

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.

In This Issue..... Click to Read

[Cornell University Newest CAST Education Program Member--P.2](#)

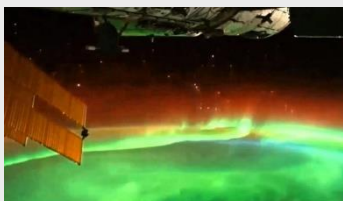
[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)



Our Amazing Planet

These [images of Earth](#)--including the aurora borealis--come from a space station point of view.

Happy Earth Day

Groundwater Meeting

UC-Davis and other sponsors will host a dynamic conference in San Francisco on June 28, 29, and 30:

[Toward Sustainable Groundwater in Agriculture--An International Conference Linking Science and Policy 2016.](#)

Beef Symposium

Kansas State University's [Beef Sustainability Knowledge Summit](#) is designed to support constructive dialogue between the panelists and the audience--May 10 in Kansas.

One Water Summit

Leaders who are transforming how [the nation views, values, and](#)

April 22, 2016

Kevin Folta Named 2016 BCCA Recipient

The prestigious 2016 Borlaug CAST Communication Award goes to Dr. Kevin Folta, Chair of the Horticultural Sciences Department at the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS). A teacher, mentor, researcher, and organizer, he focuses on clear, credible information. [Click here for the entire press release.](#)

Dr. Folta knows how to communicate science to nonscientific audiences-- and how to train scientists, farmers, physicians, and students to perform public outreach in scientific or controversial topics. This Agri-Pulse article provides [insights about the challenges Folta has faced](#) in his efforts to communicate about science-based agriculture.



The Borlaug CAST Communication Award is presented annually for outstanding achievement by a scientist, engineer, technologist, or other professional working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena.



The announcement regarding Dr. Folta occurred on April 21 at the World Bank in Washington, D.C. CAST and DuPont hosted the event, an afternoon that began with a presentation from 2015 BCCA winner Dr. Channapatna S. Prakash. His speech focused on biotechnology and society--*Gene-edited Crops: More*

Palatable to GMO Critics and Consumers? Watch for a video version of his presentation in next week's *Friday Notes*.

News and Views

[manages water resources](#) will gather June 8-10 in Atlanta, Georgia, for One Water Summit 2016.

Student Water Project

A recent federal grant will enable a [Mississippi State student team to continue developing](#) a project to provide clean, sustainable water for areas that do not have it.

Award Winners

Eleven [University of Arkansas students won awards](#) at the 2016 Annual Meeting of the Southern Weed Science/Weed Science Society of America.

Ag News Online Outlet

The [Global Farmer Network](#) provides news related to biotech, trade, and other ag-related topics.

NAMA Trends

A university student covers the excitement at the NAMA competition--and [explains the most important ag trend](#).



CAST Social Media

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

****TPP Update:** The [proposed Trans-Pacific Partnership agreement](#) is a hot topic--especially for agriculture.

****Biotech Lightning Rod:** A [fight regarding genetically-engineered crops](#) in Colorado seems to symbolize the national argument--supporters think they are a wonder of technology; detractors view them as a symbol of what is wrong with modern agriculture.

****CRISPR on the Market:** DuPont Pioneer announced plans to market the first crop that uses a type of precise genetic modification called CRISPR-Cas9. The [USDA says some types of biotech crops](#) do not need monitoring.

****The Spread of Rural Poverty:** During a Farm Foundation Forum, Agriculture Secretary Tom Vilsack spoke about [rural poverty and its far-reaching influence](#).

****Fighting Waste and Hunger:** This article features [seven suggestions to reduce waste](#) and fight hunger. Check out the University of Pennsylvania and CAST publication [Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem](#).

News from the Far Side of the Barn

We Don't Even Want to Know What It Eats: A 25-foot, 550-pound python was captured in Malaysia, but [it is two inches short of a record](#). The longest snake lives at a haunted house in Missouri.



Is there a herpetologist in the house?

Fido Food Truck (video): This Seattle food truck business has literally [gone to the dogs](#).

When Sea Turtles Get Sick: Sea turtles have a life expectancy of more than 100 years, and folks at the [Sea Turtle Hospital](#) are helping them reach that number.

CAST Welcomes the Cornell University CALS Program

Another highly respected land-grant school has joined the CAST Education Program. Cornell University's [College of Agriculture and Life Sciences](#) is known for its excellence in many areas--research, education programs, and extension work. As the program's homepage says:

From the university's highly-ranked undergraduate business program to innovative teaching, research and outreach in communication, development sociology, landscape architecture, environmental sciences, biological sciences, and other fields, CALS offers a broad spectrum of programs that complement our historic and powerful agricultural roots. Our diverse portfolio of faculty, staff and students enables us to address challenges associated with feeding the burgeoning global population in the context of a changing climate that will stress many crops with heat and either drought or flooding, attack from ever-evolving pathogens and pests, and limits on agricultural practices that threaten boundary conditions for planetary stability. Our scientists address needs that range from strengthening regional economies--from farm to market--to making urban environments more livable.



The CAST community welcomes Cornell University, and we support its mission to "create and disseminate knowledge that improves lives for not only citizens of New York, but also the nation and people around the globe."

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 space photo from youtube.com, snake pic from kcci.com. Animal Sec. pig pic from pbs.twimg.com. Food Sec. Wilde poster from pinterest.com. Plant Sec. meme from pinterest.com. Inter. Sec. burger pic from aht.seriousseats.com. Gen. Sec. tractor photo from agweb.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

A Day in the Life of a Broiler Chicken (video): This clip [explains the thought and research](#) that go into housing, food, breeding, and medical care for broiler chickens.

Gettin' Your Goat (photo essay): This farmer says nothing beats the adorable face and enthusiastic personality of goats, but don't be fooled--[they are a lot of work](#).

Keeping Pigs Safe: Canadian research scientists say a variety of strategies are being explored for reducing the effects of feeding [mycotoxin- contaminated grains](#) to pigs.

Young Ranchers Work for Success: Some young cattle producers beat the odds, and [three of them shared their experiences](#) at the Range Beef Cow Symposium in Colorado.

Some Progress for Poultry: Mexico's government will lift its highly pathogenic avian influenza-related [bans on poultry exports](#) from 14 states, but a ban remains in place for poultry exports from Indiana.



It's hard to oink with this thing on!

Dairy, To Be Precise: Researchers, academics, and scientists are excited by the [possibilities of precision dairy farming](#), but what does it really mean for a farmer today?

If You Like Longevity, Be a Tortoise: This simple chart shows [how long different animals tend to live](#).

Tidy Animals: From birds that remove their babies' "dirty diapers" to crows that store their tools, [nature is full of orderly species](#).



Food Science and Safety News

Milking Information from the Label (opinion): This writer wonders whether or not milk from a cow eating genetically modified feed [should be labeled as GMO](#).

Full-fat Paradox: A new study finds that dairy fats found in milk, yogurt, and cheese [may help protect against Type 2 diabetes](#)--although scientists advocate more research.

Butter Less Battered? This research team casts [doubt on the practice of replacing butter](#) with certain types of vegetable oils.

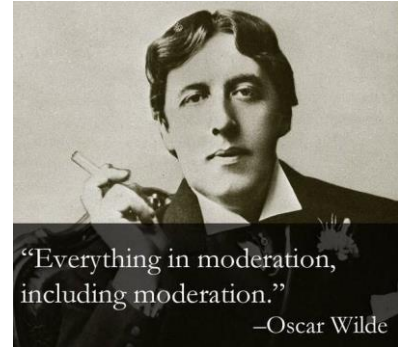
Extreme Moderation? Everything in moderation is valued as simple, effective advice to promote healthy eating--but [some say it can be misleading](#).

Perils of Processing (opinion): Researchers have found what they call a "[new side effect](#)" from eating fast food.

Food Inspections: According to this report, the U.S. Food and Drug Administration "[has neither the personnel nor the funding](#) to physically inspect more than 1% of all shipments" when it comes to border enforcement.

No Longer Roach Coaches: Within a decade, many American communities have seen [food trucks go from being problems](#) that included food safety to economic contributors.

Mapping Out Our Eating Habits: These 40 maps, charts, and graphs show where America's [food comes from and how we eat it](#)--with some drinking information thrown in for good measure.



Plant Agriculture and Environmental News

Dig It (videos): This site from the [Soil Science Society of America features clips](#) about soil in relation to plant health, climate, and even culture.

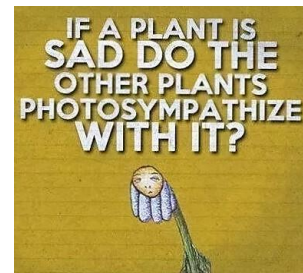
Neonics and Yields: Scientists from Mississippi State University say that treating soybean seeds with neonicotinoid pesticides [provides higher yields](#) in southern U.S. states.

Gene-edited Mushroom Keeps Its Color--Whatever That Is: The USDA says it will not regulate a mushroom that has been gene edited to [prevent it from turning brown](#).

Helping the Tomato Gets Its Mojo Back: A University of Florida researcher is [working to build a better tomato](#).

Plant Memories: Researchers have concluded that plants can [learn long-lasting behaviors](#).

Good Soil, Good Atmosphere: This Cornell University professor says we have the technology now to begin employing good soil [practices to reduce greenhouse gas](#) emissions.



Rice on the Rise? Rice production is dwarfed by the millions of corn, soybean, and cotton acres in the United States, but the crop could see [its acreage climb this spring](#).



International News

Beef Export Prediction (video): Beef exports from the United States [into Europe are expected to fall](#) by as much as 20%, according to the secretary general of the European Meat and Livestock Trading Union.

The Grand Big Mac: McDonald's of Japan offers [two beef patties that up the meat content](#) by 30%. This special menu item joins a long list from way back that includes McChoco Potatoes and Ginger Chicken.

Fast Food Oddities in Any Language: [Global food items](#) continue to get creative. How about a Wienerwald sandwich, Foie Gras burger, or Coffee Jelly frappuccino?

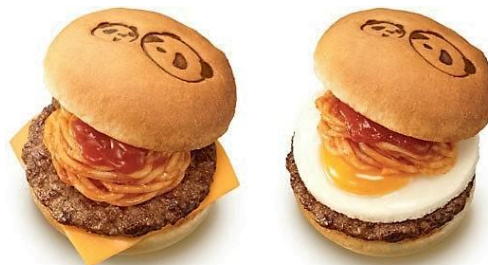
Wrinkled Cotton: The National Cotton Council is vowing to fight Turkey's [decision to impose anti-dumping penalties](#) on U.S. cotton imports.

Protein Sources? A giant Swiss company backs a series of research and development projects looking at [insects, algae, and pulses as alternative protein sources](#).

Southeast Asia Water Shortage: The dry spell in the once-fertile Mekong Delta is [devastating food supplies in southern Vietnam](#) and threatening to reduce global exports of rice, seafood, and coffee.

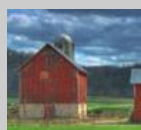
Drought in the Sub-continent: A years-long drought in India is taking a toll on 330 million of the country's residents as people suffer from water shortages and poor farmers are [helpless to save their dying crops](#).

Aussie Trade: A [fruit fly is undermining Australia's efforts](#) to grow its \$3 billion fruit and vegetable export industry, despite the country reaching a series of free trade agreements with its largest trading partners.



『ナポリぱんだバーガー(チーズ)』 『ナポリぱんだバーガー(エッグ)』
単品:350円 ※税込 単品:370円 ※税込

No, Panda Burgers are not made from real pandas.



General Interest News

Maybe She Should Be on Survivor (video): Check out the incredible story of [a 72-year-old woman and her dog](#), lost in the Arizona desert for nine days.

Machinery Breaking Bad (photo gallery): This photo gallery shows what can happen when the weather, poor decisions, or [bad luck strike farmers and their implements](#).

Young Farmer Boost: Two U.S. senators introduced legislation to exclude from gross income the first \$5,000 earned by students 18 years old or younger on [projects completed under the supervision of 4-H or FFA](#).

Pros and Cons of Sun and Wind: Solar and wind farms have become [a new stable income stream for farmers](#), but not everyone is happy to see solar panels or wind turbines in their neighborhoods.

From the International Potash Institute: This fertilizer report summarizes [knowledge about mitochondrial potassium channels](#), with a special focus on unanswered questions in this field.

Bee Power: Bees are amazing creatures, and this report says there is some [evidence the insects can help fight Sclerotinia](#), a disease that hammers soybeans, canola, and sunflowers.

Floating Forest of Food: An 80-foot-long barge filled with an actual [forest of edible plants and fruits](#) will soon be floating around New York City.



When vertical farming goes awry.

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.

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- * 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
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- * National Pork Board

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- * 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

- * Cornell University
- * 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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