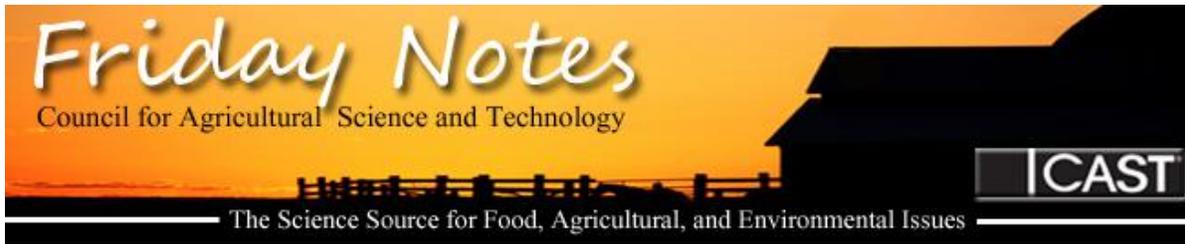


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Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, 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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[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

Harvest Time



It's time to harvest the crops in the Northern Hemisphere, and this Luke Bryan [song sets the soundtrack](#).

You're Invited

CAST and CropLife Foundation invite you to [honor Marty Matlock, the 2018 Borlaug CAST Communication Award winner](#), on the occasion of the 2018 Borlaug Dialogue hosted by the World Food Prize Foundation--October 17 morning event.

USDA Input

USDA/NIFA is [hosting a series of stakeholder listening opportunities](#) at locations across the United States. Input from these sessions will be used to help prioritize research, extension, and educational initiatives into the future.

Young Leaders Program

October 5, 2018

Focus on Food Waste

From local practices to biotech to CAST research

Most agree that one of the best ways to "feed the world" involves minimizing food loss and waste problems. Some cities are taking action such as passing [laws related to restaurant waste](#). Innovative tech groups also highlight community projects, and they focus on [biotech methods that can help](#) reduce food waste.



With CAST EVP Kent Schescke providing an introduction, Dr. Zhengxia Dou presented the "Food Loss and Waste" findings to House and Senate staffers on Capitol Hill.

A recent *Agripulse* article sees food waste reduction as a "potential game changer," and like several other organizations, they referred to the new [CAST issue paper, Food Loss and Waste](#). This issue paper provides a critical overview of the situation through an objective, data-driven approach. Check page two below for more about this timely science-based material.

News and Views

USMCA: Trade officials struck a deal for a [three-way trade pact](#) to replace NAFTA--the United States-Mexico-Canada Agreement. This audio report examines the pact [from a livestock perspective](#). Members of the dairy industry are [voicing mixed responses](#). Many others are still [digging through the details](#) of the new trade deal.

The American Soybean Association and Corteva Agriscience are [seeking applicants for the 2018-2019 Young Leaders Program](#) for young individuals who are passionate about the future of agriculture.

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

Helping Military Students
 A University of Nevada-Reno assistant professor was recognized for her research and [efforts to support students in the military](#).

Innovation Grant
 An interdisciplinary team at Iowa State University is [trying to bridge the gap between agronomy and engineering](#) to increase efficiency and reduce uncertainty for a range of key agricultural issues.

Catch CAST Online!
 Follow us on [social media](#) to stay up to date on the latest ag trends and recent CAST news!



What's Been Happening: The [CAST Summary of Activities](#) for June-September 2018 highlights recent publication releases, board updates, and member updates.

Ag Economy: This well-known economist [has a special name for the current agricultural recession](#) that is causing farmers across the country to tighten their balance sheet--the Grinder.

Farmer Award: Patrick Bane of Illinois has been named America's [Pig Farmer of the Year](#) by the National Pork Board.



News from the Far Side of the Barn

A Horse Walks into a Bar (video): But this one was kicking, bucking, and in no mood to listen to the usual punchline, "So the bartender says, [Why the long face?](#)"

One Hump or Two? During harvest, pictures circulate of [wildlife flushed out of cornfields](#) by combines--deer, turkeys, feral hogs, even bears. But a camel?

Tirdy Works (video): This Maine woman is [making art out of moose poop](#), and her work is sure to give you the giggles.

Showing Their Farming Pride: People can say a lot with a little ink. These [18 farm tattoos](#) will make you proud to be from rural America.



An Australian [dog saved a baby koala's life](#) by snuggling with it--and now they're best friends.

Food Loss and Waste

Research findings, access to papers, and a link to the presentation video



Food Loss and Waste is the fourth paper issued in the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*.

Dr. Zhengxia Dou with CAST EVP Kent Schescke (right) and CAST Board of Directors member Dirk Drost (left).

The publication was released September 28, 2018, with Task Force Chair [Dr. Zhengxia Dou](#) (University of Pennsylvania) presenting highlights and key findings in two Washington, D.C., rollout events.

The [complete version of CAST Issue Paper 62](#) is available as a free download here.

This [one-page Ag quickCAST contains excerpted material](#) from the publication.

A [video of Dr. Dou's slides and presentation](#) is available here.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 farm scene pic from etsy.com and dog pic from news.com.au. Animal Sec. chicken pic from IRTI.com. Plant Sec. tomato pic from dailymess.com. Inter. Sec. cow pic from cms.qz.com. Gen. Sec. poster from meme.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Hog Disease (video): Porcine epidemic diarrhea virus may not be as devastating to hogs as it was a few years ago, but it [still damages the bottom line](#), according to this pig expert.

Poultry Inspections: This veterinarian says USDA inspections of poultry facilities can make [contributions to food safety](#)--and the findings can help bring about live-production and processing-plant improvements.

Distiller Digestibility: This university has been [evaluating a new high-protein type distillers dried grain](#) with solubles that are now commercially available for use in pig feed.

Cow Care: A Wisconsin scientist is working with dairy farmers on [strategies they implement to promote cow comfort](#).

Pig Protocol: A recent study [investigated the welfare quality protocols of pig production](#) in medium-scale, rustic pig farms and commercial, technological pig farms to test the validity of animal welfare indicators.

3-D Printed Skull: As shown in this canine operation, new technology makes a 3-D model from two-dimensional CT scans, so [surgeons can plot their approach](#) before the first incision is made.

The Diets of Horses: Researchers are [supplementing yeast in the diets of sport horses](#) to see if it affects their feed digestibility--leading to improved performance, optimum health, and quality nutrition.



"Oh, you didn't mean me?"
Research shows that wearing, cleaning, and changing boots in poultry facilities can [reduce the spread of diseases](#).

Cattle Health and Well-being: Michigan State University researchers have been awarded a grant that will be focused on [decreasing the use of antimicrobials on dairy farms](#), while increasing farm profitability.



Food Science and Safety News

Fast Food Frenzy (video): Among the [many findings in this National Center for Health Statistics report](#), apparently 37% of U.S. adults consumed fast food on any given day between 2013 and 2016.

Bio-food Labels (opinion): Dan Flynn cites the Council for Biotechnology as he looks at the [confusion that seems to exist](#) around bioengineered food disclosure labeling standards.

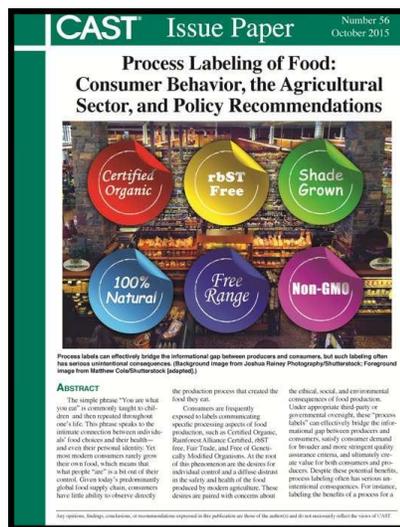
Chemicals and Food: The FDA says [pesticide/herbicide levels](#) are within legal limits in most food items--glyphosate limits in the tests were all within the range.

Requiring Blockchain: Walmart is requiring [all leafy green vegetable suppliers to use blockchain technology](#) to improve food safety for customers.

Drinking Water Detection: To [rapidly detect the presence of E.coli in drinking water](#), Cornell scientists tried applying a genetically engineered virus in hard-to-reach areas around the world.

Eye-catching Colors: Scientists say they have new evidence that [plants owe their rainbow of fruit colors](#) to the animals that eat them.

Defining Food: The [U.S. government has rules about what can be called "yogurt,"](#) but the dairy industry says they are confusing. Clarification might come from a Trump administration update.



[Click here to access](#) the CAST paper *Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations*. Related link at left above.



Plant Agriculture and Environmental News

Not Just a Simple T-shirt (video): Follow [the journey of cotton from field to fabric](#) in these videos.

Pepper Picker (video): This [sweet pepper harvesting robot](#) is designed to operate in a single-stem row cropping system, with nonclustered fruits and little leaf occlusion.

Crop Stats: University of Illinois researchers tout their new, scientifically rigorous [method of predicting crop production](#).

Forbidden Fruit: Cultivated fruits that have been genetically modified to be much higher in sugar content than their natural ancestors [are causing zookeepers to wean some animals off fruits](#), as they are too sweet for their own good.

Protective Plant: A new study offers hope for a relatively simple mechanism to promote bee health and well-being--



"I'm not the tomato you are looking for." Three papers from research groups detail [attempts to make a new type of super tomato](#)--one that does not sacrifice taste for convenience.

providing bees access to [sunflowers and the medicinal properties the pollen provides](#).

A Success: A University of Kentucky research trial studying [the feasibility of growing plants used to treat malaria](#) was successful in its first growing season.

Tracking the Age of Groundwater: By sampling groundwater and determining its age, University of Nebraska-Lincoln researchers hope to determine whether or not predictions for [groundwater discharge rates and contamination removal in watersheds are accurate](#).



International News

Island Disaster (video): An [earthquake and tsunami in Indonesia](#) have left 70,000 homeless and more than 1,400 dead. Relief efforts are underway.

USMCA and Dairy: The United States-Mexico-Canada Agreement replaces the North American Free Trade Agreement--[opinions about the dairy terms differ](#) among countries.

Dealing with Waste: Singapore has worked out a special program to alleviate the [problem of waste packaging](#).

Camel Milk Medicine? United Arab Emirates researchers say camel-whey proteins might provide [anti-diabetic and anti-inflammatory benefits](#).

Women Farming on the Sub Continent: The latest agriculture census shows a rise in the [percentage of female farmers](#) in India.

Under Pressure: Farmers are among the UK's hardest workers, and [this survey shows that the long hours and lack of holidays](#) threaten to undermine the health and well-being of many working in the industry.



"This IS my happy face."
These Icelandic dairy farmers believe that [technology and smart production practices](#) lead to happy cows and more profits.



General Interest News

Fighting Fire (video): The USDA [provides health tips](#) for those who are experiencing smoke-filled air from surrounding wildfires.

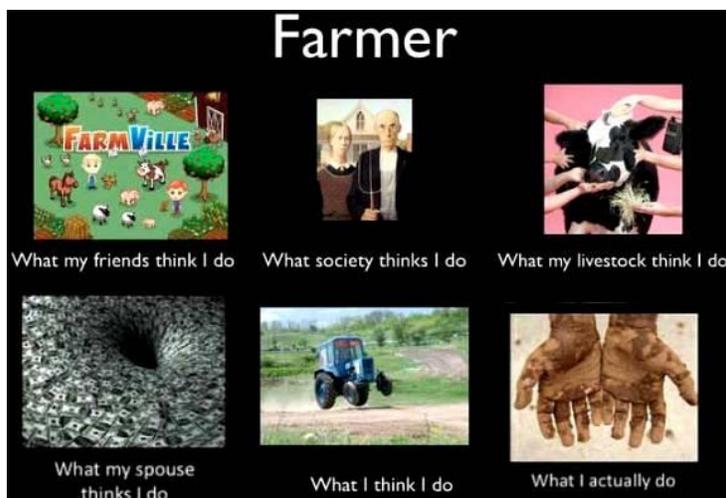
Right Kind of Farming: Famed [agriculturalist Wendell Berry](#) says we should focus on the ecological health of the farm and the economic health of the farmer.

Fighting Off Poachers: Artificial intelligence is helping Cornell's [Elephant Listening Project](#) to better protect endangered animals.

Pave Paradise? Porous pavement can look like regular pavement, but it allows water to trickle down through the usually impermeable street or sidewalk--the [water can be naturally filtered by the soil](#).

Skeeters Get Choosey: According to North Carolina State University research, certain female [mosquitoes evolve selective mating behavior](#) when faced with threats from other invasive mosquito species.

Exposure to Farmyard Bugs: A recently published study reveals that [exposure to farmyard bugs can reduce immune overreaction](#) found in childhood asthma cases.



Check out Mark Parker's top ten [ways a farmer knows old age is catching up](#).

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.



CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Colleen Hamilton at 515-292-2125, ext. 224 or chamilton@cast-science.org, or [CLICK HERE](#) for CAST membership information.

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- * 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 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
- * American Veterinary Medical Association
- * Aquatic Plant Management Society
- * BASF Corporation
- * Corteva Agriscience, Agriculture Division of DowDuPont
- * Croplife America
- * Crop Science Society of America
- * Entomological Society of America
- * Innovation Center for U.S. Dairy
- * Land O'Lakes
- * Monsanto
- * 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
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tyson Foods
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science

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Note: Land O'Lakes provides sponsorship for the distribution of *Friday Notes* to the National Association of Agricultural Educators.

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