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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 the CAST organization.

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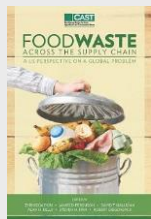


It's Not All Sheep

Agriculture is the most productive sector in New Zealand. Yes, there are millions of sheep--and even a few hobbits.

Food Waste Across the Supply Chain

The University of Pennsylvania and CAST offer the well-received publication *Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem*. It cites experts from academia, government agencies, industry sectors, and NGOs. The publication is now available on Amazon. CAST members can download it [free from the website](#).



Compost Crusader

June 3, 2016

Rising Tide of Water Concerns

Various stakeholders tap into the issues



The

Supreme Court opened the door to more lawsuits regarding the Clean Water Act in a [recent ruling that allowed businesses to challenge](#) the federal government's decisions concerning the wetlands and streams it can regulate. WOTUS regulations have been big debate topics in the ag world, but controversies are rising in many U.S. states.

From the Chesapeake Bay to Lake Mead, groups, officials, and farmers are struggling with the overall concept of water use--availability, regulations, and safety. The [CAST Commentary Benefits of Controlling Nuisance Aquatic Plants and Algae in the United States](#) looks at one issue that affects several U.S. states. **Scroll down to page two** for further links regarding more of these issues.

News and Views

****Blurred Genetics:** New [molecular tools are blurring the distinction](#) between genetic improvements made with conventional breeding and those made with modern genetic methods. One example is marker-assisted breeding, in which geneticists identify genes or chromosomal regions associated with traits desired by farmers and/or consumers.

****Gene Editing Update:** CRISPR/Cas [genome editing has captured the attention](#) of the popular media, the scientific community, and the investment world.

****Food Protection:** The USDA issued a final rule aimed at [preventing](#)

Individuals can also make a [difference with waste problems](#). A Milwaukee waitress has served up one solution to her city's food waste problem.

Sell By, Use By, Bye Bye?

CAST's [series of 50 informative 90-second videos](#) focuses on important food information. This week's featured topic: [What Is the Difference Between Sell By and Use By Dates?](#)

Labels and Congress

Witnesses told the House Agriculture Committee that "sell-by" and "use-by" labels on food products [need to be standardized](#) to help consumers make better choices and to help reduce food waste.

Individual Membership

Pass on the message--CAST offers a [summer special for new members](#). Help CAST communicate science-based information about agriculture.

CAST Social Media

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

[the adulteration of food](#) from acts intended to cause wide-scale harm to human health, including acts of terrorism.

****Antibiotics and a Superbug:**

According to some reports, the [superbug that doctors have been dreading](#) has reached the United States.



Has the superbug arrived?

****Ag and Pollution:** According to the USDA, American farmers, ranchers, and foresters have begun to adopt [practices that could cut greenhouse gases](#). This interview with Secretary of Agriculture Tom Vilsack looks at this issue and more.

News from the Far Side of the Barn

Hoping They Won't Be Licking

Their Wounds (video): Lions lick water off a tent as [campers sit quietly](#)--very quietly--inside.



Hold the Digital Anchovies

(video): Pizza Hut in Japan will be the first major chain to utilize [robots to serve customers](#) in its pilot program later this year.

Political Animals: A surprising number of [animals hold mayoral office](#) in the United States.

Water--States Dealing with Concerns

Some believe water will be (or is) the number one global crisis, and links in *Friday Notes* often lead to information about agriculture, the environment, and food production as they relate to water issues. The following items are just a few of the many water-related articles flowing through the information system recently.

****The Chesapeake Bay** has been a focal point of water concerns. [The EPA site says](#), "Restoration efforts to improve water quality in the Chesapeake Bay include reducing pollution, restoring habitats, managing fisheries, protecting watersheds, and fostering stewardship through communication and outreach programs.

****California** Governor Jerry Brown issued an executive order that [builds on temporary statewide emergency water restrictions](#) to establish longer-term water conservation measures--including permanent monthly water use reporting, new permanent water use standards in California communities, and bans on clearly wasteful practices such as hosing off sidewalks and driveways.

****Minnesota** state officials and corporate executives announced a new [public-private partnership](#) to protect and improve water quality across the state.

****Iowa** farmers have planted more acres of corn and many expect [nitrate levels in water](#) to rise--but recent research questions that contention.

****Researchers** are confident they can reduce agricultural water use [before tapping into the Ogallala Aquifer](#) becomes economically prohibitive, but they're not sure producers will quickly buy into it. The aquifer is a primary water source for **Oklahoma, Nebraska, Colorado, Kansas, New Mexico, South Dakota, Texas, and Wyoming.**

****The Texas** Water Resources Institute spring 2016 publication [features research projects](#) from throughout the Texas A&M University System, funded by the inaugural round of water research seed grants.



**Assessing the Health of Streams
in Agricultural Landscapes:
The Impacts of Land Management Change
on Water Quality**



Click here for the Ag quickCAST of the [Special Publication](#) *Assessing the Health of Streams in Agricultural Landscapes: The Impacts of Land Management Change on Water Quality.*

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 New Zealand pic from dupont.co.nz, water diagram from agro.basf.jpg, bug cartoon from riskmanagement365.com, and lion pic from kivitv.com. Animal Sec. rattler pic from global.fncstatic.jpg. Food Sec. hot dog pic from commonsenseevaluation.com. Plant Sec. robot pic from robotlab.com. Inter. Sec. poster from pinterest.jpg. Gen. Sec. dessert pic from recipestation.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

These Pigs Almost Fly (video): Texas A&M experts demonstrate the [jumping abilities of wild pigs](#) and provide a panel height recommendation for trapping efforts.

Lucky Pigs in the Mud (video): These farmers take pride in the fact that they have [every genetic line of the Large Black pig](#) in the United States.

Poultry Trade: The return of the United States in many poultry markets is [shaking up global trade streams](#), with other exporters defending their market share via price concessions, according to Rabobank.

Are You Smarter Than a Beef Quiz? This site uses photos, videos, and multiple-choice questions to [test your knowledge about beef](#).

Some Herpetologists Are Not Impressed: An [Oklahoma rattlesnake roundup](#) includes handling, venom milking, and meat recipes--but some say the tradition should end.

Cage Fight: The movement toward cage-free eggs in the United States seems inevitable, but one vocal [group of egg farmers continues to resist](#).

Bovine Paranoia (includes links and video): We all love cows, but some of them [can be downright dangerous](#).

Poultry Health: Poultry producers have a few extra weeks to beef up their [pathogen reduction programs](#) that include new *Salmonella* and *Campylobacter* testing.

Calf Production Techniques: The University of Florida Institute of Food and Agricultural Sciences is showing small cow-calf producers how using the latest [reproductive research leads to larger profits](#).



The rattlers do not seem happy about the roundup either.



Food Science and Safety News

Salt and Guidelines (video opinion): The FDA proposed [voluntary guidelines for food companies](#) regarding sodium use. This site includes "sodium graphs" and a look at the "confusion" of the Dietary Guidelines.

The London Vegetable Orchestra (video): Check out these [musicians who literally play with their food](#)--although you'll probably agree carrots and zucchini taste better than they sound.

Food Safety: U.S. food is safe overall, but stuff happens--such as *Listeria*, *Salmonella*, *Botulism*, *Streptococcus*, *Hepatitis A*, and *E. coli*. These are the [ten biggest food poisoning outbreaks](#) since the 1970s.

Grill Season: Research suggests that Americans [prefer their hot dogs straight off the grill](#)--Memorial Day Weekend kicked off the so-called summer of seven billion hot dogs.

Seeing Large, Eating Large? What do large tables, large breakfasts, and large servers have in common? They all [affect how much you eat](#).

The Other NRA: The 2016 annual meeting of the [National Restaurant Association](#) is all about local food--with a very liberal definition of "local."

Food Records: This slideshow provides 24 unbelievably [huge world food records](#).

Titanic Food: This article [lists food menus](#) for the first-class, second-class, and third-class passengers on the Titanic. What was Leonardo DiCaprio having?



For those times when a real grill seems too mundane.



Plant Agriculture and Environmental News

Going Up (video): Indoor vertical farming is [transforming agriculture](#) by controlling environments with technology to grow the perfect plant.

Johnny Appleseed Got a Drone (video): This company thinks [tree planting in remote, forbidding places](#) can be dangerous, so they offer drones that can do the work.

Biotech Benefits: A British study finds that farmers around the world who use genetically modified seeds reaped [economic benefits and improved the environmental sustainability](#) of their operations.

Cleaner Orchard Air: Fruit growers in the Hood River Valley [find solutions to cleaner air](#) through a partnership with the Natural Resources Conservation Service--innovative pruning and conversion of smudge pots.

Sweet Revenge: Scientists have discovered a new form of plant nectar that Bittersweet Nightshade uses for [defense against herbivores](#).

Chemical Spills and Ag Land: A Colorado State University research team looks at chemicals spilled during fracking and the [effects on agricultural land](#).

Trees for Their Daughters in India: A [village's initiative aims to promote gender equality](#) and has boosted the local economy.

Successful Student Organic Farm: At the Iowa State University Horticulture Research Farm, students grow about [40 different fruits, vegetables, and herbs](#).

Disrupting Its Love Life: University of Florida graduate students and USDA scientists are working on an environmentally [friendly way to control insect pests](#) that transmit "citrus greening."



Maybe Johnny Appleseed's dream is about to be undertaken by some [even more tireless beings](#).



International News

Wheels, Baskets, and Other Designs--International Food Guides: The United States may have replaced its classic food pyramid with a simple plate design in 2011, but [creative food guides](#) still reign around the world.

Small Farms, Big Impact (opinion): Around the world, [nearly 500 million smallholder farmers](#) manage just 12% of agricultural land--yet they produce a tremendous amount of food.

Chocolate Quality: Belgian chocolate is a world-famous delight, and now researchers are [checking its quality with ultrasound](#).

Tiger Troubles: Wildlife authorities in Thailand say they have discovered the [carcasses of 40 tiger cubs](#) in a Buddhist temple long suspected of engaging in animal trafficking and abuse.

Dairy Aid: Germany announces a 100-million-euro aid package for its country's [stricken dairy farmers](#).

Milkin' It in Canada: Canada's University of Guelph is committed to the country's \$6-billion dairy sector, and the school calls itself "[Canada's Dairy University](#)."

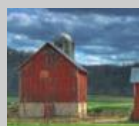


Most folks just check the quality of chocolate by eating it.

Insect Larvae for Livestock: This European project is researching whether or not insect larvae--grown on organic waste materials--could be a [suitable protein source in feed](#) intended for pigs, chicken, and fish.

Eater's Guide to World Food: Global restaurant-hopping means looking for that perfect iconic essential dish, and this guide looks at some of the most [inspiring culinary experiences for travelers](#).

The Tesla of Eco-villages: This Dutch town will [grow its own food, live off-grid](#), and handle its own waste.



General Interest News

Vaccines, Autism, and Science (video): This 12-year-old kid claims to have collected [all the evidence showing vaccines cause autism](#). His video has gone viral--in a positive way for science.

Baked Alaska--Historically: Back in Seward's "folly days," they found that [meringue insulates ice cream](#) from heat.

Precision Farming and Evolving

Science: Nanotechnology--designing ultra-small particles--is now emerging as a promising way to [promote plant growth and development](#).

Honeybee Health: This study says [honeybees collect the vast majority of their pollen](#) from plants other than crops, and an Ohio State University professor says homeowners should curtail insecticide use when possible.



Hot dessert in a cold land.

Law and Intestinal Disorder: The wheels of justice turn slowly--but stomachs will churn rapidly--over the [toxic and counterfeit food products](#) that police agencies have seized recently in 57 countries.

Toasting Turmeric: Many chefs are developing a [newfound affection for the Indian spice](#) called turmeric. Some refer to a turmeric latte as "Golden Milk."

Blinded by the Light: Street [lighting is playing havoc with moths](#), distracting them from pollinating plants and potentially contributing to "catastrophic" declines in their populations, scientists have warned.

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