

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

New Board Member and Impact Report about New Publication--P. 2

Animal Agriculture News

Food Science and Safety News

Plant and Environment News

International News

General Interest News

Dronestagrams



These 15 "dronestagram" photos show impressive <u>images from above</u>.

BCCA Nominations

Nominations are open for the 2017
Borlaug CAST Communication
Award (due Feb. 6). The list of
award winners includes noted
scientists and ag communicators.

Folta Honored Again

University of Florida scientist Kevin
Folta was named the 2016 Pro
Farmer Ag Person of the Year. Dr.
Folta also won the prestigious
Borlaug CAST Communication
Award.

Borlaug Summer Institute Applications

The <u>U.S. Borlaug Summer Institute</u> on Global Food Security is an annual

January 6, 2017

An App to Organize Our Apps

And then one to control that app?

According to this BBC report, science provided plenty of positive stories in 2016--from gene editing to fighting deadly diseases.

The world of agriculture also continues to be affected by tech and innovation. These <u>17 ag apps claim to help</u> with scouting fields, managing agronomic data, creating farm maps, and many other precision jobs. Sounds good--but considering the barrage of innovative options, some



Alexa--milk the cows, feed the pigs, and do my taxes.

think an Alexa-like technology might be needed ("Alexa, what is the future of farming?" "I am."). On the other hand, this blogger looked in a different direction as his old-fashioned Dad App organized him on the farm.

Many farmers are just figuring it out the best they can. This Michigan farmer has followed the developments, and he wonders about cost, efficiency, and relevance. And in the end, he even gets a bit "Luke Skywalkerish." He pictures a farmer guiding a fleet of robotic helpers in the fields, communicating with each other and with a base computer. "The sky is kinda the limit with what we can do with technology."

News and Views

**Ag Secretary Position--Looking Back and Thinking Ahead: While the farm community speculates about who will be the new Secretary of Agriculture, this writer claims that the most interesting person to hold the office was Henry Wallace: "... not only the most talented of agriculture's leaders, but also the craziest."

**Departing Words: Agri-Pulse spoke with Agriculture Secretary Tom Vilsack. "Agriculture is diverse; let's celebrate all facets."

two-week learning program for graduate students attending U.S. institutions--application deadline Feb. 17, 2017.

2017 World Food Prize Nominations

Nominations for the <u>2017 World</u> Food Prize are now open.

4-H and American Farm Bureau Link

Leaders of the National 4-H Council and the American Farm Bureau Federation <u>announced a newly</u> established partnership.

Societies and CAST

In 1971, representatives of 16 scientific societies met to discuss the new organization and decide on a name: Council for Agricultural Science and Technology (CAST). In 1972, the organization was chartered as a nonprofit (access CAST's history site here).



CAST
Social
Media
Click here for
links to CAST
sites: Twitter,

Facebook, Pinterest, LinkedIn, videos, and blogs.

- **A Year of Big Stories: From a surprising election to mega mergers to chemical drift, these "top stories from this past year" were compiled by the Successful Farming team.
- **Feeding Human Progress--a Tribute on Film: Land O'Lakes, Inc., used a poem by Amelia Barr and some impressive filming to create this tribute to the agriculture community.
- **Ag Expert Working Hard and Playing Hard: Alison Van Eenennaam (UC-Davis) demonstrates the difficulty of analyzing and critiquing published papers. As she admits, "As with most everything in agriculture, there are no simple sound-bite answers." And in this video parody, she has fun with the selfie craze by showing "scifies" of female plant and animal breeders from around the world, emphasizing the important role women play in this field. Note: Dr. Van Eenennaam won the 2014 Borlaug CAST Communication Award.

News from the Far Side of the Barn

Hero Whales

(videos): Researchers have observed humpback whales defending.smaller.sea.animals from killer.whale attacks. The battles often last for hours, and the humpback whales apparently do it for altruistic reasons.

Giant Panda 1, Snowman 0 (video): This panda decided that there was room for only one big, cute personality in its cage.



As Captain Ahab found out, you don't mess with humpback whales.

That Time When You'd Rather

Have a Lump of Coal: A woman in Australia discovered a meter-long venomous snake wrapped around her Christmas tree.

Dr. Flis Joins Board of Representatives

The Fertilizer Institute part of CAST community

Sally Flis will represent <u>The Fertilizer Institute</u> (TFI) on the CAST Board of Representatives (Plant Agriculture and Environmental Issues work group). Dr. Flis was recently hired as the director of agronomy at TFI. Their mission is to represent, promote, and protect the fertilizer industry through the following strategies:

- foster a prosperous fertilizer industry through legislative and regulatory activities at the federal, state, and local levels
- address issues impacting TFI member companies
- share knowledge with members, government, and the agriculture industry on issues related to fertilizer and the farm economy



The CAST community welcomes Dr. Sally Flis and The Fertilizer Institute.

Latest CAST Publication Gets Wide Notice

Paper examines biotech crop approvals and trade disruptions

CAST's "report and review" about biotech crops and the effects of certain trade situations garnered plenty of interest in the press and with government officials. The paper and a Mandarin Chinese translation are available on the CAST website: The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation (access the paper here). The link also includes a video presentation of the December 8 rollout session cohosted by the U.S. Biotech Crops Alliance at the American Farm Bureau Federation Building (CAST introduction from Kent Schescke: 0:00-09:25; presentation of report by Nicholas Kalaitzandonakes: 09:26-39:49; panel discussion and Q&A: 39:50-1:26:03).



The report and its subsequent distribution pulled in numerous hits on CAST social media avenues such as Twitter and Facebook--and hundreds of downloads from the CAST website. CAST Director of Operations Melissa Sly reports the following statistics that come from the original press releases:

- 3,105 press release "reads"
- 84,285 headline impressions (amount of times the article was retrieved through SEO searches)
- 1,544 media deliveries

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 drone pic of road from washingtonpost.com, Echo pic from agprofessional.com, and whale pic from hitchhikinganimals.blogspot.com. Animal Sec. cow pic from msnbc.media.jpg. Plant Sec. weed pic from pathslesstravelled.jpg. Inter. Sec. pangolin pic from pinktreefrog.typepad.jpg. Gen. Sec. cow pic from pic.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.





Animal Agriculture and Environmental News

Something Fishy on Midwest Pig Farm (video): A thousand miles from the ocean, this lowa farm raises <u>barramundi for seafood markets and restaurants</u> across the country.

Not Quite Ready for Olympic Dressage (videos): A New Zealand girl who didn't have a horse growing up has <u>taught her cow to jump instead</u> (scroll down in the article for videos).

GFI #213--USDA Antibiotic Ruling: A key plank in the FDA's platform to <u>slow down the development of antibiotic resistance</u> and extend the life of medications important to humans and animals is in place.

Explaining the Pig Priority: The <u>2016 Pig Farmer of the Year</u> says farmers and ranchers need to do a better job of showing what they doespecially since most pigs are raised indoors.

Planning for Avian Flu: The USDA is <u>updating its National Poultry</u> <u>Improvement Plan</u> to participate in a compartmentalization program for highly pathogenic avian influenza.



A horse is a horse, of course... unless it's a cow.

Pigs, Chickens, and Orchards: On this England farm, pigs and chickens are <u>used to control insects and weeds</u> in their certified organic orchard and berry patches.

Meat on the Move? Rabobank expects that 2017 will see a <u>record pork volume shipped</u> to China--with beef and poultry imports there also on the rise.

Beefy Facts: This site provides <u>50 links to facts and information about global beef</u>--including production, consumption, and trade.

Meat Processing Collaboration: The Quapaw Tribe is building a meat processing plant in Oklahoma, and faculty from the University of Arkansas are assisting with design and construction.

Married to Their Work: This husband-and-wife team are <u>part-time farmers and full-time veterinarians</u> in South Dakota. They blog to relay their experiences about farming, herd health, and marrying another vet.



Food Science and Safety News

Holy McSacrilege? (video): A lawsuit is being filed to block a McDonald's restaurant from continuing to operate in Rome, because it is located <u>near the walls of Vatican City</u>.

Mindset about Waste: Diners <u>waste less food when they learn</u> about the harm it can inflict on the environment. But if they know the food is going to be composted, the educational benefit disappears.

Creative about Waste (related to above): Much wasted food perishes between the farm and the supermarket shelf. This initiative aims to change our food system by inspiring innovation and collaboration.

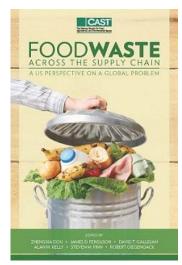
Food Safety in a Time of Change (opinion): According to this analyst, food safety efforts in 2017 will face storms and stability--with key factors being "complicated bureaucracies" and governing transitions.

Collaborating for Food Security: This University of Florida ag expert explains how to get more food from less land--with productivity that relies on innovation from industries, farmers, and land-grant universities.

From All-day Breakfast to Pizza-stuffed Crust--Seven Success Stories: Fast-food chains constantly try new ways to entice hungry customers; some fly, some flop, and some become standards for the industry.

Fruits, Vegetables, and Heart Health: The FDA is amending a regulation to allow more <u>fruits and vegetables to carry a health claim</u> that they reduce the risk of coronary heart disease.

Power Food Combos: According to *Men's Health* magazine, you can combine the right ingredients and your food becomes <u>even more nutritious</u> (and delicious).



Click here to access the CAST/UPenn publication Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem.

Fries, Frites, or Chips: Whatever you call them, fried potato sticks are universally beloved, and this <u>site</u> provides several facts about fries.



Plant Agriculture and Environmental News

Data, Research, and Food Security (video): This Ohio State University researcher uses data to help with food security in east Africa--specifically focused on <u>cassava plants damaged by fly infestation</u>.

Environmental Techniques (opinion): These farmers are using precision ag techniques, cover crops, buffer strips, and GMO crops to <u>clean up the Chesapeake Bay area</u>.

High on No Till (related to above): A switch to a no-till cover crop system changed this farmer's management dynamic and <u>provided a booster shot to weed control</u>, irrigation efficiency, and overall soil health.

Pass the Salt: According to this blog from the Soil Science Society of America, salt melts ice on roads and walkways--but when overused or mismanaged, it can become a serious environmental pollutant.

Biosensor and Pesticides: These university scientists helped create a flexible, low-cost, disposable biosensor that can detect pesticides in soil.

This Noxious Weed Is Clever: Palmer amaranth seed has many <u>ways of reaching new farms</u>--from poorly cleaned equipment to "fertilizer-ready" duck excrement.

USDA Grant for Wheat Research: Scientists from several universities-including Nebraska, Texas A&M, and Kansas State--will work to <u>develop higher-yielding lines of hybrid wheat</u>.

More Wheat Research (related to above): An international research project--headed by a UC-Davis geneticist--is using new technology to <u>identify</u> wheat genes that impact yield.





International News

Smoke Gets in Your Eyes (video): Beijing has been afflicted by heavy smog in recent days, and a resident captured this time-lapse film of a thick smog cloud rolling through the city over the course of 20 minutes.

Challenging Traditions and Making Good Sushi (video): These women are challenging the <u>myth that sushi</u> making is exclusively a man's world.

Water Woes--Preventing Death and Suffering? More than a billion people around the world have little or no access to fresh water, and some hope <u>high-tech ag might provide solutions</u>.

Going Green in a Big Way: According to this report, Costa Rica ran entirely on <u>renewable energy for more than 250 days</u> last year.

Pangolin Face Extinction: Chinese officials <u>seized tons of illegally trafficked pangolin</u> scales from a port in Shanghai--their meat is a delicacy, and their scales are used in traditional Chinese medicine.

Claims That the "Wurst" Offenders Mislead

Consumers: Germany's agriculture minister defended meat lovers by calling for a ban on names such as "vegetarian schnitzel" for meat-substitute products.

Possum Burgers? Horse, possum, camel, and donkey will be available from South Australian butchers soon if recommended changes to food safety regulations are adopted. Some groups oppose this.



Pangolins are endangered--wanted for their meat and scales.

12 Urban Ag Centers: The international community is beginning to recognize the <u>integral role of urban agriculture</u> in improving the economy, environment, and health of cities.

Preserving Kenya's Forests: The Ogiek tribe is trying to revive the Mau Forest of Eastern Kenya by planting new trees and working with the Kenya Forest Service.



General Interest News

Surfing Wipeout? Surfing the internet in class is now <u>linked to poorer test scores</u>--even among the most intelligent and motivated of students--according to this Michigan State University research.

Why Put a GoPro on a Cow? (video): This media expert provides tips for making a good farm video.

A Mighty Wind? This Iowa State University study says turbulence created by wind <u>turbines may help corn and soybeans</u> by influencing variables such as temperature and carbon dioxide concentration.

Tiny Bugs, Hungry Pigs, and Savvy Investors: This Bloomberg's <u>end-of-year assessment for agriculture investors</u> looks at those who made winning decisions because of tiny bugs and hungry Chinese pigs.

It's in the Bag (opinion): Michigan became the fourth state to place <u>a ban</u> on banning plastic bags--and some are unhappy about the laws.

Ag and Local Economies: This Mississippi State University agricultural economist explains the <u>positive effects of the ag industry</u> on local economies.



New Year selfie? Done. Now where's my GoPro?

"Fantasy Football" with Crops and Livestock: Fantasy farming is a game that gives high school students a chance to learn firsthand about the guesswork and gambles that farmers make every year.

Easing the Fire Ant Problem:

A new test kit, developed by USDA scientists, could <u>limit the spread of red imported fire ants</u>--the insects cost Americans \$6 billion annually to control and repair damage.

CAST Information

Check out CAST's page at the <u>YouTube site</u> to view highly regarded agscience 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 <u>clicking HERE for</u> the "Proposal Format and Background Information Form."

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- * American Dairy Science Association
- * American Farm Bureau Federation
- * American Meat Science Association
- * American Meteorological Society, Committee on Agricultural and Forest Meteorology
- * 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**
- * California Dairy Research Foundation
- * Council of Entomology Department Administrators
- * Croplife America
- * Crop Science Society of America
- * DuPont Pioneer * Elanco Animal Health
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- * Monsanto
- * 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
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science
- * WinField, a Land O'Lakes Company

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