



*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

[Research Funding and Public Health-  
-P. 2](#)

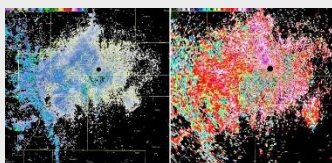
[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)



#### Butterfly Clouds

A lacy, cloud-like pattern drifting across a Denver-area radar screen turned out to be a [70-mile-wide wave of butterflies](#).

#### Global Youth

Each year, exceptional high school students from across the United States and other countries are selected to participate in the three-day [Global Youth Institute hosted by the World Food Prize Foundation](#).

#### Hunger Summit

This year's Iowa [Hunger Summit at the World Food Prize](#) will feature former USDA heads such as Tom Vilsack and Dan Glickman.



#### Gene Editing Conference

The [Genetic Editing in Agricultural Biotechnology](#)

[Roundtable](#) will occur Oct. 24 at the

*October 13, 2017*

## Agriculture, Technology, and Youth

*World Food Prize Laureate Dr. Adesina looks at how digital communication is empowering young agriculturalists in Africa*

Akinwumi Adesina (President, African Development Bank Group) will receive the World Food Prize next week, and his accomplishments include dynamic ag and finance programs in Africa. In this [special op/ed written for CAST](#), Adesina says, "The impact of digital technology on agriculture has been spectacular, and the mobile phone has also become a highly versatile agricultural implement with a large number of uses."



Adesina describes many programs currently in place and the practical tech benefits they provide, but he also looks at social changes and the ways digital capabilities empower "women and young people for whom barriers to adoption have in the past often impeded their potential and contributions."

Read Dr. Adesina's [full text here](#). Note: Adesina received the [2010 Borlaug CAST Communication Award](#).

## News and Views

**Senators Supporting Biofuel:** A bipartisan group of 38 U.S. senators [asked the EPA to abandon plans](#) to lower biofuel requirements for oil refiners in 2018.

**California Wildfires:** Raging [fires have killed at least 31 people](#) in Northern California, as officials continued the grim search for more bodies amid the ashes. The damage to the region's vital [wine making and tourism industries](#) is also immense.



North Carolina Biotechnology Center.

### Swine Day

Kansas State University's [annual Swine Day](#) will take place on Nov. 16, featuring updates on more than 50 research projects.

### University Buzz

The [University of Nevada-Reno](#) is at the forefront of a growing national initiative to expand the use of evidence-based teaching practices; [The Ohio State University](#) offers a workshop for women landowners and tenants to learn about legal matters; and [Mississippi State University](#) students had the fun of collaborating with elementary school kids to make plans for a new playground.



### CAST Social Media

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

**Students and Staff Join the Effort (see above):** [UC-Davis aid efforts continue in the Northern California fire emergency](#), while the university and individual employees from the coast to the main campus are also being impacted by this crisis.

**Clean Power Plan Nixed:** EPA leader Scott Pruitt confirmed Trump administration plans to repeal the Obama administration's landmark [climate change rule for power plants](#).

## News from the Far Side of the Barn

### DragonflyEye Drone (video):

Engineers have [outfitted an actual dragonfly](#) with drone tech--backpacking a suite of next-generation navigation.



The tiniest drone you've ever seen has taken flight.

### Big Buzz--30,000 Bees and 40 Pounds of Honey (video):

This beekeeper was [called to remove a super hive](#).

**Moose Gets Loose:** A drone pilot captured the tense [encounter between a moose and a wolf](#).

## Federal Food Safety Funding Cuts Risk Public Health

*Guest commentary from Cornell University's Kathryn Boor*

"As lawmakers in Washington, D.C., prepare to author the next federal Farm Bill, our ability to maintain a safe and adequate food supply is in their hands. This Congress must authorize an increase of financial support for agricultural research and innovation, which is central to the ongoing health and security of our nation, or else risk a future where our food supply is increasingly less safe."

Boor, the dean of Cornell University's College of Agriculture and Life Sciences, says, "To protect the health of our citizens, we must commit to the idea that more investment in food and agricultural research is essential. Public and private partners need additional encouragement to come together to ensure the future of a safe, affordable, and wholesome food supply." [Link to the full article here](#).



## CAST's Annual Award Event at the World Food Prize

*Award ceremony, a speech from Jayson Lusk, and a panel presentation*



CAST and Syngenta will [honor Dr. Jayson Lusk](#)--the 2017 Borlaug CAST Communication Award winner--on the occasion of the 2017 Borlaug Dialogue hosted by the World Food Prize Foundation. The session will occur October 18, 7:00-9:45 a.m. CDT in Des Moines, Iowa.

The event will feature a keynote speech by Jayson Lusk--*The Future of Food*. This will be followed by a presentation and panel discussion--*Designing the Road out of Poverty: Ensuring Resource Access*--cohosted by the American Society of Agricultural and Biological Engineers (ASABE). Watch for social media updates, press releases, a video of the presentation, and more.

*CAST recognizes that BCCA winners are an important part of the critical need to promote credible, science-based information about agriculture.*



## Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Adesina pic from dw.com, butterfly cloud pic from timedotcom.files.com, gene edit pic from news.mit.edu, dragonfly pic from mashable.com, and wildfire pic from sacbee.com. P. 2 lab pic from timesunion.com. Animal Sec. cartoon from backyardpoultrymag.com. Food Sec. pic from nashvillereporter.com. Plant Sec. farm pic from etsy.com. Inter. Sec. cheese shop pic from dairyreporter.com. Gen. Sec. poster from trillmag.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



### *Animal Agriculture and Environmental News*



**Iconic Beef Throwback (video):** Twenty-five years after establishing one of the nation's most iconic food brands, America's beef farmers are leveraging the equity of the "[Beef--It's What's For Dinner](#)" tagline.

**Parasite Control (video):** The FDA Center for Veterinary Medicine provides an [explanation of drug resistance in livestock and management practices](#) for retaining the efficacy of products used on a farm.

**Too Many, Too Few?** Some say the country has [too many cage-free eggs](#), while others suggest there is a shortage.

**Robotic Dairy (video):** This [virtual farm tour gives you a behind-the-scenes](#) look at Kansas' first robotic dairy.

**CRISPR Bacon:** It's already known that in pig production, "[everything but the squeal](#)" can be used by humans--but now pigs may have even higher value.

**Grazed and Confused:** The conclusion of new research shows that [grass-fed beef is not as environmentally friendly](#) as some proponents claim.

**Piglet Protection:** A device created by this [college student helps keep baby piglets from being crushed](#) by sows in farrowing crates.

**The Python Effect:** A University of Florida researcher looked at whether or not invasive species could increase the risk of disease for humans by [setting off a certain chain of events](#).



**Chicken Coop Roomba?** A new robot can clean, disinfect, spray vaccinations, and help monitor hens.



## Food Science and Safety News

**#WorldEggDay (video):** The [EIC](#) visited a university campus located in the Midwest to [talk with students about the egg industry's environmental footprint](#).

**Millionaire's Bacon:** This thick-cut, succulent-and-sweet version of the breakfast staple is [increasingly popping up on menus](#) across the Bay Area.

**Food Facts (opinion):** Consumers face a barrage of misinformation--this veterinarian [breaks down five food myths](#).

**Food Writers in Fly-over Country:** Find out about three food writers who live in [places where restaurants can be few and far between](#).

**The McVegan:** [McDonald's is testing a vegan burger](#) causing lots of conversation among both plant-based and fast-food fans.

**The Stinky Cheese Syndrome:** This article looks at [why a pungent, delicacy cheese](#) gives some the munchies but sends others reeling and swooning.



**Cowboy Troy**--a "hick-hop" country rapper--released a new song titled "Porkchop." Click here for a YouTube [video of the song](#).



## Plant Agriculture and Environmental News

**Picture-based Crop Insurance (video):** Millions of [small farms around the world lack access to affordable insurance](#)--once again, technology may suggest an efficient solution.

**Fighting Herbicide Resistance:** Many states are facing herbicide resistance in Palmer amaranth--these possible [solutions are under development](#).

**Science-based Research about Weeds (related to above):** Check out this CAST Issue Paper regarding [herbicide-resistant weeds and soil conservation](#).

**Tiny Seed, Big Fuel?** Researchers are zooming in on *Brassica carinata* to see if oil extracted from a tiny seed [could be the key to what powers jet planes](#).

**Nitrogen "Fixing":** Some bacteria carry an enzyme called nitrogenase that enables them to grow by [incorporating nitrogen from the air into biomass](#). Transferring nitrogenase to cereals might aid crop production and reduce fertilizer needs.

**Artificial Intelligence in the Field:** Scientists have developed a mobile phone application that uses [artificial intelligence to accurately identify crop diseases](#) in the field.

**Herbicide Rotation:** A new study suggests that [herbicide rotation does not delay or reduce resistance evolution](#).

**Gene Discovery:** Researchers [identified a gene that keeps grasses from entering their flowering cycle](#) until the season is right--a discovery that may help plant breeders get more from food and energy crops.



Harvest time has undergone a [massive tech makeover](#).



## International News

**Removing Hurdles:** The [long-awaited passage of a bill this week clears the way](#) for large-scale field tests and a commercial release of GM crops in Uganda.

**Children, Obesity, and Malnutrition:** The number of [obese youngsters worldwide has risen tenfold](#) in four decades--trends indicate there will be more obese children than those moderately or severely underweight by 2022.

**Bananapocalypse:** Australian researchers are hoping genetic modification will make Cavendish [bananas resistant to a damaging fungus](#).

**Smart Aging Concept:** DuPont in Japan hopes to spur innovation in the [supplement and functional food space for the aging population](#) by launching new yogurt, chocolate, and other products.



A [Dutch cheese shop that broadcast live online](#) for five days brought in almost 57,000 visitors and took in more than 500 orders.

**Antarctica or Bust:** A team of [Cal-Poly researchers is headed to the South Pole](#) to study the physiology of the Weddell seal pups.

**Ivory Ban:** The UK will impose a [ban on ivory sales](#) to help bring an end to the poaching of elephants.



## General Interest News

**Farmers for America (video):** This [documentary traces the extraordinary challenges facing young and aspiring farmers](#) who work to provide America's food supply.

**Blue Planet II Trailer (video):** This [nature documentary has spectacular footage](#), Sir David Attenborough narrating, and a soundtrack created by Hans Zimmer and Radiohead.

**Ag Tech:** Kansas State researchers have worked in five countries to test and develop new agricultural technologies that are already improving the way crops are grown--[especially through the use of drones](#).

**Hemp Production Hurdles:** Eastern Kentucky's [burgeoning hemp industry faces challenges](#)--the lack of suitable land, and hemp's association with marijuana.



**Avoiding a Halloween High:** Hemp is not marijuana, and many say that candy should not be either. With Halloween approaching, Colorado is [banning marijuana edibles that look like kids' candy](#).

**Floating Wind Power:** A recent study suggests that [wind farms in open ocean environments may be able to sustain higher electricity generation rates](#) than wind farms on land.

## 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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- \* Land O'Lakes
- \* Monsanto

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- \* National Pork Board
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\*\* With assistance from Carol Gostele (Managing Scientific Editor)

