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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.

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Scoopin' the Orbital Loop



After a successful Space X rocket launch, the Tesla Roadster is [cruising off to the asteroid belt](#). This footage provides [visuals and sounds as the two booster rockets land](#) back on Earth.

Tech and Research

The latest ideas and technology related to machinery, crop inputs, and agronomic practices will be on [display at the annual Commodity Classic](#) February 27-March 1 in Anaheim, California. Attendees will also see the announcement of the winning research and product concepts from the National Corn Growers Association's inaugural Consider Corn Challenge.

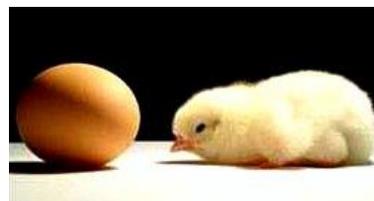


Send 'Em In
[Click here to submit an idea](#) for a CAST publication.

February 9, 2018

The Egg--It's Still Incredible

Consumers do not seem to fuss over the "what came first" question. They just appreciate the nutritious, versatile food that comes in a shell. Long a staple in the United States, eggs are also a [U.S. export success story](#), as they gain a large global market. The Egg Industry



Center released its first year-in-review research [report featuring 22 new, ongoing, or completed research projects](#). A different site provides [articles, analysis, and information on managing egg operations](#) and other issues--including a look at grants from the Foundation for Food and Agriculture Research to UC-Davis and other universities for study regarding [how to improve the health and productivity of egg-laying hens](#). And this article recommends eggsploring (you knew we'd crack into an egg pun sometime)--looking at [the many ways eggs can be used](#).

News and Views

Biotech Regs and Animal Innovation: This look at the regulation [debate about genetics and animals](#) includes insights from Alison Van Eenennaam, Kevin Folta, and Greg Jaffe.

Glyphosate Issue: A U.S. House Committee questioned the World Health Organization's cancer [research findings on glyphosate](#) during a recent hearing.

Farm Income Forecast: Highlights from the USDA's February 2018 [Farm Income Forecast](#) show that farm sector profits are likely to decline.



Blockchain and Ag: Some believe that a recent U.S. soy transaction is a sign that [blockchain has some real potential](#) for the transfer of agricultural commodities. And another article uses tomato commerce to explain that blockchain technology [might help facilitate consumer preferences](#).

Innovation Sources: In this interview (7 minutes into the podcast), Jayson Lusk explains how [agriculture innovation](#) comes from students, nonprofit scientists, university professors, and struggling entrepreneurs.

Veterinarian Loan Funding

Funding to help eligible veterinarians [offset a portion of their education debt incurred](#) in pursuit of a medical degree is now available.

Food Security

The [Global Food Security Symposium](#) will be March 21-22 in Washington, D.C.

Cover Crops

The University of Nebraska-Lincoln is offering a cover crop conference to growers in a corn/soybean rotation on February 15th. [Click here for more info.](#)

CAST Social Media

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



News from the Far Side of the Barn

Super Bull (video): This [Iowa landmark statue was featured in an advertisement](#) in Sunday's Super Bowl.

Beetle vs. Toad--Who Will Survive? (video): Animals have evolved all sorts of tactics to [ward off predators and avoid getting munched.](#)

Bovine Express Mail (video): These farmers are surprised when a [cow makes off with their mail.](#)



A pink ice cream--just in time for Valentine's Day--includes a [mix of fire-breathing chili peppers.](#)

CAST Gains Global Perspective

Caryn Dawson joins CAST staff

Pursuing a major that requires a backpack and a suitcase at Iowa State University, Caryn Dawson is working toward a bachelor's degree in [global resource systems](#) and horticulture with a minor in animal science and Spanish. Her interest in traveling was sparked by a [Rotary International](#) cultural exchange to Argentina for ten months after graduating from high school. During her trip, she learned a new language and was immersed in a new culture.

Caryn's connection with CAST happened long before she even realized it. Prior to her freshman year at Iowa State, a 4-H mentor encouraged her to attend a luncheon and an ISU women's basketball game on campus. It was during that visit that Caryn received a personal introduction to Wendy Wintersteen (former CAST Board of Trustees chair and current ISU president). "After telling her about my trip to Argentina, Wendy encouraged me to look into global resource systems. If it weren't for her input and guidance, I don't believe I would be where I am today."

As an administrative assistant intern at CAST, Caryn is hoping to gain knowledge and expertise on a wide variety of issues in agriculture. "I am excited to have the opportunity to gain experience in various aspects of



Caryn exploring Argentina during her cultural exchange trip.

finance, not only to help me in my personal endeavors but also in my future career." We welcome her to the CAST staff.

To read Caryn's full story, [click here](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 space pic from nerdlist.com, egg pic from scienceblogs.jpg, farm painting from smithsonianmag.com, and ice cream pic from atlasobscura.com. P. 2 photos from Kylie Peterson and Caryn Dawson. Animal Sec. crayfish pic from nyt.com. Food Sec. coffee pic from precisionnutrition.jpg. Plant Sec. grain bin pic from katherineplessner. Inter. Sec. mascot pic from metro.co.uk. Gen. Sec. gene diagram from doublexscience.org. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Brain Training for Old Dogs (video): Scientists have discovered [the importance of lifelong learning in animals](#) as they study cognitive training in dogs using touchscreen games.

Swine Flu Vaccine: A Kansas State University researcher has licensed a new vaccine to an animal health company to [fight a highly contagious swine disease overseas](#). The U.S. is currently free of the disease.

Beef Research: University of Arkansas researchers are [conducting a life-cycle analysis of the beef industry](#) to identify ways it can increase sustainability -and to assess how much the industry has improved during the past decade.

Antibiotic Alternative? This USDA report says scientists are studying a natural supplement as a possible [alternative to antibiotics for promoting pig health and growth](#).

Setting the Record Straight: The National Milk Producers Federation [admonished the authors of a university study](#) for a research article falsely describing milk as a high-risk factor in spreading foodborne illness.

Dairy Cow Health: A new method can detect most major mastitis-causing bugs in as little as three and a half hours. That means [infected cows can be correctly diagnosed and treated](#) more quickly.



Sounds like a horror movie, but a crayfish mutation has made it possible for the creature to clone itself, and now it has [spread across much of Europe and gained a foothold on other continents](#).



Food Science and Safety News

Challenge for Food: This breakthrough [research shares how people responded to questions regarding food labeling](#)--spotlighting a disconnect between consumers, farmers, and the food system. Check out this CAST blog that [highlights similar consumer trust research](#).

Hot and Cold Running Food Safety Methods: The most economical way to kill the bacteria that cause common foodborne illnesses is heat, but [this study looks at lower temperature mechanisms](#) that kill *Salmonella*.

Food Delivery Apps: Some worry that the growing use of services like Uber Eats and Seamless will [put restaurants out of business](#).

Your Aging Brain on Leafy Greens: A study in *Neurology* finds that healthy seniors who had daily helpings of leafy green vegetables--such as spinach and kale--had a [slower rate of cognitive decline](#).

Attitudes about Biotech Food (opinion): The Genetic Literacy Project says consumer-friendly GMO foods could [change minds about biotech crops and animals](#).

Breeding Tastier Tomatoes (see related article in Plant Section): A new study has uncovered which flavor-enhancing genes have been lost, giving growers [a road map to breed tastiness back into tomatoes](#).



Yet Another Cup of Coffee Research: After poring over the evidence, these experts declare [coffee is \(mostly\) good for you](#).



Plant Agriculture and Environmental News

Robotic Harvest: [Automation systems are superseding strenuous manual labor](#) and making their way into the agricultural industry--as [robotics knock on the door of cotton growers](#).

Soybean Markets: High oleic soybeans crossed the final regulatory hurdle, creating opportunities to increase [U.S. soybean competitiveness in the global market](#).

It's a Gas: Ethanol scientists are working on a breakthrough to [turn greenhouse gas into fuel](#).

We're Not Exactly Sure What It Means, But It Sounds Cool: Check out the research about high-resolution spatiotemporal transcriptome [mapping of tomato fruit development](#) and ripening.

Cover Crops and Water Quality: The Iowa Department of Agriculture and Land Stewardship kicked off a three-year project aimed at [increasing acres of cover crops and improving water quality](#) in the state.



The National Corn Growers Association announced the [25 winners of the 2017 Fields of Corn Photo Contest](#)--including this beautiful photo from Katherine Plessner.



International News

Dam Release Provides Temporary Relief (video): Cape Town, South Africa, is suffering from an extreme drought, but [temporary relief came with a water release](#) from a dam reservoir.

Golden Rice Update: Bangladeshi rice scientists have [advanced a beta carotene-rich rice](#) to a varietal release stage, heralding a new era in the fight against vitamin A deficiency.

Escalating Trade Dispute? China launched an [anti-subsidy investigation into imports of sorghum](#) from the United States--the latest move in what appears to be an escalating trade dispute between the two countries.

Grain Transport Slowdown: A [protest by grain transporters in Argentina](#) could leave exporters and crushers operating without soy, corn, and wheat.

Planting Peppercorn: As traditional cash crops struggle under extreme weather, farmers in Cameroon have started growing [drought-resistant Peja peppercorn](#).

Meat Questions in England: Great Britain's food regulators call for a [nationwide review of meat-cutting plants](#) after the discovery of serious incidents at two key facilities.



Winter Olympics: Ice, snow, cute mascots and norovirus? The [illness is causing a stomachache for the event](#).



General Interest News

Talking Killer Whale: According to researchers, a [killer whale has the ability to mimic human speech](#) by copying its trainer.

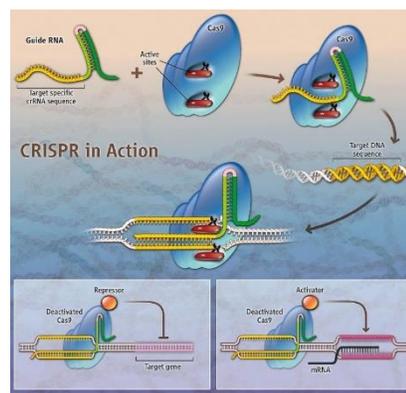
A Flood of Water Issues: This site says [many cities are facing water problems](#) due to climate change and urban drought. See related article about Cape Town in the International Section above.

The Right to Repair: Two manufacturing associations developed a "statement of principles" they claim will help farmers and ranchers [minimize downtime and maximize productivity](#) of farm equipment.

Help Wanted: Finding [good farm help has become tough with labor shortages](#), but farmers are discovering ways to recruit and manage qualified employees.

Renewable Energy (opinion): This speculative overview tries to imagine powering civilization entirely with [energy from renewable sources](#)--wind, sun, water, geothermal, and plants.

Farm Babe in India: Michelle Miller--the Farm Babe--speaks, writes, and farms, and she recently [traveled India to explore its food/ag scene](#).



These biologists produced an animation to [explain the basic concepts of the CRISPR-Cas9 gene-editing technique](#).

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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- * Crop Science Society of America
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- * Elanco Animal Health
- * 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
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