**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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**August 5, 2016**

**Climate Change and Ag**

Global reports seem to proclaim each new month as the "hottest yet on record." Climate change, global warming, and other environmental terms cause alarm and controversy. The biggest argument focuses on this: to what degree are humans at fault and what should be done about it? An internet search for any of the above terms and debates will keep you digitally busy. But for now, we provide two reports that might be of interest:

**“Global Warming Report:** Produced by more than 450 scientists from 62 countries, this report from the National Oceanic and Atmospheric Administration includes 300 pages documenting the historic warmth, as well as scores of other aspects of 2015’s climate.

**“Impact on Agriculture:** A study published in Environmental Research Letters—from MIT and the University of California at Davis—provides farmers and agriculture stakeholders with information they need to make more informed decisions about the impact of climate change on U.S. agriculture.

**News and Views**

**“Controversial Research Approved (unfolding story):** The National Institutes of Health is preparing to lift a ban on funding for controversial medical research that incorporates human stem cells into animal embryos, creating a hybrid human-animal organism known as a chimera.

**“It’s Official--GMO Labeling Law:** President Obama signed a bill requiring labeling on foods with genetically modified organism ingredients. Senate Bill 764 directs the Secretary of Agriculture to "establish a national mandatory bioengineered food disclosure standard."
**Biotech and Organic--Ted Talk:** Discussion about the pros and cons of GMOs and organic is often filled with misconstrued, biased, agenda-driven information. In this Ted Talk, Greg Peterson (Kansas farmer and popular video producer) tries to look at the facts.

**Gene Editing Is Here:** CRISPR is a game-changing technology, and the agricultural R&D pipeline is fast filling up with edited agricultural plants and animals. This writer says constructive discourse on its use and policing is urgently needed.

### News from the Far Side of the Barn

**This Eagle Cam Has an Ouch Factor Involved (video):** We all love eagles, but you don’t want to be a baby osprey when one comes by for a take-out lunch.

**Not Much Demand for Porcupines, We Assume:** A new zoo in the Czech Republic apparently lets visitors cuddle with the animals—hug a boa or snuggle up with a puma. What could go wrong!?

**Where's the Beef? Now We Know:** Owners of a restaurant in Maine created an enormous 100-pound sirloin steak burger to celebrate the company's one-year anniversary—and support a charity.

### What's in Your Fridge?

*Food, safety procedures, and labeling issues*

In the classic film *The Odd Couple*, this exchange occurs after Oscar pulls some sandwiches from the fridge and offers them to his poker-playing buddies:

Oscar: I got, uh, brown sandwiches and, uh, green sandwiches. Which one do you want?
Murray: What's the green?
Oscar: It's either very new cheese or very old meat.
Murray: I'll take the brown.

Food safety is usually not a laughing matter, so we provide several articles and videos that might help.

**Food Safety:** The Centers for Disease Control and Prevention estimates that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases.

**Fridge Lifespans:** This article gives 15 recommendations for the shelf life of refrigerated food--these are suggestions. Please check your food carefully and use common sense.
Chances Are You're Reheating Wrong: When it comes to leftovers, reheating food can be the difference between a quick meal and a sick day.

The Cost of Date Labels on Food (opinion): According to this report, date labels on food cost American consumers billions of dollars and result in massive amounts of waste.

Top 50 Food Questions--Use By, Sell By: This CAST video looks at the question “What Is the Difference between Sell By and Use By Dates?”

Food Safety Humorous Videos: Professor Carl Winter of UC-Davis produced many entertaining parodies about food safety, including this one of Kenny Rogers’ “The Gambler.” Winter was the recipient of the 2012 Borlaug CAST Communication Award.

Click here to access CAST’s video series about food issues.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 volcano pic from abcnews.go.com and eagle pic from inhf.org. P. 2 fridge pic from listoftoptenz.com. Animal Sec. coyote pic from npr.org. Food Sec. sandwich pic from dudefoods.jpg. Plant Sec. odor pic from spokesman.com. Inter. Sec. pig pic from agwebcom. Gen. Sec. airplane pic from traveldiscountcode.co.uk. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.

Animal Agriculture and Environmental News

Trade Deal and Some Beefs about It (opinions): The USDA has reached an agreement with Brazil to allow access for U.S. beef and beef products to the Brazilian market for the first time since 2003. This also means imports into the United States from Brazil, and some groups are not happy about this. In one more view, this expert looks at the market implications of the agreement.

Ad Campaign Touting Antibiotics (opinion): The poultry industry has reduced its use of antibiotics, but a major poultry processor has started an advertising campaign to defend its continued use of antibiotics.

Hog Waste and the Environment: At North Carolina State University, conservation efforts have been boosted by hog waste agreement funds.

Cloned Animals and Public Fear: Entertainment value aside, the science-fiction image of cloning creates some fear among the public as they consider the application of cloning in meat and dairy production.

Veterinarians and the Cattle Industry: This historical perspective from a Kansas State University expert looks at the shared heritage of veterinary medicine and the U.S. cattle industry.
Coyotes Ugly?  The Urban Coyote Project in Los Angeles aims to help locals and lawmakers make informed decisions about coyotes in the city.

Where the Wild Things Are:  Animals and humans sometimes struggle to get along when boundaries are crossed—from coyotes riding the train to ground squirrels protecting their young.

Solving Problems:  After more than 50 years of research, UC-Davis experts have identified the tick-borne bacterium responsible for one of the most devastating cattle diseases in the western U.S.

The Cheese Heads Got Yer Goat:  Wisconsin has long been known as one of the nation's leaders in cow dairies, but now it is becoming the place with the most dairy goats in the country.

Chicken Check In:  The National Chicken Council launched "Chicken Check In," as they hope to provide answers about chicken production and insights for shoppers about the way birds get to the store.

Food Science and Safety News

This Singapore Food Stall Received Michelin Star (video):  This food stall is recognized as one of the finest food establishments in the world.

Eat It:  The Center for Science in the Public Interest is out with its Xtreme Eating Awards honoring restaurant meals with shockingly high calorie counts—one restaurant has provided a winner for ten straight years.

Hunger Doesn't Take a Summer Break:  The Summer Food Service Program is a federal initiative of the USDA that provides funding for states to feed their children when schools are closed for the summer.

Cutting the Salt:  When food firms cut the salt, what do they put in instead?

Food Waste Policies:  These four states are doing something truly revolutionary with food—and trying to lessen the big food waste issue in the United States.

Why Waste? (opinion--related to above):  This is why Americans throw out $165 billion in food every year—that's 40% of all food they buy.

Can They Reduce Inflammation Or Is That Nuts?  This article looks at the possible good points of eating nuts—and the questions that remain.

Historical Food Trends--Buffalo Wings in 1977?  Look up what food obsession was popular each year from the '70s on.

Plant Agriculture and Environmental News

Proudly Made with GMOs:  This Los Angeles-based start-up called Soylent has decided to shout out about its GMO content.

Can't Get No Respect?  Many U.S. sugar beet growers don't understand why some consumers object to how
they farm. They say GMO sugar beets actually help the environment.

**Pesticide Drift Issue (opinion):** This article looks at the [dicamba pesticide drift problems](http://example.com) in Arkansas and considers how they might be tackled.

**Corpse Flowers Come to the East Coast:** A corpse flower can grow to six feet tall and *pulsate with a stench* that will burn off the hair in your nose.

**Cover Crop Dividend:** For the fourth year in a row, these researchers found a *yield boost in corn and soybeans* following the use of cover crops.

**Use a Spoon, Not a Shovel (opinion):** This expert advocates closely matching nitrogen application to plant uptake to minimize nutrient loss, maximize utilization, and improve plant performance and yield.

**Biodiesel and Livestock (opinion):** This biodiesel spokesman says the product is not just for fuel—the industry *brings benefits for livestock producers*.

**Global Wheat Prospects (opinion):** This expert provides six takeaways from the latest wheat market outlook.

**Soil--Getting a Makeover:** When soils lose their natural fertility, farmers and gardeners turn to amendments to replenish the earth.

**Plant Snap:** A new app lets users capture a plant's image and *identify it in seconds*.

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**International News**

**Shear Madness (video):** Thousands of people watched around the world as the sheep-shearing world record was broken. Matt Smith sheared 731 ewes in nine hours.

**Weather and Crop Traits (opinion):** India's heatwave highlights how extreme weather conditions threaten our ability to put sufficient nutritious food on all our plates. Can biotech and "specific crop traits" help?

**Pigs and Floods in China:** Record floods in China drowned animals and prompted concerns about possible disease outbreaks in the world's biggest pork producer and consumer.

**Donkey Cheese:** In Serbia, milk from the beasts of burden is used to make the world's most expensive cheese—$55 for a small mound of it.

**Anthrax and Reindeer:** Anthrax appears to be spreading from reindeer to humans in an outbreak at the "end of the world."

**Staying Put:** Migration is no longer the only option for many young Ethiopians, as careful restoration *revives livelihoods on eroded and deforested land*.
Advantages from Both Methods? This Swedish study says neither conventional nor organic is clearly environmentally superior.

**General Interest News**

**Drought Tools Resource Guide:** A publication by climatologists from the National Drought Mitigation Center at the University of Nebraska-Lincoln highlights 50 drought tools used by global planners and policymakers.

**Carrying On the Borlaug Perspective (audio):** This Forbes interview with Julie Borlaug includes discussion of agriculture innovation and global food security.

**Tractor Time:** Overall U.S. retail sales of ag tractors continued to beat the 5-year average as 2016 hit the midyear mark, with smaller tractors still the sales leader.

**Frequent Flying or Frequent Failures? (humor opinion):** Scientist--and traveler--Kevin Folta provides lessons learned from his days on planes. **Note:** Folta is the 2016 Borlaug CAST Communication Award recipient.

**Young Farmers:** This husband-wife duo has tailored their modern, diversified farm to protect the land and watershed. They raise hogs and cattle while integrating cover crops, corn, and soybeans.

**Bee Guts and Parasites:** Bacteria in the gut of young honey bees may provide clues about the impact parasites have on bee health. That and other experimental findings were published by the USDA.

**Fixing Proteins:** A new way of fixing inactive proteins has been discovered in algae, using chloroplast extracts and light to release an interrupting sequence from a protein.

**Farm Dust and Asthma:** According to research in the New England Journal of Medicine, scientists may have found an ingredient to prevent asthma in children: microbes from farm animals, carried into the home in dust.

**Hygiene Hypothesis on the Farm (related to above):** Check out the blog titled Farm Germs Might Be the Best Medicine.

**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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