

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](#)

[Ag Students Travel to Brazil--P. 2](#)

[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

Drone Photo Awards



This [photography competition](#) is dedicated to the emerging art of aerial photography--the flower field above is one example.

Rise to the Challenge

The World Food Prize announced that [registration for the 2018 Borlaug Dialogue is open](#). Scheduled for Oct. 17-19 in Des Moines, it will convene a diverse array of scientific experts, policy leaders, business executives, development researchers, and farmers to address critical issues in global food security.

Growing the Future

[Young farmers and ranchers can network](#) with peers and hear from industry experts at this event held in Indianapolis on August 8-9.

Tech and Food

On Sept. 8-9, the [CoNFoMA symposium in Minneapolis](#) will focus on establishing a collective

August 3, 2018

Misleading Messages?

Food labels continue to stir controversy

Grocery store customers are inundated with labels such as organic, fair trade, and cage free. They may be eye catching but are often free of any scientific basis, and they can stigmatize many healthy foods, according to [University of Delaware-led research](#).



Some labels might be "fact free" too.

Kent Messer, the study's lead author, was also the task force chair of CAST IP 56, [Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations](#). In a related commentary, this 2013 World Food Prize winner looks at "free-from labeling" and the [misleading ad campaigns](#) that impact the potential of biotech foods.

News and Views

Vehicle Emissions Ruling: The Trump administration [recommended freezing mile-per-gallon standards for cars and light trucks](#) after the 2020 model year, saying it will keep prices lower for consumers and improve safety. Reactions vary widely.

Summer Inferno: Wildfires are raging in many parts of the country. A seemingly endless [summer of flames in the Golden State](#) is affecting lives, property, and agriculture. [UC-Davis firefighters are on the front lines](#), battling fires hundreds of miles away while still keeping campus safe.



Dr. Matlock and Sustainability: Marty Matlock--[2018 BCCA winner](#)--focuses on the interface of food, water, and community systems. This site shows the extent of his work as the executive director of the [University of Arkansas Resiliency Center](#).

vision for linking cutting-edge research with food engineering across the FEW spectrum, as well as safety and sustainability.

Poultry Paper Impact

CAST [Issue Paper 61](#) about free-range poultry received plenty of buzz. These links lead to [Google](#) and [Yahoo](#) pickups of searches regarding the release.

Submit an Idea

We welcome suggestions for future CAST publications and projects. [Click here to submit ideas.](#)



Biotech Blog

Check out the CAST guest blog about the EU's [gene-editing ruling](#).



Catch CAST Online!

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

High-tech Ag: Biometrics and facial recognition technology are becoming [more available for agriculture](#), allowing farmers to differentiate animals and to study crop patterns.

News from the Far Side of the Barn

A Stinker of a Business (video): This [enterprising 7-year-old started selling cow dung](#) to tourists from his family's farm.

Making Hay (video): This clip shows how mechanical [hay and rack fingers](#) are made. To actually move out to the field, check out the blog [Fresh-cut Hay--the Intoxicating Smell of Nostalgia](#).

Stirring Up Dust (video): This young man captured [incredible footage of a dust devil](#) sweeping across a farm in New York earlier this month.



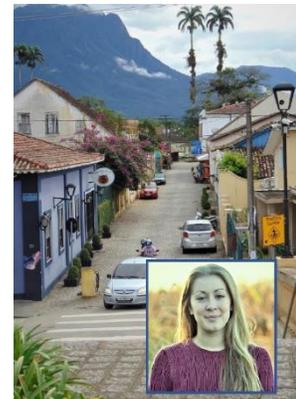
World Record: The catch of this bluefin tuna has been [approved as a Florida state record](#).

Differences, Diversification, and Techniques

Students learn about the Brazilian agricultural scene

At the beginning of this summer, Caryn Dawson was given an opportunity to participate in a travel course through her studies at Iowa State University. The object of the global resources course was to learn about the agriculture, food, and natural resources of Brazil. Fourteen students and two professors participated in the trip.

A key connection Caryn made can be summed up in this statement from her. "Just as there were differences of interest and diversification within our group that helped us learn from each other, we also saw a lot of diversification in the agriculture, food, and natural resources of Brazil. The country is intriguing all around but especially in regards to its culture and abundance of natural resources."





Caryn attends classes at Iowa State University and works as a student administrative assistant at CAST. She enjoys travel as a way to increase her understanding of agriculture and international relations. As she says, "Diverse cultures have so much knowledge to offer, and cross cultural experiences are one of the best ways to improve personal thinking and to generate ideas and goals for companies and organizations that are working toward making a positive impact on agriculture and feeding the world."

Click here to [access Caryn's entire blog](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 flower pic from newatlas.com, fire pic from sacbee.com, and fish pic from akamaized.net. Animal Sec. bee pic from ars.usda.gov. Food Sec. group photo from erienewsnw.com. Plant Sec. map from bloomberg.com. Inter. Sec. Zimmern photo from abcnews.go.com. Gen. Sec. woman photo from cloudfront.net. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Chickens in Crop Rotation (video): Iowa State University researchers are conducting experiments to determine what advantages may arise from [integrating chickens into vegetable production systems](#).

Drug Delivery: With the proper equipment and operation, this Kansas State University study [indicates remote drug delivery can provide a subcutaneous dose](#).

PED Virus: A U.S. study conducted earlier this year confirms that [even a few flies have the ability to infect pigs](#) with porcine epidemic diarrhea virus.

The Buzz on Bees (related to right): Click here to access the CAST Commentary [Why Does Bee Health Matter?](#)

Dairy Debut: Dairy producers and vets have another tool in their toolbox with the debut of the [first vaccine licensed for the prevention of mastitis](#).

Marine Evolution: Cornell University researchers say many marine species are subdivided into multiple populations that have [evolved to thrive best under contrasting local environmental conditions](#).

Determining Dog Years: These vets explain [how formulating your pet's age in "dog years"](#) could be much trickier to determine than previously thought.

Getting to the Heart of Brisket Disease: University scientists are [gaining a better understanding of the genetic and environmental factors](#) involved in the often fatal conditions of bovine pulmonary hypertension.



According to a new study, scientists have found that a [honeybee's microbiome changes at different speeds depending on its social hierarchy](#).



Food Science and Safety News

Teen Bakery (video): Teenagers in Minneapolis run the Green Garden Bakery, where [they serve healthy foods and support the neighborhood](#).

Food Waste and Sharing: A Cal Poly economics professor co-authored a research paper on strategies to salvage and sell cosmetically flawed produce--[Food Waste in the Sharing Economy](#) (related information under photo at right).

I Heart Dairy (opinion, related video): Consuming dairy products such as [milk and cheese could cut the risk of heart disease](#) and stroke, according to a study that challenges some commonly held beliefs.

Food Consumer Findings: The number of Americans [over the age of 50 who do their grocery shopping online is relatively low](#). This IFIC/AARP survey presents several findings about consumers and food.

Sneaky Toxin: *Salmonella* is one heck of a resilient bacteria group, and this North Carolina State food safety specialist [shares how it gets into dry, processed foods](#).



At the age of 14, [Maria started a now-successful food pantry program](#) to get "wasted food" to the needy.
Note: Watch for the CAST Issue Paper, *Food Loss and Waste*, available in late September.



Plant Agriculture and Environmental News

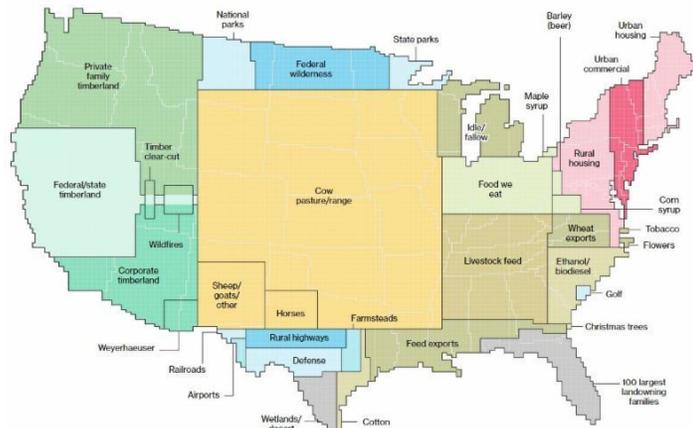
Mexico's National Juice (video): [Ever wonder how tequila is made?](#) Jose Cuervo shows us the ropes.

Underground Network (video): Plants have their own [interconnected networks that allow them to communicate](#) with each other, sometimes over considerable distances.

Corn Facts (video): Corn pollination has been successfully completed in many areas throughout the Midwest. This agronomist talks about corn staging and [the differences between missed pollination and aborted kernels](#).

Flight Sensor: A real-time, cloud-based [insect monitoring system has the ability to detect, classify, and qualify insects](#) in hopes of reducing and preventing pesticide resistance in bug populations.

Pepper Picker: A new breakthrough in modern engineering [may one day pick fruit and veggies for our meals](#)--a task way more difficult and important than it appears.



These maps help piece together the puzzles that decipher how Americans' use their [land to create wealth and measure productiveness](#).

Computer Vision and Machine Learning: A group of scientists has [developed a method for predicting an increase in plant biomass](#) using 2-D and 3-D images.

Red-tide Algal Invasion: Florida has an algae problem. An overgrowth in the waters off the state's southwestern coast is [killing wildlife and making some beaches noxious](#).



International News

Blood Moon (video): The recent full moon could be seen as a blood moon in many parts of the world. This video explains the [science behind a lunar eclipse that is known as a blood moon](#) because of its red glow.

Pesticide Controversy (opinion, video): A Brazilian government commission [recommends easing restrictions on the use of pesticides](#) to aid the country's agricultural industry--but many locals disagree.

Cookin' with Gas--Pig Style: In Brazil's Santa Catarina state, pig producers have been allowed to [start selling energy from biogas](#) after a recent change in legislation.

Biotech Cotton: Nigeria has [commercialized its first genetically modified crop](#), approving pest-resistant Bt cotton as a means to revitalize its comatose textile industry and boost economic development.

Ham Is Back: USDA Secretary Sonny Perdue and the U.S. Ambassador to Argentina celebrated the [reintroduction of U.S. pork products to the Argentine market](#) after more than 20 years.

The Heat Is On: Weather stations logged record-high temperatures on the edge of the Sahara and above the Arctic Circle, while [heat-related problems](#) have occurred in Japan, Norway, and other countries. Some scientists say China's northern plain [will become a deadly heat zone](#).



For more than a decade, Andrew Zimmern has crisscrossed the world, eating some of the craziest things you can imagine. For his show, *Bizarre Foods*, he has munched on unusual fare ranging from silk worms to goat organs to wildebeest eyeballs--[but does he ever get sick?](#)



General Interest News

Fair Time (video): Mark Parker gives a tongue-in-cheek [top 10 list of county fair headlines](#). And Kylie explains what it's really like to [be a livestock exhibitor at the fair](#).

Turtle Tumors: University of Florida researchers are [using genetic analysis to determine precision medicine-based treatment for turtles](#) with a contagious disease that causes debilitating tumors.

Protein Research and Pests: A University of Kentucky research team discovered a protein that plays a critical role in the effectiveness of RNA interference in beetles--[this could help with pest control](#).

A Bright Future (opinion): This blog shows [the perception of the agricultural industry through the eyes of millennials](#). Contrary to popular beliefs, this generation will hold on to the roots that run deep in agriculture and make them stronger.

A Long, Strange Trip: The [reproductive history of the uni-sexual, female-only salamander is full of evolutionary surprises](#). Researchers from The Ohio State University are working to uncover the mysteries.



Aniela Gottwald is riding through the American wilderness to [campaign for better environmental practices](#).

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
- * 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
- * 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 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)*