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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 CAST.

#### In This Issue..... [Click to Read](#)

[Credible Research Ties in with Current Headlines--P. 2](#)

[Animal Agriculture News](#)

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A safe, enjoyable Memorial Day weekend to all. [Check out this article to learn](#) how an agricultural weed came to symbolize Memorial Day.

#### World Pork Expo

The Pork Checkoff will host its annual Producer [Opportunity for Revenue and Knowledge](#) Academy sessions at the Iowa State Fairgrounds on June 6 and 7.

#### Ag Voices of the Future

Are you interested in ag policy, have a passion for soybean production, and at least 18 years old?

[Don't miss out on this opportunity!](#)

Applications are due June 1.



#### Nominations Due

The [Dr. Norman E. Borlaug Award for Field Research and Application](#) is presented every October in Des

May 25, 2018

## The Inscrutables?

*Not really--but the concept of "blockchain" and the term "sustainable" are often tough to pin down*

In ag circles, "blockchain" is the new buzz word, and "sustainable" has been an overused adjective for years. While some in the world of agriculture are experts about these issues, others get a glazed look as the terms come at them in a hypnotic barrage. The following links might help:



**Blockchain** is a type of [digitally distributed shared database](#)--transactions from multiple computers are security recorded into "blocks" of verified data entries in real time. [Some say this will benefit agribusiness](#) with lower transaction costs, increased traceability, and potentially greater value creation across the supply chain.

Marketers love the word "**sustainable**," and this writer says they have "[loved all of the meaning right out of the word.](#)" What does the term mean when it comes to agriculture? The writer of this article says that [biodiversity is a key to successful sustainability](#). Note: Professor Marty Matlock--the [2018 Borlaug CAST Communication Award winner](#)--is the [Executive Director of the Office for Sustainability at the University of Arkansas](#). His site includes information and research about sustainability programs.

## News and Views

**Trade, Tariffs, and Ag:** Trade tensions between China and the United States are still high, but [some grain groups are optimistic](#)--and this article says [beef might benefit, also](#). On the other hand, President [Trump is now downplaying expectations](#) for a quick resolution to trade issues with China.



**The Bill:** The Farm Bill is still in play, and this link provides a couple of [reports about what is likely to happen](#) as the debates continue.

Moines, Iowa, by the World Food Prize Foundation. Nominations are due by June 15.

### Submit an Idea

We welcome suggestions for future CAST publications and projects. [Click here to submit ideas.](#)



### Fighting Hunger

Elanco's Jeff Simmons, the 2015 BCCA laureate, explains a [combined effort with Heifer International to fight hunger.](#)

### A Challenge for Farmers

Consumers want to know the story behind their food, and it could only take as much as [10 minutes of social media each day](#) to make a difference.



### Catch CAST Online!

Follow us on [social media](#) to stay up to date on the latest ag trends and recent CAST news!

**Biotech and Food (podcasts):** According to Kevin Folta, these six podcasts offer [insightful discussions on the topic of genetically engineered foods.](#)

**Robotic Weeders:** Robots are taking [precision weed killing to another level](#)--and this could affect pesticide use and biotech crops.

**Farms, Ranches, and Land (video):** Along with a look at land prices, this article includes a report from the American Farmland Trust--an assessment of [the loss of U.S. farmland and ranch land.](#)

## News from the Far Side of the Barn

### Not-so-ugly Ducklings

**(video):** A Labrador retriever named [Fred adopts nine ducklings.](#)

### Captivating Cacti

**(video):** This time-lapse video of [blooming cacti is hypnotic.](#)

**Octo-aliens? (video):** These scientists say [octopuses came from outer space.](#)

### Cat Cruisin' at High Speed

**(video):** We're hoping this cat [enjoyed the ride and landed on its feet.](#)



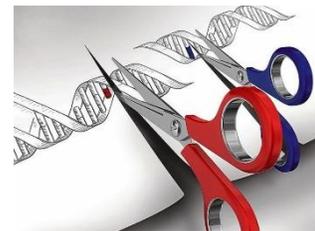
**Two weeks ago, an osprey hijacked a fish and shark; this time, a diving eagle takes a fox airborne as they fight over an unlucky rabbit.**

## Science-based Research and Current News

The phrase "credible, peer-reviewed research" might elicit cosmic sighs from some, as they envision publications laden with technical terms and scientific concepts. But the process is crucial in a world that needs solid, thoughtful information. CAST publishes issue papers, commentaries, and special reports to inform the public and policymakers--and with increasing regularity, the topics are resonating in current headlines. The following links reflect a few of the connections between CAST papers and current news. For more examples, click here to read our latest blog, [CAST Publications Continue to Resonate with Recent Research.](#)

**Biotech and Labeling:** In a recent email to suppliers, Whole Foods announced the company would [pause its genetically modified food labeling requirements](#) that had been scheduled to start on September 1. CAST Issue Paper #56 examined [process labeling and its effects on the food industry.](#)

**Gene Editing, Crops, and Regulations:**The [CRISPR-Cas9 gene editing method](#) has the potential to greatly influence agriculture and food production. A recent CAST Issue Paper looks at the potential of this process and the [ways that regulatory barriers hinder innovation.](#)





**Without bees they'll  
all be off the menu**

**More Buzz about Bees:** The University of California-Davis provides a [video to look at some of the complicated issues](#) regarding bee health. And this Cornell University scientist discusses [additional challenges bees face](#). The topic brings up many opinions, and the CAST Commentary, "[Why Does Bee Health Matter?](#)" uses science-based information to explain some of the important concepts.

**Animal Health and Welfare:** Researchers are working to [discover nutritional products that could help decrease illness](#) and lessen the need for medicines. [Animal welfare is a controversial topic](#), and this editorial writer says some extreme activists have trouble understanding the word "compromise." A recent CAST Task Force Report looked at the science behind some of these issues: [Scientific, Ethical, and](#)

[Economic Aspects of Farm Animal Welfare.](#)

## Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 flag pic from livinwithme.jpg, ag question mark pic from farmcrowdy.com, ag voices image from soygrowers.com, and eagle pic from livingwilderness.com. P. 2 gene edit graphic from news.mit.edu and bee poster from geneticliteracyproject.com. Animal Sec. cow pic from feedstuffs.com. Food Sec. grill pic from packer.com. Plant Sec. helicopter pic from heliteam.com. Inter. Sec. lion pic from news.com. Gen. Sec. Beyonce photo from houstonchronicle.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



### *Animal Agriculture and Environmental News*

**Can Eggs Have a Footprint? (video):** As [the end of National Egg Month draws near](#), check out this video that highlights the industry's commitment to lowering their carbon footprint.

**Subcutaneous Fitbits:** A start-up company in Utah is [putting biomonitors under cows' skin](#) in hopes of helping farmers spot disease earlier.

**Bioprinted Pigs:** This research team is [working to print 3D pig liver tissue](#) from genetically engineered pig cells.

**For Brain and Body (opinion):** According to Farm Babe, [meat is full of nutrients](#) such as iron, zinc, selenium, magnesium, vitamins, and fatty acids--and such a diet is a component of brain health.

**Pushing Beef Quality to the Limits:** Texas A&M researchers are exploring the potential for [cloning animals for meat quality using DNA](#) from postmortem muscle cells.

**Dog Years:** The world's most influential synthetic biologist is behind a new company that plans to [rejuvenate dogs using gene therapy](#). If it works, he plans to try the same approach on humans.

**"PHARM-ers":** A disability can be difficult for anyone to handle, but it can prove especially challenging for farmers. These [four-legged friends are making farm life a little easier](#) for those who need assistance.



**Penn State researchers found descendants of diverse Holstein lineages--several [recently born calves have garnered a fan following.](#)**



## Food Science and Safety News

**Fresher Food Tips (video):** These seven tips and tricks are [proven to leave your food fresh and edible](#) for longer periods of time.

**Field and Fork Food Pantry:** Thanks to [the generous donation made by a Florida cattleman](#), those who rely on this University of Florida food pantry and garden will enjoy a nutritious meal packed with protein.

**Feed 4 Thought:** A recent survey indicates a [majority of consumers believe their protein is raised](#) and handled with proper food safety measures.

**Wasted:** These master chefs say [the key to reducing food waste includes](#) putting leftovers to use, never shopping hungry, and giving your booze an upgrade.

**Don't Cry over Spilled (Raw) Milk?** Legislators from both sides of the aisle joined to defeat an amendment to the Farm Bill that would have allowed the [interstate sale of unpasteurized raw milk](#).

**A Meaty Issue:** Missouri is one step closer to being the first state to [enact labeling that makes it clear whether or not "meat" is sourced](#) from an animal or not.

**An Un-meaty Issue (related to above):** The makers of the plant-based Beyond Burger unveiled their latest innovation--featuring a [blend of peas, mung beans, rice, and sunflower protein](#).



**Grilling up a Healthy Meal:** Grilling season is well under way, and this survey shows nearly [75% of consumers prefer to grill their vegetables](#).



## Plant Agriculture and Environmental News

**Biology Breakthroughs (video):** The USDA recently [released the review of a GE virus](#) that fights against the Florida citrus greening disease.

**Tomato Wellness (podcast):** This UC-Davis plant breeder [explains the art and science behind breeding](#) delicious tomatoes that are ripe with flavor and nutrition.

**Cotton Agronomics:** Mississippi State researchers are [using biodegradable film to trap soil heat](#) and help young cotton plants establish a more robust root system--resulting in more vigorous and healthier plants.

**Organic Produce, Pesticides, and Truth (opinion):** This noted editorial food writer looks at the USDA [measurements of pesticide residues in our food](#).



Cattle producers are using [helicopters to apply herbicides to control invasive weeds](#) and put pastures back into grass production.

**Rejoice for Rice:** A team of Purdue scientists used CRISPR to develop [a variety of rice that produces 25-31% more grain](#)--something that would have been impossible with traditional breeding methods.

**Plants Rule the Earth:** Research says that [plants pack more heft than any other kingdom of life](#) on the planet--making up 80% of all the carbon stored in living creatures.

**Fighting Fungi:** University of Florida scientists hope that a group of [fungi might fight a disease](#) that's dangerous to tomatoes and specialty crops.



## *International News*

**Feline Fence:** The world's [longest cat-proof fence](#) has been built in central Australia to help endangered species.

**Egging on Healthy Hearts:** A major study of nearly half a million Chinese people has concluded that eating an egg a day [may lead to a lower risk of heart disease](#).

**The Ancient Rice Road:** A study of 4,000-year-old DNA suggests that [rice cultivation came with farmers migrating from China](#).

**Seaweed in Your Tank?** Part of the Dutch energy program includes a push for the use of [seaweed--a product ideally suited for biorefining](#).

**Armyworm on the March:** Experts warn that the fall armyworm that has destroyed African crops [could spread to Europe](#).

**Ebola Crisis:** Despite the WHO declaring the West Africa region Ebola-free two years ago, [there is a new wave of cases](#), this time in the Democratic Republic of Congo.



**This Malawian forest was almost emptied of wildlife, but a [modern-day Noah's ark maneuver](#) to move wildlife from other parts of the continent has rejuvenated the area.**



## *General Interest News*

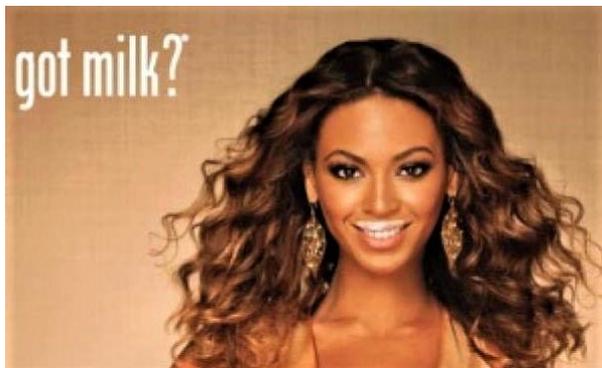
**Farming Leads to Fortune (video):** In this interview, [the world's richest man says he learned his work ethic](#) from his time spent on a cattle ranch as a kid.

**Safety and Fun:** As a three-day weekend looms, this article provides [tips for hosting a cookout in a public park](#).

**Sunscreen in a Pill?** The Food and Drug Administration is warning consumers [not to purchase alleged sun-protection supplements](#) from four companies because they do not work.

**Rural Infrastructure:** The USDA is investing \$243 million in [50 rural community facility projects](#) in 22 states.

**Agriculture Takes a Social Approach:** Farmers and ranchers across the globe are taking to social media to share their stories of raising food, fiber, and fuel to supply a growing population. [Here is a list of more than 600 active bloggers](#).



The successful "Got Milk?" [ad phenomenon morphs](#) into a "Got Jobs?" campaign by the dairy industry.

## 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.



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- \* American Meat Science Association
- \* American Meteorological Society, Committee on Agricultural and Forest Meteorology
- \* American Seed Trade Association
- \* 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
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- \* Croplife America
- \* Crop Science Society of America
- \* Entomological Society of America
- \* Innovation Center for U.S. Dairy
- \* Land O'Lakes

- \* Monsanto
- \* National Corn Growers Association/Iowa Corn Promotion Board
- \* National Milk Producers Federation
- \* 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
- \* Tyson Foods
- \* United Soybean Board
- \* Weed Science Society of America
- \* Western Society of Weed Science

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