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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.

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Land of the Pineapples



This [colorful area of China](#) produces a large annual output of pineapples.

World Pork Expo

The [World Pork Expo](#) runs June 7-9 at the Iowa State Fairgrounds in Des Moines--sponsored by the National Pork Producers Council.

Breakthroughs 2030

Breakthroughs 2030 is a long-term project that will gather scientists who are looking at [opportunities for fundamental and applied interdisciplinary research](#) that is both grounded by a deep scientific understanding of food and agricultural challenges and elevated by exciting insights and innovation.

June 2, 2017

What's in a Word

Science, Consumers, and Connotations

Shakespeare's Juliet said that a rose by any other name would smell as sweet, but as far as we know, it was not a genetically engineered flower back then. In this era of biotech, the connotation of a word makes a difference.

According to Kevin Folta, the term "GMO" is misleading. "It is time for the science-minded community to adopt a common vocabulary to enhance effective discussion and enjoy more meaningful dialogue. We should replace 'GMO' with 'Genetic Engineering'." [Click here to read](#) Dr. Folta's blog about biotech terminology.



Many are urging scientists to choose the correct words and to speak up often. In her essay *Why Can't Scientists Talk Like Regular Humans?*, Katherine Wu says, "Today, [improving science communication is a more urgent issue than ever](#)." She cites the George Bernard Shaw quote, "The single biggest problem in communication is the illusion that it has taken place." She suggests that scientists need to engage in conversations with the general public whenever possible.

News and Views

****U.S. Leaves Climate Accord:** President Trump announced that the [United States will withdraw from the Paris Climate Accord](#). Some of his closest advisors--including Secretary of State Rex Tillerson--urged him to reconsider. Others--like EPA Administrator Scott Pruitt--advocated strongly for withdrawing from the agreement. This article includes reactions from various politicians and agriculture organizations.

****Budget Realities:** The president of the American Farm Bureau

Science Breakthroughs 2030

A Strategy for Food and Agricultural Research



Prominent Scientist on Committee

UC-Davis professor Alison Van Eenennaam, [2014 BCCA winner](#), is a key committee member for the *Breakthroughs 2030* project. Note: Dr. Van Eenennaam was the task force chair for the influential CAST Issue Paper [The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#).

Food Evolution

Narrated by Neil deGrasse Tyson, this important new film explores the [controversies surrounding biotech foods](#)--watch for it in theaters on June 23rd.

CAST Social Media

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

Federation says the proposed federal budget affects agriculture immensely, but he thinks [Congress will do the key work](#) of amending and adjusting those figures.

****Trade, China, and Ag:** Iowa's new governor will lead a [trade mission to China that will focus on agriculture](#). The group will also visit the previous governor of Iowa--now the U.S. ambassador to China.

****Ag and the Tech Revolution:** In California's Salinas Valley, farmers and tech experts are teaming up to form a kind of Silicon Valley for agriculture. From machines like water-knife-wielding robots to precision data that spurs artificial intelligence, a type of [ag revolution seems to be under way](#).

News from the Far Side of the Barn

The Ophidiophobia Edition

Bounty Python (video): An [estimated 100,000 pythons](#) live in the Florida Everglades--and they prey on everything from deer to alligators. The Swamp Apes club is now taking on this invasive species.



A friendly smile--from a dangerous, invasive species.

Close Encounter (video): A TV nature commentator named Nick the Wrangler has an extremely [tense encounter with a dangerous Eastern Diamondback](#).

When One Boa Just Isn't Enough: A scientist from the University of Tennessee discovered that [Cuban boa snakes hunt in groups](#).

Food Labels, Honey Bees, and CAST Papers

Labeling--An Ongoing Conversation for Consumers

Labels such as hormone free, all natural, organic, cage free, antibiotic free, grass fed, and non-GMO litter the food market. This makes the task of determining what exactly is healthy food a very confusing one for the average consumer.

[Click here to access a recent CAST issue paper](#) that presents a systematic review of the current use of food process labels and their effects on food and the agricultural sector. [This blog also includes links](#) to current articles about food labeling laws and controversies.





Why Does Bee Health Matter?

CAST Commentary Rollout Coming June 19th in Washington D.C.

Bee Health--Science and Debate

One thing all agree on--bees are important. Recent science shows that bee health might be influenced by many factors, including mites, viruses, diseases, miticides, pesticides, and poor nutrition. A forthcoming CAST commentary, *Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It*, will add the expertise of several specialists to the conversation, and the following links lead to

two of the many articles about bee health: this report covers the [latest survey of U.S. beekeepers](#), and this article looks at [neonicotinoids and honeybees](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 aerial photo from globaltimes.cn, communication graphic from blogs.nature.com, and snake pic from junglewalk.com. Animal Sec. pig cartoon from pigs__edizon.nd. Food Sec. milk graphic from midwestdairyassoc.com. Plant Sec. drone pic from rt.com. Inter. Sec. tarantula pic from trantulaheaven.com. Gen. Sec. horse pic from ratemyhorsepro.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

The Egg--Still Incredible (video): These Midwest college students join in to celebrate the environmental--and nutritional--[advantages of eggs](#).

The Importance of How You Cut It (video): This educational clip [explains the different cuts of beef](#).

Antibiotics Ban: A bill passed by Maryland's legislature makes the state the nation's second to [ban the routine use of antibiotics in livestock](#).

Biosecurity in Poultry Houses: This article looks at how proper hygiene and preventative practices help [manage disease risk in a poultry house](#).

Social Media as a Tool for Beef Promotion: These producers are discovering ways that technology can help the [family market their beef](#).

Cowboy Language (opinion): A horse expert explains how some terms get "lost in translation." But he says there are [some things horse people can agree on](#).

Antimicrobials and Hog Operations: The USDA will conduct a national study focusing on [how antimicrobials are being used on swine operations](#) in the country--from May through August.



These three don't seem so happy about the [report that shows Americans are eating more pork](#) than they have in years.

Do Ewe Have a Sick Sheep? Cambridge University scientists developed a computer program that can [detect whether farm animals or pets are in pain](#).

Hike! Harbaugh Helps with Cow Delivery: Pulling calves on many dairies is a regular task, but having a [former NFL quarterback and head football coach helping deliver a calf](#) is rare indeed.



Food Science and Safety News

Debates about Food Safety and Sustainability: These entrepreneurs are using [biotechnology to create vegetarian foods](#) that "taste more like meat and promise ecological advantages."

Meat Safety: This Kansas State University food scientist says a [meat thermometer is the best defense](#) in keeping food safe.

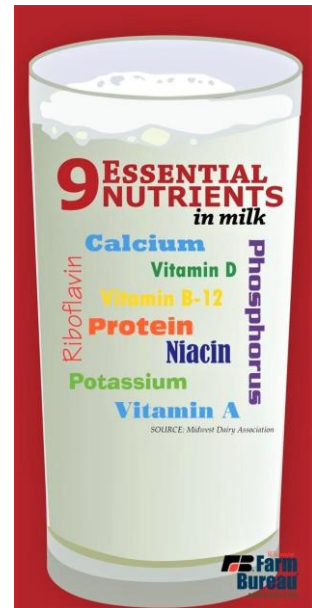
Pest Control on the Wing: This family farm uses a team of trained [falcons to protect organic greens from nuisance birds](#).

Buckeyes Join the Challenge: Leaders at The Ohio State University have joined the [Challenge of Change Commission](#) to work on food insecurity and global hunger.

Burnin' Calories (opinion): Green tea, hot peppers, enough protein, and whole grains--it might all help, but don't lean on individual foods for a big metabolism boost. Your [best bet for burning calories is to get moving](#).

Getting the Munchies on Mars: Colonizing Mars might depend on [making food taste better in space](#). Future Matt Damons can't live on potatoes alone.

Raw Milk Updates: [State policies vary](#) from outright bans to permitting retail sales, and the FDA has banned the transport of unpasteurized milk across state lines for the past 30 years.



June is [National Dairy Month](#), and June 1st was World Milk Day.



Plant Agriculture and Environmental News

Goats on the Go (video): Iowa's [coolest new weed eater has four legs](#) and a sardonic grin.

Crop Scouting (video): This crop expert helps viewers [better identify signs of potential disease](#) and stress.

Drones and Crop Production: This Texas A&M report claims [unmanned air systems may be the answer](#) to boosting crop production in the future.

Who's Number One? The Weed Science Society of America released its ranking of the [most troublesome weeds](#).

A Demonic Weed: This university agronomist helps farmers [deal with Palmer amaranth](#)--a fast-growing weed that can severely affect crop yields.

Purple Corn Not a Cause for Big Concerns: Cold temperatures and saturated soils can cause a [phenomenon in young corn seedlings](#) known as "purple corn."

Ancient Grain: Archaeologists have unearthed bits of [rice from when it was first domesticated](#) in China--at least 9,400 years ago.

Educated about Wine: Cal Poly has raised nearly \$10 million for [teaching about wine](#)--new vineyards, classrooms, and labs.



Not quite ready for crop work--but [this video shows a man riding a drone](#). Surf's up.



International News

Gearing Up Food Production (video): Chinese government money is backing a [variety of efforts to modernize farming](#) and improve grower outputs.

I Sing the Body Electric (video): Researchers in Japan have developed "[electronic skin](#)" with an organic circuit that can be worn on the human body--health monitors, electric tattoos, and even video on the skin.

Fish Can Be Electric, Too: Solving a 140-year-old taxonomic puzzle, Cornell researchers identified and described a [new species of electric fish](#) from the Ogooué River in Gabon, Africa.

Here Comes the Sun: [Solar panels in the United Kingdom](#) scorched the previous record set last month by generating 8.7GW of power, more than nuclear and coal power combined.



A Mexican Red Knee tarantula shows how to [crawl out of its own skin](#).

Farming Seaweed in Fiji: Seaweed production in Fiji is expected to [continue its rapid increase](#).

Global Food: The Chicago Council on Global Affairs says the world has seen [decreases in global poverty](#) during the past three decades, with agriculture a major help. But many countries still face food insecurity.

Bin Buster: South Africa expects a [record GMO corn harvest this season](#)--ample rains are bringing robust yields.

Cuttin' the Mustard: Amid lively debate about the safety of genetically modified food crops, India's top biotechnology [regulator declared a transgenic mustard plant](#) "safe for consumption."



General Interest News

Bugs on the Menu (video): This entomologist discusses the [nutritional value of insects](#), current farming practices, and consumer acceptance trends in the United States and worldwide.

I Want Your Blood: New research has nudged scientists closer to one of regenerative medicine's holy grails--the ability to create customized [human stem cells capable of forming blood](#) that would be safe for patients.

Let the Sun Shine In: Cal Poly will break ground this summer on a [solar farm that will generate renewable energy](#), create "Learn by Doing" opportunities for students, and save the university millions of dollars.

Avoiding Melanoma: Many farmers spend hours in the sun, and this blogger gives a personal account of her [experiences with skin cancer](#).

Organic Sales: This report says the American organic sector [stayed on its upward trajectory in 2016](#), gaining new market share and shattering records.

Drone Regs: Commercial drones must still register, but a federal court said that the FAA's rule forcing [registration of recreational drones under 55 pounds is unlawful](#).

Uber Down on the Farm: Uber has extended its services from the taxi division to include truck freight. [Could hay, hogs, and sweet corn be next](#) on their list?



Mini horses at this airport terminal [provide therapy for travelers](#).

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 Meat Science Association

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- * American Seed Trade Association
- * American Society for Nutrition Nutritional Sciences Council
- * American Society of Agricultural and Biological Engineers
- * American Society of Agronomy



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- * Monsanto

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- * National Pork Board
- * North Carolina Biotechnology Center
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