

Friday Notes

Council for Agricultural Science and Technology

CAST

The Science Source for Food, Agricultural, and Environmental Issues

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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In Living Color



From canyons to fields to the striped mountains in China (above), this site visits 15 of the world's [most colorful landscapes](#).

CAST and Societies

In 1973, CAST was composed of 10 member societies, but by 1978 that number [had grown to 25 food and agricultural science societies](#). In 1975, CAST hosted the "Food Day Dialogues," with scientists answering hundreds of phone calls from students.

Veterinary Ed

The College of Veterinary Medicine at The Ohio State University received a large monetary gift to establish the [Building Preeminence in Veterinary General Practice Education Program](#).

Sustainable Farming

October 7, 2016



Borlaug Dialogue--2016

Let Food Be Thy Medicine



This year is the 30th Anniversary of Dr. Norman E. Borlaug establishing the World Food Prize, and the [2016 conference will convene an impressive array](#) of international leaders, policymakers, farmers, agribusiness executives, and specialists from nongovernmental organizations--as well as scientific, academic, and development experts--to address the most critical issues facing global food security.

The [World Food Prize](#) is the most prominent global award for individuals whose breakthrough achievements alleviate hunger and promote global food security. The [2016 World Food Prize Laureates](#) are Drs. Maria Andrade, Robert Mwangi, Jan Low, and Howarth Bouis.



As USAID Administrator Gayle Smith said, "These four extraordinary World Food Prize laureates have proven that science matters, and that when matched with dedication, it can change people's lives." The prize rewards their work in countering world hunger and malnutrition through biofortification, the process of breeding critical vitamins and micronutrients into staple crops. The recipients will be honored at an October 13 ceremony in the Hall of Laureates, Des Moines, Iowa.

News and Views

****Congressional Action and Farm Loans:** An administrator from the Farm Service Agency says the backlog of [farm loans will be covered](#) now that the continuing resolution has been passed by Congress.

****Message from the President about Agriculture:** Click here for President Barack Obama's comments about the [Strength and Resilience of Rural America](#). He focuses on honesty, responsibility, hard work, and toughness against adversity.

****Ag Espionage:** A Chinese businessman admitted guilt in a plot to steal trade secrets from U.S. agriculture companies and [will spend three years in prison](#). For more background and insights into this issue, check

The U.S. Farmers & Ranchers Alliance released an [animated video highlighting sustainable farming](#) and ranching practices to help answer questions consumers have about how food is grown and raised.

Ag Jobs

According to the USDA, employment opportunities for [graduates in agriculture and related industries](#) are expected to outpace the number of applicants over the next five years.

Farm-to-Table

The University of Nevada-Reno hosted its [inaugural Farm-to-Table Dinner](#) to highlight local food production and raise money for student internships.



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

out this blog: [The Spy who Came in from the Corn](#).

****TPP Tipping Point:** The chief agricultural negotiator with the U.S. trade representative group says there is still time to complete the [Trans-Pacific Partnership trade agreement](#).

****Ag Tech on the White House Lawn:** Food and agriculture entrepreneurs recently took the stage at the White House lawn to discuss the [potential and limits of technology](#) to feed a burgeoning world population.

News from the Far Side of the Barn

How Do You Say "Hakuna Matata" in Polish?

(video): Four [rare white lions were born](#) at a zoo in Poland, and the mother is not letting anyone hug or cuddle the newborns.



Hold the Anchovies; Add the Digital Toppings: At this pizza shop, [robots and algorithms run the show](#).

Grab This Quiz by the Tail: Guess the name of the animal [by looking at a picture of its tail](#).

October Events

The month is more than just harvests and Halloween

BCCA at the WFP: CAST and DuPont will present an October 12th ceremony to honor the [2016 Borlaug CAST Communication Award winner](#)--Dr. Kevin Folta--on the occasion of the 2016 Borlaug Dialogue hosted by the World Food Prize Foundation.

Farm-to-School Month: Thousands of schools, early care and education sites, farms, communities, and organizations will [celebrate food education, school gardens, and healthy lunches](#).

National Farmers' Day: Our food providers should be honored daily, but October 12 is designated as [National Farmers' Day](#), and Florida is celebrating with the release of an informational video about agricultural producers--[The Story of Florida Agriculture: A Rich Legacy and a Bright Future](#).

National 4-H Week: With the theme "#4HGrown," National 4-H Week--October 2-8--focused on [promoting the 4-H brand](#), recruiting youth and volunteers, and engaging with alumni.

FFA--Celebrating a Way of Life: University ag/ed student, CAST intern, and FFA enthusiast Mikayla Dolch explains why the organization is "the iceberg beneath the water" when it comes to the mission--and [her family's](#)



Kevin Folta will join a list of dynamic, influential BCCA winners: (clockwise from top right) Carl Winter, Alison Van Eenennaam, Akinwumi Adesina, Catherine Bertini, Channapra Prakash, and Jeff Simmons.

[impressive legacy with FFA](#). She also notes that the [2016 National FFA Convention and Expo](#) will be October 19-22 in Indianapolis, Indiana. As she says, "Check out all the blue corduroy jacket successes."



**An excerpt from [Mikayla's essay](#):

The blue corduroy jacket may proclaim "outdated" and "unfashionable" to some on the outside, but it is what people do not see (hard work, late nights, courage, failures, persistence, discipline, criticism, and adversity) that triggers my smile each time I spot the emblem. It is what keeps us committed. The legacy of my family's involvement within the organization stems from the iceberg beneath the water.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 mountain pic from cnn.com, prize winners photo from seedworld.com, and lion pic from news.yahoo.com. Animal Sec. dog pic from thehive.files.wordpress.jpg. Food Sec. diner pic from girleatsworld.curious-notions.net. Plant Sec. tree pic from propstreecare.com. Inter. Sec. road pic from static.touriststate.com. Gen. Sec. tractor pic from agprofessional.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Bird Is the Word--Processing Poultry (video): Check out this popular YouTube video providing a behind-the-scenes look at today's high-tech, highly [efficient poultry processing plants](#).

The Courts and Confinements: A U.S. District Court [dismissed a lawsuit brought by HSUS](#) and other activist groups against the EPA, alleging the agency would not regulate confined animal feeding operations.

Antibiotic Use (opinion): The debate continues regarding how farmers strive to maintain healthy herds and flocks and how some consumers [demand that no antibiotics be used](#) in raising animals.

Online Cattle Reports: The USDA says it will [require meat packers to report cattle purchases](#) they make through online auctions to the agency--some traders think this will result in more transparent markets.

Hog Heaven: With design help from Iowa State University, this pig farmer has erected an [energy-efficient and environmentally sound hog building](#)--with odor reduction, air filters, and climate control features.

Dogs' Noses Know: Specially trained dogs have been known to sniff out explosives, drugs, missing persons, and certain cancer cells--and this author says all [dogs have special olfactory abilities](#).

Got Yer Goat: A six-year Texas A&M AgriLife study proved what many West Texas stockmen know--[properly managed meat goats are valuable](#) property.



A dog with more than just smells at the tip of its nose.

Beef Prices: News that China is lifting a 13-year import ban on U.S. beef is [not helping prices as much](#) as some cattlemen would have hoped, according to this Mississippi State University agricultural

economist.

Domo Arigato Mr. Milking Roboto: The largest robotic milking facility in North America will be operational in Michigan in 2017--with 1,500 cows and [24 robotic milking units](#).

Hog Inventory: The United States [inventory of hogs and pigs](#) on September 1, 2016, was 70.9 million head--up 2% from 2015 and up 4% from June. Breeding inventory and market hog inventory were also up.



Food Science and Safety News

Access to Info about Food: A new study from the Center for Food Integrity says only a minority of consumers believe they have access to all [the information they need about food production and safety](#).

Top Diners in Every State (opinion): From the Lucky Wishbone in Alaska to the Kill Devil Grill in North Carolina, this list provides [a "best diner" in each state](#).

In the Genes: Some people are [genetically wired to prefer the taste of fatty foods](#), putting them at increased risk of obesity, according to UK researchers.

Young Athletes and Nutrition: According to this article, [young athletes need more energy and nutrients](#) to fuel activity and must consume enough food to fuel age-appropriate growth and development.

Raw Debate about Raw Milk: In Texas, state law says raw milk dairies can transport raw milk purchases to a pickup location. At issue is [whether or not an agent can carry out that delivery](#).

Retailers Can Help Control Waste and Customer Satisfaction (opinion): These food groups examined how [reducing waste affects on-shelf availability](#) and overall efficiency.

Too Much "Thought for Food" (opinion): A growing number of doctors, scientists, and patients argue that food can be an addictive substance and [food addiction a legitimate psychological disorder](#).

Electric Kale: Bell peppers, carrots, and green beans can also turn your microwave into a disco ball. [Why do some foods spark in the microwave?](#)



Modern? Is that term nostalgic, hopeful, or ironic?



Plant Agriculture and Environmental News

A Tree Machine with Bite (video): This tree spade [slices trees out of the ground](#) in one big gulp.

Battling Low Prices: The USDA will pay farmers more than \$7 billion to keep them [afloat in the face of a bad farm economy](#). Ag Secretary Vilsack said this will help them stand strong against low commodity prices.

Biofuels (opinion): Production of [biofuels and biobased products](#)--such as plant-derived plastics--supports 4.2 million jobs, but the industry's future growth rate depends in part on oil prices and government incentives.

GMOs Are a Necessity (opinion): According to this article, research shows that biotech crops are essential [for farmers and the environment](#).

Plant Smarts: Scientists at the Weed Science Society of America say plants can sense and communicate in ways that may surprise you, and these findings open the door [for new approaches to weed control](#).

Slowing Soil Degradation: Soil degradation is a growing problem throughout the world--and an important topic for our times--as [it affects the food we eat every day](#).

Seedy: An Iowa State University study may help scientists sift through vast amounts of plant seeds stored in gene banks across the globe to identify those useful to [plant breeders attempting to produce better varieties](#).

Diversified Cover-Up: Planting a multi-species mixture of cover crops--rather than a cover crop monoculture between cash crops--[provides increased agroecosystem services](#), according to these researchers.



A machine that gets to the root of the situation.



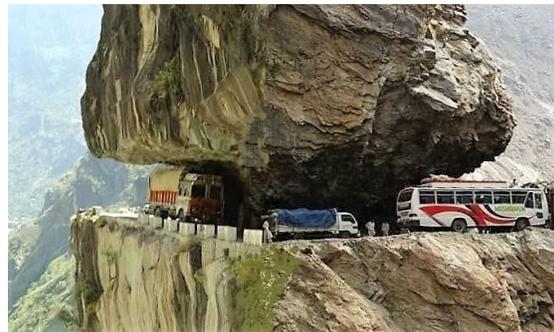
International News

From the Breezer to the Sneezer--Shearing Them Properly (video): Approximately 28 million sheep live in New Zealand--seven for each person. The small town of Te Kuiti calls itself the [shearing capital of the world](#).

India's 15 Deadliest Roads: India's natural beauty also features [geographical formations](#) that can make life difficult for drivers.

Farmopolis in London Town: On the banks of the River Thames, this project forms the beginnings of a social, technological, and [agricultural prototype for urban farming](#).

Tanzania GMO Crop Trials: Many African countries have been reluctant to permit [biotech foods, but opposition has softened](#) amid a punishing drought.



Don't look down--or up!

Gender Equality in Agriculture: [Cornell University and Makerere University in Uganda](#) team up to offer a training course called "Gender Responsive Root, Tuber, and Banana Breeding."

Nogyojoshi Project: An increasing number of [Japanese women are staking their future on agriculture](#), and the trend has drawn the attention of the government.

That's Yuan Big Loan: The Agricultural Development Bank of China [agreed to loan at least 3 trillion yuan](#) (\$450 billion) by 2020 for the modernization of China's agriculture industry, state media said.

Euro Innovation: This [special edition of Futuris](#) investigates how scientists and engineers are helping farmers, entrepreneurs, and industrialists across Europe.

So, Dory and Nemo Can Talk! Australian [experts recorded fish vocalizing](#)--communication that plays a vital role in different fish behaviors, including reproduction, feeding, and territorial conflict.



General Interest News

Celebrating Farmers with Song (videos): Country music superstar Luke Bryan, the son of a peanut farmer from Georgia, takes his [annual farm tour to eight cities](#) across the United States.

Farmerless Tractor Update (opinion): This writer says the "Gotham-looking" robot Case IH [tractor is steering toward the future](#). "This may be what finally puts precision agriculture on the path it needed to be on all along."



Ghost on the machine.

Robots-R-Us? (opinion--related to above): This writer says the possibilities for automation in agriculture are increasing with phenomenal speed, and the farming robot's [moment of truth is approaching](#).

Solar Breakthrough? Researchers from North Carolina State University and Chinese experts created environmentally friendly semi-printed plastic solar cells--without toxic halogen solvents--by using a food additive.

Bee Protection: In a first for bees in the nation, [seven bee species native to Hawaii](#) are now protected under the Endangered Species Act.

Keeping the Great Lakes Great: The Ohio State University and Nature Conservancy experts used computer modeling to get a handle on the impact of various [conservation efforts in the western Lake Erie watershed](#).

Renewable Fuels Investment: The USDA has been working with farmers and ranchers to make [critical investments in renewable fuels](#), from manufacturing facilities to storage tanks and dispensing pumps.

Mom Knows Best: The University of Arkansas' [Moms on the Farm Tour](#) gives attendees a better understanding of how farmers provide consumers with food for their families.

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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* University of Nevada

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