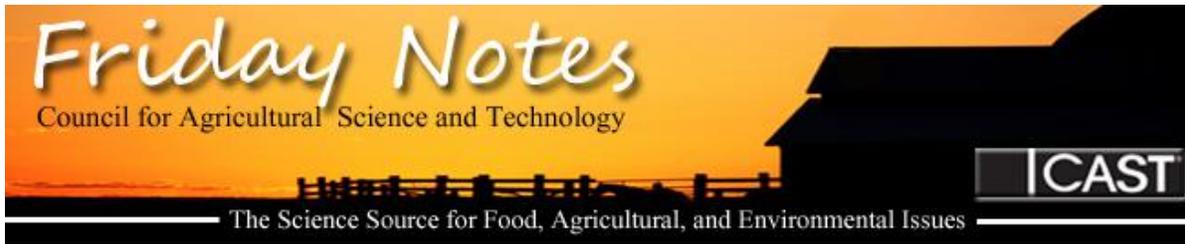


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Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, 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](#)

[What Is the Sound of One Hand Clapping?--P. 2](#)

[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

The Art, Teamwork, and Beauty of a Barn Raising

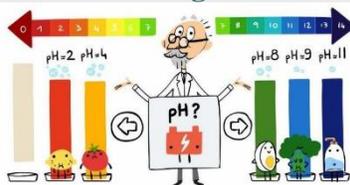


This time-lapse video shows the [amazing coordination and effort it takes to build a barn.](#)

World Pork Expo

[World Pork Expo](#) is an event much anticipated by animal agricultural enthusiasts of all ages. Check out the [top 5 things you don't want to miss](#) at this year's event.

Science Google Doodle



Google celebrated SPL Sorensen, a Danish biochemist who [founded the pH scale system.](#)

Ag Grad Opportunities

June 1, 2018

Trade Tensions and Global Competitiveness

How does public R&D fit into this equation?

In the current global trade climate, situations could change by the time this paragraph is finished. But it now appears that President Trump is [imposing steep tariffs on steel and aluminum](#) from three of America's biggest trading partners--Canada, Mexico, and the European Union. The administration also indicated it will take steps to impose 25% [tariffs on \\$50 billion worth of Chinese goods](#) and establish broad investment restrictions along with pursuing litigation at the WTO. Several [countries have promised to impose retaliatory tariffs](#), with agricultural products on the lists.



Farmers are increasingly concerned about global competitiveness and the threat of a possible trade war affecting their bottom lines. [In this article](#), Mark Keenum, president of Mississippi State University, explains the importance of public R&D and the problems that arise as America's global share in public research falls. He points to the Foundation for Food and Agriculture Research as one model for helping to bridge the gaps, and he also says the upcoming Farm Bill is an opportunity for Congress to support the resources and innovation needed to meet the challenges ahead.

News and Views

Biotech and Trade: According to this study, the U.S. biotech industry says delays in Chinese approvals hurt the value of U.S. corn harvests by [preventing farmers from using new seeds](#) that can protect crops from pests and weeds. Check out the [related CAST Commentary](#), *The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation.*

One of CAST's member universities is featured in this list of highly specialized agricultural [graduate certificate programs](#).

Submit an Idea

We welcome suggestions for future CAST publications and projects. [Click here to submit ideas](#).



Hawaii's Fiery Beauty



As these [stunning photos show](#), Kilauea's eruption is affecting part of the Big Island in Hawaii, but the state wants tourists to know that it is [still safe and pleasurable to visit](#) the "paradise islands."

Summer Shark Project

A Mississippi State shark expert and student researchers are on the Gulf Coast [analyzing local shark populations](#).



Catch CAST Online!

Follow us on [social media](#) to stay up to date on the latest ag trends and recent CAST news!

Storm Disaster: People in Puerto Rico have endured the devastation left behind by Hurricane Maria since the storm hit eight months ago. Many still struggle to get clean water and medical care, and [new reports say the death toll was much higher](#) than originally stated.



Merger Approved: The U.S. Justice Department [approved Bayer AG's acquisition of Monsanto](#), as long as Bayer sells approximately \$9 billion in businesses and assets to BASF--such as vegetable oils, seeds, and seed treatments--"[to ensure fair competition in the market](#)."

EPA in Court: An [ethanol coalition is suing the EPA in federal appeals court](#) over RFS "hardship" waivers they say were granted to three large oil refiners in what constitutes an abuse of the EPA's authority.

News from the Far Side of the Barn

Rare Quadruplets

(video): The [chances are 1 in 11.2 million](#)--making this family the luckiest cattle farmers in Minnesota.

Hippo Power (video): When a wildebeest gets caught by a crocodile, a [herd of hippos decides the watering hole is their turf](#).

Donkey Gets a Leg Up: A miniature donkey is walking again after [part of his leg was amputated](#) and replaced with an artificial one.



Ridin' the L Train in Chicago. [Coyotes are colonizing](#) nearly everywhere. And a [past blog](#) looks at coyotes and other "[wild things](#)" that mix with humans.

Standing Up for Science

Guest bloggers help with CAST's mission

Friday Notes often features links to blogs by science experts such as Jayson Lusk, Kevin Folta, and Alison Van Eenennaam.

This week, CAST features a guest blog written by the president of the American Council on Science and Health--[Hank Campbell](#). CAST has benefited from the contribution of several guest bloggers--such as [Jason Riis](#), [Gregory Jaffe](#), [Wanda Patsche](#), [Carl Winter](#), and [Roxi Beck](#)--whose views support our goals and mission. They provide an outside perspective and often generate thought-provoking conversations.

Campbell's blog does just that as he encourages scientists to stand up for science even if their political allies are against it. He thinks too many experts qualify issues with the "on the other hand" phrase. As he says, "If you are in any kind of application-relevant field, be a one-handed scientist."

Campbell believes the science community loses ground by using nuanced language. He says they offer qualifications, expectations, and limitations when speaking to the public on issues that are obvious. "It is time to stop talking about the other hand because it creates false balance. Basically, I argue we need to find more one-handed scientists."

[Click here for full access to this week's blog](#), "Will Somebody Find Me a One-Handed Scientist?!"



Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 barn pic from thisiscolossal.com, lava pic from usgs.gov.png, globe graphic from nutritionforthehealthofit.com, Puerto Rico photo from pogo.org, and coyote pic from npr.org. Animal Sec. pig pic from wsj.net. Food Sec. spam pic from theoutlet.com. Plant Sec. succulent pic from vox-cdn.com. Inter. Sec. Botswana poster graphic from vimeo.com. Gen. Sec. tractor pic from agriculture.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News



How Do You Milk a Water Buffalo? (video): These Arkansas farmers have added [some unique livestock--water buffalo](#).

Continuing through the court, litigation against a major pork company in North Carolina has [implications about how food is produced](#).

Poultry under the Lights: This North Carolina State graduate student studies the [effects of LED lighting on bird behavior and performance](#)--with some interesting results.

Cow Horns and Biotech: Two North American teams of dairy genetics experts have joined ranks to speed up access to [genetics for hornless dairy cows](#).

Rumen Efficiency: A new decision-making tool was created to focus on [nine holistic indicators to assess feed efficiency](#) of dairy cattle.

Beef Up on Your Terminology: This article takes [another look at the terms](#) regarding grass-fed, grass-finished, and conventionally raised beef.

Wild Duck Experience (video): Each year, more than fifty UC-Davis students [gain hands-on experience working with wood ducks](#).



Food Science and Safety News

Conventional vs. Organic--You Decide (video): The only difference between these two production practices is the price tags--this video [sheds some light on the subject](#).

Secret behind Baby Carrots (video): From picking to bagging, [this video explains the secret behind](#) how baby carrots are made.

Keeping the Fake Out: The Organic Trade Association announced a groundbreaking pilot project to [prevent and detect fraud in the global organic system](#).

Fire Up the Facts (video): Whether [you're the king of the backyard barbecue or master of the grill](#), these two resources [address a few myths about eating off the grill](#) during these hot summer months.

Bettlejuice for Breakfast? While most would prefer to see cockroaches squashed on the sole of a shoe, the [creepy critters may soon be popping up on cafe menus](#) across the nation.

From Big Stuff Oreos to Cheetos Paws: This report dives into [long-vanished sweet and savory snacks from the 60s through the 90s](#)--ones that had loyal followings in their time but have been all but forgotten.



SPAM lovers recently gathered in Hawaii to [celebrate the legendary food](#).



Plant Agriculture and Environmental News

Travel Deep Inside a Leaf (video): Enter the stoma and [view photosynthesis on a molecular level](#) by taking a journey through the inside of a redwood tree leaf.

Seaweed Supplement (video): UC-Davis researchers say [seaweed may be the super food dairy cattle](#) need to reduce the amount of methane they burp into the atmosphere.

Golden Rice Gets Approved: The USDA says that GR2E [Golden Rice received a positive food safety evaluation](#)--the first nutritionally enhanced, genetically modified rice to receive such approval.

Questioning WASDE (opinion): The USDA's World Agricultural Supply and Demand Estimates (WASDE) are the global benchmarks for assessing crop yields, but [this editorial says the methods used are faulty](#).

Fungicide Coming on the Market: This [caboxamide fungicide has been approved by the EPA](#), and marketing will begin in late 2018. It can be used in corn, soybeans, wheat, peanuts, grapes, vegetables, and potatoes.



Due to a drought, social media, and a generation of itinerant aspiring gardeners, the succulent has become [one of the trendiest members of the plant kingdom](#).



International News

DryCard Invention (video): This new low-cost invention [can help prevent food spoilage](#) while advancing food security and health around the world.

It's a Small World? This study looks at small farmers--[how much of the world's food do smallholders produce?](#)

Cat-proof Fence: Feral [cats are a threat to native animals in Australia](#), so one region is trying to physically shut them out.

Easing Global Crises (opinion): When dealing with disease and poverty, Bill Gates says it is important to fund development assistance programs and multilateral partnerships that are working--including [programs that use scientific discovery and technological innovations](#).

Pig Immunology: British researchers have generated a new tool that allows scientists to [identify virus proteins recognized by the immune system](#)--leading to the development of more effective vaccines.



This ["flow motion safari"](#) seamlessly transitions from one stunning locale to another.



General Interest News

The Power of Body Heat (video): Based on research conducted by a team at Texas A&M, it may one day be possible to [power electronics by using your body heat](#).

The Buzz on Climate Change: According to a recent university survey, the result of erratic weather patterns brought on by climate change [may be causing honeybees to die](#) at faster rates.

Climate Change and Ag: Food Tank's Danielle Nierenberg featured [some climate change solutions](#) at the 2018 General Assembly of the World Farmers' Organization.

Who Owns the Farms? (podcast): This agriculturalist explores the [history of farmland ownership](#)--who actually owns the land and what this all means for farming.

Discovering Dinosaur Genomics: An Iowa State scientist has contributed to a study offering a tantalizing [glimpse of what a dinosaur genome might have looked like](#).



In case you feel as if you're just spinning your wheels, these [videos of sprayers stuck in the field](#) might help you get some traction.

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.



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- * 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
- * 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

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