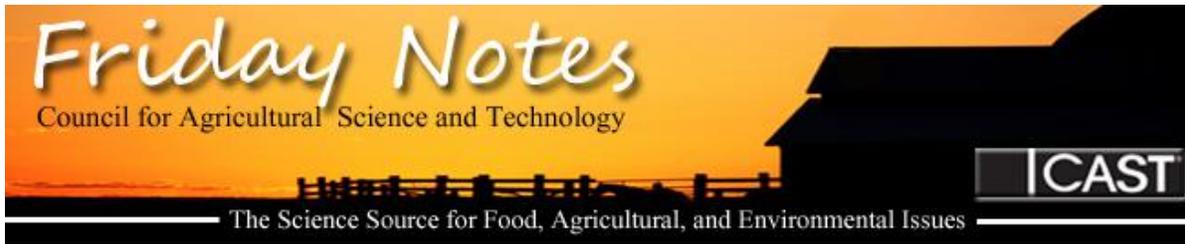


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Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained in linked articles is from the original authors and does not necessarily reflect the views of CAST.

In This Issue..... [Click to Read](#)

[Impact of Biotech Regulations Publication--P. 2](#)

[Animal Agriculture News](#)

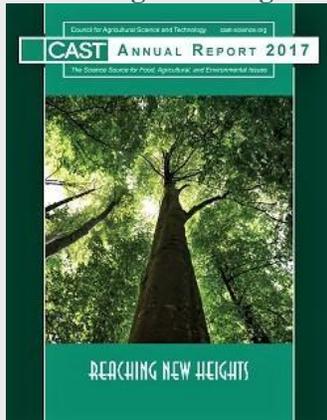
[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

Reaching New Heights



[Click here to access](#) the *CAST Annual Report 2017*. As CAST President Nancy Reichert said, "We appreciate the support of our members and stakeholders."

Consumer Confidence

At the Unified Voice Protocol gathering on April 24 in Arlington, Virginia, Jayson Lusk--Purdue University department head and [2017 BCCA winner](#)--will present [research regarding consumer beliefs and poultry production](#).

Food Security Gathering

March 30, 2018

Gene Editing Green Light

USDA announcement about biotech

The USDA gave the market a clear signal it will [not seek to regulate emerging gene-editing technologies](#) that could open a new era of plant development for agriculture. U.S. Secretary of Agriculture [Sonny Perdue issued the statement](#) regarding USDA oversight of plants developed through these new techniques, saying the department will "allow innovation when there is no risk present." Perdue added that they are not stepping away from regulatory responsibilities. According to him, the USDA has "an important role to play in protecting plant health by evaluating products developed using modern biotechnology." Note: scroll to page two for related information about the rollout and impact of CAST's latest publication about biotech regulations.



News and Views

Trade Pact Amendment: The United States and South Korea agreed to [amend the decade-old free-trade pact between the two countries](#). This was welcome news for U.S. beef and pork industries, but the South Korean government raised [questions about the nature of the agreement](#) after subsequent statements from President Trump.

Omnibus Spending Bill and Agriculture: This article looks at the \$1.3 trillion appropriations bill and the ways it is [connected to the agricultural industry](#).

Activism Gone Wrong: Mark Lynas--now a biotech supporter--tells of his involvement in a [failed activist plot](#) to kidnap the world's first cloned sheep, Dolly.

A Green Revolution as Peace Program? World Food Prize President Ken Quinn says that [Norman Borlaug's legacy of confronting hunger and alleviating human suffering](#) can bring people and countries together across wide chasms of political, religious, ethnic, or diplomatic differences.



Environmental Dispute: Mayors from 47 states and territories

High school students participated in the second annual [World Food Prize Mississippi Youth Institute](#) at Mississippi State University.

Award-winning Research

Kansas State University students [swept many of the top honors](#) during the American Society of Animal Science's recent regional meeting.

University Ag Programs

The University of Nebraska-Lincoln is bringing [tractor testing into the modern era](#); University of Nevada-Reno scientists are searching for ways to [reduce potato crop losses](#) during storage; and Cornell experts are [helping maple syrup producers get more sap](#) from less land.



CAST Social Media

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

[expressed their opposition](#) to efforts by the Trump administration and EPA Administrator Scott Pruitt to repeal the Clean Power Plan.

News from the Far Side of the Barn

Complex Insect Societies

(video): The [world's first genetically modified ants](#) show expanded sense of smell that helps them become more social.



Make Way for Ducklings: Duck herds in Asia can be real traffic stoppers.

Fox on the Run (video):

This urban fox has some serious [skills when it comes to stealing wallets](#).

Where the Wild Things Are--But Maybe Shouldn't Be: This blog considers the tension as coyotes and other [wild animals cross paths with humans](#).

Regulatory Barriers Rollout *Presentations and Impact*

During a two-day event in Washington, D.C., on March 22-23, the Council for Agriculture Science and Technology released a CAST Issue Paper titled [Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities](#). The celebration of National Ag Week (March 17-24) in D.C. complemented the release of the paper perfectly.



To roll out this important research paper, Dr. Alan McHughen, CE Biotechnology Specialist and Geneticist from the University of California-Riverside, [presented highlights on March 22 at an event](#) cohosted by the Association of Public and Land-grant Universities (APLU). On Friday, March 23, the National Coalition for Food and Agricultural Research (NC-FAR) hosted a morning Senate presentation and House of Representatives lunch seminar.



Thursday's program at APLU was well attended and promoted insightful questions and discussion following the presentation. Dr. Alan McHughen concluded by stating, "Until the regulations change, not only scientists, but farmers, consumers, and the environment will continue to be denied potential benefits."

Conversations on the internet and various social media platforms regarding the release of this paper have been active. CAST Communications and Social Media Specialist Kylie Peterson shares, "The current impact of CAST's recent issue paper regarding *Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities* has

experienced active feedback thus far. Various news stations, organizations, and media outlets have [helped to disperse CAST's publication link](#). We look forward to seeing even more growth as the topic continues to stir interest and possible biotech regulation changes."

More information regarding the rollout of CAST's latest issue paper and the impact it has had thus far can be found on our [website](#) or [blog](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 lab pic from farmfutures.com, sheep pic from buzzfed.jpg, and duck pic from newyorknewsbriio.jpg. Animal Sec. pork infograph from porkcdn.com. Food Sec. teeth pic from fastcodesign.com. Plant Sec. Einstein pic from rawforbeauty.com. Inter. Sec. rhino pic from TLC.com. Gen. Sec. boy photo from kwwl.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Turkey Farm Tour (video): Take a [tour of this family-owned turkey farm](#) to see firsthand how these birds are raised.

E.coli Contamination in Cattle: Producers may want to top off their water troughs after this Cornell University study found a water source that was a conduit for [the spread of toxic E.coli in cattle](#).

Poultry Welfare Issues: Jayson Lusk considers the poultry "cage free movement" in light of [consumer demand and economics](#), while Tamar Haspel provides her [opinion about the animal welfare implications](#).

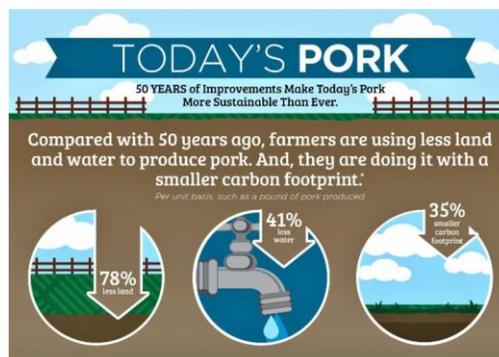
Cow/calf Production: Kansas State's new Purebred Beef Unit is focused on improving producer profitability--[specializing in breeding, genetics, and cow/calf production](#).

Pig Research: The Foundation for Food & Agriculture Research and the National Pork Board announced support for a \$2 million [competitive research program to improve pig health](#), productivity, and well-being.

Mealworms on the Menu: Some believe it will take decades to persuade people to eat nutritious mealworms, so they are [focused on producing insect-based animal feed](#) on a large scale.

Pocket-sized Forage Tester: A new device the size of an electronic key fob, paired with a smart phone, will allow livestock producers and consultants to [conduct real-time, on-farm feed analysis](#).

Avian Influenza Alert: The Iowa Department of Ag is [urging all poultry farmers to be on the lookout](#) following confirmation of several recent avian influenza cases in the United States.



This site provides several [infographs about pork production and sustainability](#).



Food Science and Safety News

Cooking with Robots (video): This fully robotic kitchen, taught by professional chefs, can be controlled from an app on your smartphone and [will be made commercially available later this year](#).

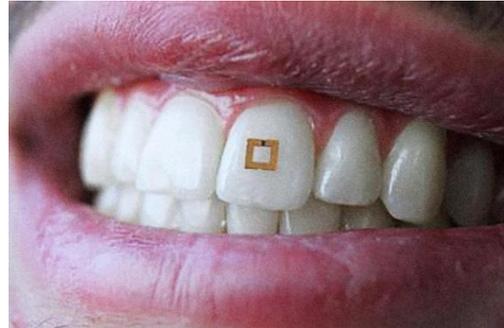
Fast and Furious: Some claim that nearly a quarter of adults in America eat fast food daily. Which states and cities have the [most and least fast food restaurants per capita](#)?

Omega-3 and Heart Health: This study indicates that omega-3 intake is closely linked to the overall risk of death and cardiovascular disease--[higher consumption might be beneficial](#), but more research is needed.

McDairy on the Menu: Scientists working for Dairy Management Inc. collaborated with members of McDonald's culinary team to create "[dairy products with great taste](#)."

Cloned Pork Consumption: A prominent Orthodox rabbi in Israel states that [meat from genetically cloned pigs can be considered kosher](#) for consumption by Jews.

Farm-to-fork Gets Even Closer: A food market in New Jersey is [growing oyster mushrooms in a small display farm](#) right in the produce section.



Forget Fitbit: This new sensor is worn on your tooth and used to [record what you eat and drink during the day](#)--leading to improved health.



Plant Agriculture and Environmental News

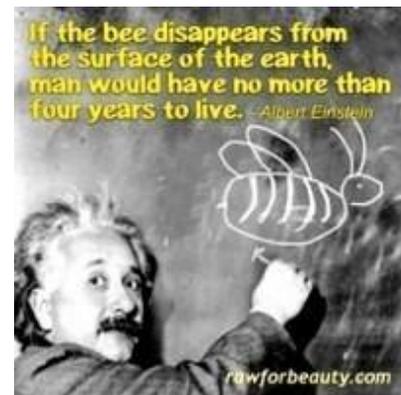
Tracking Resistant Weeds: Cases of herbicide-resistant weeds are [continually compiled online](#) in the International Survey of Herbicide Resistant Weeds--provided by the Weed Science Society of America.

Bee Power: (1) Bees [pollinate a third of what we eat](#) and play a vital role in sustaining the planet's ecosystems. (2) This study discovered enzymes in honey bees and bumble bees that determine [how sensitive they are to different neonicotinoid insecticides](#). (3) Click here to access the CAST 2017 Commentary about [why bee health matters](#).

Alfalfa Checkoff Program: A national, voluntary checkoff will begin collecting money this September to [support future alfalfa research](#) for the third most valuable field crop.

Modifying Our Food (opinion): Penn State scientists explore why crops are modified to [provide an overview of crop modification techniques](#) and address common concerns related to the issue.

Marijuana's "Kissing Cousin": Senate Majority Leader Mitch McConnell announced a [push to legalize hemp](#). University of Kentucky researchers are investigating agronomic parameters affecting [field-scale production of industrial hemp](#).



Einstein was usually correct (in a relative way), so you may want to check out the three links about bees provided on the left.



International News

Smoke-breathing Elephant (video): Scientists at an India National Park stumbled upon [this elephant who appeared to be breathing smoke](#)--leaving many puzzled.

Robotic Crop Picker (video): Britain's workforce shortages have lead scientists to the [development of ground-breaking technology](#)--robots.

Swine Industry Innovation: Eight clever [software applications, environmental tools, and animal health solutions](#) were key to a Netherlands trade show.

Fighting Malnutrition with GMOs: University of Minnesota researchers are working with a team of experts from other countries [to make a genetically modified potato](#).

Feral Pig Fence: The Danish government has [proposed to construct wild boar fencing](#) along the Danish-German border to keep out the spread of African Swine Fever.



The final male White Rhino died, but there is hope for the species. Poaching has been disastrous, but [Jurassic Park-style science might help](#).



General Interest News

Farm Danger: A father of five and his 14-year-old son were killed after the grain inside a silo at their Wisconsin dairy farm [collapsed and trapped the pair](#). And this blog looks at farm safety and "[Danger in the Fields](#)."

Regaining Rural Population: Census data results show that some long-declining small town farming and manufacturing communities are seeing a growth in population as [dispersal begins in large cities](#).

Running on Renewables: A variety of models [predict the role renewables will play in 2050](#), but research shows some may be too optimistic and should use this resource with caution.

Diabetes in the Darkness: This blind [fish's ability to cope with wildly fluctuating blood-sugar levels](#) might provide breakthrough clues--resulting in the improvement of human health.

Rescue Robots: Texas A&M's Center for Robot-assisted Search and Rescue is designed to promote the use of artificial intelligence to [help human and canine rescue responders](#).



A disabled [farm boy who loves to show cattle](#) was surprised with a machine that is making his life a lot easier.

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 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
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- * American Dairy Science Association
- * 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
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- * American Veterinary Medical Association
- * Aquatic Plant Management Society
- * BASF Corporation
- * Corteva Agriscience, Agriculture Division of DowDuPont
- * Croplife America
- * Crop Science Society of America
- * Entomological Society of America
- * Innovation Center for U.S. Dairy
- * Land O'Lakes
- * Monsanto
- * 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
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tyson Foods
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science

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.

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- * University of Kentucky
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