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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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Taking Flight

Wingsuits are technologically amazing, but [jumping off a ledge and then spreading synthetic wings](#) to take flight over a beautiful Swiss mountain vista is still scary.

World Food Prize Hunger Summit

The [Iowa Hunger Summit](#) is held during the World Food Prize's week of events in October. The summit kicks off the events, preceding the Norman E. Borlaug International Symposium, also known as the "Borlaug Dialogue."

Mixed Messages on the Farm

Youngsters growing up on the farm are getting mixed messages--with income down and times tough for many. But global demands mean the farm kids of today will be growing

July 15, 2016

GMO Label Law Update:

The House joined the Senate by [passing the GMO labeling law](#); scroll down to page two for further coverage.

A Robot Revolution Down on the Farm

A recent report--*Planting the Seeds of a Robot Revolution: How Autonomous Systems Are Integrating into Precision Agriculture*--paints a vivid picture of farming's future landscape. While that future includes many advanced versions of new technology that farmers have already embraced--



such as biotechnology and precision tools--the study looks a little further into the future, [a day when robots of various kinds will alter the landscape of farming](#) across the world (*info from southwestpress.com*).

Check out these related articles about farms and robots:

**As field robots have become cheaper, a steady stream of [farm jobs are being automated](#).

**Some emphasize the link between [robots and the shortage of labor](#) in certain ag sectors.

**This [robot field day](#) provides a glimpse into the future from Europe and around the globe.

**This article says the [costs of many systems are coming down](#)--for corn growers with large operations, lettuce weeding, strawberry harvesting, and more.

**Some think these farm bots will [make your garden grow](#).

News and Views

food for billions of people, and the [ag job market is bright](#).

Public Health Ed

Starting in the fall 2017 semester, Cornell University will offer a [Master of Public Health degree](#) with a focus on epidemiology, infectious disease, food systems, and sustainability.

Style Engineers

At the University of Kentucky, more than 300 young people will become "style engineers" this summer, thanks to a [grant received by Kentucky 4-H](#).

Agriview

The College of Agriculture, Food and Environmental Studies at Cal Poly made the [new edition of the Agriview magazine, available online](#).

Pass the Word

Join CAST as an individual member by August 31 and [pay half price for 2016 membership](#).

CAST Social Media



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

****Rural Energy for America Program:** The USDA is providing nearly \$55 million in grants and loan guarantees to help 821 small [businesses in rural areas save on energy costs](#).

****Omega Issues:** This CAST video looks at the question [If Omega 3s Are Good, Are Omega 6s Better?](#) It is one of many 90-second videos that address questions that people want answered about food issues.

****Food Waste:** [According to new research](#), half of all U.S. food produce is thrown away. [Click here for the University of Pennsylvania/CAST publication Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem](#).

News from the Far Side of the Barn

Before the Young Birds Fly the Coop (video):

This [osprey cam lets us spy](#) on some cool birds. The site also provides links to other wildlife cams.



Osprey take-out food.

Phyt Signs--Listening to Your Plants

(videos): This tech start-up offers the [opportunity for plants to talk to people](#) through transmitted signals. However, some think the only thing dumber than a house plant is someone actually trying to talk to one.

Sacré Bleu (video): Tour de France riders face many obstacles--including [llamas, sheep, and wayward dogs](#).

GMO Labeling Bill Moves through Congress

Recent CAST Papers Helped Inform the Public and Policymakers

Farm groups, food companies, and the biotech industry are pleased that [the House voted to clear legislation that will prevent states from requiring on-package labeling of GMOs](#). The bill moves to President Obama's office, and the Agriculture Department says a working group has been formed to write rules necessary to implement the legislation.

CAST Issue Paper Regarding Mandatory Labeling

Nearly two years ago, CAST's Issue Paper titled [The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#) gained widespread interest and respect. Chaired by Alison Van Eenennaam, the paper looks at the controversies regarding mandatory labels, state legislation, and other issues.

CAST Issue Paper Regarding Process Labeling

A [recent op-ed in The Hill by David Just and Harry Kaiser of Cornell University](#) links the results of the CAST Issue Paper--[Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations](#)--to the bipartisan Roberts-Stabenow bill that passed the Senate and the House.

As the paper's Task Force Chair Kent Messer said, "The policy recommendations from the Roberts-Stabenow bill are remarkably similar to the recommendations of our CAST Issue Paper. I don't believe that this is coincidental, especially since the paper was presented at GMA and they seemed to embrace parts of the paper."

****An excerpt from the editorial:** In the face of so much potential, there have been vocal calls by anti-GMO activists for mandatory labeling of genetically modified (GM) foods. Specifically, these activists want labels appearing on the front of food packages, as is required under Vermont law. This kind of warning-type label is designed to provide just enough information to scare the uninformed and is not based on any sound science. The Roberts-Stabenow bill wisely puts into policy the recent recommendations of behavioral economics research summarized in a CAST Issue Paper written by Kent Messer of the University of Delaware, Harry Kaiser of Cornell University (and a co-author of this piece), Marco Costanigro of Colorado State University and Attorney Shawna Bligh. These researchers showed that using warning-type labels that have phrases like "contains" or "free of" implicitly casts rival products in a negative light and leads consumers to stigmatize and shun these products even when there is no evidence of them doing harm to human health.



Three recent views of the proposed law that has now been passed by the Senate and House:

In this editorial, Mark Lynas states why the GMO Labeling [Bill should be passed](#) (it was). More than 1,100 [organizations and companies agreed](#).

In this editorial, Dan Murphy says it is [essential to understand why there is opposition](#) to biotechnology.

Will food shoppers really seek out [GMO information using QR codes](#)?

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 wingsuit pic from dallasbasecrew.com, robot pic from robotlab.com, and osprey pic from msn.jpg. Animal Sec. horse pic from thehits.co.nz.jpg. Food Sec. kid pic from npr.org. Plant Sec. bug pic from pioneer.com. Inter. Sec. sheep pic from streetviewfun.com. Gen. Sec. beaver pic from airspacemag.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Hog Production Information and Insights (video): Check out various [videos and news items](#) from the [Swineweb](#) site.

Antibiotics and Livestock: With big changes to [rules governing antibiotic use in animal agriculture](#) pending at the end of this year, producer opinions range from cautious support to skeptical opposition.

Your Therapist Could Be a Horse: Hippotherapy is a form of [equine-assisted therapy used by specialists](#) to improve muscle tone, speech, and other functions--for brain injuries, cerebral palsy, and other needs.

Eggs in School: America's egg farmers launched a website to help fit eggs into school nutrition programs--it provides resources promoting the nutritional value and cost-saving [benefits of serving eggs in schools](#).

Primping and Priming Your Chicken: Backyard coops, poultry pets, and now [chicken beauty contests](#).

Cattle from Past to Present: This [pictorial history](#) looks at how cattle have changed as producers try to improve them.

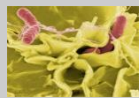
Gone Fishin': Global per capita [fish consumption has hit a record high](#); United Nations data shows that this is the result of improved aquaculture and reduced waste.

Erasing Stereotypes: These women are redefining [perceptions of the modern dairy farmer](#).

Drones, Candy, and Ferrets: The U.S. Fish and Wildlife Service has a plan to [save the endangered black-footed ferret](#), and it involves candy.



Really. We're laughing with you--
not at you.



Food Science and Safety News

"Free-from" Labels (video): Many consumers buy "free-from" products (gluten-free, lactose-free, sugar-free, fat-free, and GMO-free) because they are looking for more natural or less-processed food. This research says [not all are equally healthful](#)--or necessary.

Livestock Labels (opinion--related to above): Many consumers do not know the [meaning of livestock phrases](#) (free-range, grass-fed, antibiotic-free), but their perceptions of the terms can have an influence on animal agriculture.

Beware the Clean-up (video): This summer's food craze in New York City appears to be [black ice cream--delicious but messy](#).

Move Over, Tony the Tiger: Food companies have long [used cartoon characters to market their products](#) to children. Maybe Sammy Spinach, Erica Eggplant, Todd Tomato, and others can get them to eat vegetables.

Allergy-free Siblings: New data suggests that the risk of [food allergies in the siblings](#) of an affected child is only minimally higher than in the general population.

Avoiding Real Pounds with Virtual

Food: What if you could indulge in cheesy pizza, sugary donuts, and juicy burgers [without feelings of regret](#)?

Classic Diners: This site looks at [50 great diners in the United States](#)--where diners are often an American breakfast institution.

Raw Food Warning: The Food and Drug Administration recently made a [surprising recommendation](#)--don't



Kids, Cartoons, and ... Vegetables?

eat raw flour.

Fancy Food Show: This twice-a-year occurrence--winters in San Francisco and summers in New York--features booths [dedicated to a single, niche, specialty food item or brand](#)--each handing out samples.



Plant Agriculture and Environmental News

Seed Security (video opinion): This [group looks at seed security](#)--its basic features, tools to assess it, guides to target responses, and how it is different from food security.

Boll Weevil Blues: This Mississippi State University Extension professor of entomology [says the boll weevil cost U.S. growers billions of dollars](#) in the past--and now Brazil is suffering from its damage.

Kudzu Bugs--They're Here! According to University of Arkansas experts, [kudzu bugs have made their way into Arkansas](#) and are poised to begin affecting soybeans in the fall.

Resisting Resistant Weeds: Herbicide-resistant weeds have been around longer than many think--[a diverse, integrated approach](#) to weed management is the first line of defense.

Farmers and Tech: This farmer says his colleagues are constantly improving their ability to use new technologies, [including genetically engineered seeds](#).

The Very Hungry Caterpillar: According to the USDA, ravenous [gypsy moth caterpillars are causing problems](#) in widespread areas.

Biotech Costs and Commitments (opinion): Getting a new genetically modified plant to farms takes years of field trials and studies--often too [time consuming and expensive](#) for the public sector or small start-ups.

Built-in Sunblock: Plants that rely so vitally on sunlight actually [protect themselves from the harmful ultraviolet rays](#) that beat down on them--and a new study provides insight into that mechanism.

Guide to Prairie Care: Conservation strips are a tool for [improving the function and integrity of row-cropped farms](#)--and they can make a big difference.



Kudzu bug--coming to a soybean field near you?



International News

3-D on the Menu (video): London has hosted strange pop-up restaurants in recent years--from an owl cafe and a Breaking Bad-themed bar to its recent naked restaurant. The latest [features food made via 3-D printers](#).



Not a Baaad Idea (video): Tired of waiting for Google to map the archipelago, Faroe Islanders launched [Sheep View 360](#)--enlisting their 80,000 sheep (in a country of 49,000 humans) to do the leg work.

A camera in sheep's clothing.

Grounded Flying Fox Bats (video): These [baby flying fox bats](#) received blankets and pacifiers as they recover from falling out of a tree and suffering with hypothermia in the Australian winter.

India as Major Beef Exporter: In 2014, India emerged as the world's largest beef exporter. A recent report from the USDA suggests [three factors have driven this trend](#).

Harvesting the Sea: Seaweed--a nutrient-rich foodstuff that was a regular part of the diet of several South American indigenous peoples--is emerging as a new [pillar of food security in Latin America](#).

Food Security and Rice: Vietnam is one of the world's major rice exporters and produces enough to feed its population--but its [food security is tested](#) by factors such as natural disasters, high prices, and poverty.

Into the Nuclear Red Zone: A photographer and two colleagues slipped into the [Fukushima exclusion zone](#). They took a three-hour walk through the woods to reach the abandoned towns.



General Interest News

Nutrition and Pokémon Go: This nutritionist has a quest to be the Brock of the local grocery store or the Misty of the neighborhood market--[by searching for key nutrients in food](#).

The Climate Change Conundrum (opinion): Is climate change real--and is it influenced by human activity? Paradoxical opinions held by scientists, consumers, and farmers affect [one of the great debates of our time](#).

Bee Facts: UC-Davis entomologists are learning all they can about [how bee colonies respond to changes](#) in the environment--they even teamed up with engineering students to build a device to weigh individual bees.

Leave It to Beavers? A study to demonstrate [beaver-mediated restoration](#) may be a viable and efficient strategy to rehabilitate streams and to increase imperiled fish populations.

Air Beaver (video): More than half a century after [a group of beavers was parachuted](#) into the Idaho back country, the state's Department of Fish and Game has uncovered film footage of the quirky wildlife management moment.

Dealing with a Fear of Hunger: The Texas A&M AgriLife Extension Service [program helps low-income children](#)--ages six months to 18 years--living in south Texas.

Women Farmers: In this new book, five authors take a look at [two trends happening simultaneously](#): an increase in the number of women farmers and a growing demand for sustainable agriculture.

Olympic Food Waste: A famous Italian chef takes his [campaign against food waste](#) to the Rio Olympics.

Wild (and Dangerous) Things: Outdoor summer activities can quickly turn hazardous if you come into contact with often [harmless-looking but poisonous plants](#)--such as wild parsnip and giant hogweed.



I'd rather be gnawing
on a tree.

If I Had a Grocery Story: A rural grocery store in Kansas makes a difference with [hard work and customer service](#).

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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