

Friday Notes

Council for Agricultural Science and Technology

ICAST

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.

In This Issue..... Click to Read

[Roots and Branches--CAST's Annual Report for 2015--P.2](#)

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Spring in the Capital

The blossoms rolled into Washington, D.C., as legislators broke for spring break.

Big Event in D.C.

On April 21, join CAST and DuPont--in cooperation with the World Bank--for a presentation about *Gene-edited Crops* by Channapatna S. Prakash, the 2015 Borlaug CAST Communication Award recipient.

At the Washington, D.C., event, CAST will also [announce the winner of the 2016 Borlaug CAST Communication Award](#).

Ag Studies in the UK

As Britain's 2015 Agriculture Student of the Year points out, [agriculture is now the fastest growing subject](#) at UK universities.

April 1, 2016

Women in Agriculture Taking on Leadership Roles

When it comes to agriculture, women are more involved than ever, especially in corporate and media positions. According to Harvest Public Media, thousands of women have taken on leadership roles in the traditionally male-dominated agriculture industry. Over the past 15 years, the fraction of U.S. farms run by women has nearly tripled to about 15%. As this article points out, some [on-the-farm women are using meetings, social media, and other methods](#) to share ideas.



Getting hands-on with management roles on and off the farm.

[FarmHer](#) is an online community for women in agriculture to come together and tell their story. Its mission is to change the image of agriculture and to include women in that image through photographs and stories--and now it is on the [television screen with RFD-TV](#).

Note: check the Animal Section below for profiles of two women farmers--one young livestock enthusiast and one grandma cowgirl.

News and Views

****Views from the Ag Department:** This [interview with Agriculture Secretary Tom Vilsack](#) looks at GMO labeling and issues that divide the farming community.

****Beating the Trade Drum:** With some political sentiment going against open trade, the USDA is making a push to drum up [support for the Transatlantic Trade and Investment Partnership](#).

****Vermont Law Set to "Wag the Dog"?** This overview looks at the latest [status for the GMO labeling law](#).

Ag Jobs and Ag Grads



Agriculture groups are trying to find people to fill [jobs working with GPS, drones, and computer technology](#). Ag programs at various universities are producing such graduates.

Learning How to Communicate

A USDA grant is helping University of Florida agriculture students learn how to increase their awareness and [knowledge about controversial topics in agriculture](#).

The Joys of Ag Ed

This writer looks at the need for agricultural [education and organizations](#) like FFA and 4-H.

CAST Social Media

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

****Ag Economic Insights:** These economists admit that conditions in agriculture are tough, but they [point out a few good nuggets](#) buried in the bad news.

****Food Waste and the Greenhouse Effect:** The topic of food waste continues to garner attention, and this article focuses on how that waste [contributes to global greenhouse gas emissions](#).

****Note--Related to Above:** [Click here for a download](#) of the University of Pennsylvania book--*Food Waste Across the Supply Chain: a U.S. Perspective of a Global Problem*.

News from the Far Side of the Barn

Snakes, Venom, and Motivation (video): The star of Discovery Channel's [Venom Hunters](#) explains why he risks his life catching and harvesting some of the world's [most poisonous critters](#).

Chocolate Milk Straight from the Cow (videos): These classic clips might help you [tend your spaghetti trees and prune your marshmallow bushes](#).

Animal Traffickers of Ancient Rome: Caesar Augustus claims that he had 3,500 African animals killed during his reign, and other emperors [used thousands of wild beasts in the arena](#).



Always tough reaching the spaghetti on the upper branches.

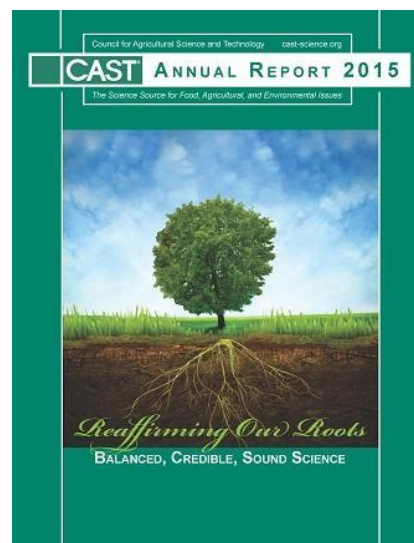
Reaffirming Our Roots

Balanced, Credible, Sound Science

The [CAST Annual Report](#) looks at highlights from 2015, and it provides a link with the past and a road to the future. In the publication, CAST President Mark Armfelt emphasizes two key points that will enrich the organization. "We need to be committed to completing and implementing the strategic plan, and we need to make every effort to move forward in a timely fashion with the multiple papers in the process of being written right now."

The report contains plenty of information and photos. In it you will find articles about the following:

- Letters from Mark Armfelt, current CAST President, and Kent Schescke, CAST EVP, that provide updates on CAST direction and new strategic plan
- Board of Trustees updates
- Summaries of the Spring and Fall Board Meetings
- Rollout of Issue Paper 56
- The 2015 Borlaug CAST Communication Award



- Linda Chimenti's retirement
- CAST social media information

In addition, there are board member and membership lists, as well as financial summaries.

As CAST's EVP Kent Schescke said, "CAST's roots are its commitment to communicating balanced, credible, sound science. With strong roots, we have the ability and opportunity to branch out in new directions."

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 blossom pic from pbs.twimg.com, pic of students from bayer.jpg, woman pic from mediad.publicbroadcasting.net, and spaghetti tree pic from huffingtonpost.com. Animal Sec. cowgirl pic from cattlenetwork.com. Food Sec. banana cartoon from ellisonpinterest.com. Plant Sec. cartoon from wdbqam.com. Inter. Sec. tractor pic from nprmedia.org. Gen. Sec. gardening pic from pinterest.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

The Science behind Cattle Ranches (video): This documentary looks at many [aspects of modern cattle ranching](#).

Raising a Stink: This research paper looks at [ways to cope with the negative impact of intensive pig production](#) on the environment, including odor. It considers nutritional approaches and other methods.

Slow Chickens: Whole Foods announced that it wants all of its suppliers, even those raising large numbers of broilers indoors, to [shift over to slower-growing breeds](#) of chickens. The shift will take eight years.

Voice of Sustainable Pork: This new website focuses on responsible, successful pork production. It brings [news, trends, research updates, and commentary](#) to various facets of the global pork chain.

Grandma Cattle Specialist: This Cowgirl Hall of Fame member ranches with passion and curiosity as she [develops a herd of special cattle](#) in Texas.

Profile of a Young Farmer: Allison Brown [returned home to the family farm](#), and she now manages a wean-to-finish hog facility and a heifer program.

Pigs Like Chocolate? Imagine That: Chocolate by-products are available for livestock feed, and North Carolina State University [researchers looked at the pros and cons](#) of using the "candy" to supplement swine feed.



"I was kind of a heterosis nut."

Wonderful World of Animals: This slide show displays 50 [weird facts about well-known animals](#)--can a blue whale's tongue weigh as much as an elephant? Do cows give more milk when music is played?

Getting Joy from Sheep and Lambs (photo essay): This farmer shares her joy of seeing [sheep in the pasture](#)--and her love of good lamb recipes.

Animal Brain Power: Scientists look at the [brain activity in animals](#) that helps them find food and other resources in unfamiliar environments where there are no cues--such as lights and sounds--to guide them.



Food Science and Safety News

Sugary Cream-filled Donuts Not Recommended (video): A new study found that [kids who ate two breakfasts](#) had a lower risk of obesity than those who skipped the most important meal of the day.

When the FDA Says No: The FDA refused food imports at the [same level between 2005 and 2013](#), even though the volume of food imports increased over that time period.

Roasting Beans on the Plains: Bali, Brazil, Kenya, and other diverse regions serve as sources of coffee for a [coffee-roasting business located in rural Kansas](#).

Back to Beef? Diners seem to be cutting into steaks and burgers more, and the USDA announces the [first increase since 2006 in beef consumption](#).

Biotech Bananas: Researchers from Iowa State, Uganda, and Australia are teaming up to reengineer the staple food of Uganda, the cooking banana. This strategy [can be both difficult and controversial](#).

Sweet, Tasty, and Healthy? Lime, fiber, and stevia provide a cocktail of ingredients that can be added to fruit juice to increase its [nutritional value and promote the sensory experience](#) of the juice.

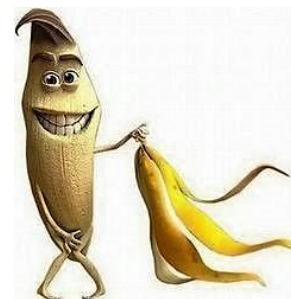
Organic Food Availability: So-called organic food is becoming more popular, but it seems to be [concentrated in selected neighborhoods](#), rather than in widespread areas.

Parmesan and Strawberries: Some food combinations seem [so wrong they might just be right](#)--ice cream and fries, anyone?

Future Food Tool? Giant retailer Target and two collaborators have [developed a handheld scanner](#) that's designed to scan and "read" foods instantly.

Can You Handle the Heat? The Burger King fast food chain began selling a sandwich with red hamburger [buns infused with hot sauce](#). It is called the "angriest Whopper sandwich."

Left-handed Burger: In a nod to the date on the calendar, we remember the famous "[left-handed Whopper](#)" ad from days gone by.



Nothing to hide.



Plant Agriculture and Environmental News

Organic Crops, Pesticides, and Bans (opinion): This agriculturalist says certain pesticides are allowed in organic production, and chemical [bans can have unintended consequences](#).

Soil Health and Rented Land: This survey says almost half of the farmers indicated they were uncertain about whether their landlords know about the [concept of soil health and how to improve it](#).

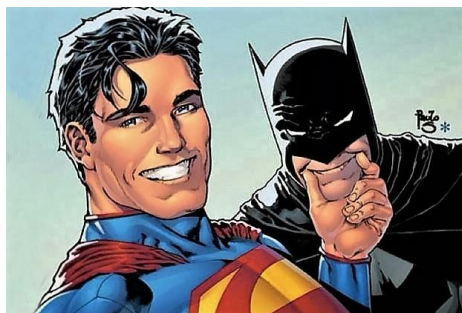
What Would Batman and Superman Do? (opinion): This writer says [organic and conventional farming](#) should work together like cooperating superheroes to help feed the world.

Climate and Agriculture: Cornell University has been awarded a \$24 million [grant to study climate-change-induced heat stress](#) and disease pathogens migrating across borders.

Beating Sugar Beet Curly Top: A new sugar beet germplasm breeding line developed by USDA scientists could usher in [new varieties of the sugar crop](#) that can better withstand the sugar beet curly top virus.

One Way to Stomp Grapes (opinion): This California winemaker [moved away from conventional viticulture](#) and toward what he calls more sustainable farming practices.

Slower Plant Response: Scientists say many plants don't [respond to warming](#) as previously thought.



"No joking; we get along famously!"



International News

Food Security and World Peace (opinion): Improving food security can help build sustainable peace and even [ward off looming conflict](#), according to this UN official.

They Call It "Hello Tractor": This new, [low-cost mini tractor](#) comes from Nigeria. Its GPS unit and user-friendly attractions make it a hot item.

Agriculture in Japan: The 2011 earthquake, tsunami, and nuclear meltdown added to [agricultural woes for Japan](#). Many hope new high-tech ideas will help.

Stressing Out Over Water: Without altering current levels of water consumption and pollution, almost half of the world's population will [suffer severe water stress](#) by 2030, according to this report.

Biotech, Hunger, and Crops in India: This writer says that in much of the developing world, the GMO question is not about labels or consumer awareness--it is about [starvation, nutrition, and quality of life](#).

Saving Coral Reefs: An international research team calls for a targeted research strategy to better understand the impact multiple influences will have on [coral reefs in the future](#) due to global climate change.

Nutella Tax Relief? France has voted to slash the "Nutella tax," a surcharge on imported palm oil that is used in [the famous chocolate spread](#).

Sniffing out *E. coli*: Researchers from Korea are [using lasers to determine how much bacteria](#) is crawling all over your stored food.



Mini tractors in Nigeria.



General Interest News

High Tide (video): These researchers say [sea levels could rise twice as fast](#) by the end of the century.

How Does Your Garden Grow? Research shows [school gardens have a positive impact](#) on student learning, health, and nutrition.

State Water Lawsuit with Broad Implications: An Iowa water lawsuit raises the question as to how far down the tile system [EPA regulations exemptions apply](#).

Water Woes? (opinion): Many Americans live under the assumption that water is cheap, pure, and plentiful. This group offers a sampling of items [covering the growing water crisis in the United States](#).



Water Program: A three-year, \$41 million initiative from the USDA will help farmers in Ohio, Michigan, and Indiana [improve the water quality](#) in the Western Lake Erie Basin--specifically to reduce nutrient runoff.

Solving the Engine Catch-22: Texas A&M researchers are making strides in the development of various types of engines, as they try to [solve the trade off of emissions and efficiency](#).

Fly the Crowded Skies: The Federal Aviation Administration [predicts sales of unmanned aircraft](#), otherwise known as drones, will soar from 2.5 million in 2016 to 7 million in 2020.

Machinery Company Acquisitions: Deere & Company and Hagie Manufacturing [announced a joint venture](#) with Deere acquiring majority ownership of the company.

Early Warning System for Bees: Biologists say that an [Asian species of honeybee](#) can produce different types of vibrational "stop signals" when attacked by giant Asian hornets.

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."



CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits.

Contact Colleen Hamilton at 515-292-2125, ext. 224 or [chamilton@cast-science.org](#), or [CLICK HERE](#) for CAST membership information.

Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- * American Association of Avian Pathologists
- * American Association of Bovine Practitioners
- * American Bar Association, Section of Environment, Energy, & Resources-Agricultural Management

- * American Dairy Science Association
- * American Farm Bureau Federation
- * American Meat Science Association
- * American Meteorological Society, Committee on Agricultural and Forest Meteorology
- * 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
- * California Dairy Research Foundation
- * Council of Entomology Department Administrators
- * Croplife America
- * Crop Science Society of America
- * DuPont Pioneer
- * Elanco Animal Health
- * Innovation Center for U.S. Dairy
- * Monsanto
- * 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
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science
- * WinField, a Land O'Lakes Company

CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.

Members of CAST's Education Program

- * Iowa State University
- * Kansas State University
- * Mississippi State University
- * North Carolina State University
- * Texas A&M University College of Ag & Life Sciences
- * The Ohio State University
- * University of Arkansas System Division of Agriculture
- * University of California-Davis
- * University of Florida Institute of Food and Agricultural Sciences
- * University of Kentucky
- * University of Nebraska Agricultural Research Division
- * University of Nevada



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Dan Gogerty (Managing Communications Editor)
The Council for Agricultural Science and Technology
 4420 West Lincoln Way
 Ames, Iowa 50014-3347
 Phone: 515-292-2125, ext. 222; Fax: 515-292-4512; E-mail: dgogerty@cast-science.org



**** With assistance from Carol Gostele (Managing Scientific Editor) and Kelsey Faivre (Admin. Assistant, Editing and Marketing).**