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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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Cosmic Views



NASA

provides [views of the Earth from deep space](#)--and quotes from astronauts. As William Anders, Apollo 8, said: "We came all this way to explore the Moon, and the most important thing is that we discovered the Earth."

Searching for the #NextNorm

The World Food Prize is accepting artwork from Iowa high school students for an [annual poster contest](#). The submission deadline is May 30.

Show Your Talent

Fiddle, yo-yo, guitar, singing? [National FFA Talent participants](#) can show off their skills at the annual convention, and applications are due by July 15.



April 26, 2019

Focus on the Environment

Students, farmers, organizations, and companies working to sustain the environment

The world kept spinning along as usual on April 22, but the special Earth Day attention was surely warranted. On that day and every day, many people work hard to protect our planet. Several of our [member universities celebrated](#) the day through various events. And the following links show a tiny fraction of the many efforts underway to "protect our Earth."



1. The National Pork Board and the University of Arkansas point out that [pig farmers often practice the principles of Earth Day](#).
2. Former Secretary of Agriculture Tom Vilsack explains [what U.S. dairy farmers are doing to preserve our environment](#).
3. An AgWeb editorial speaks about "what Earth Day means to farmers and [what farmers mean to Earth Day](#)."
4. The GMO Answers site claims that biotech offers some of the most overlooked [solutions to combating threats to our planet](#).
5. In this video, USPOULTRY highlights [broiler and turkey farmers using sustainability practices](#).

News and Views



Praise for BCCA Honoree: As announced last week, Frank Mitloehner was named as the 2019 Borlaug CAST Communication Award recipient. Social media comments and ag editorials pointed out that Dr. Mitloehner has brought reason and responsibility into the discussion of livestock and GHG emissions. Check out this [editorial from Feedstuffs](#) and this insightful [commentary from Drovers](#).

Low Prices Put Stress on Farm Income: This article gives one picture of [what is happening to farm income](#) by looking at three

Poultry Meeting

The [2019 Poultry Science Association meeting](#) will be in Montréal, Canada, July 15-18.

Helping Veterinary Students

The Association of Veterinary Medical Colleges funded three program grants designed to [foster the enrichment of international academic veterinary medicine](#), and the offerings include a look at wellness practices for veterinary medical students.

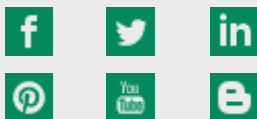
Staff Honors

The UC-Davis Academic Senate and Academic Federation announced the university's annual [staff awards for teaching, research, and public service](#)--and it includes two BCCA winners.

Send in Ideas

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

CAST Social Media



sources of information--USDA indicators, U.S. farm sector financial indicators, and a University of Minnesota report.

Trade Affected by Disease: Officials say most hog farms in China [will not replenish herds](#) lost to African swine fever, as the country's hog production has dropped 21% since the first outbreak.

Another Look at the Census Report: This analysis of the USDA Ag Census looks at [farmer demographics, ag consolidation, and financial stress](#) for farmers.

Nutrient Loss Research: *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape*--[Click here for a video presentation](#) of the slides and narrative from Dr. Heidi Peterson.

News from the Far Side of the Barn

Porcupine--It's Not What's for Dinner: [More than 200 porcupine quills were lodged into the face](#) of an Oregon K-9 while conducting a search. The dog, Odin, is now doing fine and resting at home.



It's that time of year again, and hooded grebe birds really [know how to step up their courtship game](#).

Large-eared Bat

(video): Pennsylvania will officially honor the "snot otter." From parasitic wasps to shark look-alikes, certain U.S. [states have made special mention of unusual animals](#). Often, students were the driving force as they hope to conserve endangered creatures.

Eco-friendly Bookkeeping (video): A library in Portugal--containing works from the 14th century--[uses bats to combat book-eating insects](#).

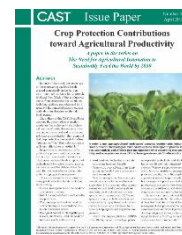
Tracking Impact

CAST publications continue to influence agriculture

Credible, peer-reviewed publications are a main focus for CAST, and the organization keeps a [record of the impact these papers have](#). As we reported in March, CAST performs a 6-month, one-year, 18-month, and two-year study for major papers, and below is the two-year impact report for the crop protection paper.

CAST Issue Paper 58: *Crop Protection Contributions toward Agricultural Productivity*

As [this impact report shows](#), the press release went to 13,016 e-contacts (7,539 media) resulting in 4,350 opens/interactions. This report also includes information about headline impressions, press pickups, follow-on activities, downloads, and more. A [free download of the full publication is available here](#).





Two years ago, Dr. Susan Ratcliffe, the task force chair, presented key findings of this publication to an audience at the CropLifeAmerica and RISE Regulatory Conference followed by a reception. The CropLife presentation was well attended with over 120 RSVPs received. [Click here to view a video of the event.](#) On April 6, 2017, Dr. Ratcliffe conducted briefings for Senate staffers in the morning and for House staffers at a noon lunch seminar. Approximately 40 attended these briefings.

Note: When CAST publications are first released, the organization sees a flurry of activity at rollouts (usually in Washington, D.C.) and also from the press, academics, and CAST members. Press releases, news coverage, and videos of rollout presentations help stir short-term interest. But the long-term impact of the publications often demonstrates the underlying value of the papers. CAST publications are months in the developmental stages--whether the topic is food, animals, plants, or other ag-related issues, the science-based information is gathered from experts who take the time to research, write, peer review, rewrite, edit, and finally publish. The process is difficult and time consuming, but the results have credibility and lasting effects.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 earth pic from earthcycle.jpg, Mitloehner photo from ucdavis.edu, grebe pic from down-production.com. Animal Sec. chicken pic from modernfarmer.jpg and cow pic from redbubble.jpg. Food Sec. bug pic from purdue.edu and Beyonce photo from houstonchronicle.com. Plant Sec. flower pic from nytimes.com. Inter. Sec. fast food pic from DairyReporter.com. Gen. Sec. tractor pic from instahu.com and potato pic from thecoli.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Happy Cows, Happy Environment

(video): This upbeat video highlights some of the [sustainability techniques dairy farmers use](#) to treat their cows and the environment well.

Dealing with a Poultry Disease: Researchers are trying to unravel the complex nature of Marek's disease virus--a possible [threat to the global poultry sector](#), already costing the industry up to \$2B worldwide.

Can We Talk about Meat? (opinion): Jayson Lusk discusses the [difficult conversations about meat consumption](#) and how cultural values and "tribe identities" get involved.

Big Data Collection (opinion): A new study on precision farming has demonstrated [the importance of collecting big data on swine farms](#).

Sharing Research Data (related to above): Another [perspective on data sharing](#) comes through in the CAST Commentary *Enabling Open-source Data Networks in Public Agricultural Research*.



The backyard chicken trend does not always mean such modern coops, but it has meant an [abundance of delicious home-grown eggs](#).

Beef Lawsuit: Four of the largest U.S. [beef-packing companies were accused of violating federal antitrust law](#) by conspiring to drive down prices they paid ranchers for cattle.



USDA Announcements: [China bought more U.S. pork](#) during the week ending April 11. Also, the USDA announced that \$1.5 million in [grant funding is available](#) for the Dairy Business Innovation Initiatives.

Don't Fence Me In? Animal science researchers with The Ohio State University will be [testing a virtual fence for cows and other livestock](#) this summer.

Food Science and Safety News

Egg-cellence in Oval Form (video): The egg, it seems, has a ubiquitous presence. From cultural practices to scientific discoveries, the egg has surely [influenced us all](#).

Is Bacon a "Piggy Revenge"? (opinion): This American Council on Science and Health editorial considers the "bacon issue," with a [look at statistics and analysis](#).

Meal Kits May Be Good for the Environment: A study suggests that grocery store-bought meals [emit 33% more greenhouse gases](#) than meal kits--from the start of production to the end. Researchers say this is partly because less food is wasted.

Eat Well and Chill Out: This article emphasizes fruits, vegetables, whole grains, and [less stress in our efforts to reduce inflammation](#).

My Brain Won't Let Me Stop! Researchers discovered a specific network of cellular communication emanating from the emotion-processing [region of the brain that keeps us eating tasty food](#).



The Whole Picture--on Milk: The National Dairy Council has been [working to bring back whole milk](#) by investing in research on its health benefits.

Leading Climate Action Strategy: A University of Florida CALS alumna was [interviewed about her journey](#) through UF's food and resource economics department and how it led to her role as sustainability manager for the McDonald's Corporation.



Purdue University experts are working toward wide-scale adoption of alternative proteins--including insects such as red termites on avocados. Check out the [video recipe for making cricket chocolate chip cookies](#).

Plant Agriculture and Environmental News

#Plant19 (video): It's planting season, and many farmers are sharing their stories on social media, including some [videos from the cab](#). Check out more stories from the soil on [Twitter](#).

Aquifer Depletion: Texas A&M reported about a recent CAST paper regarding [groundwater, aquifers, and the effects on agriculture](#).

Water Quality: Maryland farmers have been working to boost the [quality of the water in the Chesapeake Bay](#). Some think this strategy could also work in other parts of the country.

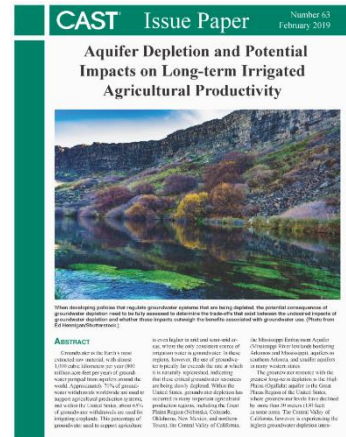
Ag Adaptations: The Florida Climate-Smart Agriculture Work Group will plan for how the state's 26 million acres of agricultural lands can [adapt to changing conditions and produce more clean water and air](#).

Cover Crop Primer: Growers are [increasingly turning to cover crops](#) to help them with the environmental care of the land.



Plant with a Memory? Researchers speculate that this beautiful Peruvian plant dispenses its pollen according to a [savvy, memory-based system](#).

Hemp 101: This USDA site provides [Q&A information about hemp production](#).



[Aquifer Depletion and Potential Impacts on Long-term Irrigated Agricultural Productivity](#), a CAST Issue Paper led by task force chair Dr. John Tracy (see related article at left).

International News

A 3D Heartbeat: A group of Tel Aviv University researchers announced an unprecedented feat--they produced the [first 3D-printed heart using a patient's own cells](#).

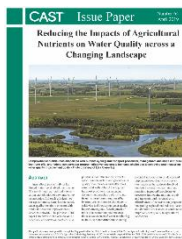
Pulling the Sweet Tooth? Officials in England are [trying to reduce the sugar content](#) of certain foods by 2020, in line with UK government targets, as they hope to cut child obesity.

A Taste of Spain: Students from Cornell's College of Agriculture and Life Science participated in a week-long trip to Spain to [study the country's food production system](#).

Pee Pee Research? A serious study in Turkey looks at the phases of ancient animal domestication, and the researchers are turning to [urine salts left behind by humans and animals](#).



McDonald's, KFC, and Pizza Hut are credited by some for opening up a [market for cheese consumption in China](#).



Phosphorus Use: Canadian research shows that placement strategies for fertilizer can affect phosphorus availability to crops and [influence the amounts and forms of runoff](#).

Nutrient Research (related to above): CAST's new publication, [Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape](#), also deals with phosphorus use. See page one above for a video presentation of the paper's rollout.

General Interest News

Rising Seas in Paradise (video): This National Climate Assessment indicates that [Hawaii appears to be more susceptible to climate change](#) than other U.S. states.

A Botanical Treasure: A [190-year-old "lost" book](#) detailing the flora and fauna of Cuba (along with its cultural uses) has turned up at Cornell University.

Ticks, Lyme Disease, and Climate: Ticks and the diseases they carry are [spreading quickly across the United States](#), and the government is having trouble keeping up with the data.

Flood Relief? Missouri's governor is expected to make a [federal disaster declaration](#) for assistance after devastating floods.



Stay at the Spud Hotel: The Idaho Potato Commission [ditched their 6-ton potato prop](#) (used to promote the state's crop) and let someone turn it into an Airbnb location. Really, [you can stay there](#).



March [sales were mostly positive](#) for U.S. ag tractors and combines--and the man in the tractor above might be in need of a new one soon.

Ag Communication: This freelance communication specialist tries to [help producers bridge the farm-to-plate knowledge gap](#) that exists with consumers today. Also check out this CAST blog about [ways to avoid spreading misinformation](#).

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.



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- * 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
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- * Tuskegee University
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- * United Soybean Board
- * University of Nevada-Reno
- * Weed Science Society of America
- * Western Society of Weed Science

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