



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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CAST Issue Paper #56 Now Available in Spanish

Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations

This [influential CAST Issue Paper](#) considers the pros and cons of food labels. It was released in English in October 2015 and is [now available in Spanish](#).

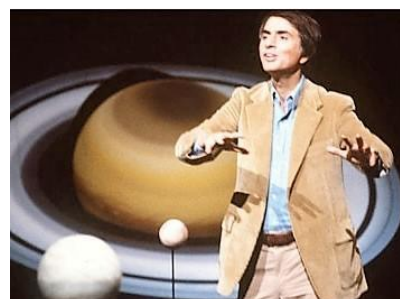
Agro Tourism

June 17, 2016

Mistrust and Skepticism

Defending science as a valid approach to explain the world

Science has been amazing, powerful, controversial, and sometimes frightening. As surgeon, researcher, and writer Atul Gawande said, "It has allowed us to nearly double our lifespan during the past century, to increase our global abundance, and to deepen our understanding of the nature of the universe. Yet scientific knowledge is not necessarily trusted."



"Science is a way of thinking..."
Carl Sagan

[What should young scientists do in the face of growing concern and attacks?](#) In his commencement address at the California Institute of Technology, Gawande put it this way: "Today, you become part of the scientific community, arguably the most powerful collective enterprise in human history. In doing so, you also inherit a role in explaining it and helping it reclaim territory of trust at a time when that territory has been shrinking."

News and Views

****Labeling Law Looming:** Many [food companies appear resigned](#) to the Vermont GMO labeling law that takes effect July 1. Some are still adamant that the act will [disrupt America's food supply chain](#) and [increase costs for consumers](#), farmers, and manufacturers.



CAST IP #54: [The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#)

****Spending Proposals:** The House Appropriations Committee advanced a \$32.1 billion spending bill for the Department of the Interior and environment programs. It [cuts \\$64 million from current spending levels](#) and would block a handful of Environmental Protection Agency rules.

Winfield--with Fair Oaks Farms--just opened an Agro tourism exhibit between Indianapolis and Chicago. It is designed to [educate the nonfarm public about where their food comes from](#). Agriculture Secretary Vilsack spoke at the event and emphasized the need to [attract young people to jobs in agriculture](#) and food production.

CAST Material Available

The latest [CAST Publications Catalog](#) is available here.

Dr. Van Eenennaam Speaks about Biotechnology

A recent *Agripulse* Open Mic program featured [Dr. Alison Van Eenennaam](#), a genomics and biotechnology researcher at the University of California-Davis.

Razorback Awards

"Best in Nation in Science" and "Best in Nation in Agriculture" awards were presented to the [University of Arkansas](#) by the Special Libraries Association.



CAST Social Media

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

****Corporate Farming Vote:** North Dakotans [rejected a law enacted last year](#) that changed decades of family-farming rules in the state by allowing corporations to own and operate dairy and hog farms.

****Food as a Weapon:** Pope Francis condemned the use of hunger as a "weapon of war" and lamented the fact that it was easier to move weapons across borders than the [aid needed to keep civilians alive](#).

****Retaking the Field:** Kansas State, Iowa State, Cornell, North Carolina State, Florida, Nebraska, and UC-Davis are among the universities joining with the SoAR Foundation in calling for a surge in federal [support of food and agricultural science research](#).

****Bee Vampires:** New insights into the reproductive secrets of the [tiny and destructive bee parasite](#)--the Varroa mite--have scientists edging closer to regulating them.

News from the Far Side of the Barn

I Can't Believe It Actually Is Butter! (video): This [2,000-year-old, 22-pound hunk of butter](#) found recently in a bog in Ireland is still believed to be edible.

Rope a Dope: An Oregon [rancher used his lassoing skills](#) to nab a would-be thief.

How to Tell If a Lion Is Happy (video): By combining experiments and observations with rigorous empathy, some experts are "[going Doctor Doolittle](#)" to understand animals.



Shhh. Do Not Disturb

Nancy Reichert New CAST President-Elect

In a recent CAST election, Dr. Nancy Reichert was chosen as the President-Elect for 2016-2017. She will officially assume her responsibilities at the conclusion of CAST's Fall Board Meeting in October. In 2017 she will become the 45th President of CAST, a singular honor and responsibility dating back to 1972, when Charles A. Black and Norman Borlaug, along with other committed scientists, spearheaded the movement to "bring science-based information to policymaking and the public."



Nancy Reichert received a B.S. degree from the University of Wisconsin-Madison in bacteriology. She fell in love with plant tissue culture early in her career while working on generating transgenic plants. This led her to graduate school at New Mexico State University where she worked in the new Plant Genetic Engineering Lab and received a Ph.D. in molecular biology. Shortly thereafter, she started as a faculty member at Mississippi State University and has been there for the past 26 years--first in the Department of Plant and Soil Sciences, and then serving as the head of the Department of Biological Sciences for eight years. During that time, she oversaw a \$12 million building renovation, helped to secure greater than \$1.6 million in external donations/pledges to the department, and stewarded the increase of undergraduate majors in the department by 200. In 2015, Nancy reconnected with her research in the lab and began teaching courses--like Biotechnology in Our Lives--that cover both animal and plant biotechnology.

Nancy plays an active role in the Society for In Vitro Biology (SIVB) and has served in various elected positions since 2002; she currently serves on the Board of Directors and chairs the Public Policy Committee, a position she has held for the past four years. Nancy was named an SIVB Fellow in 2006 and has received two SIVB Distinguished Service Awards.

Nancy has represented SIVB on the CAST Board of Representatives since 2013, and as a member of the Food Science and Safety Work Group, she recently had an issue paper proposal approved that she is liaison and champion for. She is also an active member of the 2016-2020 Strategic Plan Committee.

In her vision statement, Dr. Reichert stressed the importance of CAST's role to reach a broad audience beyond those ready to accept--and adequately interpret--the information conveyed. Her goals involve broadening the distribution of credible science-based information, thereby contributing to CAST's vision by better engaging educators and educational organizations--such as the Extension Service--and by making CAST resources more accessible and searchable. She also plans to adhere to goals delineated in the 2016-2020 Strategic Plan. As she stated, "Integral to the success and impact of CAST is development of a plan to achieve a stronger financial base; a primary goal of the President-Elect should be to help formulate a sound strategy to achieve this."

*****CAST EVP Kent Schescke said, "We look forward to working with Nancy as a part of the leadership team. She brings a wealth of experience and valuable insights to our organization."***

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Sagan pic from nytimes.com and lion pic from lionssleeping.jpg. Animal Sec. pig pic from pbstwing.com. Food Sec. map from npr.org. Plant Sec. cow pic from guernseypic.com. Inter. Sec. Sydney pic from wpengine.netdna--ssl.com. Gen. Sec. chicken pic from telegraph.co.uk. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Pigs and Kids--It's Showtime (video--scroll down on page): A World Pork Expo highlight each year is the Junior National Show--kids and parents from across the country [compete in the show ring for top honors](#).

Brisket--Pitmaster with a Knife (video): As this expert demonstrates, [trimming brisket is an art form](#).

Stopping *Salmonella*: With at least 21 Kentuckians recently contracting *Salmonella*, University of Kentucky poultry specialists are urging those with small flocks to be [proactive about preventing the bacteria](#).

Meat Power: The U.S. [meat and poultry industry accounts for](#) \$1.02 trillion in total economic output--5.6% of gross domestic product--and it is responsible for 5.4 million jobs.



Not yet ready for the show ring, these pigs snuggle up.

Slaughterhouse Rules: Most USDA actions against America's largest meat and poultry plants during the government's second quarter were for the [inhumane treatment of animals](#) during slaughter.

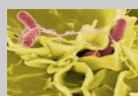
Meat of the Matter Interview: Dan Murphy interviews the controversial head of HSUS for *Drovers* website--[part one here](#) and [part two here](#).

Eggs, Males, and Culling: United Egg Producers announced that it is encouraging the development of alternatives to the [practice of male chick culling](#), with the goal of phasing out the practice in egg production.

Top 20 Milk Processors: The Dairy Research Network released the [IFCN Top 20 Milk Processor list](#).

Cow-pie-ology: According to this expert, "There is no better method of determining the nutritional condition of cattle than the [visual observation of manure](#)."

Horse Whisperers--Using Touch: Jim Masterson has been teaching his [equine bodywork system](#) for more than ten years--some believe the "massage therapy" is a definite benefit for the animals.



Food Science and Safety News

Food Origin Maps: This study reveals the full extent of [globalization in our food supply](#). More than two-thirds of the crops that underpin national diets originally came from somewhere else.

On the Road--Food Map: Travelers looking for cheap food on summer vacation trips might use this [interactive map for ideas](#).

It's a First: Because of huge social changes, Americans are [spending more on restaurants than on groceries](#).

Milk--Raw Style: The state of Illinois will allow certain on-farm [sales of raw milk](#) directly to consumers starting on July 1.

Tell Us What You Really Think (opinion): This editorial writer says probiotics are unnecessary,



Really? Thai chilies come originally from Central America, while Italian tomatoes come from the Andes?

GMOs are harmless, and a [gluten-free diet is a terrible idea unless](#) you really need to be on it.

Targeting *E. coli*: Researchers try to [kill it, use it, and otherwise figure out](#) *E. coli*. It is a frequent target of laboratory research that often gets published during the summer.

Milk for the Muscles? Chocolate milk has been touted by marketing campaigns and the health fitness industry as a [natural sports recovery drink](#).

Who Has the Best Sandwiches? According to this source, these are the [best sandwich shops in each U.S. state](#) and Washington, D.C.

Energy Drinks Have Energized Sales: Global sales of energy drinks hit billions of dollars last year, and they are [expected to increase](#), even as regulatory efforts are on the rise.



Plant Agriculture and Environmental News

Ancient Rice Terraces Still Produce Today (video): Rice is grown in a [beautiful terrace system](#) that was started more than 2,000 years ago in this Philippine village.

Biofuels Not a Threat: Bioenergy produced from crops [does not threaten food supplies](#), according to researchers funded by the U.S. government, World Bank, and others.

Rethinking Stink of Antibiotics in Manure: When applied with manure to crops, antibiotics mix with air, soil, and water. [Scientists are trying to prevent problems](#) such as antibiotic resistance and pollution.

Wheat Genome: Wheat breeders around the world now have access to the [whole genome assembly for bread wheat](#), courtesy of the International Wheat Genome Sequencing Consortium.

Beauty of a Wheat Farm (photo essay): Despite unpredictable yields and many changes in farming technology, this Colorado [family stays connected to the land](#).

Arsenic and Rice: Researchers at the University of Delaware found that incorporating rice husk to soil can [decrease toxic inorganic arsenic levels](#) in rice grain by 25 to 50% without negatively affecting yield.

Herbicide Decision Coming: Farm groups say they are concerned that the EPA's [report on atrazine](#) could severely limit farmers' ability to use the herbicide.

Controlling Weeds (related to above): These Kansas State University researchers look at [controlling larger weeds](#) in Roundup Ready soybean fields.

Drainage Water Management: This North Carolina State University expert believes the [time is ripe for controlled drainage](#) to make a comeback as a way to minimize nitrogen loss from croplands.



Manure is just my way of recycling.



International News

Mochi Master (video): This expert makes Japan's traditional soft and chewy treat by pounding, flipping, and smashing glutinous rice at [high speeds in perfect coordination with a team](#)--and he still has his fingers!

A Bug Fest of Biblical Proportions (video): This [locust swarm sweeps through](#) southern Russia.

Ag Tech Down Under (opinion): According to this ag expert, the Australian agricultural industry is enthusiastic about the [potential of technologies to improve operations](#); the country faces challenges and advantages.

Clever Cows: A Tasmanian dairy farmer--whose herd was trapped in floodwater--has described how his cows climbed onto machinery to [escape surging water](#).



Is Australia fertile ground for tech advances?

Donkey Milk Chocolate: A [Swiss-based donkey milk company](#) is ramping up production and is set to launch the first large-scale production of a chocolate bar made with donkey's milk.

Something Fishy in Berlin: The start-up culture in Berlin has attracted an [investor-funded aquaponic initiative](#) that farms fish and vegetables in water.

Soy Contracts Soar in China: While trading in everything from steel to cotton futures has collapsed, [soymeal contracts have continued to expand](#).

Managing Manure: As China's livestock industry grows, manure management is becoming an obstacle to growth. The U.S. Grains Council sponsored a symposium on the [scientific principles for manure recycling](#).



General Interest News

Rodeo Roundup (video): A rodeo-loving couple both placed first in their respective events at the [College National Finals Rodeo](#).

Foul Is Fair at Sea (video): Two years at sea have fostered a close relationship between [two fellow sailors as they cross the globe](#)--a 24-year-old Frenchman and a hen that occasionally lays eggs.

Precise about Irrigation: These five [new irrigation technologies](#) aim for precision from automated moisture sensors and new propane-powered engines.

Military Veterans and Farming: The University of Arkansas received a grant to fund a [Military Veterans Small Farms outreach program](#).



Who's captain of this ship?

World's Favorite Second-hand Tractor? Some say these [two Massey Ferguson tractors](#), both out of production for decades, are essential to farmers in dozens of countries around the world.

Baby Talk for the Birds: These scientists say some adult birds use "baby talk" when singing to chicks to [help the baby birds better learn](#) their songs.

Disease Outbreak Predictor: According to this report, climate change may predict [which diseases will jump from animals to humans](#)--and when.

Mosquito Repellents: Texas A&M staff and students discover a [receptor on the legs of mosquitoes](#) that, when activated, keeps female mosquitoes from taking a sugar meal and makes them fly away.

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 Association of Avian Pathologists
- * 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
- * Aquatic Plant Management Society
- * California Dairy Research Foundation
- * Council of Entomology Department Administrators
- * Croplife America
- * Crop Science Society of America
- * DuPont Pioneer
- * Elanco Animal Health
- * Innovation Center for U.S. Dairy
- * Monsanto
- * 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
- * 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.

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- * 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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**** With assistance from Carol Gostele (Managing Scientific Editor).**