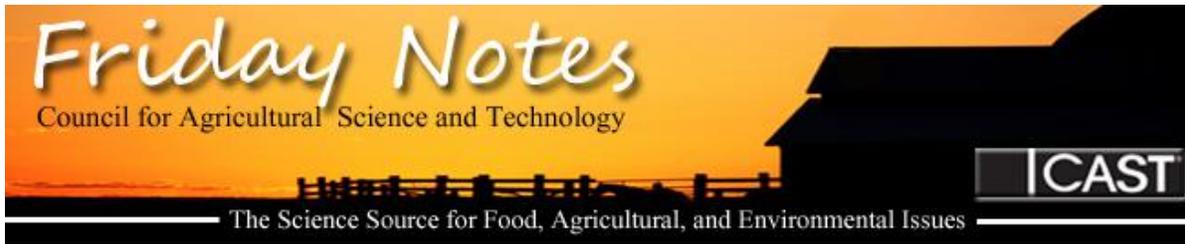


Having trouble viewing this email? [Click here](#)



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..... [Click to Read](#)

[Presentation on Capitol Hill--P. 2](#)

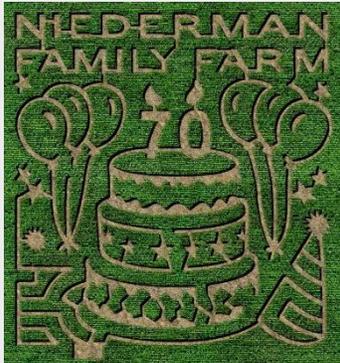
[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)



Stalks are high, and modern precision agriculture is lending itself to [creating some cool crop designs](#).

AgGrad 30 Under 30

AgGrad, an organization dedicated to [helping young professionals in agriculture](#), is launching a 30 Under 30 program and looking for your nominations.

Ag and the Public

The University of Missouri College of Agriculture, Food and Natural Resources' South Farm Research Center [opens its laboratories and research projects to the public](#) on September 29. Nearly 16,000 attend each year.

Disease Research

September 28, 2018

Rollout on Capitol Hill

CAST publication looks at crucial food waste issues

Reducing food loss and waste is one of the key strategies to combat hunger and sustainably feed the world. This new CAST publication provides a critical overview of the issue in the United States

through an objective, balanced, and data-driven approach. See page two below for more about this topic and the CAST presentations to the House and Senate. [Click here to access](#) the press release and a link to the full publication.



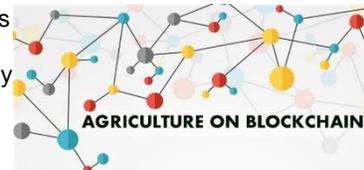
News and Views

Japan-U.S. Discussions: The United States and Japan announced they will open negotiations on a [bilateral trade agreement](#) between the world's first- and third-largest economies. Many hope this will increase market [access for many agricultural goods](#).

U.S.-China Relationships: In another pronouncement, [President Trump accused China](#) of interfering in the U.S. midterm elections with "farm belt ads and tariffs."

KORUS Agreement: The United States and South Korea signed off on the renegotiated [U.S.-Korea Free Trade Agreement](#)--a move that could ease certain farm sector concerns.

Blockchain Update: According to this [update about blockchain](#) technology, the concept will greatly change the way agricultural commodities are grown, traded, and processed.



High Yields and Sustainability: This report indicates that the best way to meet rising food demand while conserving biodiversity is to [wring as much food as sustainably possible](#)

social, cultural, and economic factors. They also describe major actions that are being taken across the nation to decrease FLW.

(3) A hard look at existing data on the quantity of food waste prevention, recovery, and recycling is taken by compiling all major sources of data that could be located, providing a reality check on how well the country is performing on lessening FLW.

(4) The authors present a critical analysis concerning three key issues: How can the United States work toward the 50% reduction goal by 2030 knowingly and confidently? What technological innovations may be game changers? What other approaches could be explored to influence consumer food behavior for the better?

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 corn maize pic from agdaily.com, ag term graphic from 123rf.com, blockchain graphic from medium.com, and panda pic from tmj4.com. Animal Sec. bear pic from kutv.com. Food Sec. headset pic from makingoftomorrow.com. Food Sec. grapes pic from news.cornell.edu. Inter. Sec. dog pic from pinterest.com. Gen. Sec. map graphic from ucdavis.edu. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Mad Mama (video): This viral video shows a farmer [trying to tag a newborn calf](#)--the cow has other plans.

Pelvic Organ Prolapse: The [second-leading cause of death to sows in the swine industry](#) is leading researchers to take a scientific approach to the issue.

Mastitis Is Moving In: A relatively [new form of mastitis is occurring more frequently](#) and is much more difficult to control due to its resistance to antibiotics.

Hunting Hogzilla: Wild pigs can be [damaging to crops and dangerous to humans](#), and this hunter takes on the big ones.

Tracing Cattle: The USDA has announced its [traceability program goals for cattle](#).

Cage-free Poultry Questions (opinion): This podcast is part three of a look into [environmental questions being asked](#) concerning "cage-free" egg production. Also [check out this CAST publication--Impact of Free-Range Poultry Production Systems on Animal Health, Human Health, Productivity, Environment, Food Safety, and Animal Welfare Issues](#).

Digital Cow Herding: For some ranchers, cattle herd [management is in the palm of their hands](#).

Bug in the Bellies of Bovine: This USDA researcher made [an interesting discovery in the rumen bacteria of cows](#) that could change the way we think about their microbial makeup and nutritional needs.



After more debate about hunting and protection, Yellowstone's [grizzlies are back on the endangered species list](#).

Compound for Cats: A new collaboration at Kansas State University is promoting the commercial [development of an anti-viral compound for a deadly cat disease.](#)



Food Science and Safety News

Pixels to Plate (video): Technology mixes with fine dining, as [3D printers are used in an upscale restaurant.](#)

Search for Quality Water: This microbiologist is [tracking potentially harmful bacteria in North Carolina's drinking water](#) due to Hurricane Florence. She shares post-storm threats and how to cut down on the dangers.

Not Just Animal Feed: Many see sorghum as being primarily for animal consumption, but a Texas A&M health agent says [it can be a food source for humans](#) as well.

Keeping Things Fresh: These food scientists provide [simple tips for storing fruits and vegetables](#) that will help to keep them fresh longer.

Perception and Calories: This research shows that weight-conscious adults often believe that if a "healthy" food item is presented along with one that's not, the "unhealthy" item is [seen as containing fewer calories than it really has.](#)



Cornell's food scientists used virtual reality to [show how people's perception of real food](#) can be altered by their surroundings.

Changing the Strategy: Will plant-based diets push meat sectors to change their marketing strategy? This analyst says producers can respond by [using market disruptions as a chance to reconnect with consumers.](#)

Organizing Your Fridge: The Ohio State University shares several tips on [how to organize your refrigerator to lessen the risk of foodborne illness.](#)



Plant Agriculture and Environmental News

Stories from the Soil (video): An [educational multimedia series is being launched](#) to hear from farmers, land stewards, and researchers on soil health management practices and innovation from the ground level.

Before The Fire (video): Researchers are part of a [collaborative project that is using unmanned aircraft](#) to improve a Kansas smoke management plan.

The Mystery of Moths: Scientists have discovered that [moths may play a much broader role as plant pollinators](#) than previously suspected--dispensing pollen under the cover of darkness.

Boosting Bug Activity: Research shows that [climate change is expected to accelerate rates of crop loss](#) due to the activity of another group of hungry creatures--insects.

The Queen of Foragers: If you have [really good management aspects of alfalfa](#), this forage specialist says, "you can produce some straight-up rocket fuel."

Mycotoxin Alert: Wisconsin officials ask livestock producers and feed mills to be [cautious as flood water contamination and mold](#) in corn, soybeans, and forage crops could threaten human and animal health.



Cornell has [produced grapes](#) that are more flavorful, have larger berries, and can be found in bigger clusters.



International News

Robotic Dog Learning New Tricks (video): Some call Aibo the "[future of robotics](#)"--with its artificial intelligence, ability to provide companionship, and puppy appeal.

Bots and Medicine: Hong Kong scientists demonstrated a new [method of controlling nano robots](#) that emulates natural swarm behavior. They hope it will advance the treatment of blood clots.

Searching for Chocolate's Roots: A newfound peace has [spurred the hunt for disease-resistant wild cacao](#) within Columbia's borders. What scientists find could help the country expand its role in global trade.



A new approach in the [fight against a disease affecting beehives around the world](#) could include the use of dogs, thanks to this New Zealand filmmaker.

A World First: UK retailers, producers, and manufacturers are taking the lead to [drive down the country's annual food waste bill](#).

The Benefits of GMO Cotton: According to the largest-ever scientific study, China has experienced large and sustained [reductions in pesticide use as a result of adopting GMO cotton](#).

Tasty Treat: Grasshoppers are [a crispy, crunchy snack often enjoyed in Uganda](#) during the wet season.



General Interest News

Willie Nelson and Friends (video): Farm Aid came to Connecticut recently with a cadre of country and rock musicians offering up music in [celebration and support of the American family farmer](#).

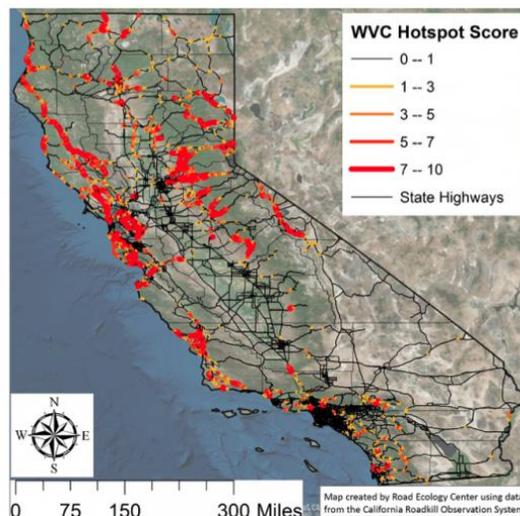
Major Breakthrough: In a big step forward in the fight against malaria, scientists have caused the [complete collapse of a disease-carrying population of mosquitoes](#) by using CRISPR.

Bats Beware: When bats swoop through the night skies devouring insects, there is one species they know not to eat--fireflies. This study determines how [these light-emitting insects fend off bat attacks](#).

Avoiding a "Castro-bee": Scientists [created a microscopic carbon particle that acts as a magnetic sponge](#), absorbing pesticide residue as it passes through a bee.

Bees and Pesticide: A university study says that glyphosate destroys [specialized gut bacteria in bees](#), but the pesticide company disputes the findings--and [this writer says](#) glyphosate has nothing to do with bee health.

California Seal Study: This Cal Poly biology professor launched an ambitious [project to study elephant seals](#).



Roadkill Roadmap: This real-time map is helping those in California [pinpoint the hot spots for wildlife and vehicle-related accidents](#).

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.

Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- * 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 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

CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.

Members of CAST's Education Program

- * Cal Poly-San Luis Obispo
- * Cornell University
- * Iowa State University
- * Kansas State University
- * Mississippi State University
- * North Carolina State University
- * Texas A&M University College of Ag & Life Sciences
- * The Ohio State University
- * Tuskegee University
- * University of Arkansas System Division of Agriculture
- * University of California-Davis
- * University of Florida Institute of Food and Agricultural Sciences
- * University of Kentucky
- * University of Missouri-Columbia
- * University of Nebraska Agricultural Research Division
- * University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources



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

Dan Gogerty (Managing Communications Editor)
Kylie Peterson (Communications and Social Media Specialist)
 The Council for Agricultural Science and Technology
 4420 West Lincoln Way
 Ames, Iowa 50014-3447
 Phone: 515-292-2125, ext. 222 (Dan) and 230 (Kylie)
 E-mail: dgogerty@cast-science.org and kpeterson@cast-science.org



** *With assistance from Carol Gostele (Managing Scientific Editor)*

