

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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Two More Societies Join CAST--P.2

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In the shallows, the dark, water-soaked sticks and twigs, smooth and old, were undulating in clusters on the bottom against the clean ribbed sand ... each minnow with its small individual shadow, so clear and sharp in the sunlight. From E.B. White's "Once More to the Lake."

Agrifood in the Spotlight

A University of California-Berkeley group will host a special three-day workshop on the agrifood business from April 19 to 21. The workshop focuses on understanding strategic opportunities for innovation in agrifood product design and supply chain design to enhance profitability.

Iowa Water Conference

The popular Iowa Water Conference will occur March 23 and 24 in Ames--the tenth consecutive year in its current format. Click here for information.

March 4, 2016

Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem

New Book Examines Food Waste Reduction Opportunities for a More Sustainable System

If the challenge is how to feed the world's billions of people while sustaining earth's resources, then one of the solutions must include reducing waste to bolster food security and increase environmental sustainability.

The scale of the problem is enormous. More than one-third of food produced for humans is not eaten but lost, while nearly 800 million people worldwide (and 1 in 6 Americans) are food insecure.

This new book (Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem) cites experts from

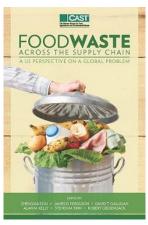
academia, government agencies, industry sectors, and NGOs by compiling papers presented at the Food Waste Conference held at the University of Pennsylvania. The authors hope that evidence-based data will lead to practical solutions and meaningful change.

CAST is pleased to be involved with the distribution of this important, timely material. Various groups, media outlets, and staff members from the U.S. House of Representatives Agriculture Committee have already requested the information.

The <u>book is available online at the CAST website</u>--free for CAST members.



**GMO Label Laws (ongoing): A bipartisan majority of the U.S. Senate Agriculture Committee adopted its own version of a <u>bill to stop states</u> from imposing their own labeling schemes. Meanwhile, Senator Merkley introduced an alternative that he touts as a compromise.



World Food Prize



Nominations

World Food Prize nominations are open for those demonstrating exceptional achievement in any field involved in

enhancing food production and distribution and increasing food availability and accessibility to those most in need.

Ag Outlook from the USDA

This annual report features the USDA's regular data releases and market assumptions about agriculture commodities in the months and years ahead.

Water Quality Conference

Ohio State University experts in agriculture, climatology, and environmental economics will be featured at a workshop and annual conference hosted by the Soil and Water Conservation Society on March 14.

Vilsack on Ag

In this recent interview, Agriculture Secretary Vilsack talks about genetically modified food and ethanol (audio available).



CAST Social Media

Check the popular CAST <u>Catch of the Day here</u> and the visually appealing <u>CAST Pinterest site</u> here.

- **Biotech and Food Security: A top scientist at the USDA and other experts agree that improving on existing biotechnology and developing new agriculture practices are vital to meeting increased global food demand.
- **Biotech Debate: The emergence of a powerful gene-editing technology known as CRISPR-Cas9 has <u>elicited debate</u> about how it might be used to modify the genomes of human embryos.
- **Water Quality and the Chesapeake Bay Ruling: The U.S. Supreme Court refused to hear an appeal, thereby letting stand a court ruling that the <u>Chesapeake Bay cleanup is legal and may continue</u>. As this video/article shows, some agriculture groups are <u>concerned about the implications</u>. Note: The U.S. Supreme Court also decided to let a contentious <u>air pollution rule for power plants</u> stand.
- **Farm Economic Woes? Many are concerned about the direction of the farm economy. The USDA expects farm income to fall for the third year in a row, and farmers are borrowing more to get by.
- **Bioenergy and Invasive Species: The <u>CAST Commentary</u>, A Lifecycle Approach to Low-invasion Potential Bioenergy Production, is available for free download, and members may also view a video of the presentation.

News from the Far Side of the Barn

Animals and Machines Behaving Badly (videos): We've seen an eagle take out a drone; now this clip shows one being knocked down by an antelope. And this segment features a terrier that considers a robot dog way beneath his dignity.



Maybe the Goats Are the Invasive Species: An Oregon city's experiment to outsource the removal of invasive vegetation to goats has backfired after the <u>animals went on a damaging rampage</u>.

Two More Influential Groups Join CAST

New Committee Members Bring in Fresh Perspectives

The Soil Science Society of America and the American Society of Agronomy both rejoined CAST, and the organizations have appointed two accomplished representatives to participate in CAST work groups.

Mary Beth Adams, representing the Soil Science Society of America, will be a member of the Plant Work Group.

Dr. Adams is a nationally recognized research soil scientist who has examined the effects of air pollution on forest ecosystems, nutrient cycling in forests, and sustainable productivity of forest soils.

She received her B.S. and M.S. in Forestry from Purdue University and continued on to her Ph.D. work in soil science and forestry at North Carolina State University. She currently lives in West Virginia where she serves with the USDA Forest Service as a research soil scientist with the Sustainable Forest Ecosystems in the central Appalachians.



Dr. Mary Beth Adams



Dr. Drew Lyon

Drew Lyon, representing the American Society of Agronomy, will also be a member of the Plant Work Group.

Dr. Lyon is currently the Endowed Chair of Small Grains Extension and Research, with the Weed Science Department at Washington State University. His extension and research program focuses on integrated weed management in dryland small grain production in eastern Washington.

He received his B.S. in agronomy/crop protection at the University of Illinois, and M.S. and Ph.D. in agronomy/weed science at the University of Nebraska-Lincoln. He served on the CAST board from November 2011 to January 2013 and attended the 2012 Annual Meeting. Lyon has been a long term CAST individual member as well.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 lake pic from kirstendotcom/twimg.com and eagle pic from slantnews.jpg. Animal Sec. duck pic from animalzoo.ro.jpg. Food Sec. breakfast pic from diabetesmine.com. Inter. Sec. earth cartoon from nationofchange.org. Gen. Sec. tea freeze pic from buff.ly/favicon. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.





Animal Agriculture and Environmental News

Duck Mother--a Real Fluff Story (video): CBS' Steve Hartman visited a <u>young girl with a duck</u>.

COOL Cut: The USDA released its <u>final rule to repeal</u> the controversial mandatory country-of-origin labeling (COOL) requirements for beef and pork.

Antibiotics and Common Sense: This Kansas State University veterinarian looks at <u>information regarding the antibiotic resistance</u> issue.

Antibiotic Use in Pork Production (opinions): The Pork Checkoff website provides this <u>information regarding</u> <u>antibiotics</u> and pork production. In a related move, Tyson Foods has <u>launched</u> an antibiotic-free line of pork.



If you tell a "why the duck crossed the road" joke, I'm gonna quack up.

Keeping Turkeys Healthy: This site provides a view of how <u>turkey farmers use a variety of tools</u>--including vaccines, good nutrition programs, and proper housing--to keep animals healthy.

Going Big in the Dairy Business: A new report from Rabobank explores consolidation in the U.S dairy sector and looks at the <u>profitability of large dairy farms</u> driven by economies of scale.

Milking More Than Black and White: Guernsey cattle are enjoying a mini revival, thanks to the popularity of their milk. The trend seems to be catching on in Australia, Japan, and even Thailand.

Animal Industry Report: The latest edition of the Iowa State University <u>Animal Industry Report</u> is now available in its entirety on this digital repository portion of the ISU Library website.

Calves and Cameras: With the use of video equipment, producers can stay warmer during the calving season with the use of cameras as their eyes on the outside <u>watching over the herd</u>.

Storing Genes for the Future: The National Animal Germplasm Collection <u>ensures that livestock genetic</u> diversity doesn't disappear. It builds a germplasm collection in case of disease or other disasters.

It's a Dog's Life: The USDA is helping to provide livestock producers in the western United States with livestock guard dogs that offer greater protection against predators. Also, check out a day in the life of an lowa farm dog, and this blog looks at old time farm dog "mutts."



Food Science and Safety News

Chew on This--Jerky Goes Mainstream (video): Jerky is the country's <u>newest health gourmet</u>--with jalapeno, cherry, and garlic joining the scores of flavors.

Wonky Veg Boxes (video): A British supermarket chain is offering discounted vegetables that <u>might look a</u> little odd on the outside but are still good to eat.

Snap Decision? Some retailers would have to adjust their items in stock under a USDA proposal to make several changes to the Supplemental Nutrition Assistance Program (SNAP) <u>eligibility regulations</u>.

Mikey Doesn't Like It: Almost 40% of the millennials surveyed by this group said <u>cereal is an inconvenient</u> breakfast choice because they had to clean up after eating it. No wonder cereal sales have slipped.

Instagram Food Data: These casual food pics are contributing to a <u>gigantic database for scientists</u> to comb through, research, and make important observations about our dietary habits.

What If I'm Allergic to Apps? A new app helps shoppers deal with food allergies.

Fresh Food On-the-Go: This article introduces us to <u>bus-stop farmers markets</u>.

Maybe not convenient to make--but many would "heart" this breakfast.

Sleep Deprived Junk Food: If you crave junk food, it may be because you're sleep-deprived. A new study suggests that <u>lack of sleep may lead to increased appetite</u> and an affinity for unhealthy foods.



Plant Agriculture and Environmental News

Soybean Research: This university study says a crop-injuring *Tospovirus* can be passed from soybean seeds to plants, a finding with significant implications for soybean production around the world.

An Insecticide Ban? The U.S. Environmental Protection Agency issued a notice of intent to <u>cancel the use of insecticides</u> that contain flubendiamide.

Soil Boosters: These seven influential projects and programs are helping to restore the world's soil.

Crops into Forage (opinion): This Texas A&M expert has some advice for those who are contemplating the move from crop production and into a forage-based system.

Biotech Decision at the Local Level: An elected board of commissioners in Colorado is considering a <u>contentious GMO issue</u> that represents some key biotech issues affecting farmers.

Wheat Yields: Texas A&M researchers are closing in on specific genetic traits in wheat that can help increase yields.



Efforts to save the soil.

Residues--Let 'Em Be: The Soil Science Society of America points out that leaving plant residues in place during the winter provides numerous benefits for the soil in fields and gardens.

Herbicide Resistant Weeds: When it comes to herbicide resistance issues, this expert says <u>close</u> management becomes essential.

Blueberries and Root Rot: This study has identified a number of highbush <u>blueberry cultivars that show</u> resistance to a "root rot disease"--as well as those varieties that are susceptible.

More Banana Woes: Around the world, banana farmers are fighting a losing battle against <u>a soil fungus that kills Cavendish bananas</u>, the only type grown for the international market.

No Longer "As Dumb As a House Plant": Plants aren't given credit for having complicated mental lives, but new research has shown not only that they form memories but also that they sometimes forget.



International News

Put Another Crab on the Barbie (video): These Aussie teens take you along on a <u>hunt for giant mud crabs</u>--and they show you how to turn them into proper bush tucker.

No Bacon Fests Here (opinion): Pigs are not eaten in various parts of the world, often for religious reasons. This article considers some of the possible reasons.

The Weight of the World: The Commission on Ending Childhood Obesity presented its final report, culminating a two-year process to address the alarming levels of childhood obesity and overweight globally.

Dire Food Situation: Half the people in the Central African Republic are going hungry every day-double the number a year ago, according to U.N. officials.

Climate Change and Food Security (opinion): According to this Oxford report, the <u>effects of climate change on food production</u> around the world could lead to many deaths by the year 2050.



What's on the menu? Irony in the form of obesity and hunger.

Women and Ag: This Tanzanian entrepreneur believes that information and communication technologies hold the key to a <u>better future for young women, especially in the</u> agriculture sector.

Wastewater with a Purpose: These workshop attendees in Peru learned about 18 case studies from South America, Asia, and Africa where wastewater is <u>being reused for agricultural purposes</u>.

Unmanned Food Store: In Sweden's first unmanned food store, all you need is a smartphone.

A Big Dry in South Africa: Water levels in South Africa's 180 dams have declined drastically, and officials say it could take more than three years for levels to recover to acceptable operating capacities.



General Interest News

Hot Tea Freeze Out: So what happens when a thermos of <u>hot tea hits minus 40 degrees Celsius</u>? This Canadian photographer finds out (photo at right).

Chill Out to Trance-inducing Sculptures (video): This sculptor creates <u>mesmerizing kinetic sculptures</u> from windpowered, curved-metal designs.

A Taxing Situation (opinion): According to this ag expert, a <u>tax provision will affect farmers</u>, ranchers, and other small businesses in a highly significant way.

Hurts So Good: This young woman shares <u>experiences</u> <u>from her first year of farming</u>--including a pasture fire, back injuries, baby pigs, and optimism about the future.



Fast freeze tea.

Wind Driven: Iowa pulled in 31.3% of its electricity last year from wind generation. The state <u>leads the nation</u> in the <u>percentage of electricity from wind</u>--followed by South Dakota, Kansas, Oklahoma, and North Dakota.

Tilting at Windmills (related to above): Check out this blog for <u>another take on wind</u> energy production.

Water Irony? (opinion): Some think California's <u>drive to save water</u> is killing trees, hurting utilities, and raising taxes.

Unleashing Rural Economies: Economist Intelligence Unit research shows that <u>promoting rural development</u> has the potential to unlock \$2 trillion of annual economic output globally by 2030.

Farm Strong? (opinion): Technology is constantly changing the face of farming, but it's also <u>changing the bodies of farmers</u> themselves--perhaps not for the better, according to this researcher.

"Hooping" It Up to Help Others: University of Nevada staff and students spent a sunny, windy day building six hoop houses that will be used to grow vegetables year-round to benefit local charities.

CAST Information

Check out CAST's page at the <u>YouTube site</u> to view highly regarded agscience 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 <u>clicking HERE for</u> 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 <u>CLICK HERE</u> for CAST membership information.

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- * 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
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Dan Gogerty (Managing Communications Editor)
The Council for Agricultural Science and Technology
4420 West Lincoln Way
Ames, lows 50014-3347

Phone: 515-292-2125, ext. 222; Fax: 515-292-4512; E-mail: dgogerty@cast-science.org



** With assistance from Carol Gostele (Managing Scientific Editor) and Kelsey Faivre (Admin. Assistant, Editing and Marketing).

