



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.

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Focus on Wild Animals



National Geographic's list of their [best animal pictures of the year](#) includes rescued songbirds, an orphaned giraffe, and tigers chillin' in the hot tub.

Winter Weather Watch

Rare but disastrous citrus freezes can hit the Sunshine State, and the University of Florida has a program to [keep Florida growers informed](#).

Organic Farming Boost

Tuskegee University received a USDA [grant to broaden organic farming](#) in the southeastern region of the United States.



Living Laboratory

This story looks at North Carolina State's [Lake Wheeler Road Field Lab](#)--

"a living laboratory for agriculture and science."

December 6, 2019

Soil Day, Everyday

"And roots, if they are to bear fruits, must be kept well in the soil of the land." --Pearl Buck

In her classic novel, [The Good Earth](#), Pearl Buck emphasized the links between human existence and the land beneath us. Soil health is a special focus for many, and

[World Soil Day](#) occurred on December 5--with this year's theme of "stop soil erosion, save our future." The American Society of Agronomy, the Soil Science Society of America, and the Crop Science Society of America are constantly focused on the importance of protecting soil as one of our valuable, natural resources.



Ways to celebrate [World Soil Day everyday](#).

Other CAST-related societies, companies, and individuals also promote soil health, and all nineteen [CAST Education Program](#) universities delve into land management. For example, Cornell's Soil and Crop Sciences Section [promotes agroecosystems](#) and sustainable management, and Purdue's Soil Fertility and Plant Nutrition program provides information to [aid farmers and advisors](#) in the management of nutrients in agricultural systems. In a specific manner, several student winners of this year's [Science Communication Scholarships](#) focused on soil and plant health, including a University of Arkansas student's look at "[ways to create a better soybean](#)." CAST also publishes [soil-focused papers](#) including a recent report titled *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape*.

News and Views

Trade Deal: Japan's legislature approved the trade deal between [the United States and Japan](#), clearing the way for its implementation beginning early next year.

From the USDA: The USDA announced (1) its estimates that [net farm income for 2019](#) will be up from last year although nearly a quarter of that comes from direct government payments, (2) [fellowship](#)

Aquatic Research

Mississippi State University announced plans to build the [Northern Gulf Aquatic Food Research Center](#) to provide the seafood industry with safety testing and quality assurance.

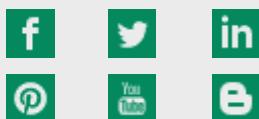
Ag Innovations

A unique Kansas State organization [focused on farm innovations in developing countries](#) will continue and expand its work for another five years--"Feed the Future Innovation Lab for Sustainable Intensification."

Send in Ideas

CAST [welcomes suggestions](#) for future publications and projects.

CAST Social Media



[opportunities](#) to connect its resources with faculty and staff at Hispanic Serving Institutions, 1994 Tribal Colleges and Universities, and 1890 Land-Grant Universities, (3) [grants from its Natural Resources Conservation Service](#) designed to help with farmland conservation, (4) Ag Secretary Sonny Perdue's [speech about the future of farming](#), and (5) the opening of signup procedures for the [Conservation Reserve Program](#).

SNAP Changes: Thousands could lose food stamp benefits (Supplemental Nutrition Assistance Program) as the [government enacts work requirement changes](#). The [USDA explains its policy](#) on this site.

News from the Far Side of the Barn

Bovine VR Experiment: A Russian farm has [given its dairy cows virtual reality headsets](#) in a bid to reduce their anxiety.

Cow Sense: This blog looks at cow pedometers, robot milkers, and [bovine fitbits versus old-fashioned intuition](#).

Cat Whisperers (video): Apparently, a few special people can read feline expressions and [understand "cat cues"](#).



"This VR is udderly moo-ving."
Related links at left.

The CAST Community

From lifetime members to students in the classrooms

CAST is made up of a diverse collection of individuals, societies, companies, and educational institutions--all focused on the mission of communicating credible science/ag information to the public and policymakers. Members help spread information through social media, conferences, and other modes--and they donate time, expertise, and funds. This time of year places a special focus on fundraising and membership renewals.

A Message about Membership

From CAST's [Membership Specialist](#) Colleen Hamilton: "It's time to renew your CAST membership. We will follow up with you individually soon by email on how to renew for 2020. Or simply [log in to the CAST website](#) and select the <Renew Membership> Menu. Your membership type is 'Individual Membership.' Select the correct pricing option and follow the instructions from there. Thank you for your support of CAST's work."



THANK YOU

Donation Options

CAST appreciated the funds that came in during Giving Tuesday, and donations are always welcome. Check out the options on the [CAST website donation page](#). When you donate to CAST, you are investing in the future of science communication.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 tiger pic from stevewinter.natgeo.com, food sign pic from ncsu.edu, soil graphic from asa.com and sssa.com, and cow pic from daily-sun.com. Animal Sec. pasture pic from producer.com and buffalo pic from kdlt.jpg. Food Sec. graphic from michaelhelfenbein.yale.edu and fish pic from SMPPost.jpg. Plant Sec. tomato pic from dailymoss.com and hemp poster from beelinehempwick.com. Inter. Sec. group photo from agri-pulse.com and donkey pic from shutterstock.com. Gen. Sec. goldfish pic from foxnews.com and tree farm pic from getalumachristmas.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



Animal Agriculture and Environmental News

Wildorado (video): This documentary focuses on a forgotten town and its hopes that a young cowboy and his class of high school ag students succeed at becoming one of the first [student-led cattle companies in the nation](#).

Poultry Power: A global [biotech company uses poultry waste](#) to make biomethane for energy and organic nitrogen for fertilizer.

Pig Production News: This [monthly look at the world of pigs](#) includes a review of the global effects of African swine fever and a mention of several new products.

Beefy Optimism: With an eye on production, trade, and feed costs, this Kansas State [economist thinks 2020 is shaping up to be better](#) than 2019 for cattle prices.



Bison on the Plains: A Kansas rancher describes his experiences [raising bison for more than 30 years](#).

Poultry Potential: Researchers discovered that lipoprotein lipase, an enzyme crucial for fat metabolism, may contribute to [wooden breast syndrome in broiler chickens](#).



Livestock farmers have made tremendous [progress in reducing their environmental impact](#), and Frank Mitloehner (UC-Davis professor and [2019 BCCA winner](#)) says consumers do not realize this.

Food Science and Safety News



Tabasco Ain't No Fiasco (video): Churning out the hot sauce--here's [how the Tabasco brand has been operating](#) for 150 years.

A Yale University analysis says Internet connections can help with "food desert" problems, if [online buying and delivery](#) are part of the SNAP program.

You Want Fries with That? A seasonal chill in several northern U.S. states and Canadian provinces [could mean fewer French fries](#) for hungry customers.

Livestock and Food Supplies: This Canadian beef expert's editorial, "Anyone Can Live on a Vegetarian Diet--Everyone Can't!" claims that [animal agriculture is essential](#) for the global food supply.

Beef Quality: The Beef Checkoff has initiated a new promotion and advertising campaign about the [Beef Quality Assurance program that trains farmers and ranchers](#) about best practices and management techniques.



Fish Oil and Health: According to this report, evidence indicates that taking a [high-dose pill of purified fish oil](#) can help prevent some heart attacks and strokes.

Omega-3 Research: This CAST Special Publication chaired by ISU Professor Don Beitz examines omega-3 polyunsaturated fatty acids and how they [might be incorporated in a healthy lifestyle](#).

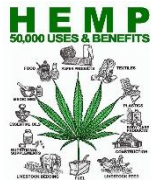
Plant Agriculture and Environmental News

No-till and Biotech Crops (video): According to this site, GM crops add to soil health by [promoting no-till agriculture](#) that helps keep soil in place and reduces erosion and water runoff.

Coated Seeds: This MIT researcher says providing seeds with a protective coating that also supplies essential nutrients to the germinating plant could make it possible to [grow crops in otherwise unproductive soils](#).

Nematodes Beware: Root knot nematodes cause severe damage to crops and result in yield losses. A University of Arkansas unit is coordinating [multidisciplinary research to work on the problem](#).

Sugar Beet Harvest Not So Sweet: Farmers in Minnesota and North Dakota are battling a plague of bad weather, as they [try to bring in the sugar beet harvest](#).



Hemp Hassles: Some farmers rushed into hemp production, but a [market glut and falling prices](#) are causing concern. Also, the [FDA is enforcing regulations](#) against marketing unlicensed, untested CBD products.

Hemp Hopes: This farmer [thinks Wisconsin is primed for growth](#) in the agricultural hemp market.



No--the above is not due to tomato blight. But scientists are assessing [whether or not phage therapy can help control bacterial blight](#) in tomato plants.

International News

Fun in the Fjords (video): These [whales in Norway](#) know how to frolic majestically.

Wrap It in Soybeans: Soybeans are used for many things in Asia, and a Singapore professor has produced a [biodegradable food wrap](#) made of cellulose extracted from the waste generated by soybean product manufacturers.

Golden Rice Debut? The pros and cons of Golden Rice have been heatedly debated, but it appears that [Bangladesh could be the first to cultivate the crop](#).

Pesticide Ruling: Thailand's government [reversed a planned ban](#) on glyphosate and delayed the imposition of bans on two other chemicals used as agricultural pesticides.

Dairy in Vietnam: With the entry of new producers and uncertain trade pacts, much of [Vietnam's domestic dairy industry](#) has been struggling this year.



No Laughing Matter: Donkey populations around the world are [at risk due to a mushrooming demand for their hides](#), a key ingredient in traditional Chinese medicine.

The Greening of Denmark: According to this report, Denmark has become a [buzzing hive of green experimentation](#)--with efforts underway inside homes, across cities, and on a national scale.



Global Ag Research: USDA Undersecretary Ted McKinney and U.S. state agriculture representatives visited [CIMMYT headquarters in Mexico](#).

General Interest News

Space Monster (video): Scientists find a [gigantic black hole](#) that is bigger than they thought possible.

Survey about Organics: In December, the USDA's National Agricultural Statistics Service will begin conducting the "[2019 Organic Survey](#)" to gather data about organic crops and livestock in the United States.

Production, Technology, Conservation: An Iowa State University scientist is focused on addressing environmental and economic [challenges to producing what we eat](#).

Environment and Economy: USDA Chief Economist Rob Johansson says it is possible to have [both environmental and financial performance](#) on a farm.



No Ho-Ho-Ho? (video): Some are worried about a [shortage of Christmas trees](#) this year, with high demand and fewer tree farmers.



Unwanted goldfish in France are avoiding the old "fish flush" by [finding sanctuary in the Paris Aquarium](#).

Sea Pollution: In a Cornell-led study, scientists report evidence of metal pollution creating [danger for the soft coral sea fans](#).

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.



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 Melissa Sly at 515-292-2125, ext. 232 or msly@cast-science.org, or [CLICK HERE](#) for CAST membership information.

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- * American Farm Bureau Federation
- * American Meat Science Association
- * American Meteorological Society, Committee on Agricultural and Forest Meteorology
- * American Seed Trade Association
- * 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
- * BASF Corporation
- * Cal Poly State University
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Entomological Society of America
- * Innovation Center for U.S. Dairy
- * Land O'Lakes
- * Bayer
- * National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- * National Corn Growers Association/Iowa Corn Promotion Board
- * National Milk Producers Federation
- * National Pork Board
- * North Carolina Biotechnology Center
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Poultry Science Association
- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tuskegee University
- * Tyson Foods
- * United Soybean Board
- * University of Nevada-Reno
- * U.S. Poultry and Egg Association
- * Weed Science Society of America

*** Western Society of Weed Science**

CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, science-based information to policymakers, the media, the private sector, and the public.

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- * University of Kentucky
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