

Friday Notes

Council for Agricultural Science and Technology

ICAST

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 the CAST organization.

In This Issue..... Click to Read

[Social Media Influencers and CAST's Strategic Plan--P. 2](#)

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Lake Pepto Bismol?

From Australia's pink lake to a blood-red waterfall in Antarctica, [these seven destinations](#) are some of the world's strangest sights.

Ag and the Curriculum

A Texas A&M study looks at the [need to incorporate animal husbandry](#) into the United States higher education curriculum.

Challenging Educators to Increase Interest in Ag

The USDA, Purdue Univ., and Iowa State Univ. estimate that more than [22,000 jobs in agricultural disciplines](#) may go unfilled every year through 2020.

Carbon Neutrality

This Cornell University professor spoke about the recently released report regarding [efforts to achieve a carbon-neutral campus](#) by 2035.

October 28, 2016

Ag Merger Proposals

Considering the long-term effects

The United States and other countries have seen a flurry of agriculture corporate merger proposals, and even though many quick responses and predictions have resulted, the effects will evolve over time. Farmers, corporate executives, investors, employees, and policymakers will no doubt read, discuss, and debate. The following links (informational and opinion) provide a number of pieces in the information puzzle about the various proposals:



** High-profile deals that would see some of the largest global [agri-chemical companies combine](#) are in the works.

** Regulators will [likely force merging agricultural companies](#) to sell off parts of their businesses.

** Top corporate [officials defended their proposed merger](#) before skeptical senators, insisting that the deal would lead to greater investments in technology that could help American farmers.

** This commentary states that these moves could trigger structural [changes to the foundations of the American food system](#).

** Two large Canadian [fertilizer producers agreed to combine](#), but the new company's potential pricing power may attract tough regulatory scrutiny.

News and Views

FFA Honors

The National FFA Organization [named its top chapters](#) during the 89th national FFA gathering.

Soil Judging Awards

Kansas State University's [soil judging team won first place](#) in the "Overall Team" and second place in the "Group Judging" categories at the 2016 Region 5 Soil Judging Contest hosted by the University of Nebraska-Lincoln.

AGventure in San Luis Obispo

Cal Poly students helped elementary [school kids learn where their food comes](#) from at the Great AGventure.

Trans Atlantic Equine Experience

A Mississippi State University equine specialist and his team of students and staff members recently shared the American tradition of Western [horseback riding during clinics conducted in Europe](#).

Take a Bath



The internet, social media, and various digital tools have become key to ag communication--but this blog looks at [how to power down and use nature](#) to do an analog cleansing.

CAST Social Media

Click here for [links to CAST sites](#): Twitter, Facebook, Pinterest, LinkedIn, videos, and blogs.

****Ag Nearly Invisible at the Debates:** Even if it was not discussed during the presidential debates, American [agriculture continues to be important](#).

****Let's Talk:** The U.S. Farmers and Ranchers Alliance announced a "Straight Talk" campaign, hoping to "engage the food industry in a [dialogue on sustainable agriculture production](#)." The program is a response to Dannon's pledge to eliminate GMO feed from the diets of some of the animals that produce its dairy products--a troubling move for many agriculture interests.

****Electric Infrastructure and Rural Upgrades:** The USDA says it will provide \$3.6 billion in loans to finance 82 [electric infrastructure upgrades](#) in 31 states--creating jobs and improving system operations for rural electric customers across the country.

****Companies, Growers, and Water:** Seven major food companies announced commitments to work with thousands of growers in their global supply chains to [reduce water use and pollution impacts](#).

****Summit in the Gateway City:** The CAST Annual Fall Meeting was held this week at impressive agricultural locations in St. Louis--including a Monsanto research center, a Danforth science center, and the St. Louis Community College campus at BRDG Park. Aside from important board meetings and organization reports, the three days included presentations, tours, and chances to share ideas about science and agriculture. [Check next week's Friday Notes for news and photos about the gathering.](#)

News from the Far Side of the Barn

Cute, Awkward, Weird, and Funny (photo essay): The organizers of the [International Comedy Wildlife Photography Awards](#) made a compilation of the best photos.

Modern Wonder Woman

(video): This wingsuit skydiver holds the [world record for fastest flying woman](#)--swooping along cliffs at 120 mph. To be honest, such flights do not always work out. This daredevil [flew too close to a tree](#)--but sustained only minor injuries.



Ever had one of those days?

I'll Let You Milk the Tasmanian Devil: Tasmanian devil milk contains a class of antimicrobial peptides called "cathelicidins," and scientists [hope it might kill the dreaded superbug MRSA](#).

Agriculture and Social Media

What does it take to be ag influencers?

Organizations must use the digital modes best suited to communicate their messages--and they need to consider mission, audience, effectiveness, and feasibility (staff, money, time, image). Considering its mission of providing credible, science-based information to policymakers and the public, CAST is evaluating its social media efforts and--using the structure of a strategic plan--looking at where to go next in the brave new world of digital communication. This [blog takes a look back, a look at current trends, and a look at CAST's action plans](#). It also provides links to articles about social media influencers (creative whiz kids), a social media guru with suggestions for agriculture (Don Schindler), and agriculture media successes such as Alison Van Eenennaam and the Peterson Brothers.



The Peterson Brothers' [parody about football and farming](#) follows on successes like their Gangnam Style farmer hit that racked up more than 16 million views.

CAST Currently Uses Social Media for Ag/Science Communication

- ** [Website \(all social media site links available at this location\)](#): Approximately 50,000 visits in past year from every U.S. state and 188 countries
- ** Twitter: More than 5,300 followers; daily tweets, retweets, likes; used to gather info too
- ** Facebook: More than 840 followers; daily "CAST CATCH of the DAY" entries (30 to 500 hits)
- ** Blog: 310 posts; few followers but average 2,000 to 3,000 visits per month; some linked or republished in newspapers, magazines, and on other websites; topics range from CAST research to farm issues to student contributions
- ** Pinterest: More than 650 followers; regular pins, repins, and postings
- ** Linked In: 98 followers; a few postings but not yet active in group sessions
- ** YouTube/SchoolTube: videos online; YouTube CAST clips have 143,800 or more minutes watched



CAST Strategic Plan and Social Media

Basic Overview--CAST's social media should deliver focused messages that are highly accessible to various influential audiences:

1. Identify and define audiences
2. Target messages to key audiences
3. Amplify through increased use of social media

Specifically, staff members are:

1. Rewriting the social media guide pages
2. Evaluating social media modes now in use, including Twitter, FB, the blog, and Pinterest
3. Considering what action to take with LinkedIn--expand use? revamp page?
4. Considering other modes such as Instagram
5. Using training sessions to enhance staff abilities
6. Deciding how much time, money, and staff effort to put into social media

Staff members are using these and more strategic plan guidelines to figure out "the shape of things to come" in the realm of CAST and social media communication.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 pink lake pic from ichef.bbc.co.uk, merger pic from blueprints.com, unplugged pic from wired.com, and bull pic from birdinflight.imgix.net. P. 2 Petersons pic from iptv.org. Animal Sec. pig pic from livesscience.com. Food Sec. map from digg.com. Plant Sec. cat pic from boredpanda.com. Inter. Sec. bullfighter pic from msn.jpg. Gen. Sec. outhouse pic from google.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

DairyMinded Insights: These experts create, collect, and analyze consumer insights, scientific research, and new opportunities--and they inspire others as they [communicate about the future of the dairy industry](#).

Veterinarian with a Mission (video): This dedicated, young veterinarian helps remind hog producers of the higher-than-ever animal welfare standards pork consumers are demanding these days.

Chicken Welfare Debate: Activist groups and consumers pressured big companies to turn to cage-free eggs, but [conditions for the chickens](#) are not necessarily improving.

Which Farm Animal Can Play Video Games? This site [provides ten interesting facts](#) about cows, sheep, pigs, chickens, turkeys, and goats.

Pigs at Play (related to above): Check out this blog--[Pigs That Fly, Drink Beer, and Enjoy Games](#).

Enrichment for Sows (related to above): These Canadian researchers are looking at [enrichment materials that might be best for sows](#)--rope, straw, and chains?

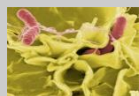
Millennials and Meat (opinion): According to this writer, animal agriculture needs to share stories about stewardship and sustainability with a [generation that has developed certain views](#).

Reducing Ammonia Pollution: Improved barn design, cleaning processes, and manure treatment could [reduce ammonia emissions](#) from commercial dairy cattle barns, according to this study.

Poultry Study Grants: The USPOULTRY Foundation [awarded student recruiting grants](#) of more than \$291,000 to six universities with poultry science departments and 26 institutions with related programs.



I'd be playing Pokemon Go but my thumbs are not yet opposable.



Food Science and Safety News

Farm to Robot to Table: Automation is shaping up to be [today's food revolution](#).

Pepper, Wine, and Hard-boiled Eggs?

Making Food Better: Researchers [suggest these eight tweaks](#) to make "good-for-you" foods even better at your next meal.

Would You Count My Calories? I'm Too Busy Eating:

These researchers show why fast food menu calorie counts [do not necessarily help consumers](#) make healthy choices.

A Taxing Situation: At least four cities--including Boulder, Colorado--will vote on [whether or not to enact a sugar tax](#).

Tomatoes in the Fridge? Just Say

No: An international group of horticulturalists published an extensive study looking at the [effects of refrigeration on flavor compounds in tomatoes](#).

Food Illness Research: Australian researchers describe how [particularly virulent strains](#) of *Campylobacter jejuni* are able to cause gastroenteritis in humans.

Preventing Food Spoilage: According to food experts, there are a few [tried-and-true ways to slow down the spoilage process](#) on a few of our favorite foods--here are six of them.

Humor, Microbes, and Food Safety: Dr. Carl Winter of the University of California-Davis (2012 BCCA winner) has a selection of [parody music videos](#) promoting food safety.



Which two states favor Laffy Taffy?



Plant Agriculture and Environmental News

Curing Insomnia (video opinion): These five plants for the bedroom are [supposed to help you sleep](#).

Flame Throwers (video): From the innocuous bell pepper to the infamous ghost chili, here's a [ranking of the spiciest peppers](#)--some provoke extreme reactions.

Popular Herbicide Stirs Plenty of Debate (opinions): This University of Nebraska weed specialist examines why some [scientists disagree about the cancer risks](#) of glyphosate.

Vertical Farming: This venture farmer is looking into the possibility of undertaking a [hydroponic, vertical farming operation](#) in a 40-foot, insulated shipping container.

Pushing for Tree Diversity: These Kansas Forest Service projects are designed to [encourage the planting of different kinds](#) of trees by showing the public examples of what the trees look like.

Rolling in the Clover: Researchers have released a [new white clover variety](#) called Renovation--developed to extend the life of perennial grass pastures and improve forage quality.

Grants for Organic Ag: The United States Department of Agriculture announced more than \$17 million is



Catnapping in the planter.

[available for research and outreach](#) to support the organic agriculture sector.

Saving a Crop: When a new pest threatened to destroy an Amish community's 2016 sorghum crop, [University of Kentucky experts stepped in to help](#).



International News

Benevolent Vampires (video): Drones [carrying lifesaving blood](#) to rural medical clinics now soar through the skies over Rwanda.

Grounded Drones: Sweden's Supreme Court overturned a lower court decision and [banned drones with cameras](#) unless pilots obtain a special surveillance permit--privacy is the key issue.

Lots of Bull: Spain's top court [reversed a ban on bullfighting](#) in the Catalonia region, saying it infringed on the government's responsibility to preserve Spain's cultural patrimony. Animal rights groups disagree.

Investing in South American Ag: Analysts say investors are looking into the possibilities of [expanding agriculture opportunities in South America](#)--specifically in Brazil.

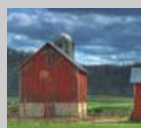
Food Safety Buzz in Hong Kong: Authorities found excessive cadmium in imported cooked snow crab, a [banned preservative in vinegar](#), and excessive pesticide residues in three vegetable samples.

Japanese Tea Goodies: Japan is now producing [delicacies out of good quality green tea](#)--ice cream, cake, and other goodies.

Killing Animals to Save Animals: New Zealand is trying to [kill millions of invasive mammals](#) in an effort to save native animals from extinction.



Guess what I have behind my back.



General Interest News

Farming in the Future--Ag and Drones (video): Agriculture already [leads the market for commercial drone usage](#), and it is expected to generate \$350 million in drone revenue in 2025.

How Many Drones Does It Take to Change a Lightbulb? (video--related to above): Only two--but you will [need a whole lot of bulbs](#).

Wait--Someone Might Be in That Outhouse! This blog returns to a time when Halloween meant [tricks, treats, and trashed outhouses](#) on the school lawn.

To Be Precise: Precision agriculture technologies require investment of capital and time but may offer cost savings and higher yields. This report examines [three types of precision agriculture](#) technologies.

Cheating in the Ring (opinion): [Cheating of various types in livestock shows](#) in general--and 4-H shows in particular--raises issues for this commentator.

Legal Trends for Ag: The American Agricultural Law Association symposium looked at [five legal trends for food and agriculture](#) companies.

Microplastic Danger: University of Oxford scientists say they have evidence of microplastics--from the washing of clothes made from synthetic fabrics--being [ingested by deep-sea animals](#).

Red-wing Mystery Solved: Scientific detective work reveals that yellow woodpeckers with [unusual red-wing feathers](#) are not the result of borrowed genes but instead come from eating berries.



Trick or treat.

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."

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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 Society of Agricultural and Biological Engineers
- * American Society of Agronomy
- * American Society of Animal Science



- * American Society of Plant Biologists
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- * National Pork Board

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- * Poultry Science Association
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- * United Soybean Board
- * Weed Science Society of America
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