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.

Ag Census Released
Data often used to steer policy and make decisions

The U.S. Department of Agriculture's 2017 Census of Agriculture has been released, along with this USDA website that provides additional resources, special subjects, various quick links, and more.

The census--taken every five years--is used to inform policy decisions about agricultural education, research, farm programs, rural development, and much more. This publication will include new information on military service, food marketing practices, and on-farm decision-making. As this informative Feedstuffs article reports, the census provides insights into farm demographics. This AgWeb story also effectively uses graphs and statistics to delve into the census report.

Examples of the findings include: The total number of farms in 2017 is 2.04 million--down from 2.12 million in 2012. There continue to be more large and small operations, with fewer middle-sized farms. Thirty-six percent of all producers are female and 56% of all farms have at least one female decision-maker--an increase of nearly 27% from 2012.

News and Views

Another Science "Wow": Scientists synchronized eight radio telescopes on four continents, and four imaging teams on supercomputers used two years to crunch the data--but we earthlings now have an eerie, fascinating photo of a black hole from a "galaxy far, far, away." This video profiles Dr. Kate Bouman, the 29-year-old scientist who was a big part of this amazing team effort.

Flood Compensation: Agriculture Secretary Perdue said farmers ought to be considered for federal compensation for grain lost in flooded bins.
CAST is pleased to announce that the National Cattlemen’s Beef Association--a contractor to the Beef Checkoff--has become a member. Watch for more about this organization and their perspectives in future Friday Notes editions.

New Type of Workshop
The first workshop of its kind will be held June 4-6 at UC-Davis: Breeding Crops for Enhanced Food Safety. The event includes a wide variety of themes, sessions, and collaborations. Abstract submissions are due by April 15.

NC A&T Happenings
North Carolina A&T recently finished celebrating “Small Farms Week,” but there is a lot more news coming from this vibrant campus.

Cal Poly Rodeo
One of the biggest college rodeos in the country is on this weekend. The Poly Royal Rodeo features athletes, competitions, and a concert.

Send in Ideas
CAST welcomes suggestions for future publications and projects.

CAST Social Media

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Cabinet Confirmation: Colorado native David Bernhardt was confirmed by the U.S. Senate as the next U.S. Secretary of the Interior.

Ag Relief for Cyclone Victims: The Norwegian government pledged support for the many affected farmers who lost almost all agricultural production when Cyclone Idai struck Mozambique with deadly force.


News from the Far Side of the Barn

Hive-opolis (video): This BBC clip shows amazing 100-pound bee colonies hanging from cliffs. Also check out the CAST Commentary about “Why Bee Health Matters”--and the related bee story at right.

Python Update (video): As a follow-up to a piece about Florida’s invasive species, consider the 17-foot-long Burmese python these scientists caught--and the 73 developed eggs it contained.

Don’t Ask for a Punch Line (video): A wild kangaroo walked into an Australian bar--the joke is that no one batted an eye.

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Contributing to a Sustainable Future--CAST's 2018 Annual Report

Each year, CAST strives to strengthen its mission--to assemble, interpret, and communicate credible, balanced, science-based information to policymakers, the
media, the private sector, and the public. Because of your support and the support of our extended community, we are able to make that happen.

Last year, individual members showed that they believe credible science is more important than ever by contributing 85% more donations than in 2017. CAST delivered by rolling out six major publications--two times more publications than in previous years.

The organization also continued to communicate ag/science information through its website, videos, social media, and weekly newsletter. CAST has become increasingly active due to successful social media platforms and an increase in its education program membership.

As CAST moves forward in 2019, we will ensure our reports--produced by the collaboration of scientists and experts--communicate credible, balanced, and accurate information to our stakeholders.

CAST wants to thank you, our members, for your support. You are not only contributing to a sustainable future for CAST but also sustaining the integrity of credible science.

Download the 2018 CAST Annual Report here.

Friday Notes News Categories
Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 flowers pic from powerslaw.com, census poster from usda.com, black hole pic from ehteslescope.com, and bee photo from latestly.com. Animal Sec. graphic from newsbbcimg.co.uk and butterfly pic from bugmugs.org. Food Sec. chef photo from atlasobscura.com. Plant Sec. wheat pic from washingtonuniv.jpg and Brouder photo from purdue.edu. Inter. Sec. pangolin pic from pinktreefrog.jpg and wasabi pic from tripadvisor.com. Gen. Sec. dog pic from bacon-google.com and glacier pic from usatoday.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.

Animal Agriculture and Environmental News

Pork Expo Cancelled (video): Due to the threat of African swine flu, the National Pork Producers canceled this year's World Pork Expo. Reports indicate that the live hog show will still occur. Watch for updates.


Consumer-driven Poultry Industry: This look at poultry agriculture from the Economist gives a "British view" of why chicken meat is so popular and so cheap.

Poultry "Best Practices": This article covers some recommended practices for poultry handling regarding the welfare of turkeys and chickens.
Livestock Welfare (related to above): Dr. Candace Croney (Purdue) looks at responses to the growing concerns of animal welfare. Croney led the task force for the CAST publication titled *Scientific, Ethical, and Economic Aspects of Farm Animal Welfare*.

Researchers, Hog Farmers, and Butterflies: This article looks at a program that involved Iowa State researchers, the Iowa Monarch Conservation Consortium, and hog farmers across the area to help plant more habitat for monarch butterflies.

Making a Splash? It's not a type of livestock that others would typically associate with the Midwest, but these growers are moving into aquaculture.

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**Food Science and Safety News**

What's the Deal With Airplane Food? (video): These chefs share how airline food is prepared to stay tasty even at 30,000 feet.

Keeping It Fresh: This “Food Freshness Card” won a tech award, and the inventors claim it can increase shelf life by 40% for many fruits, vegetables, and breads.

Simple Abundance Farm: This couple started farming with a plywood sheet of microgreens, and now they have a high tunnel for additional vegetable production—peas, radishes, spinach, salad greens, kale, and more.

So Much for a "Sugar High": This university study says sugar does not necessarily improve mood and make people alert after its consumption.

A Misleading Whopper? (opinion): This editorial says that Burger King is trying to dupe beef lovers with the Impossible Whopper.

Plant-based Production: A $310 million plant-based protein manufacturing facility will be built in Indiana to produce vegetarian burgers, hot dogs, and other products.

Fake Labels? (opinion): The president of the National Milk Producers Federation describes their fight against fake milk products.


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**Plant Agriculture and Environmental News**
The Journey into the World of Seeds (video): This trailer features a new film by an Iowa State University scientist showcasing the science and beauty of seeds.

Data Sharing: Professor Sylvie Brouder (featured at right) led the task force for the CAST Commentary, Enabling Open-source Data Networks in Public Agricultural Research.

Glyphosate Research: Bayer has made more than 100 glyphosate safety studies public, as several trials against its acquired Monsanto Round Up weed killer are ongoing.

Pass the Mustard: Kansas State University researchers have received national recognition for a study showing that planting a mustard cover crop helps to improve soil health and, ultimately, boosts soybean yields.

Wheat Breeding: A recent genome assembly of pasta wheat is leading to new insights for modern wheat breeding.

Turf-use Conservation: University of Florida research helps reduce fertilizer, water, and fuel use, as the state’s turf coverage has grown to 3.5 million acres.

International News

How to Train Your Komodo Dragon (video): Indonesia’s Komodo Island may close for a year—officials hope to increase the Komodo dragon population.

Partnership for the Environment: Tuskegee University is developing an academic partnership with universities in Japan and Indonesia to focus on environmentally responsive architecture and design.

Bio Crops Accepted: Nigeria’s decision to approve genetically modified cowpea and cotton has boosted hopes for the technology across Africa.

Research on the Ropes? Researchers in Brazil are up in arms after the government announced it had frozen 42% of the budget for the country’s science and communications ministry.

Aussie Activists: Australia’s prime minister criticized animal rights activists after dozens were arrested in nationwide protests. Some broke into abattoirs and chained themselves up to protest against the meat industry.

Singapore officials seized tons of illegal pangolin scales—one official estimates 36,000 pangolins were killed for the shipment.
**Spicin’ Up the Sushi:** According to McGill University researchers, wasabi has antimicrobial properties that may safeguard Japanese sushi eaters.

**Sudan’s Struggle:** This story looks at how decades of political and foreign powers influenced Sudan’s agriculture—and it says Sudan should be "a food-growing paradise."

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**General Interest News**

**Measles Update (video):** New York City declared a health emergency and instituted some regulations because of a measles outbreak, but some opponents may file court challenges.

**Reducing Food Waste with Biotech:** The U.S. government declared April as "Winning on Reducing Food Waste Month," and this site explains why GMOs can aid in this effort.

**Brain Research Questions:** Rhesus monkeys engineered to express a human gene reportedly show delayed brain development and better short-term memory—but some scientists are raising ethical red flags.

**Eyes in the Sky:** Artificial intelligence is using images taken by satellites to identify farms. The goal is to detect the illegal pollution of waterways.

**An Essential Protein May Be Key:** A Cornell study is trying to help people with inflammatory bowel disease and food allergies.

**Farm Show:** This classic farm magazine offers stories about new agriculture products, clever “made it myself” inventions, fun DIY farm projects, money-saving tips, and more.

**Glacial Changes (videos and articles):**
These three links are a tiny fraction of the many reports about glaciers and climate. (1) A National Geographic story says the world's glaciers are the smallest they've been in human history. (2) NASA research analyzes why a previously fast-shrinking glacier in Greenland might be suddenly growing. (3) This PBS series looks at Antarctica's rate of ice and glacier loss.

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**CAST Information**

Check out CAST's page at the [YouTube site](https://youtube.com) 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 Melissa Sly at 515-292-2125, ext. 232 or msly@cast-science.org, or [CLICK HERE](https://www.cast-science.org) for CAST membership information.

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

* Agricultural & Applied Economics Association
* American Association of Avian Pathologists

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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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