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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.

In This Issue..... Click to Read

CAST Annual Report--P. 2

Animal Agriculture News

Food Science and Safety News

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Big Week Coming



On April 15, Dr. Heidi Peterson will present highlights of CAST's new issue paper, *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape*, <u>at three venues in</u> <u>Washington, D.C.</u> Also in the nation's capital on the following day, April 16, Dr. Marty Matlock will make <u>a presentation</u>, and CAST will <u>announce</u> the 2019 Borlaug CAST Communication Award winner.

Veterinary Schools

UC-Davis and Cornell held on to top spots in U.S. News & World Report's latest rankings of colleges of veterinary medicine, and Tuskegee received special notice for its diversity and overall success.

Welcome NCBA

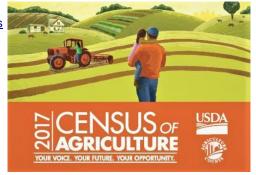
April 12, 2019

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 <u>informative Feedstuffs article reports</u>, the census provides insights into farm demographics. This <u>AgWeb story also</u> 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 <u>earthlings now have an eerie</u>, <u>fascinating photo of a black hole</u> from a "galaxy far, far, away." This <u>video profiles Dr. Kate Bouman</u>, 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 <u>federal compensation for grain lost</u> in flooded bins.

CAST is pleased to announce that the <u>National Cattlemen's</u> <u>Beef Association--a</u>



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: <u>Breeding</u> <u>Crops for Enhanced Food Safety</u>. 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 <u>more news</u> <u>coming from this vibrant campus</u>.

Cal Poly Rodeo

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

Send in Ideas CAST <u>welcomes suggestions</u> for future publications and projects.

CAST Social Media f ♥ in ⑦ B **Cabinet Confirmation:** Colorado native David Bernhardt was confirmed by the U.S. Senate as the next <u>U.S. Secretary of the Interior</u>.

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

Debate about Controversial Food Report: The World Health Organization pulled out of sponsoring a global initiative <u>stemming from</u> <u>the EAT-Lancet Commission</u>.

News from the Far Side of the Barn

Hive-opolis (video): This BBC clip shows amazing <u>100-pound bee</u> <u>colonies</u> hanging from cliffs. Also check out the CAST Commentary about "<u>Why Bee Health Matters</u>"-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 <u>73</u> developed eggs it contained.



The Tracks of Her Tears: Doctors found four sweat bees living under a woman's eyelids, feeding off her tears. An ACSH <u>expert</u> <u>provides insights</u>.

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



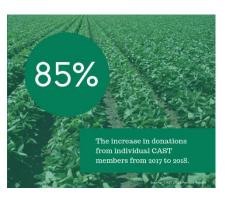
Contributing to a Sustainable Future--CAST's 2018 Annual Report

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 ehtelescope.com, and bee photo from latestly.com. Animal Sec. graphic from newsbbcing.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 <u>canceled</u> <u>this year's World Pork Expo</u>. Reports indicate that the <u>live</u> <u>hog show will still occur</u>. Watch for updates.

Cattle Conference: The Dairy Cattle Welfare

<u>Symposium</u>--May 29-30 in Orlando--brings together dairy farmers, veterinarians, consultants, universities, and the dairy community to discuss best recommended practices.

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



As this National Cattleman's Beef Association video demonstrates, <u>cows help provide a wide</u> <u>range of products</u>--from lipstick to jet fuel.

Poultry "Best Practices": This article covers some recommended <u>practices for poultry handling</u> 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 <u>Scientific, Ethical, and</u>

Economic Aspects of Farm Animal Welfare.



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

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

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 <u>claim it can increase</u> <u>shelf life</u> 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 <u>additional vegetable</u> <u>production</u>--peas, radishes, spinach, salad greens, kale, and more.

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



Chef on Ice: Some say that <u>researchers at this base in</u> <u>Antarctica</u> eat better than you do.

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

Plant-based Production: A \$310 million <u>plant-based protein manufacturing</u> 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 <u>against fake milk products</u>.

Research about Labels: For background information, check out CAST IP #56, <u>Process Labeling of Food</u>: Consumer Behavior, the Agricultural Sector, and Policy Recommendations.

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 <u>showcasing the science and beauty of seeds</u>.

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 <u>100</u> <u>glyphosate safety studies public</u>, 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 <u>planting a mustard cover crop helps</u> to improve soil health and, ultimately, boosts soybean yields.

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

Turf-use Conservation: University of



Professor Sylvie Brouder of Purdue thinks we can <u>feed the</u> <u>world and preserve the</u> <u>environment</u> as she focuses on soil, GHG emissions, and water quality. See related link regarding Brouder at upper left.

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 <u>environmentally responsive architecture and design</u>.

Bio Crops Accepted: Nigeria's decision to approve <u>genetically modified cowpea and cotton</u> 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 <u>budget for the country's science</u> <u>and communications ministry</u>.



Singapore officials <u>seized tons of illegal pangolin</u> <u>scales</u>--one official estimates 36,000 pangolins were killed for the shipment.

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



Spicin' Up the Sushi: According to McGill University researchers, <u>wasabi has</u> <u>antimicrobial properties</u> 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 <u>"a food-growing paradise."</u>

General Interest News

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

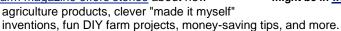
Reducing Food Waste with Biotech: The U.S. government declared April as "Winning on Reducing Food Waste Month," and this site explains why <u>GMOs can aid in this effort</u>.

Brain Research Questions: Rhesus <u>monkeys engineered to express</u> <u>a human gene</u> 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 <u>images taken by</u> <u>satellites to identify farms</u>. 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 <u>inflammatory bowel disease and food allergies</u>.

Farm Show: This classic farm magazine offers stories about new





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 <u>glaciers are the smallest</u> they've been in human history. (2) NASA research analyzes why a previously fast-shrinking glacier in Greenland <u>might be suddenly growing</u>. (3) This PBS series looks at Anarctica's rate of <u>ice and glacier loss</u>.

CAST Information

Check out CAST's page at the <u>YouTube site</u> to view highly regarded agscience 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 <u>CLICK HERE</u> for CAST membership information.

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* Agricultural & Applied Economics Association

* American Association of Avian Pathologists

MY RECIPE CALLS FOR 2 CUPS OF BACON,1/4 Teaspoon of Bacon, and a dash of bacon.



University of Nevada-Reno researchers are examining pet food labels and looking at how much methylmercury--a toxic compound-might be in <u>what our pets eat</u>.

- * 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
- Phorid Supported by Plants and Ari
- * American Society of Plant Biologists * American Veterinary Medical Association
- Aquatic Plant Management Society
- * BASF Corporation
- * Cal Poly State University
- * 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
- * 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
- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tuskegee University
- * Tyson Foods
- * 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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- * Purdue University
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