

Friday Notes

Council for Agricultural Science and Technology

CAST

The Science Source for Food, Agricultural, and Environmental Issues

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

[--Share the Data and Reap the Rewards P. 2](#)

[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

Underwater Photos



The winning photos of the [2019 Underwater Photographer of the Year Contest](#) take you beneath the waves.

Cold Weather, Cool Views



Most of us might be excited for warmer weather around the corner, but some crowds are enjoying the extended bitter cold for viewing [ice castles](#).

Share Your Thoughts

If you are interested in writing a science-based commentary for the CAST blog, contact [Kim Nelson](#) for more information.

March 8, 2019

Celebrating Women in Ag

March is Women's History Month



Women may not be in the [majority](#) for agricultural professions, but they are certainly [leaving their mark](#). Historically, women have always been involved in agriculture. [Abigail Adams](#), wife of U.S. president John Adams, ran the farm while he was in Philadelphia during the American Revolution. In another century, Anna Baldwin patented one of the first milker machines in the United States. The [Women's Land Army](#), formed during World War II, is often highlighted as a major influence women had on United States agriculture.

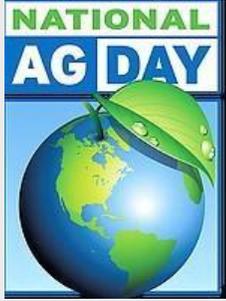
In more recent times, women are working to get their work recognized by larger audiences. Nonprofit [projects](#) focus on raising awareness of women farmers by keeping multimedia records. And it's working, as more women are being [recognized](#) for their impact on agriculture.

At CAST, we have had notable women lead our Board of Directors, publication task forces, and committees, as well as receive awards. To name a few, [Catherine Bertini](#) won the prestigious Borlaug CAST Communication Award in 2011. Three years later, [Alison Van Eenennaam](#), extension specialist at UC-Davis, was awarded the same honor. Last year, [Nancy Reichert](#) handed off the title of Board of Directors President to current President Gabe Middleton. And our latest commentary (available Monday) will be presented in Washington, D.C., by the task force chair, [Dr. Sylvie Brouder](#) of Purdue University.

As the month progresses, we wish to celebrate all women in agriculture for their contributions to the field.

News and Views

Next Week is
National Ag



Day

National Ag Day is set for March 14.

[Check here for information.](#)

Upcoming CAST Paper

Stay tuned for one of our next publication releases on April 15, *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape.*



GOT AN
IDEA?

Send in Ideas

CAST [welcomes suggestions](#) for future publications and projects.

No-Fly Zone



A [global analysis](#) states 100 bird species are in danger of becoming extinct because of current farming and forestry practices.

CAST Social Media



International Women's Day: Today also marks International Women's Day. This day is meant to celebrate women from around the world and create awareness of the challenges women face. [This article](#) notes the importance of social media's role in connecting women in agriculture to form a global community. And you can watch short clips introducing female farmers from around the world [here](#).

#WomenInAg: The American Farm Bureau Federation is honoring women leaders in agriculture [on their blog](#) throughout March.

Farmers Are Sustainability Experts: Dr. Frank Mitloehner of UC-Davis said that after tweeting his response to the Green New Deal's mention of "farting cows," freshman congresswoman Alexandria Ocasio-Cortez's office [reached out to him](#) to ask serious questions about agriculture: "Who in the world is a greater expert in sustainability than a farmer," Mitloehner said.

Wanted--Large-Animal Vets: South Dakota State University Extension Veterinarian Dr. Russ Daly says [the state is facing a shortage of large-animal vets](#) in rural areas. The shortage means universities are reorienting their programs to attract prospective students who want to stay in rural areas that are in most need of the specialty.

News from the Far Side of the Barn

Glo-worm, Ocean

Edition (video): A pair of scuba divers found a translucent, 26-foot-long tube of individual organisms called zooids that formed a pyrosome "swimming" off the coast of New Zealand. Oh, and [it glows](#).



[Picasso, the rescued pig](#), paints in its studio near Capetown, South Africa.

Exotic Smuggler: Filipino customs officials found four suitcases filled with more than [1,500 live turtles and tortoises](#). The animals have been turned over to the Department of Environment and Natural Resources.

Music Brings the Cows Home (video): In the past, we've featured trombone-playing [Farmer Derek](#) serenading his cows. Now, there is [a young girl](#) who plays a concertina accordion for her family's herd.

Share the Data and Reap the Rewards

CAST Commentary focuses on benefits of big data in agricultural research and strategies for sustainable data networks and collaborative efforts.

If you are using digital technology, you are generating a lot of data. Emails, surveys, clicking on links, "likes," posting to social media, filling out forms, etc.--it's all data.

The datasets organizations collect (the intentional and incidental) are changing how we conduct research, but much of it is difficult for scientists to access, especially in agricultural research.

For instance, a small portion of the dataset may be analyzed and the rest is locked away, unable to be used by research teams inside or outside of the organization. This exacerbates the current criticisms toward research conducted by academic and government institutions (think issues with reproducibility, transparency, and trust).



To combat these problems, some industries are working to make data equally accessible to all who benefit from its analysis. While agricultural research is only beginning to implement data-sharing strategies, the field has the opportunity to build and improve upon what has already been accomplished in other fields.

Of course, this is a big subject with a lot of points to be made, which is why we are publishing a commentary discussing the topic in more detail.

Download the paper and Ag quickCAST Monday, March 11, from [our website](#). If you're in Washington, D.C., drop into one of our [three presentations](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 women's history month created at canva.com, turtle photo from msn.com, cool views photo from apnews.com, bird extinction photo from bbc.com, picasso pig photo from msn.com. P. 2 technology photo from shutterstock.com. Animal Sec. green chimney school pic from nytimes.com. Food Sec. wine photo from pexels.com. Plant Sec. forest drawing from National Geographic--youtube.com. Inter. Sec. coffee photo from npr.org. Gen. Sec. rocket take-off image from nbcnews.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Animals Feeling Good (videos): Maybe it is because we are approaching the start of spring, but there has been an uptick in videos showing animals enjoying themselves lately. One [baby turtle](#) can be seen floating, flipping, and twirling during a swim in the tub with its siblings, and another shows a [felicitous skipping cow](#) enjoying the outdoors.

Meow That's Purr-fection: There was no cat-astrophe at Cornell University's first [Spay Day](#). No kitten, the spay-and-neuter event was paw-sitively received by the surrounding community, and they hope to hold fur-ture events to help the over-paw-pulation of cats in the area.



Pro Carbon Tax (opinion): Former BCCA winner Jayson Lusk comments on why a carbon tax for certain goods like meat could be [a good thing](#).

Broadening Horizons: A [new instrument](#) attached to the International Space Station will soon help farmers by collecting data around the globe on how plants use water.

Nature Helps Nurture: A school located on a farm in New York is helping [students with special needs](#) learn in a unique environment.

Work it, Merlin: Merlin the duck was born with a leg deformity, but he can now get around on land, thanks to a [wheelchair](#) specifically designed for the animal.

Green Chimney, located in the state of New York, has more than 240 special needs students enrolled. The farm provides a unique and beneficial learning environment for its students (read story at right).

Food Science and Safety News

Steak Mistakes (video): This foodie points out the most [common mistakes made when people cook steak](#)--and provides plenty of suggestions.

Mind Your Fiber: New research suggests [high-fiber diets](#) can aid certain cancer treatments. While the findings are rather new, one researcher on the team states that a high-fiber diet is probably not going to hurt anyone anyway.

Bean-nut butter: A fourth-year food science and technology student at Ohio State created an [allergy-free peanut-butter-like](#) spread out of garbanzo beans.

Beets to Dye For: Cornell food scientists--hunting for a stable, natural [red food coloring to replace artificial dyes](#)--have unlocked a secret: use beet extract and pair it with a starchy partner.

The 2019 Food Purge: The [FDA purged](#) more than 47,000 food facilities that failed to renew their registrations at the end of 2018, according to this article.

Wild About Wines: Some native grapes found in North America contain a "grapey" odor, and most experts agree that ruins the taste, along with an accompanying "grapey taste." But if you were exposed to the flavor early on, you're probably a fan, [this study says](#).



You only think you like that Cabernet Sauvignon because you "learned" to like the grapes it's made from, a new study suggests (read story at left).

Plant Agriculture and Environmental News

An Edible Forest (video): Motivated by climate change and weather-related "extreme events," a gardener in the UK created a diverse garden filled with [500 edible plants](#).

Plotting Campus Sustainability Efforts: An environmental sciences major at Mizzou created an [interactive map](#) to help students learn about the sustainability initiatives their campus has to offer.

Safe Weed Control: Purdue researchers have developed a compound [effective for controlling weeds that is also safe](#) for people and the environment.

Hemp Research: Kansas State Research and Extension specialists will begin growing and harvesting small, highly controlled [plots of industrial hemp at research facilities](#) around the state.

Tracking Traits for Tasty Treats: UC-Davis scientists [sequenced and analyzed the genome](#) that makes strawberries so juicy, sweet, and red.

A Need for Nature's Revival: This company is figuring out how to [speed up nature's recovery time](#) in deforested areas. Another [article reports](#) the rapid rise in human population is outgrowing the increase in agricultural technology.



Gardener Martin Crawford only spends a few hours a month maintaining an edible garden made up of 500 plants (read story at top right).

International News

Looking for Common Ground: A new article examines the perceptions of agricultural researchers, policymakers, and farmers in the EU. The study found [each group had different priorities](#) to achieve sustainable agriculture.

Cheesy in Thailand: Thailand isn't well regarded for dairy consumption--let alone production--so it might be surprising that a small city in the country's heartland is [building a reputation for its cheese making](#).

Maintaining the Daily Grind: A project in Central America is working with young adults to keep the coffee-farming industry alive. Most coffee farmers, [according to the article](#), average from 50 to 60 years old.

Bothered by Brexit: Despite the current uncertainty with Brexit, Britain's people are reportedly stockpiling imported foods that are likely to go up in price if the separation occurs. But one restaurant owner thinks it's [too early to be concerned](#) about food trade.

Salmonella Outbreak: At least 21 people have been sickened by a [Salmonella outbreak](#) in ten counties in Norway. As of Wednesday, officials are unsure of the source.



Coffee experts ages 15 to 20 are learning "climate-smart growing techniques" to keep the industry afloat in Central America, according to the article (at right).

General Interest News

The Nonrecruitment of Rural Students: Colleges prefer to send recruiters to metro areas because they are able to reach more high school students per trip, which leads to more profitable returns than visiting schools in rural areas, this [article reports](#).

'The 2019 Lunar Library': Israel sent a spacecraft to the moon in order to reportedly preserve human history. What's on board? "[A 30-million-page archive of human knowledge](#)."

Sweet! The U.S. [honey industry is thriving](#), according to this University of California study. The industry is responsible for 22,000 jobs and an economic output of \$4.74 billion.

Alternative Answers: Florida farmers are looking for sturdier crops that can withstand natural disasters such as the one caused by Hurricane Michael last year. [Hemp is currently being considered](#).

Blue-tiful Photography: Check out these [stunning photos](#) of marine life from around the world, and learn a little bit more about the animals that inhabit Earth's waters.



A DVD-sized object sent into space to preserve human history is designed to survive for 6 billion years (article at left).

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 Melissa Sly at 515-292-2125, ext. 232 or msly@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
- * 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 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.

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
- * Purdue 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



Dan Gogerty (Managing Communications Editor)
Kimberly Nelson (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 (Kimberly)
E-mail: dgogerty@cast-science.org and knelson@cast-science.org



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