

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.

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Spring Blossoms

Cherry blossoms signify springtime in parts of the Northern Hemisphere, as farmers gear up for another planting season.

Ag Ed Resources

The U.S. Farmers & Ranchers Alliance and Discovery Education have partnered on an exciting initiative to engage urban youth with a [first-hand glimpse into agriculture](#).

Iowa Water Conference

The [Iowa Water Conference](#) will be held March 23 and 24.

Students Win Prize for Biosensor Invention

UC-Davis students built an [award-winning biosensor](#) that quickly tests olive oil quality.

WFP Nominations

The [World Food Prize nomination](#) process is now open.

March 18, 2016

Biotech Labeling Bill in the Twilight Zone

A bill that would preempt state GMO-labeling laws failed this week in the Senate. Unless a compromise emerges in the next few months--or a judge steps in--a national precedent will be established in July when Vermont's labeling law takes effect. Stakes are high and viewpoints are diverse. These five links might give some insights into the overall situation:



**This article provides a [general overview](#) of the labeling controversy.

**This article indicates there is a possible [compromise that could work](#) for all interested parties.

**This article claims labels are [pointless and expensive](#).

**This article says the Senate did the right thing by blocking a bill that [would hinder transparency](#).

**This article satirizes surveys, as a recent poll shows that 80% of Americans support "mandatory [labels on foods containing DNA](#)."

Note: For additional background information, click here for the CAST Issue Paper [Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations](#).

News and Views

****Where Is the Ag Talk on Political Trail?** Dan Glickman--the former U.S. secretary of agriculture--says consumers are more interested than ever in food production, but the presidential candidates seem to be [oblivious of food production issues](#).

****Water Relief:** More than 100 organizations--including commodity groups and state Farm Bureaus--penned a letter [urging Congress to speedily pass drought legislation](#). The groups asked for a bill that would encourage the modernization of western water systems.

****Change the World?** [Research and creative thinking](#) can change the world, according to these writers. They say, "Academics need to start playing a more prominent role in society instead of largely remaining observers who write about the world from within ivory towers and publish their findings in journals hidden behind expensive digital paywalls."

Ag Day Follow-up

The winner of the fourth annual [National Ag Day poster](#) contest had her artistic start by entering work in the fair through her 4-H group.



Food Waste Across the Supply Chain

The [University of Pennsylvania](#) and CAST offer an insightful book that stems from expert presentations at *The Last Food Mile Conference*. A [free download for CAST members is available here](#).

CAST Social Media



This blog looks at [traditional family meals](#), smartphone blockers, and the "Leave It To Beaver Effect."

****Invasive but Welcome?** Some scientists argue that [not all invasive species are destructive](#); some, they contend, are even beneficial.

****Invasive but NOT Welcome:** When invasive species are introduced as bioenergy crops, problems can occur. The authors of this CAST Commentary show that the risk of invasion can most effectively be [prevented through a life-cycle approach](#).

News from the Far Side of the Barn

Animals with Personality (videos): The Internet is a menagerie of viral clips about animals, and you have to admit some of these creatures have a certain attitude.

- This [thieving fox](#) seems to be after credit cards.
- This [orphaned joey kangaroo](#) just wants its mum--or a suitable substitute.
- This Hollywood [mountain lion has an appetite](#) for furry zoo animals (pity the little koala).
- And this [penguin swims thousands of miles](#) to show its loyalty for a man who once saved it.



Pouch Time

Casting About for Quality Resources

A few clicks to access credible ag/science information

Most folks in the ag world emphasize the need for credible information and clear communication. CAST has been working on that since 1972, and with the kaleidoscope of sources now available, we want to make sure members know what can be accessed through CAST avenues.

- **CAST Website Sections:** [Click here](#) for information about membership, education opportunities, editing services, and various news items. Check the access bar at the top of the website homepage for these categories.
- **CAST Website Publications:** [Click here](#) for free access to recent issue papers, commentaries, and special publications. This section includes some foreign language versions of CAST material. It also includes the popular Ag quickCASTs.
- **CAST Social Media:** [Click here](#) to access the website homepage, and look for the icons at the top right. CAST's Facebook page offers the popular "Catch of the Day," the blog site provides weekly postings, and the YouTube video channel includes clips about various agriculture issues. The icon bar also provides links to Twitter, Pinterest, LinkedIn, and School Tube.



Of course, this publication (*Friday Notes*) includes many links to ag/science articles, but CAST's other sites do also. Twitter messages and Facebook notices keep viewers informed, and CAST benefits substantially from its association with universities, organizations, and companies. Individual members also share information on occasion.

Another CAST connection that pays dividends is the [Borlaug CAST Communication Award](#) process. The distinguished list since 2010 includes C.S. Prakash, Alison Van Eenennaam, Jeff Simmons, Carl Winter, Catherine Bertini, and Akin Adesina. All six are influential contributors to agriculture--including pursuits in research, communication, and education. CAST connects with their work through *Friday Notes* links and Twitter entries.

An example of a BCCA recipient with a strong voice for agriculture [comes from Catherine Bertini](#), the 2011 recipient. In this article, she comments about the way we might "truly celebrate International Women's Day."

As Bertini stated, *"Celebrating women sounds like a positive, upbeat action. We can note women's increasing roles in government, in business, and as leaders of civil society. We can also describe how women are the backbone of every community and virtually every family. Let's throw the excuses in the dust bin of history and commit to listening to women and girls and to supporting programs they want and need."*

NOTE: The 2016 Borlaug CAST Communication Award recipient will be announced on April 21 during a special event at the World Bank in Washington, D.C.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 Cleaver family pic from lessonbucket.jpg, GMO pic from boulderweekly.jpg, and kangaroo pic from dailymail.co.uk. P.2 casting pic from flyfishingtraditions.jpg. Animal Sec. bison poster from i.dailymail.co.uk. Plant Sec. weed pic from realagriculture.jpg. Inter. Sec. futuristic pic from bubble.com. Gen. Sec. Belushi pic from homevideos.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 (videos): This site provides a look at the [many aspects of large-scale chicken production](#).

Views about Beef Production (opinion): Chuck Jolley comments about Dr. Oz's relevance in the ag world and then interviews rancher Will Harris, a staunch [proponent of grass-fed beef](#).

PEDv Puzzle: Porcine epidemic diarrhea virus has been devastating in Asia and North America. Outbreaks in Europe appear less destructive. What is the [global impact of this disease](#)?

Taking Care of the Newborns: [Calving season](#) is one of the most exciting, frustrating, and tiring seasons of the year for many cattlemen and women.

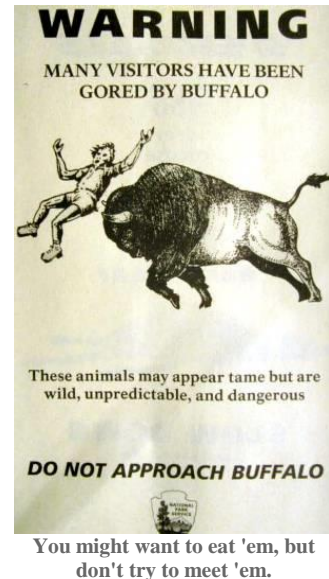
Bison Burgers and More: [Demand for bison meat grows](#) as products from protein bars to bone broth compete for consumers.

D.C. Forum about Antibiotics: The National Pork Board joined with Atlantic LIVE to bring together experts at a forum to discuss the [challenge of responsible antibiotic use](#).

Meat and Climate Change (opinion): Jude Capper says it is disturbing that another study claims the only way to reduce climate change is to [cut meat consumption when plenty of data shows otherwise](#).

The Impact of Animal Agriculture (related to above): Dr. Capper was the task force chair for CAST's Issue Paper titled [Animal Feed vs. Human Food: Challenges and Opportunities in Sustaining Animal Agriculture Toward 2050](#).

Animal Domestication--Which Ones and Why: This article explains why [cowboys never rode zebras](#) across the Wild West.



Food Science and Safety News

Computers and Speculations about Food (video opinion): This TED Talk speaker [promotes changing the food system](#) by connecting growers with technology and raising student interest in modern farming.

A Wee Touch of the Green (video): This article looks at [Shamrock Shakes and their cult following](#)--including a classic 1980s ad.

Irony or Coincidence? A West Virginia lawmaker passed out cups of raw milk to celebrate a [raw milk-related bill](#)--but he says the unpasteurized beverage did not cause an intestinal virus that hit many imbibers.

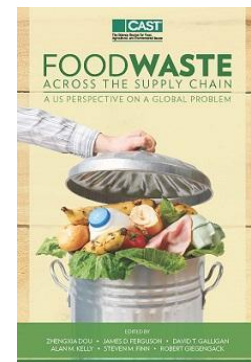
Details about the Food Waste Problem: This data-driven [road map to reduce food waste](#) comes from food businesses, environmentalists, anti-hunger organizations, policymakers, and investors.

Report Touts PulseNet: Approximately 276,000 cases of [foodborne illness are avoided each year](#) because of PulseNet, a 20-year-old network coordinated by the Centers for Disease Control and Prevention.

Sources of U.S. Food: A majority of the [food facilities required to register with the USDA](#) are now located outside of the United States. However, U.S. facilities account for more than 80% of the food Americans eat.

Naturally Misleading: Certain [food labeling and marketing claims](#) can be misleading. This Kansas State food safety expert explains why terms such as "natural" and "healthy" aren't regulated.

March is National Nutrition Month: Throughout the month, the USDA will be highlighting results of its efforts to [improve access to safe, healthy food](#).



The comprehensive Univ. of Penn [book is available here](#).

Fried Healthy? This study found that [vegetables fried in olive oil](#) actually carry some health benefits missing in other cooked veggies.



Plant Agriculture and Environmental News

High-tech Weed Whackers (video): This cool-looking [weed technology](#) can detect and treat individual weeds using red lights, sensors, and a nozzle control system installed along the boom.

Seeing the Forest for the Trees (video): A scientist from the Center for International Forestry Research explains the importance of [sustainable management of forests](#).

Costly and Counterproductive (opinion): Campaigns against GMOs disproportionately [hurt those nations with the greatest need](#) for more productive agriculture, according to this viewpoint.

Biotech Logjams (opinion): North Carolina State Professor Jennifer Kuzma says that [genetic engineering has become increasingly contentious](#), and the arguments about "process, product, and regulation" are stalling scientific progress.

Related to Above: Dr. Kuzma belongs to a CAST task force working on one of the papers in the [Ag Innovation series](#): *Gene Editing in Food Production, Regulatory Review, and Public Acceptance*.

Terrestrial Biosphere (opinion): This research claims that agriculture contributes to methane and nitrous oxide emissions, making the terrestrial biosphere a net contributor of [greenhouse gas emissions](#).

Pesticides in Hawaii: Reaction to a [draft report on pesticides used in Hawaii](#) was mixed after the report called for heavier regulation of pesticides in the state. Public comments are being accepted until April 8.

Algae in Your Tank? University of Florida researchers may have found a key to [converting algae to fuel](#)--a certain "transcription factor."

Feeling the Pain: By applying various vibrations, these researchers have determined that [plants know when they are being eaten](#) and send out mechanisms to defend themselves.



The new weed sensor nozzles do not have quite the *Star Wars* look of the booms above.



International News

Seed Sales: The [global market for biological seed treatment](#) is projected to climb, according to this crop market report. BASF, Bayer, and Monsanto lead this growth, as they contest for markets like Brazil.

It's Not All Vegemite: Check out these [Aussie food favorites](#), from Lamingtons to beetroot on the burgers.

"Agritecture"--Rural Settings in Cities of the Future? Most urban centers have a bad rap for pollution and energy consumption, but the [cities of the future could be very different](#).



Norwegian Know-how: In the Romanian countryside, sewage is often discharged directly into rivers and lakes. Norwegian technology is [helping with this environmental challenge](#).

Fukushima--Five Years After: This publication investigates the current understanding of radiation's effects on health and observes the ongoing [psychological and physical issues](#) in the devastated region.

You Want Foie Gras with That Burger? According to this study, three quarters of restaurants in France have a hamburger on their menu, and 80% of those say the [burger is the top-selling dish](#).

Something Is Not So Rotten in Denmark: Denmark is distinguishing itself in the race against food waste--this time with a supermarket hawking [items once destined for the trash bin](#).

Don't Worry; Be Happy (related to above): Denmark is the world's [happiest country](#) yet again, according to a new survey. The report also found that countries where there was less inequality were happier overall.



General Interest News

Food Lab to School Cafeteria (video): Staff and students at this Chicago high school [used hydroponics to grow food](#) and earned the certification required to serve the lab's harvest in the school's cafeteria.

Tiny Eyes in the Sky (video): This [nano drone is one example](#) of the many tiny machines that are available to inexperienced drone enthusiasts.

Water Safety and Food Production (opinion): This writer says inspectors should revisit the standards for the safety of food production water systems and [focus on potential chemical, radiological, and microbial hazards](#).



"Hmm. Hydroponically grown and perfect for a food fight."

Ag Investment and Growth: Ag tech start-ups show explosive growth in the billions of dollars. A leading driver in economic growth has been [investment in drones and robotics](#).

Modern Food Systems--the Goods and Bads (opinion): This writer thinks we need to reconcile divergent perspectives and come together to [make a sustainable food system](#).

Agriculture, Fracking, or What? Scientists are trying to discover why [methane levels in the atmosphere](#) started rising in 2007 after holding steady for nearly a decade.

Negative Waves from the Blackfish Documentary: In a major concession to critics and animal welfare groups, Sea World says it will [stop breeding captive killer whales](#).

Range Wars? (opinion): This westerner admires ranchers, but he thinks folks should stop spouting anti-government rhetoric about [grazing fees and land use](#).

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."

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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 Society of Animal Science
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- * National Pork Board

- * National Turkey Federation
- * North Central Weed Science Society
- * North Carolina Biotechnology Center
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- * Poultry Science Association
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- * United Soybean Board
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Note: WinField Solutions (Land O'Lakes) provides sponsorship for the distribution of *Friday Notes* to the National Association of Agricultural Educators.

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 Gosteale (Managing Scientific Editor) and Kelsey Faivre (Admin. Assistant, Editing and Marketing).**