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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 the CAST organization.

In This Issue..... Click to Read

[CAST Research Rollout in Washington, D.C.--P. 2](#)

[Animal Agriculture News](#)

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In the Wild



These beautifully composed photos of majestic animals have been chosen as some of the [best wildlife photos of the year](#).

Biotech Crop Forum

With influential speakers and a lively panel discussion, the [December 7 forum about biotech crops](#) included plenty of insights about this year's [biotech report from the National Academies of Science, Engineering, and Medicine](#).

NCBA Trade Show

The [National Cattlemen's Beef Association Trade Show](#) allows industry members the opportunity to come face-to-face with decision makers in a fun environment--Nashville, Tennessee, Feb. 1 to 3.

Looking Ahead to Pork 101

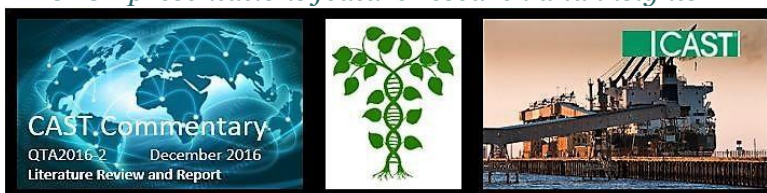


Pork 101 is a three-day, hands-on experience designed to update participants on [quality](#)

December 9, 2016

Trade Issues and Biotech

CAST presentations feature research and insights



International trade is often a complicated issue--and when it involves biotechnology, crops, and national policies, it becomes even more entangled. A [new CAST literature review and report](#) looks at problems caused by the current system of asynchronous approvals for biotech crops. The authors focus on the economic effects and other topics ranging from farm income to biotech investment.

The findings were presented on December 8 at three venues in Washington, D.C. As CAST Executive Vice President Kent Schescke said, "The sessions went well, and there is a lot of interest in the paper."

Scroll down to page two of this newsletter for more information, and check out the [CAST website](#) for updates about this important topic.

News and Views

**Picks Made--EPA, Ambassador to China, and Labor

Department: President-elect Donald Trump tapped Oklahoma Attorney General Scott Pruitt as [head of the U.S. Environmental Protection Agency](#), Iowa Governor Terry [Branstad as the ambassador to China](#), and fast-food executive Andy [Puzder to run the Labor Department](#).



[and consistency issues in the pork industry](#)-next year at two venues, Texas A&M and Iowa State Univ.

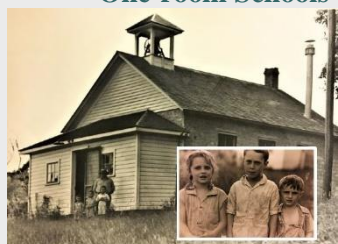
FFA Scholarships

The 2017 [National FFA online scholarship application](#) is open until February 1. Check here for details.

Alliance for Science

The Cornell University Alliance for Science graduated 28 Global Leadership fellows from 13 nations; they will return home to [advance scientific innovation](#) as a means for enhancing food security.

One-room Schools



Hannah looks at the "[old school connections](#)" with her grandmother and great-grandmother.

CAST Social Media

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

****Sec. Vilsack Reflects:** Ag Secretary Tom Vilsack wrote his replacement a 24-page note commenting on his eight years holding the highest position in agriculture. "It's been a tremendous experience...a [privilege and honor](#)."

Sec. Tom Vilsack

****CRISPR-cas9 in Court:** The high-stakes fight over who invented a gene-editing technology that could revolutionize medicine and agriculture heads to a courtroom--and the [tangled case could be worth billions of dollars](#).

****Split Views Regarding the Science of Food:** This Pew Research report shows that the U.S. public has [divided views about the benefits and risks](#) of organic and biotech foods.

****Key Ag Issues and Opportunities:** The AGree group offers these [post-election bipartisan recommendations](#) that were "carefully crafted as an outgrowth of engaging more than 2,000 of the best minds in food and agriculture."



****Real or Fake?** The media world has been affected by the turbulence of "fake news." This article looks at [how to check the topics and get the facts](#). This second site provides a list of suggestions from a professor about [how to deal with fake news](#).

News from the Far Side of the Barn

Hero Rats Find Mines and TB (video): African giant pouched rats are [better mine sniffers than dogs and faster at TB diagnosis](#) than human doctors, according to this report.

Kangaroo Brawls (videos): An Australian man apparently saved his dog by [punching a kangaroo](#), but as this BBC video shows, roos can really duke it out [when two of them fight for a female](#).



Fair dinkum, mate--that's a bit below the belt.

Pigs Fly and Passengers Calm Their Fears: San Francisco International Airport introduced a small, spotted Juliana pig named LiLou as their newest member of the "[Animal Assisted Therapy Program](#)."

CAST Presentations in Washington, D.C.

Research focuses on biotech and trade issues

Rollouts at the Senate, the House, and a public forum

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.

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

Experts Reviewed Research about the Effects of Trade Policies

This CAST literature review and report looks at problems caused by the current system of asynchronous approvals for biotech crops. The authors focused on the economic effects in countries that are major global commodity exporters and importers--and showed 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. Nicholas 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](#).

****Check the CAST website and next week's *Friday Notes* for more about the CAST publication, [The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation](#).**



Dr. Kalaitzandonakes presenting CAST's latest paper at a "Lunch 'N Learn" session for House staffers.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 polar bear pic from daisygilodini.digg.com, sign pic from miller-mccune.jpg, school pic from hannahpagel, and kangaroo pic from media.theage.com. Animal Sec. cow pic from premiumtimesnq.jpg. Food Sec. hot dog pic from commonsenseevaluation.com. Plant Sec. tomato meme from pinterest.com. Inter. Sec. solar farm pic from turner.com. Gen. Sec. bat pic from michaeldurham.audubon.org. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Lifting the Carbon Hoof Print: According to this article, carbon sequestration can be a [positive aspect of beef cattle grazing](#) on grasslands.

Chicken Scratchings: The National Chicken Council announced several [new resources pertaining to broiler chicken welfare](#) and chicken products in the United States.

Weaning Weight and Sows: National Pork Board research projects found a positive and highly significant relationship between the weaning weight of replacement gilts and their [future longevity as sows](#).



This blogger describes a time when the grazing [cattle ganged up on him](#).

Dairy Dealing: Despite some optimism in the industry, there are [five wild cards dairy farmers need to watch](#) as they enter 2017 and contemplate risk management options, according to this expert.

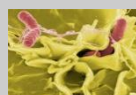
Bad Bacteria: Some workers at industrial hog production facilities might be [carrying livestock-associated, antibiotic-resistant bacteria](#) in their noses and in skin infections, according to this research.

USDA-FSIS Deadline: Individuals and animal activists' organizations swarmed the government [comment site regarding proposed new guidelines](#) about labeling claims and how animals are raised.

Antibiotic Issue: Ohio State University researchers identified [resistance in farm animals to an antibiotic](#) called *carbapenem*. Unsure how the bacteria came to the farm, they urge more research.

Reaction to the Issue (above): The National Pork Board reacted to the discovery of an antibiotic-resistant gene in one farrowing barn, saying it was not found in a market hog and [there is no threat to food safety](#).

Cows, Diets, and Nutritionists: This blogger writes about the "[symbiotic farmer-cow relationship](#)" that leads to a healthier animal giving a higher quality of milk.



Food Science and Safety News

Can I Eat It? (video): The American Chemical Society addresses some [basic food safety concerns](#)--Can you eat past the date printed on the package? Can you eat moldy berries? How about moldy cheese?

Food Keeping (related to above): The USDA and Cornell Univ. produced FoodKeeper, a site (and app) that helps you [understand food and beverages storage](#)--and how to maximize the freshness and quality of items.



How the Sausage--Make That Hot Dog--Is Made: The National Hot Dog and Sausage Council unveiled the [Hot Dog Ingredients Guide](#) to provide consumers with information and transparency--[this writer thinks it might be TMI](#).

A hot dog connoisseur who probably isn't worried about the ingredients.

Avoiding Heart Problems (opinion): This study found that emphasizing healthy foods in your diet, not just banishing "bad" foods, may be the [key to avoiding heart attack and stroke](#).

Health and Fast Food? New "[healthy fast food chains](#)" are seizing the opportunity to compete with legacy brands, creating low-calorie menus for around the same price.

How We Search for Food: Google search interest [can reveal key food trends](#) over the years--from the rise and fall of recipes to cooking trends and regional cuisines.

Space Food: NASA is developing [high-calorie bars for deep-space missions](#)--but would Captain Kirk or Mr. Spock like them?

What's the Top Fast Food Place in Your State? (video): This interactive map shows the [most popular fast food restaurants](#) in each state.



Plant Agriculture and Environmental News

Tomatoes on the Fast Track: Using CRISPR gene editing, researchers devised a way to make [tomatoes flower and produce ripe fruit](#) more than two weeks faster than commercial breeders are currently able to do.

Foods Safe to Eat (opinion): The silver anniversary of the USDA's Pesticide Data Program shows American-grown [fruits and vegetables are safe](#) because pesticide levels are kept below levels permitted by the EPA.

Words Matter--Organically: There is a battle going on in the organic industry over hydroponics, the technique of growing plants without soil. The debate gets at the [heart of what it means to be "organic."](#)

Sunprime Raisin Grape: A new raisin grape developed by USDA/ARS scientists in California is proving to be very popular among producers because it [costs less to harvest](#).

Soil Health: The White House Office of Science and Technology Policy, other federal agencies, and private-sector stakeholders announced steps to work toward the [long-term health and sustainability of soil](#).

Soil Sensor: This Iowa State University team of researchers created a [flexible, low-cost, disposable biosensor](#) that can detect pesticides in soil.

Genetics and Thirsty Plants: Scientists uncovered the genetic and metabolic mechanisms that [allow certain plants to conserve water](#) and thrive in semi-arid climates.

A Friendly Fungus: Monsanto and the Danish company Novozymes A/S have developed a coating for seeds made from a [friendly fungus that helps corn plants](#) in their earliest growth stages.

Biopesticides (opinion): According to this article, [biopesticides deserve serious consideration](#) because "...they work and they make money."

Bees of the Sea: Underwater [invertebrates can ferry pollen between flowers](#) in the same way that bees and other animals pollinate plants on land.



Faster tomatoes due to biotech?



International News

Something Fishy in Hong Kong and Japan (video): This link provides a [clip about fish farming in Hong Kong](#) and a look at a Japanese university that hopes to satisfy the country's demand for tuna.

India's Place in the Sun (video): India is on schedule to be the world's [third-biggest solar market next year](#), and a video at the bottom of the website page focuses on this push.

Solar in a Sunburnt Country: The first funding agreement from the Australian Renewable Energy Agency has been signed. Australia is [supporting solar energy--while also expanding its coal production](#) and transport capacity.



Let the Sun Shine: Massive solar farm in Morocco.

Banking on Africa: Dr. Akin Adesina announced that the African Development Bank will invest \$24 billion in [agriculture and agribusiness on the African continent](#) in the next 10 years.

Pig Fever: Russia has seen an unprecedented rise in the [loss of pigs to African Swine Fever](#) in 2016.

Bird Fever: [Outbreaks of bird flu were reported](#) in Denmark, Finland, Germany, and Sweden--and 190,000 ducks were destroyed at six Dutch farms.

Avian Flu in South Korea: Twenty days after a highly pathogenic avian influenza virus was first detected in South Korea, the epidemic shows no sign of abating. [Nearly 3.4 million chickens, turkeys, and ducks have been culled.](#)

An App for Waste on the Emerald Isle: These Irishmen developed an app that helps businesses [notify charities when they have surplus food](#) available.



General Interest News

Robo-Spoon May End the Spills (video): This promo clip presents a [robotic spoon that makes it almost impossible to spill](#)--not sure whether or not it can handle hot soup or jiggling jello.

Guzzlers--Hidden Oases: Created by the government more than half a century ago, these hidden water holes in the Oregon desert are [magnets for all kinds of thirsty animals](#).

Silicon Valley Down on the Farm: Big data offers farmers worldwide more [precise insights about weather and soil](#), allowing them to use the smallest possible amounts of water, sprays, and fertilizer.

Electric Tractor Prototype: SESAM (Sustainable Energy Supply for Agricultural Machinery) is the first [tractor fully powered by a battery pack](#), and the makers hope it will work as well as a diesel engine.

Investing in Ag Innovation: Tyson Foods launched a Chicago-based venture capital fund with an ambitious mission: [develop technologies to feed the world](#), perhaps with something beyond its core meat products.

Tech and Productivity: These essayists examine trends in food demand and crop yields, uncovering how precision technologies like sensors and GPS-guided tractors can [help farmers grow more food on less land](#).

Water Rights in California: Farmers in California's drought-stricken Central Valley could get additional irrigation water under bipartisan provisions included in a congressional [agreement to reauthorize water projects](#).

Family Farms Still the Foundation of American Ag: This new USDA research shows not only just [how dependent America is on family farms](#), but also how many are independent of government.

Gifts for Foodies: These specialized gifts are [possibilities for those who love food](#)--from an inside grill to a guacamole saver to an emoji pancake maker.



This Michael Durham photo for the Audubon Society shows a bat swooping for a drink.

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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- * 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
- * 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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Dan Gogerty (Managing Communications Editor)
The Council for Agricultural Science and Technology
 4420 West Lincoln Way
 Ames, Iowa 50014-3347
 Phone: 515-292-2125, ext. 222; Fax: 515-292-4512; E-mail: dgogerty@cast-science.org



**** With assistance from Carol Gostele (Managing Scientific Editor), Hannah Pagel (Student Administrative Assistant), and Mikayla Dolch (Student Administrative Assistant)**