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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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[CAST, Social Media, and Communication--P. 2](#)

[Animal Agriculture News](#)

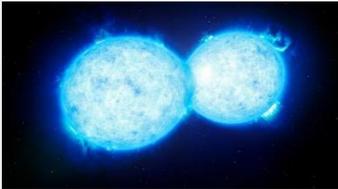
[Food Science and Safety News](#)

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Stars Collide



Astronomers predict that [colliding stars will light up the night sky in 2022](#). Check here next week for information about the "super blue blood moon" coming on January 31.

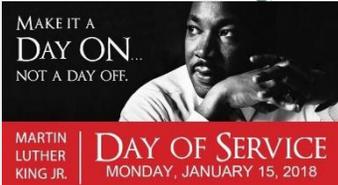
Sunday with a Scientist

A University of Nebraska State Museum's program for children and families [will focus on snakes, nanotechnology, and protein](#).

Branding Yourself

The 2018 AMSA Student Leadership Conference will be held in Oklahoma on March 23-24. [Registration is now open](#).

Martin Luther King, Jr.



January 12, 2018

Raw Water and Raw Milk

Nutritious options or raw deals?

Some of us grew up on farms long ago when everything seemed raw. We'd play in creeks, drink from bubbling springs, and squirt milk from our Guernsey's udder straight at an unsuspecting brother's face. But times have changed. Water quality is a major issue, and the types sold in plastic bottles range from Aqua Fina to Zephyrhills--and now "Live Water." And while milk might still come in long-recognized cartons, other products are now available, including "raw milk" purchased directly from farms.



Apparently these consumers are raw milk fans.

Debates about nutrition, labeling, cost, and safety have heated up also, and if you are like many of us, it is sometimes hard to figure it all out. The [links here might give you some insights regarding raw water and raw milk](#), but many more opinions and news releases are available. As always, we recommend that you look to science and the most credible sources possible.

News and Views

The President Speaks at Ag Meeting: In an appearance before the American Farm Bureau Federation, [President Trump spoke about the administration's moves](#) to help farmers. He also expressed his support for crop insurance and made brief references to the controversial NAFTA negotiations. Another report points out that a majority of [presidential appointments for the USDA](#) are still unfilled.

A Tech Push for Farmers? Agriculture Secretary Sonny Perdue [focused on integrating technological innovation](#) into American farms. Perdue also submitted the [Task Force on Agriculture and Rural Prosperity](#).



Organizations around the country (including agricultural groups) will [participate in service activities](#).

Death-defying Dives

When you picture a university professor doing research, [it probably involved test tubes and beakers](#), not cave diving on the coast.

Calling All Vet

Students This program [supports promising veterinarian students](#) interested in food animal medicine.

Farmer Voices

Check out these animal agriculture [social media sites produced by farmers](#).



CAST Social Media

Click here for [links to CAST sites](#):

Twitter, Facebook, LinkedIn, Pinterest, videos, and blogs.

Reflections on Farm Policy: Former Secretary of Agriculture Tom [Vilsack responded to the comments](#) from President Trump and Secretary Perdue.

Credible or Not? The ACSH organization wrote a guide to identify whether or not a scientific paper has been published in a [legitimate scientific journal or a so-called predatory journal](#). They recommend that researchers, institutions, funders, regulators, and others work to assure credible science.

News from the Far Side of the Barn

A Snow No Go: Horses are [released to play in the snow](#), and they say, "Neigh."

Talk to Your Toilet and Cuddle with a Robot: The [annual consumer technology confab](#) features innovative products--some catch on, some don't.

Hitchcock Was Right about "The Birds": Researchers say certain [Aussie Outback birds spread fire](#) so they can feed on animals as they flee.



Winter made an unwelcome visit to Florida, and in some places it was [raining frozen iguanas](#). Most of them warmed up and survived.

CAST Challenges YOU in 2018

Announcements, links, and items keeping you tuned into some of the happenings and opportunities at CAST

You may have noticed an increased focus on social media and [effective science communication at CAST](#) in 2017. It's been said many times and in many ways that more than two-thirds of Americans use social media as a source for their daily news. Since CAST's mission is to serve as a source for unbiased scientific information, it is crucial for us to be a part of the discussion on science, technology, and all things agriculture.

Did you know that you can play a huge role in making CAST's voice heard? As a board member, volunteer, donor, or friend of CAST, you can help us achieve our vision--a world where decision making related to agriculture and natural resources is based on credible information developed through reason, science, and consensus building instead of fake news and fear.

It's as simple as following [CAST](#) on social media--engage with our posts through likes, re-tweets, shares, comments, or even simply leaving a review. Let's make bringing awareness to CAST and [actively advocating for science](#) a part of your New Year's resolution!



Contact Kylie Peterson (kpeterston@cast-science.org) for questions, comments, and input about CAST social media.

To access CAST's social media accounts, click on the icons below.



Note: Nominations are open for the [2018 Borlaug CAST Communication Award](#), an honor that recognizes professionals actively working in agricultural, environmental, or food sectors while also promoting agricultural science in the public policy arena. Due date--February 5.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 MLK announcement from flossmoor.org, stars colliding pic from sciencemag.org, cat pic from pbs.twimg.com, internet symbol from extremetech.jpg, and iguana pic from independent.co.uk. Animal Sec. chicken pic from pinterest.com. Food Sec. cartoon from moonbattery.jpg. Plant Sec. tomato pic from dailymoss.com. Inter. Sec. market pic from nationalgeographic.com. Gen. Sec. Wonka photo from wonka.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Facial Recognition (video): Veterinarians and computer scientists from UC-Davis are developing a way to [use facial recognition to identify pain in animals](#).

Chicken Check-in (Video): Baby chicks arrive at the farm within 24 hours of hatching. [See what their first days on the farm are like](#).

Terminator Cattle: [Gene editing can determine an animal's sex](#), and the techniques are being used to produce male cattle for better meat marketing.

Young Inventor: A young man with a "shocking product" was named Entrepreneur of the Year for his [device designed to save baby pigs](#) from being accidentally crushed by sows.

Biotech Bugs: A Cornell professor says that with the flick of a genetic switch, [agriculture could turn the sex drive of an insect](#) against itself.

Dairy Trends: This report examines three [dairy management trends](#) to watch in 2018.



"I don't know. You tell me first. Why did you cross the road?" This researcher says chickens have "[patterns of speech](#)" that reveal a lot about their well-being.

Dog Flu: Veterinarians and pet owners across the country are warning dog lovers to get their pooch vaccinated with a newly released drug after an [outbreak of canine influenza](#).

Pork Exports: According to this report, [U.S. pork exports broke another record](#).

Poultry Feed Efficiency: University of Arkansas scientists are out to discover the [impact mitochondrial activity in chicken cells has on a bird's](#) ability to convert food into muscle.



Food Science and Safety News

Kids and Diets Around The World: This photographer traveled around the world and [photographed kids alongside what they ate in one week's time](#).

Mislabeled? (opinion): This article looks at why it is no surprise that [consumers do not trust food labels](#).

Beneficial Fiber: Some research supports the concept that [dietary fiber can be a valuable part](#) of a healthful diet.

Naked Bacon: This Northern Irish food manufacturer is [looking to make "healthier" bacon](#).

Brain-boosting Bacon? This report says that [mothers who consume eggs and bacon](#) during the last three months of their term tend to have smarter babies.

Beyond Burger: The [Beyond Burger will be added to the menu](#) at more than 450 TGI Fridays U.S. locations nationwide.



Homer's diet plan did not work well. This writer gives [five reasons to opt out of the obsessed diet culture](#) this year.



Plant Agriculture and Environmental News

Neonic Freeze in California: Pesticide manufacturers and applicators are examining the impacts of a California decision to "freeze" uses for neonicotinoids while [the state re-evaluates their effects on pollinators](#).

Glyphosate Debate (opinion): Kevin Folta of the University of Florida says the attack on glyphosate is not science based and [farmers need to be part of the conversation](#) surrounding the weed killer.

Peanut Power: According to the Southern Crop Production Association, a five-year research project gives scientists a map to unlock some of the [genetic potential of the peanut plant](#).

Soybean Color: A study shows that lightening the color of soybean leaves [may increase the growth and yield](#) of this major world food crop.



Facial recognition technology may allow farmers to identify plant diseases from the field-- researchers hope to [train computers to recognize crop diseases](#) from photos.

Online Game about Ecosystems: Students learning to [balance agricultural production with environmental impacts](#) have a new resource developed by Iowa State University.

Grants for Organic Research: The USDA announced the availability of \$17.6 million in [grants focused on organic agriculture research](#), education, and extension activities.



International News

Dairy in the Emerald Isle: Record Irish [exports were led by dairy products](#) in 2017.

From Seed to Seat: This British [gardener](#) doesn't build furniture, he grows it.

Bird Flu in the Middle East: Iraq has [culled tens of thousands of chickens](#) amid a serious bird flu outbreak.

Hidden Hunger: HarvestPlus announced it has been awarded \$15 million as one of the finalists in a challenge to work on [a global problem--hidden hunger](#).



This [night market in Bangkok, Thailand](#), offers food stands and discounted goods for tourists and locals alike.

The Heat Is On Down Under: Australia had its third-hottest year on record in 2017, and farmers warn that [unpredictable seasons are hurting the \\$47 billion agricultural sector](#).

Bat Disaster (related to above): Hundreds of bats had their "[brains fried](#)" as Sydney experienced temperatures of 117 degrees Fahrenheit.

Sizing Up South American Crops: This is the time of year when [South American weather is critically important](#) for impacting potential crop yields.



General Interest News



Urban Ag Going Global: Researchers have assessed the value of urban agriculture and [quantified its benefits](#) on a global scale.

Willy Wonka Approves: Scientists are using [gene-editing techniques to help the threatened cacao plant](#)--the source of chocolate.

Driverless Tractors: This system allows a farmer to set staging and unloading locations in a field, adjust speed, monitor location, and [command the grain cart to sync precisely](#) to the speed and direction of the combine.

Top Ten Ag Deals: During the past year, [farm technology negotiations](#) included a few high-profile venture capital exits and some of the largest deals on record.

Gut Reaction: This edible sensor could reveal [what our gut microbes are up to](#)--science-based information about our food and medicines and their abilities to act in harmony with our resident microbes.

From Ice Cream to Ag: Dippin' Dots Company--[with its flash-frozen process](#) and 30 years of cryogenic experience--offers patented technology and equipment to other industries, such as ag and animal feed.

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.



If you have a good idea for a CAST publication, contact us by [clicking HERE for the "Proposal Format](#) and Background Information Form."

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 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
- * Croplife America
- * Crop Science Society of America
- * DuPont
- * Elanco Animal Health
- * 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.

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