



*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.

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#### Ag on a Big Scale



Agriculture is a BIG thing--this [photographer captures it](#) in all its scope, grandeur, and dizzying scale.

#### CAST 2016 May to Dec. Summary of Activities

Photos and short descriptions [highlight the key facets](#) of CAST's efforts in the second half of 2016.

#### Borlaug Summer Institute Applications

The [U.S. Borlaug Summer Institute on Global Food Security](#) is an annual two-week learning program for graduate students attending U.S. institutions--application deadline Feb. 17, 2017.

#### Leading Fertilizer Group on Board

*December 16, 2016*

## Biotech Approvals and Trade

*CAST paper provides important information*

During a panel discussion about the material in CAST's new report, one U.S. government official summed it up this way: "The paper is very helpful and will continue to be so."

This special literature review and report examines the impacts of asynchronous approvals and looks at possible solutions. Through presentations, social media, and its website, CAST has provided the information for a wide audience. Several ag media groups featured the publication, and many people have accessed it through Facebook, Twitter, and other online sources.

**\*\*Scroll down to [page two for more](#) information, photos, and links.**



[The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation](#)

## News and Views

**\*\*Mixed Reviews--Some Heated--for GIPSA Rulings:** The USDA finalized a rule that it says will protect pork and poultry producers, but industry groups are crying foul. The Grain Inspection, Packers and Stockyards Administration released its "Fair Farmer Practices" regulations--[many have strong opinions about the proposals](#).

[The Fertilizer Institute](#) (TFI) has rejoined CAST, and the respected organization will have a representative on the CAST Board. More details about this and other CAST membership news in the January 6 edition of *Friday Notes*.

### Ag Teaching Award

This California teacher won a [national agriculture educator award](#)--students focus on projects and independent practical applications of classroom knowledge related to agriculture.

### Soil Management

University of Nebraska crop production and pest management specialists have scheduled a series of [crop production clinics in January](#) to provide the latest research-based information and recommendations.



The next edition of *Friday Notes* will be on January 6, 2017. Happy Holidays to all.

### CAST Social Media

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

**\*\*Fracking Report Gets Fractured Responses:** A report about hydraulic fracturing considers the positives and negatives of fracking. Proponents and opponents of the technique [disagree about the findings](#).



**\*\*EPA Pick Also Illicits Mixed Reactions:** The President-elect's pick of Scott Pruitt to head up the EPA is [welcome news for some](#) farmers, ranchers, and ag organizations. Others, especially environmental groups, [take issue with the choice](#).

**\*\*Why I Farm:** This young Iowa State alum has been living on the road, sharing the stories of America's farmers [through blogs and photography](#) as part of Beck's *Why I Farm Movement*.

**\*\*How to Promote Ag?** This writer says most farmers are intelligent entrepreneurs and eager risk-takers--and though he admires them, he [does not promote the "thank a farmer rhetoric"](#) in the ag press.

## News from the Far Side of the Barn

**Bacon for Christmas and Reindeer Trivia (video):** Derek Klingenberg has apparently [become a bacon zombie](#), and an Ohio State University press release tells you everything you ever wanted to [know about reindeer](#).



**For the Sake of Science--and British Pie Enthusiasts (videos):** A meat and potato pie attached to a weather balloon has been "sent into space" from a location in England. [Space enthusiasts attached a camera and tracking equipment](#) to monitor the pie's progress.

Rudolf turns cynical:  
"Yeah, sure, this joke sleighs me. How many reindeer does it take to change a light bulb? Eight--one to screw in the light bulb and seven to hold Rudolph down. Hilarious!"

**That's Why They're Called Toads (video):** This short clip will make you [feel better about your own agility](#).

## Influential CAST Paper Examines Trade and Biotech

*Rollouts in D.C. focused on impacts of asynchronous approvals*



The Council for Agricultural Science and Technology rolled out its latest paper-- *The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation*--on December 8, with a presentation for Senate staffers and a Lunch 'N Learn for House staffers. The literature review and report was also presented at an afternoon session cohosted by the U.S. Biotech Crops Alliance at the American Farm Bureau Federation Building.

Photo at left (from left): Kent Schescke (CAST Executive Vice President), Dr. Nicholas Kalaitzandonakes (Univ. of Missouri-Columbia; Task Force Chair and author for the publication), Dr. Val Giddings (Information Technology and Innovation Foundation; one of the authors for the publication), and Andrew Conner (Manager of Global Biotechnology, U.S. Grains Council).

**\*\*[Click here for the full press release.](#)**

## **"Here's how we're all losing; how can we all win?"**

Experts from government, academia, and agribusiness seemed to agree with an insightful statement from one of the panel members. He pointed out that all countries, all producers, and all consumers lose under the current fractured system of asynchronous approvals. CAST's literature review and report looks at ways to solve the problems.

The authors focus on the economic effects in countries that are major global commodity exporters and importers, and they show that asynchrony in the global approval of new biotech crops and the resultant risk of low-level presence (LLP) puts large volumes of trade worth billions of dollars at risk. As Task Force Chair Dr. Kalaitzandonakes said, "How the world's regulatory systems operate in the area of biotech crops is critically important to producers and consumers."

The report offers several potential solutions and provides research about approaches that might ease the negative impacts. The paper concludes, "As long as the current situation persists, agricultural biotechnology will be prevented from delivering the full range of promised benefits of improved standards of living and food security."

Click here to download [the report](#), the [Ag quickCAST](#), and the [Chinese version of the paper](#).



Panel presentation at the session hosted by CAST and The U.S. Biotech Crops Alliance (from left): Veronica Nigh (Economist, American Farm Bureau Federation), Jonathan Cordone (USDA Deputy Under Secretary, Farm and Foreign Agricultural Services), Bobby Frederick (Director of Legislative Affairs and Public Policy, National Grain and Feed Association), Matthew O'Mara (Managing Director, International Affairs, The Biotechnology Innovation Organization), and Andrew Conner (Manager of Global Biotechnology, U.S. Grains Council).



# Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 veggie workers pic from nyt.com (George Steinmetz), winter painting from moline.jpg. Animal Sec. printer pic from entrepreneur.jpg. Food Sec. poster from pinterest.jpg. Plant Sec. orchid pic from npr.org.jpg. Inter. Sec. cow pic from theherald.com. Gen. Sec. drone pic from johnlund.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



## *Animal Agriculture and Environmental News*

**Beefy Optimism (video):** A spokesperson for *Farm Factor* gives an update on U.S. beef--its quality and [why it is in demand around the world](#).

**Chicken Venture Hatches Debate:** A [proposal that would jump-start the chicken business](#) in Nebraska has some residents concerned about potential environmental impacts--but others hail the venture.

**Meaty Concerns (opinion):** Dan Murphy gives his insights about the day coming when consumers will be able to [print their own 3-D meat products right in their own kitchens](#).

**Finding a Veterinarian (audio available):** [Finding a qualified local vet](#) can be a time-consuming process, but a new online resource--provided by the National Pork Board and Global Vet Link--is designed to help.

**Baby Pig Digs:** Pigs [raised in group housing during lactation](#) weigh less than those in conventional farrowing pens, German researchers have found. In addition, mortality is higher.



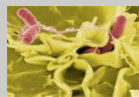
No, this is NOT what it looks like--yet anyway.

**Potential Bacteria Problem:** Some workers at industrial hog production facilities [might be carrying livestock-associated, antibiotic-resistant bacteria](#) in their noses and in skin infections, according to this research.

**Hard to Find, Costly, and Trendy:** A small but [noticeable movement of cult steaks](#) is sweeping the globe, starring farmers and artisanal producers in places from Japan to California.

**Calling Little Bo-Peep:** This director from the American Sheep Industry says the United States [needs to produce more lambs](#).

**AnimalAgCast about Horses (podcast available):** This government official gives an overview of the [Wild Horse and Burro Program](#) that is dealing with the welfare of the four-legged animals.



## *Food Science and Safety News*

**What's in Your Stocking? (video):** According to this clip, these delicious food products are [perfect to share this holiday season](#)--and they're made in America.

**What Not to Eat (video):** 2016 was filled with food recalls--[here are the top nine](#).

**But My Pizza Joint Isn't Listed!** The 50 [best college-town pizzerias](#) in the country--and yes, these choices will foster heated debate.

**Make Health Food--But Gimme Chips:** This food and beverage giant says it wants to make more "good for you" snacks, but much of its [revenue growth comes from standbys](#) such as Cheetos.

**Chocolate Glut?** Cocoa prices are spiraling lower, making [chocolate cheaper in time for the holidays](#)--and overall, people are eating less chocolate, according to this article.

**Fat Phobia (opinion):** When it comes to dietary fat, what matters most is the type of fat you eat, according to this article. New research suggests that [certain types of fat are beneficial](#).

**What's the Fuss about Choline? (opinion):** Most Americans [are not getting enough choline](#), according to a recent study published in the *Journal of the American College of Nutrition*.

**Shedding Light on Milk Taste:** Scientists say that LED lighting installed in retail display cases [can improve the taste of milk](#) packed in translucent, high-density, polyethylene containers--and consumers seem to like it.

**Teaming Up for School Nutrition:** The USDA Food and Nutrition Service and the Institute of Child Nutrition partnered to create the [Team Up for School Nutrition Success](#) initiative.



Mommy knows best.



## *Plant Agriculture and Environmental News*

**Modern Genetics and Our Food (video):** This popular TED talk features a specialist who describes her decade-long quest to isolate a [gene that allows rice to survive prolonged flooding](#).

**Beautiful and Deadly:** Female [orchid mantises are dazzlingly beautiful](#)--and they have evolved to get large enough to successfully hunt prey.

**Stressed Weeds and Herbicide Failure:** A University of Florida weed specialist looks at why herbicides might fail during droughts. "Ironically, we [need healthy weeds for herbicides to be effective](#)."

**Law of the Minimum:** This Georgia farmer [shatters corn and soybean yield records](#)--and he claims to be a disciple of the "Law of the Minimum: One weak nutrient to rule them all."

**Gift-giving Plants:** This article suggests these as the [best plants to give as holiday gifts](#).



Mantis "flower" is beautiful and deadly.

**Plants--Precisely:** [Precision gene editing in plants](#) is a way for scientists to increase nutritional value and decrease susceptibility to diseases, according to this specialist from the American Seed Trade Association.

**A Weed on Fire:** The weed downy brome has invaded millions of acres of arid grasslands in the western United States, and this research shows [it has developed fire-survival traits](#).

**Plant Memories and Junk DNA:** This article explains current scientific exploration into [how plants know when to flower](#).

**Think Pink:** A strain of pineapple [genetically engineered to be pink instead of yellow](#) received the go-ahead from the U.S. Food and Drug Administration.



## International News

**A Delicacy out of Fermented Cabbage and Spices (video):** For South Korea, [kimchi is a symbol of national pride](#), and Kim Myung-Sung makes some of the best fermented vegetables around.

**Tomatoes in the Desert (video):** Sundrop Farms in South Australia is growing 15,000 tons of [tomatoes using seawater and thousands of mirrors](#).

**Milkshakes and Geologists:** A [dairy farm in New Zealand with an active fault line](#) running through it has become a mecca for geologists seeking to unlock secrets deep underground.

**First Animal to Walk on Land Was Wearing a Kilt?** A twisted [tale of animal fossils brings our ancestry back](#) to what is now the land of bagpipes, kilts, and haggis.

**Puttin' 'Em out to Pasture (opinion):** Irish scientists say there is [evidence that pasture-fed cows do produce](#) better products.



Although not on the dairy farm mentioned in the article at left, these New Zealand cows were definitely "on a fault line" during a recent earthquake.

**Associative Learning:** This Australian research says that [plants can learn about their environment](#) by making links between events, an ability thought to be exclusive to animals.

**It's Terrible--Give Me More:** Scandinavian-Americans still seem to treasure the "Viking" dish made from lutefisk even though [it is famous for being smelly and, for many, terrible to eat](#).



## General Interest News

**Campus Hunger (video):** The number of food pantries on college campuses has quadrupled, and data suggests that hunger is [more common among college students](#) than in the U.S. population as a whole.



**Drone Deliveries in Test Stage:** A drone from the Prime Air fleet made a 13-minute flight in England to drop off a package--the first in a [trial to deliver packages to a number of customers](#).

Apparently, the stork is unhappy about recent drone ventures.

**Droning On about Drones (related to above):** For more links about drones and a look back at old-fashioned "drone deliveries" from the Watkins' man, [click here](#).

**Animal Therapy--for Humans:** A growing body of evidence reinforces the [health benefits of animals for humans](#)--including the help they can give to those suffering from mental illness.

**Delta Dawgs Key to Research Efforts:** This feature profiles [Mississippi State University graduate students working](#) at the Delta Research and Extension Center.

**Lead and Water Don't Mix:** According to this report, four million Americans [could be drinking toxic water](#) and not know it.

**Renewable Fuels and Research (opinion):** According to this article, the Renewable Fuel Standard keeps the research community busy [looking into new plant-based sources of energy](#).

**Pipeline Leak:** The Belle Fourche [pipeline recently leaked roughly 180,000 gallons](#) of crude into a creek in far western North Dakota. The incident occurred as hundreds protest the Dakota Access Pipeline.

**Ethanol Spills and the Environment (opinion):** As production and transportation of ethanol has risen dramatically in the region over the past three decades, [so have ethanol spills](#).

**Growing Algae:** Scientists say [global warming is altering the Arctic food chain](#)--with unforeseeable results.

## 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 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 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
- \* Innovation Center for U.S. Dairy
- \* 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
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*CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.*

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