



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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Passing the Gavel



Outgoing CAST President Gabe Middleton passes the gavel to new President Juan Tricarico who spoke optimistically about the organization "building on its strengths." Check page two below for more about CAST's Annual Fall Board Meeting.

Dates to Note

The 92nd [National FFA Convention](#) in Indianapolis, Oct. 30-Nov. 2.

The ASA-CSSA-SSSA International Annual Meeting Nov. 10-13 in San Antonio--[Embracing the Digital Environment](#).

CAST papers coming early in 2020: *The Microbiome's Positive Impacts on Crops* and (2) *Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply*.

November 1, 2019

Earth, Wind, Fire--and People

Complicated Causes and Valiant Efforts in California Wildfires

Fire season seems to be a year-round event in California--lives are in danger, property is destroyed, and [agriculture is affected](#). Firefighters, air crews, and civilians work valiantly to [contain multiple blazes](#), and even a herd of 500 goats is credited with [helping to save](#) the famous Reagan Presidential Library from wildfire.



The causes are varied and often debated. [These experts think](#) the problem of forest and fuel management and the problem of wildland-urban interface often clash. Other factors are often discussed, including [climate change](#), [power lines](#), and [arson](#). All note the influence of the fierce [Santa Ana](#) and [Diablo winds](#) that have been featured in folklore, literature, and climate studies.

[While firefighters](#) and citizens battle the infernos, universities are also involved--including members of the CAST Education Program: [UC-Davis](#) staff and students have been [caring for dozens of animals](#) that were displaced or injured in the fires. Programs are in place at [Cal Poly](#) to [prepare students for various fire events](#), and before the semester began, University of Nevada-Reno extension specialists listed [what to pack](#) in case of wildfire evacuation. Many aspects of food production are also affected, including [dairy farmers](#), [wine producers](#), and [farm workers](#).

News and Views

Hemp Policy from the USDA: Secretary of Agriculture Sonny Perdue announced the establishment of the [U.S. Domestic Hemp Production Program](#), a requirement in the 2018 Farm Bill. This Texas A&M ag/law blog post focuses on [three key issues in the new guidelines](#).

Economics on the Farm: U.S. [farm bankruptcies in September surged](#) 24% to the highest level since 2011 amid strains from a trade war with China and a year of wild weather.

ERS and NIFA: The USDA signed a lease for [permanent office space in Kansas City](#), Missouri, to serve as the new home for the Economic Research Service and National Institute of Food and Agriculture.

The Agri-Pulse [Ag & Food Policy Summit](#)--March 23, 2020, in Washington, D.C.

The [2020 Global Food Security Symposium](#)--March 26, 2020, in Washington, D.C.

Students Selected

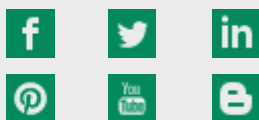


The Thurgood Marshall College Fund selected 34 talented North Carolina A&T State University students to attend an impressive [talent and professional development recruiting conference](#).

Send in Ideas

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

CAST Social Media



Pesticides and Food Research: This audio/slide [presentation features Dr. Carl Winter](#) explaining the CAST Issue Paper [Interpreting Pesticide Residues in Food](#).

Food Production and Science Communication: In this presentation, Dr. Frank Mitloehner receives 2019 BCCA recognition and then--at approximately the 8-minute mark--[speaks about topics](#) such as carbon emissions, agricultural productivity, and science communication.

News from the Far Side of the Barn



Treat, Not a Trick, from NASA: NASA celebrated Halloween by sharing a [photo of the sun](#) looking like a flaming jack-o'-lantern.

Creatures of the Deep (video): A team of divers off the Norwegian coast encountered a giant floating orb--a huge [squid egg filled with thousands of little animals](#).

Don't Mess with Momma (video): A grizzly bear shows how she [protects her cubs](#).



In this Hubble photo, merging galaxies add a [spooky flavor to space](#).

CAST Annual Meeting

Arkansas Hospitality Mixed with a Focus on Agriculture and Science

The tours, meetings, and lively discussions finished Thursday at CAST's 2019 Annual Fall Board Meeting in Fayetteville, Arkansas--but the ideas and concrete plans will continue to grow as board members and the CAST community develop the best possible methods to deliver credible science-based information to policymakers and the public.

Along with varied work group breakout sessions, the key programs focused on (1) *Block Chain and Other Technologies Related to Traceability, Food Safety, and Identity Preservation* and (2) *The Future of Protein*. 2018 BCCA recipient Marty Matlock spoke, the 2019 student scholarship winners were recognized, CAST EVP Kent Schescke and President Gabe Middleton ran the proceedings, and incoming CAST President Juan Tricarico presented his vision statement. Check next week's *Friday Notes* for more content and photos from these events.





Above: Board members learned about plant and animal agriculture, research, art, and more during various tours in the Fayetteville area.

Left: CAST Science Communication Scholarship winners (see their impressive [videos](#), [podcasts](#), and [infographics here](#)) are shown with outgoing President Gabe Middleton (far left), 2018 BCCA winner and University of Arkansas professor Marty Matlock (second from right), and CAST EVP Kent Schescke (far right).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 fire pic from ucsb.edu, sun pic from nasa.org, and galaxy pic from sciencealert.com. P. 2 photos from Kimberly Nelson. Animal Sec. bee pic from govdelivery.com and cow pic from fateclick.com. Food Sec. nuts pic from stillwatersadc.org. Plant Sec. sprayer pic from agriculture.com and grape photo from cornell.edu. Inter. Sec. professor photo from youtube.com and snake pic from MarcMontes.jpg. Gen. Sec. lab photo from iastate.edu and snowplow pic from biofuels-news.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



Animal Agriculture and Environmental News

Poultry Trade Moves? Shares for the three largest poultry companies in the United States rose recently, following reports that China might end some [bans on U.S. poultry products](#).

Pig Feed Safety and Performance: Kansas State University researchers reported findings about the effects of varying levels of fumonisin-infected corn on the [growth performance of nursery pigs](#).

Poultry Research: USPOULTRY and the USPOULTRY Foundation [approved funding for six research grants](#) at five institutions including North Carolina State University and The Ohio State University.

Water Quality and Beef Production: The EPA estimated that 55-77% of U.S. waters are threatened or impaired. A research publication, [Water Quality and Beef Sustainability](#), explains how farmers and ranchers implement practices to improve water quality.

Pork Performance and Quality: This article looks at the search for natural products to improve growth performance and meat quality, and it says [phytogenics can be a potential solution](#).



ARS research shows that [deformed wing virus for bees is more genetically diverse](#) in the United States than previously thought. Also, check out the [CAST Commentary about why bee health matters](#).



Four Stomachs Might Help (video): This farmer answers the question, "Why can't we just [eat the food we feed to cattle?](#)" Also, [check out CAST IP53 Animal Feed vs. Human Food: Challenges and Opportunities in Sustaining Animal Agriculture Toward 2050.](#)

Online Gaming and Cattle Production: The Texas A&M Department of Animal Science is using [interactive gaming to introduce students to concepts of working with cattle](#) before they've even stepped foot in a pen or pasture.

Food Science and Safety News

Chicken Sandwich Battle (video): Crispy, spicy, and popular, chicken sandwiches are "hot items in the market," and [the sandwich fight is on.](#)

Cosmic Apples: The Cosmic Crisp is the [first apple bred in Washington state](#), and some say it will be a game changer.

We All Eat Bugs! Check out comments from a Texas A&M professor who has eaten bugs--from termites to silkworms. And note that the [USDA allows a certain number of insect parts](#) in chocolate bars, pizza sauce, and spaghetti. Bon appetite.



Obesity is Complicated: This nutrition expert says that the obesity problem involves [biology, behavior, society, culture, and policy.](#)

Nuts to You: Many dietitians are upbeat about the [benefits of eating nuts.](#)

Hava Avocado: This new research suggests that [eating one avocado a day](#) may help keep "bad cholesterol" at bay.



Insects as food? Grasshopper sushi and scorpions on a stick get the ick-factor headlines, but [insect meal--for humans and livestock--might become more important.](#) See related link at left.

Plant Agriculture and Environmental News



Healthy Soil, Happy Earth (podcasts): Supported by the CSSA, SSSA, and ASA, this "Field, Lab, Earth" site provides various [podcasts about soil health](#).

Specialty Crops (video): In an RFDTV interview, a farmer/blogger explains that [specialty crops are part of the diversification](#) that helps her farm stay relevant during a time of many changes.

Organic Producers' Concerns: Organic growers are concerned with fraud, regulations, and other issues--especially [the need for more workers](#).

Definitely Not Cotton Candy: As a follow-up to last week's story, this looks at the FDA's approval of a [dual-purpose cotton variety](#) developed by Texas A&M researchers for human and animal consumption.



Grape Yields and Robots: Cornell researchers are [helping grape growers predict seasonal yields](#) by using inexpensive, touch-sensitive robots.

Wheat Drop Off: U.S. winter-wheat acres are expected to be the [lowest in 110 years](#).

This [article looks at information released](#) last week about [EPA proposals regarding buffer zones](#) intended to protect people from exposure to pesticides during their application on the farm. The EPA will receive comments for a limited period of time.

International News

Oil, Water, and Beaches Don't Mix: The [source of the oil spill](#) washing up on Brazil's coastline during the past few weeks remains the subject of a great deal of speculation.

Cow Control: A New Zealand start-up touts a collar for "[remote-controlled cows](#)" to aid with situations ranging from moving herds to checking individual health.

Fitbits and Facial Recognition (related to above): Check out two blogs about cow production techniques--[A Fitbit for Bossy](#) and [Bovine Facial Recognition](#).

Bucking the Dairy Trends: The biggest [dairy company in South Australia](#) has been trying various--some say radical--methods to get out of the "dairy doldrums."



Coil Up and Enjoy (video): Hanoi's most popular snake restaurant features [cobra meat and other dishes](#) for adventurous diners.

Support for British Farmers: A [survey shows overwhelming public support](#) for British farmers, and it indicates that most consumers want certain animal welfare and environmental standards upheld.



This math professor [used technology and humor to prank](#) a tech conference in Amman, Jordan.

General Interest News

An Arboreal Birthday Present: During October, University of Nebraska-Lincoln students began [planting 150 trees on campus](#) to honor the school's sesquicentennial.

"Where's the Farmer?" "I Am the Farmer": These three young [women farmers share their experiences](#) about working in nature and feeding the world.

Drone Program Update: Mississippi State University professors and students are developing technology using [drone imagery to help farmers save money](#).

Universities Stimulate Economies: Universities provide [financial input to state economies](#). As an example, the University of Florida contributes billions of dollars to its state's economy through research, medicine, agriculture, and more.



Powered by Clean Diesel: The EPA, the Renewable Energy Group, and other agencies are part of the [National Clean Diesel Project](#) that will help power snowplows that run on B100 fuel.

White Oak Genome Map: The University of Kentucky is partnering with bourbon industry leaders to [map the white oak genome](#).



Win, Win, Win: Iowa State University [veterinary students get experience](#), animal shelters save money, and animals get good care.

CAST Information

Check out CAST's page at the [YouTube site](#) to view highly regarded ag-science videos about probiotics, food safety, and water issues--or the latest video dealing with proposed mandatory labeling of GMO food items.

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- * American Association of Bovine Practitioners
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- * 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 for Nutrition
- * American Society for Nutrition Nutritional Sciences Council
- * American Society of Agricultural and Biological Engineers
- * American Society of Agronomy
- * American Society of Animal Science



- * American Society of Plant Biologists
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- * BASF Corporation
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- * CropLife America
- * Crop Science Society of America
- * Entomological Society of America
- * Innovation Center for U.S. Dairy
- * Land O'Lakes
- * 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 Carolina Biotechnology Center
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Poultry Science Association
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- * United Soybean Board
- * University of Nevada-Reno
- * 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.

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