

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

[Animal Agriculture News](#)

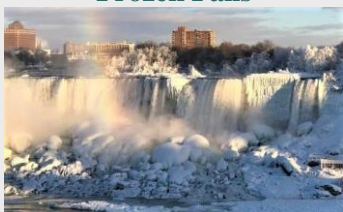
[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

Frozen Falls



If you're like Elsa and the cold doesn't bother you anyway, try [Niagara Falls during a freeze out](#).

Innovature

Innovature, a joint effort of the Biotechnology Innovation Organization and the American Seed Trade Association, is a platform to engage people in a [dialogue about the benefits of innovation in food and agriculture](#)--including the evolution of breeding methods such as gene editing.

BCCA Nominations

Nominations are open for the 2019 Borlaug CAST Communication Award--[forms and instructions are available here](#).



Input about Wetlands

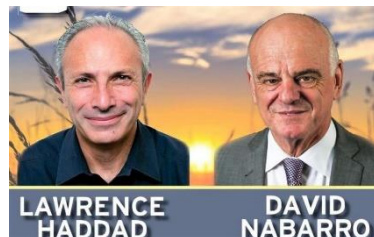
The USDA says [updated guidelines](#)

January 25, 2019

World Hunger and Malnutrition

World Food Prize winners provide insights

According to a United Nations report released four months ago, [hunger and malnutrition have been rising](#) during the past three years. The winners of the 2018 World Food Prize recently discussed some of the factors affecting this situation. Lawrence Haddad and David Nabarro are known for their work regarding world hunger and their special insights regarding maternal and child nutrition.



[During a recent interview](#), Dr. Haddad said, "This upward trend is serious but it shouldn't detract from the incredible progress we've made in reducing that number overall. It's worrying that it's been going up in the last three years, but we think we know why that's the case." Haddad listed climate, conflicts, and weather as key factors.

Dr. Nabarro added, "Nutrition is particularly critical in the interval between conception and a child's second birthday." Along with other observations, both men emphasize the crucial need for providing nutrients for women and young children--and the need for countries, organizations, and individuals to work together on the problem.

News and Views

Open Offices and Shutdown Impacts: U.S. Agriculture Secretary Sonny Perdue said all [Farm Service Agency offices](#) will reopen. This article provides updates regarding the [impacts of the shutdown](#)--including a look at the lack of crop and livestock report information.

Insights about Meat: Jayson Lusk (Purdue University) examines some of the [debates that have arisen about meat consumption](#)--especially in light of the EAT-Lancet report. Dr. Lusk was the [2017 BCCA winner](#).



Pork Congress Presentation: While speaking at the Iowa Pork Congress, Dr. Frank Mitloehner (UC-Davis) encouraged the protein industry to pay attention to [the agenda of the EAT-Lancet report](#).

[for wetland determinations](#) are posted and available for public input until February 5.

Send In Ideas

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

Career Fair

The spring version of the career fair sponsored by the [College of Agriculture and Life Sciences](#) at Iowa State is set for Feb. 6.

Pastures Please

The University of Kentucky will host its [Ag Equine Program](#) featuring pasture maintenance on January 28.



Beef School

The Ohio State University Extension Beef Team will host the 2019 [Ohio Beef Cattle School](#) on February 5.



Countering Climate Change: These Cornell University researchers analyzed 21 [natural ways to mitigate climate change](#)--including the use of forests, wetlands, and agricultural lands.

Smart Ag: The so-called "smart agriculture" market is booming as the "[Internet of Things](#)" transforms business and farming, from the United States to Africa and India.

News from the Far Side of the Barn

Chewing an Aqua Cud (video):

Grazing cows have a certain zen quality, and this [grazing sea cow adds an underwater aspect](#) to the procedure.

Feeling the Astral Vibe (video): This man is convinced crop circles are "[alien graffiti](#)," and this video looks at [one view of the phenomenon](#).

Circular Logic: This video indicates that [crop circles are complicated but explainable](#), and this article says many believe the circles are "[man-made](#)."



Crop circles are controversial (see links at left), but all agree they are photogenic.

CAST and Social Media

Ag-science info in a time of likes, tweets, and pins

At first glance, the information on this page might look like cold, hard statistics--but we like to think of them as warm, flowing indicators. OK, that might be a bit rich, but the point is this: CAST is focused on communicating credible, science-based information, and social media is an integral part of that process. The following notations show some of CAST's recent activity in this realm.

Twitter: In the past 30 days, CAST tweets were seen more than 52,000 times, and the account gained 95 new followers, with a total now of 6,728.

Facebook: CAST posts get attention through likes, comments, and shares. With 19 new followers in the past month, the total is now 1,463.

LinkedIn: During the past 30 days, CAST placed 52 posts that were seen 1,900 times. CAST gained 4 new followers for a total of 255.

Pinterest: CAST pins are viewed hundreds of times daily, and overall visits are up.

Blog: Even though December included the holidays, CAST's blog recorded 3,840 visits in a 30-day period. During January, blog hits passed the 200,000 overall mark since its inception.



CAST also offers information through its [website](#), [YouTube videos](#), and--most notably--its [influential publications](#). The website recorded more than 9,461 views during December, and the visitors come from throughout the United States and around the world.

Kimberly Nelson, CAST Communications and Social Media Specialist, is constantly monitoring and expanding social media connections and methods that will help spread important information about science and agriculture. You can contact her at knelson@cast-science.org.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Niagara pic from newsbeez.com, photo of two men from washingtontimes.com, globe pic from globe-world-grass.jpg, meat pic from sxc.jpg, wetlands pic from NRCA.jpg, and crop circle pic from nationalgeographic.com. Animal Sec. photo of Temple Grandin from umn.edu. Food Sec. recipe pic from nymag.com, and cake pic from foxnews.com. Plant Sec. lab pic from npr.org and hemp pic from beelinehempwick.com. Inter. Sec. wombat photo from tripadvisor.com and banana cartoon from pinterest.com. General Sec. farm sim pic from cdn.com and bear pic from independent.co.uk. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Eggs and World Hunger: Egg and nutrition leaders reached out to the Food and Agriculture Organization to highlight the [key role eggs have in the fight against hunger](#) and malnutrition in the developing world.

Global Pig Protection: A Minnesota pork expert looks at the [threat of African swine fever](#) in Asia and Australia--and the protection measures underway in the United States.

Livestock Welfare Research (related link in caption at right): Check out the science-based information in the CAST Task Force Report entitled [Scientific, Ethical, and Economic Aspects of Farm Animal Welfare](#).



Influential agriculturalist Temple Grandin continues to inform students and others about her [perspectives on humane treatment of livestock](#).

Cattle and the Environment: This new, comprehensive beef cattle life-cycle assessment found that beef production's [environmental imprint is often overestimated](#).

Controlling Poultry Disease: A California veterinarian [recommends that poultry exhibitions be cancelled](#) if they include birds from counties that are at high risk for Newcastle disease.



Beef Projections for 2019: This beef expert thinks of himself as a [reluctant but thoughtful prognosticator](#).

Accessing Gene Editing Tools (opinion): Famed animal expert Alison Van Eenennaam said [harmonizing the regulations associated with gene editing](#) in food species is imperative.

Science-based Research (related to above): Click here to access CAST Issue Paper 60, [Genome Editing in Agriculture](#).

Food Science and Safety News

The Shutdown and Food Safety: The FDA is being affected by the government shutdown, but Secretary Perdue reassures consumers that USDA [personnel are on site for key inspections](#).

What! How Many Get Food Poisoning Every Year? This North Carolina State expert gives [advice about food safety](#)--eat in, eat out, eat raw?

Food Safety Parody Videos: Carl Winter (UC-Davis) is known for his teaching, research, and [instructional food safety parodies](#). Note: Dr. Winter was [the 2012 BCCA winner](#).

GMO Literacy: People who most intensely oppose genetically modified foods [apparently know the least about it](#), according to a peer-reviewed paper.

High Fat, High Risk? According to these scientists, a high-fat diet is bad for both younger males and females, but exactly [how it is harmful may differ between the sexes](#).



Do You Believe in Unicorns? One of the [top-searched food terms](#) of 2018 was "unicorn cake."

Food Insecurity and the Rise of Obesity: This university study looks at the [link between food-related hardships and obesity](#).



The Joy of Hashtag Cooking: The Instagram snowball effect means a recipe can enter the home-cooking canon in a matter of days, not years.

Plant Agriculture and Environmental News

We're Shocked (video): Zapping weeds with bursts of electricity might not work for all occasions, but this Ohio farmer [demonstrates the technique on soybeans](#), and this article [explains the challenges and opportunities](#) of using "old sparky" as a weed controller.

Pesticide Research: A leading plant research institute and a development organization created a start-up called RNAissance. It will look at [RNAi technology to create pesticides](#) that have little or no environmental impact.

Integrated Pest Management: There's an app for this--new [data-driven enhancements help control pests](#).

High-tech Control of Plant Disease: A North Carolina State expert uses big data, advanced predictions, and [smartphones to help control a grass disease](#) that especially affects golf courses.



What Is It Good For? Farmers have a lot of [questions about hemp](#), so the founding chair of the National Hemp Association answered a few.

Cotton Spot Disease: Mississippi State experts have been [studying the responses of cotton varieties](#) to target spot disease incidents, especially considering varieties and locations.



Hacking Photosynthesis: Scientists have re-engineered photosynthesis, creating [genetically modified plants that grow faster and bigger](#).

International News

European Plastic Restrictions: EU member states reached an agreement to [restrict certain single-use plastic products](#) such as cutlery, plates, and straws.

Tricking Rhubarb: This British farmer "forces" rhubarb to grow in winter. It has a [bright pink hue, tender texture, and sharp taste](#).

Oh Canada--And Its Waste: This report says more than [half the food produced in Canada is wasted](#). The average kitchen tosses out hundreds of dollars worth of food products every year.

Research on Waste (related to above): Click here to access the CAST Issue Paper [Food Loss and Waste](#).



Going Bananas in Korea: Bananas already grow on an island off the southern coast of Korea, but some claim climate change is making it [possible in other parts of the country](#).

German Protest about Farming: Organizers said 35,000 people marched through Berlin [to advocate for changes](#) within the "industrial agriculture" system.



Australian officials are discouraging tourists from going for the popular ["wombat selfie."](#)

General Interest News

Tech Wows: Check this article for [one more look at some of the hit trends](#) at the CES tech show--from wearables to immersive gaming to health care.

Bees and the Environment: This article looks at agriculturally intense landscapes and the [effects they might have on bee diversity and pollination](#).

Bee Health Research (related to above): Check out the CAST Commentary entitled [Why Does Bee Health Matter?](#)

Can You Say "Phytophthora Food Rot"? Mark Parker lists his [top 10 coolest things about being a farmer](#).

Learn by Doing (interview): This Cal Poly alum talks about "learn-by-doing" lessons at school that help him with his [award-winning olive oil production](#).



On the Rocks? Greenland's [ice is melting faster](#) than scientists previously thought, with the pace of ice loss increasing fourfold since 2003, according to this new research.

Risks and Rewards: This profile looks at a young couple [working hard to make a success out of farming](#).



A software corporation announced the Farming Simulator League, a competitive tournament for the [popular PC series, Farming Simulator](#). Click here for a [long tutorial about the game](#).

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



Note: Land O'Lakes provides sponsorship for the distribution of *Friday Notes* to the National Association of Agricultural Educators.

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 (Kylie)
E-mail: dgogerty@cast-science.org and kpeterston@cast-science.org



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