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

The Importance of University Research--P. 2
Animal Agriculture News
Food Science and Safety News
Plant and Environment News
International News
General Interest News

You're Not Superstitious
But just in case Friday the 13th gets to you, this ag writer lists 13 farming superstitions, and this link provides several common beliefs according to the Farmers' Almanac.

CAST Events in D.C.
CAST invites you to a presentation on Scientific, Ethical, and Economic Aspects of Farm Animal Welfare. Dr. Candace Croney will present highlights of this CAST Task Force Report on April 23 in Washington, D.C. Also, on April 24 in the nation's capital, please join CAST for a presentation by Jayson Lusk on the Politicization of Food Consumption and Communication--followed by an announcement of the 2018 Borlaug CAST Communication Award winner.

Celebrate Earth Day!

April 13, 2018

Biotech Regulations Update
CAST publication ties in with current media

The recent CAST Issue Paper regarding biotech regulations continues to have influence, with more than 2,000 website downloads. The press release created buzz with 5,000 opens and mentions from companies, universities, organizations, and well-known social media influencers. CAST Communication Specialist Kyle Peterson states, "We expect these numbers to rise as this topic generates further discussion in the science community."

With genetic innovation such a highly visible topic in the news, other recent releases have also focused on it.

In this segment of a multipart series on U.S. biotech regulations, the Genetic Literacy Project looks at the nuts and bolts of how the system works, especially in the realm of crop production. The organization will cover biotech animal regulations in its next installment.

Also this week, UC-Davis professor Alison Van Eenennaam's latest article addresses the situation regarding animals in her article "The Importance of a Novel Product Risk-Based Trigger for Gene-Editing Regulation in Food Animal Species."

Two popular documentaries complement the release of CAST's biotech regulations paper: Well Fed follows two men from Amsterdam who set out on a quest to discover the truth about GMOs. And Food Evolution explores food-related challenges we face globally, the critical role science plays in addressing them, and public perceptions involving the science of food.

News and Views

On the Hill: Ag Secretary Perdue sought to reassure senators about the RFS, trade, and a host of issues--including the president's 2019 proposed ag budget. Some senators voiced their concerns.

More Buzz from D.C.: A draft of the 2018 Farm Bill includes potential changes to several programs. Other reports indicate that President
Earth Day is set for April 22 and it could be the perfect opportunity to share how your farm, company, or industry is committed to taking care of the natural resources in your community.

Pig Research
The National Pork Board is partnering with the Foundation for Food and Agriculture Research by jointly putting up $2 million for a competitive research program to improve pig health.

Northey on Beef
U.S. Under Secretary for Farm Production and Conservation Bill Northey will be the keynote speaker April 24 at a Texas A&M AgriLife Beef Cattle Conference.

Catch CAST Online!
Follow us on social media to stay up to date on the latest ag trends and recent CAST news!

News from the Far Side of the Barn

Reap What You Sow: A man who ate a Carolina Reaper—the world's hottest chili pepper—in a chili-eating contest ended up in the hospital after experiencing “thunderclap” headaches.

Mesmerizing Beauty (video): Footage of rainbow mist rolling off Yosemite Falls is a stunning sight to see.

Another Reason to Go Paperless? Apparently, elephant dung is an excellent source of cellulose for paper manufacturing in countries where trees are scarce. Cow and goat manure might work well, too.

The Importance of University Research
A Collaboration of Recent Studies and Discoveries

Every day we reap the benefits of discoveries made or knowledge advanced from public and private research universities. They continue to produce discoveries that improve the health of living organisms, grow our economy, provide an innovative hands-on learning environment for students, and enhance our day-to-day lives in profound ways. CAST appreciates the work of our 14 member universities that complements our mission of serving as a catalyst and voice for credible, balanced, science-based information. The goal of these universities—developing the minds of future scientists and agriculturalists paired with their internationally respected research programs—makes their work extremely valuable.

Trump might be interested in rejoining the Trans Pacific Partnership and making E-15 blends of gasoline available year-round.

More Innovation Needed? According to this report, agriculture is the least digitized of all major industries—but this report looks at five high-tech farming trends that are emerging.

Optimistic about Tech: Bill Gates believes that during the next decade, gene editing could help humanity overcome some of the most persistent challenges in global health and productivity.
In this week’s blog we highlight several recent findings from an array of universities. Here are a few examples of the stories we featured:

**From Moo to Brew:** This Cornell professor is working to turn dairy waste into a flavorful drink with an alcoholic kick. Dairy by-product beer could soon be found on tap near you.

**Product with Potential:** A wind-powered grain drying system developed by students at the University of Kentucky could improve grain quality and human health in Africa.

**Entomology Experiment:** This Kansas State doctoral student in entomology recently spent time in China learning about new ways to attract beneficial insects to the habitat around farmers’ fields.

**Space Gardener:** This University of Florida student is developing imaging procedures for a GoPro with hopes of using this technology to grow food on Mars.

As colleges prepare for summer break, CAST continues to encourage collaboration through educational membership, free student membership, or other forms of association.

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**Friday Notes News Categories**


**Animal Agriculture and Environmental News**

Click here to access Poultry Science—original papers, research notes, symposium papers, and reviews of basic science as applied to poultry.
From Feed to Fever (video): Kansas State University is involved in researching the African swine fever's ability to spread through imported feed and feed ingredients.

Fertility Research (video): An Iowa State professor studies how environmental stress, obesity, and chemical exposure affect female fertility and reproduction in humans and animals.

Cowboys in the Great North: Alaskan cowboys are raising cattle--from Angus to Texan Longhorns--and locals get pasture-fed beef.

Pig Health: This university researcher says recent interest in the microbiome and its effects on infectious disease has expanded to include pathogens primarily affecting the respiratory tract.

Gut Reaction (related to above): This article examines common gut health measurements reported in the literature and how to interpret their relevance for achieving improved performance in pigs.

The Scoop on Cow Poop (video): This film clip looks at responsible environmental practices for dairy farms as they manage animal waste.

Pet Food Recalls and More: The American Veterinary Medical Association site shows recalls and alerts announced by the FDA and/or manufacturers in the last 90 days.

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Food Science and Safety News

Online Grocery Shopping (video): ABC News and UC-Davis’s post-harvest extension specialist compared three same-day delivery services by placing simultaneous orders and judging the results. Note: related link in caption at right.

For Some, It Is a Medical Necessity: A study suggests it may be even more difficult than previously thought to remain gluten free.

Nanoparticles and Digestion: Food packaging could be negatively affecting the way your digestive tract operates, according to this university research.

Omega-3 Booster: Scientists looking to boost the levels of healthy fats in eggs have found that increasing oleic acid had an unexpected effect on levels of omega-3.

Omega-3--Related Event: Watch for information next week about the CAST Issue Paper Omega-3 Fatty Acids: Health Benefits and Dietary Recommendations. Plans include live streaming of the presentation on May 8 in Minneapolis, Minnesota, with the finished video posted on CAST’s website.

Just Eat Plenty of Fruits and Veggies! (opinion): The dirty dozen list of fruits and veggies came out again, but this article says such lists are counterproductive.

Veggies and Nutrition (opinion): Switching to a plant-based diet has raised questions about nutrient deficiencies. This article looks at some of the concerns.
No-till for the Soil (video): Farmers throughout the country are working to regenerate life-giving soil. This [clip looks at the no-till method](http://example.com)

Green Light for Biotech Wheat: The USDA has concluded that a [new gene-edited wheat](http://example.com) should not be subject to the regulatory process to be approved.

Robotic Revolution: With the immigration debate raging on in D.C., some believe this could [drive the innovation and adoption of robotic use](http://example.com) in agriculture.

Corn Prices: Market attention has been on the possibility for soybean price volatility because of the Chinese tariffs, but [some analysts think corn could move higher](http://example.com) over the next couple of years.

CRISPR Cassava: A UC-Berkeley professor says cassava is an important staple crop for about 800 million people--and [scientists plan to use CRISPR to make the crop safer](http://example.com).

Monster Yield: This Virginia farmer won the 2017 National Corn Growers Association yield contest with a [monstrous 542 bushels per acre](http://example.com).

Changing Ag in China (video): This town in China is trying to improve field infrastructure, [promote climate-smart farming practices](http://example.com), and support sustainable agriculture.

Park Ranger Tragedy: In recent years, poaching and civil war have seriously damaged the Congo’s wildlife population--and [175 park rangers have been killed](http://example.com).

Sheep Scandal? The Australian government will investigate the mistreatment of animals after reports of thousands of [sheep dying from heat stress](http://example.com) on board a ship traveling to the Middle East.

Milky Risks? New Zealand’s government is reminding people to be aware of the [risks that come with drinking raw, unpasteurized milk](http://example.com).

Battling the Armyworm: Kenya could lose half of its maize crop and face a massive food crisis following an [invasion of the fall armyworm](http://example.com).
Fatally Trashed: A young whale found dead off the coast of Spain had 64 pounds of garbage in its digestive system--trash bags, polypropylene sacks, a drum, net segments, and other things in its stomach and intestines.

General Interest News

Yoo-hoo, Over Here (video): Amazon has been granted a patent by the government for a delivery drone that can respond to human gestures--the flying robots might interact with human customers waiting on their doorsteps.

Amazon Left a Pig on My Doorstep: Check out the links and reflections about deliveries from this blog.

Just Out Feedin’ the Cows (video): This young farmer uses a contraption called a bale bed attached to the back of her car to load up a big bale and unfurl it for a group of happy cows.

Frog Findings (video): A University of Nevada-Reno disease ecologist went on a search to help prevent frogs from extinction but instead found clues on predicting and responding to something much bigger.

Shazam for Agriculture: This app allows you to identify plants and animals from photos by harnessing image recognition technology--combining artificial intelligence and neural network technologies all from your smartphone.

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 Colleen Hamilton at 515-292-2125, ext. 224 or chamilton@cast-science.org, or CLICK HERE for CAST membership information.

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