dr. Lamm was also asked to speak at the [WFP Borlaug Dialogue](#).

The American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America will host the "[Translating Visionary Science to Practice](#)" annual meeting online—Nov. 9-13.

This site looks at how [FFA chapters get help in times of need](#)—from fire areas to hurricane zones and other situations in various states and Puerto Rico.

CAST College Corner

[North Carolina A&T State](#)

October 9, 2020

CRISPR Nobel Prize

The Nobel Prize in Chemistry 2020 was awarded jointly to [Jennifer A. Doudna \(left in photo\)](#) and [Emmanuelle Charpentier](#) for the development of a method for genome editing revolving mainly around the method known as CRISPR/Cas9. This genetic tool can result in innovative crops, groundbreaking medical treatments, and more. CAST's Issue Paper--[Genome Editing in Agriculture: Methods, Applications, and Governance](#)--provides a base of knowledge about the topic.



News and Views

USDA Updates: The USDA seeks input about technologies and practices for its [Agriculture Innovation Agenda](#). Check this site for a list of recent USDA [press releases](#).

Food Program Honored: The 2020 Nobel Peace Prize has been awarded to the [United Nations World Food Program](#) for its efforts to [combat hunger--especially in conflict zones](#)

Easing World Hunger: At an October 15 World Food Prize side event, the discussion will focus on [reducing chronic hunger levels](#) and avoiding pandemic-influenced famine. [Catherine Bertini](#) and [Jayson Lusk](#), both past BCCA winners, will join other experts on the panel.

Communicating Science: Kevin Folta ([2016 BCCA](#)) spoke with Cami Ryan (Bayer) about how we can [maximize our time in communicating science](#). Ryan is one of the authors on the [CAST Commentary](#) *The Importance of Communicating Empirically Based Science for Society*.

Promoting Science: The [Cornell Alliance for Science site](#) includes articles about (1) misinformation and disinformation, (2) social justice, poverty, and hunger, (3) genetically engineered crops, and (4) agricultural innovation.

Agriculture Practices and Connotations: A major agriculture company is supporting farmer-led efforts to adopt [regenerative ag practices](#). The Noble Research Institute is celebrating 75

[University](#) partnered with a media firm to bolster career development and diversify employment opportunities in the communications profession.

[UC-Davis](#) wildlife veterinarians teamed up with CDFW experts to save a severely burned black bear in 2017, and the collaborative efforts are continuing in this fire-ravaged year of 2020.

[Tuskegee University](#) hosts the 75th Diamond Anniversary Virtual Celebration for its College of Veterinary Medicine October 10.

The [University of Kentucky](#) joins in hosting the Kentucky Grazing Conference—online, Oct. 27-29.

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

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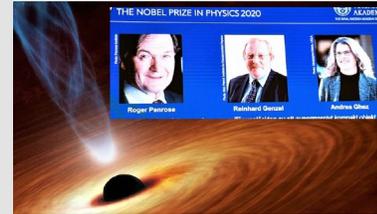
CAST [welcomes ideas](#) for future publications and projects.

years of helping farmers and ranchers [work with the natural environmental system](#), and more ag operations have [converted to USDA-certified organic production](#) during 2020. However, as this *Genetic Literacy Project* editorial points out, the [term "regenerative" has a long history](#), and some are concerned it will become a "buzzword."

News from the Far Side of the Barn

From Science Fiction to the Nobel Prize (video):

The [2020 Nobel Prize for physics](#) was awarded to a Briton, a German, and an American for advancing knowledge of black holes.



Bouncing Baaaa (video):

A New Zealand [sheep named Bacon took to the trampoline](#).

Putting on the Hibernation Hundred: The annual [Fat Bear Week tournament](#) in Alaska crowned a chunky champion ready for a long hibernation.

What's This Spider Eating? A huge spider web in Missouri [looks big enough to catch a human](#).

CAST Updates

Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger

CAST's new Issue Paper, *Food Biofortification—Reaping the Benefits of Science to Overcome Hidden Hunger*, will be released on October 14 as part of the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*.

On October 15, join Dr. Howarth Bouis, 2016 World Food Prize Laureate and lead author for this publication, as he and a [panel of the task force authors](#) present highlights from this paper followed by Q&A. The webinar will be held at 10 a.m. Central, and registration for the free webinar can be [found here](#).

BCCA Award Presentation

Please join us for the 11th annual Borlaug CAST Communication Award (BCCA) presentation cohosted by CAST and CropLife Foundation, featuring keynote speaker and 2020 award winner Dr. Alexa Lamm. [Check here for registration information](#). This online presentation event--held during World Food Prize week--will occur on Tuesday, October 13, from 12:00 PM to 1:00 PM Central Time.



New CAST Blogs

Jayson Lusk
2017 Borlaug CAST
Communication Award Winner

Frank Mitloehner
2019 Borlaug CAST
Communication Award Winner

This week we caught up with two past BCCA recipients. Jayson Lusk received the award in 2017; [read his blog](#) to see how his background led him to study food technology and ag economics.

Frank Mitloehner received the award in 2019. [His blog discusses](#) his involvement with the CLEAR Center at UC Davis and how the pandemic has impacted his work.

Upcoming Publications

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges
(November 17 release)

Animal Agriculture and Environmental News

Minks and COVID-19: Thousands of [minks at Utah fur farms have died because of the coronavirus](#) in the past 10 days. The COVID-19 infections may have spread from workers on the farms, but authorities say people don't appear to be at risk from the animal outbreak.

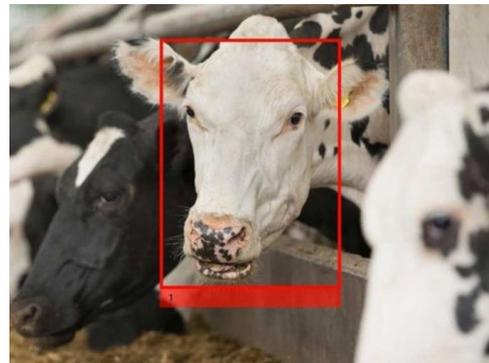
Reducing Wildfires with Livestock Grazing (video): The *Match.Graze* program helps [reduce wildfire fuel](#) with the grazing of overgrown rangelands and pastures.

Pork Production in the U.S.: This site provides an [overview of pork production in the United States](#) including focuses on major companies, swine diseases, and feeding tactics.

Poultry Worker Wearables: Some think [wearables could reduce staff turnover in poultry processing](#), with personalized data that might help with worker performance.

Milk Snackcelerator: The California Milk Advisory Board will add more than \$350,000 in additional awards to the Real California Milk Snackcelerator, its [dairy product innovation competition](#).

Poultry Case: The Dept. of Justice announced six new chicken-industry defendants in its ongoing [investigation into price-fixing and bid rigging](#) for broiler chicken products.



Kansas State University is developing artificial intelligence technology to build a database of [facial recognition technology for the cattle industry](#).

Hog producers are not always aware of the [quantity and quality of water delivered to pigs](#). This Iowa State expert explains why "the forgotten nutrient" is essential.

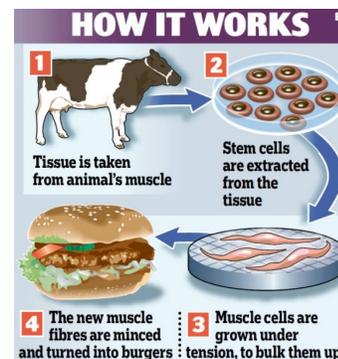
Food Science and Safety News

Food Safety Research: Texas A&M-led research aims to develop an accurate [way to predict potential contamination with SARS-CoV-2](#), the virus that causes COVID-19, throughout the food supply chain.

Avoiding Foodborne Illness: The Ohio State University provides this USDA information about how to [cook frozen foods safely](#).

Food for Workin' Out: During the pandemic, many have questions about how to [fuel up before exercise and what to eat post-workout](#). This article provides some guidelines.

FDA Proposal: The Food and Drug Administration is scheduling three day-long virtual meetings on its [proposed rule to increase traceability requirements](#) on fresh produce and other foods. A public comment period will follow.



UC-Davis researchers received a grant from the National Science Foundation Growing Convergence

Plastic-free Packaging: A company has created packaging from [sugarcane waste](#) that can be used on vegetables, fruit, and other food.

Bulk Meat Purchase Options: The University of Missouri Extension offers a free Zoom class on [how to find and store meat](#) on October 13.

program to [explore the long-term sustainability of cultivated meat](#).

Check out the CAST Commentary [Producing Food Products from Cultured Animal Tissues](#).

Plant Agriculture and Environmental News

Climate and Science (video): This *60 Minutes* segment includes insights from NASA scientist James Hansen and others about the [climate science behind this year's wildfires and powerful storms](#).

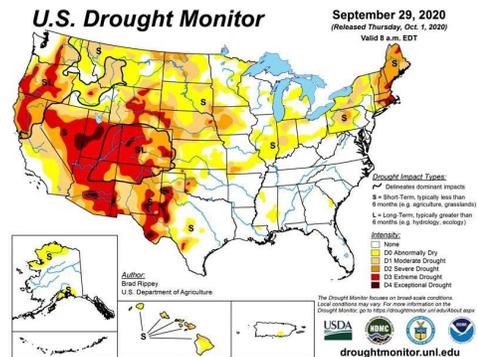
Transparent Wood: Researchers claim [transparent wood](#) has the potential to outperform glass currently used in construction with economic and ecological benefits.

Dealing with Pests: A Mississippi State University entomologist says [common pests are a real problem](#) for cool-season vegetable crops.

Measuring GHG Starts in the Soil: These North Carolina State researchers are looking at [agriculture in relation to nitrous oxide levels](#).

Renewable Fuels Production: The Renewable Fuels Association says the volume of 100.7 million gallons in August was the [highest monthly total since March](#).

Plant-based Biodegradable Oils: ARS scientists and industry partners are working on [biosynthetic oils that could be used to make many products](#).



Worsening [drought remains a major concern](#) across the western half of the country, and this video includes maps reflecting the [dry conditions in corn growing states](#).

This University of Nevada-Reno site looks at [issues dealing with wildfires](#) including climate change and land management.

International News

Getting Creative with Garbage: The city of Amsterdam has figured out how to [get rid of garbage days](#) with a focused recycling system.

Pesticide Use in France: Lawmakers approved a draft bill [allowing sugar beet growers to use pesticides](#) that are banned to protect honeybees--a move welcomed by farmers hit by crop disease but condemned by environmental groups.

International Dairy: Many dairy farmers want U.S. trade policy to [focus on opening markets](#) and fending off competition from the European Union and New Zealand.

Gene Editing and Pig Health: Reports indicate that Chinese researchers developed breeding material that has [made pigs resistant to three major infectious diseases through gene editing](#).

Genetic "Time Travel": This study deploys advanced tools to retrace 1,000 years of African pastoralist cattle breeding to [identify traits linked to cattle survival and resiliency](#).



Back in Time for Dinner: A hit Australian TV show has a family [eat food from the past](#), including 1950s "overcooked meat" and 1900s "calf's head and brain fritters."

Young Leader Spotlight: Combining her [love of science and raising cattle](#), this young Canadian has a career path in meat research.

General Interest News

High-tech on the Farm: Many experts [surveyed the state of agricultural tech](#) during Washington State University's Digital Agriculture Summit, and a major ag company shows that some farmers are using [high-resolution cameras and A.I. sensors for harvesting](#).

Farmworker Health: As fall harvest season begins, the University of Florida and others are enacting efforts to provide [COVID-19 testing for farmworkers](#).

Carbon Credits and Conservation: Ag companies are using blockchain technology and new initiatives to create a [voluntary carbon removal marketplace](#).

COVID-19 Research and University Students: Penn State research is (1) investigating the possibility of [aerosol disinfection of classrooms](#) using ultraviolet, and (2) looking at how college students may actually have a [decrease in anxiety during the pandemic](#).

Plastic Glut: COVID-19 has hit plastic recycling, and this article explains why that is a [problem for the environment](#).

Asbestos Use: Surprisingly, some think [asbestos could be a powerful weapon against climate change](#), as scientists explore ways it could pull carbon dioxide from the air.



This indoor field of dreams produces seafood that uses sustainable, environmentally friendly methods to [raise shrimp for Midwestern customers](#).

A report finds nearly one in three jobs in central Nebraska are in agriculture, but [many of those farming jobs aren't on the farm](#).

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- * Northeastern Weed Science Society
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- * United Soybean Board
- * University of Nevada-Reno
- * U.S. Poultry and Egg Association

- * Corteva Agriscience
- * CropLife America

- * Weed Science Society of America
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The Science Source for Food,
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