

Friday Notes

Council for Agricultural Science and Technology

ICAST

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.

February 12, 2016

Joining Forces to Fight Avian Influenza

Many farmers, organizations, universities, companies, and government agencies have battled against avian influenza outbreaks in the past year. Quick action seems to have helped during the [recent flare-up in Indiana](#), but the poultry industry wants to be ready for any sign of the [disease that ravaged the poultry industry in 2015](#). Groups such as the [American Association of Avian Pathologists](#) and the [Poultry Science Association](#) provide information and updates on their websites.



USDA-NIFA, the University of Maryland, and Capital Media Group also collaborated on a project to help prevent the spread of avian influenza. The first of three biosecurity videos has been released and is [available by clicking here](#).

News and Views

****Crop Insurance Program:** The federally subsidized crop insurance program is an issue in the Obama administration's 2017 budget proposal. Some are [against possible cuts](#) to the program; others seem to think [favorably of the potential action](#).

****Make Ag More Than a Polarized Argument:** This university student says it is time to reconsider the one-way routine of "ag cheerleading" -- [time to move beyond advocacy](#).

****Highest Court Nixes EPA's Pollution Plan:** The Supreme Court blocked the administration's landmark [climate rule for power plants](#), dealing a major blow to the president's climate agenda.

****Cuba Restrictions and Agriculture:** Agriculture Secretary Vilsack and a bipartisan group of lawmakers are pressuring Congress to [ease trade restrictions with Cuba](#). They claim it would give tremendous opportunities for U.S. farmers and ranchers as well as producers of farm

In This Issue..... Click to Read

[New CAST Research Paper--P.2](#)

[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)



A Passel of Possums

A U.S. Fish and Wildlife employee saw this possum family on the move.

Service Award

The Iowa Chapter of the American Society of Farm Managers and Rural Appraisers presented its Distinguished Service to Iowa [Agriculture Award to Wendy Wintersteen](#), the Dean of Iowa State University's College of Agriculture and Life Sciences.

Welcome to the Agrihood

Gated communities with houses clustered around golf courses are common in suburban areas. Now homes built [adjacent to functioning farms](#) seem to be the trend.

Hooked on Ag

This blogger says, "4-H got me started in agriculture and [FFA got me hooked](#)."

Call for Research

The Food Protection and Defense Institute is accepting exploratory white paper [submissions for research and transition projects](#) related to transformative, evolving, and/or maturing R&D--demonstrating significant improvement in protecting the food supply.

Scholarships and Precision Ag

These Mississippi State students are [receiving precision agriculture scholarships](#) this year, as they focus on a method that utilizes cutting-edge technology to pinpoint what a field needs to produce the largest amount of food and fiber.

The Dirt on Organic Matter

An Ohio State University soil scientist shared insights about [maintaining healthy and productive soil](#) as the foundation of sustainable organic farming at a weekend workshop.



CAST Social Media

Check the popular CAST [Catch of the Day](#) [here](#) and the visually appealing [CAST Pinterest site here](#).

machinery.

*****Chicken Farmer" Wins MVP Award at the Super Bowl:** Von Miller of the Denver Broncos was crowned the most valuable player at the Super Bowl, but he [apparently knows plenty about chickens too](#). The former poultry science student at Texas A&M says he hopes to turn a small operation into a major poultry concern.

News from the Far Side of the Barn

Sheep Help Stop Suspects on the

Lam: New Zealand police received some unexpected help as they chased a car full of purported thieves--a [flock of sheep came to their aid](#).



New Zealand sheep apparently have many talents.

The Elephant in the Room (video): A wild [elephant rampaged through an east Indian town](#), smashing cars and homes and sending panicked people running before the animal was tranquilized to be returned to the forest.

Five Minutes of Classic Literature

(related to above): [Click here to read](#)

George Orwell's thought-provoking short story, "Shooting an Elephant."

Teach a Dog to Fish (video): This [golden retriever catches dozens of fish](#) (and even some turtles). In this case, it uses bread as bait to snatch a bluegill.

Preventing the Next Kudzu

CAST Presents New Research Paper about Bioenergy Production

CAST and NC-FAR will present the new research commentary--*Life-cycle Approach to Low-invasion Potential Bioenergy Production*--on February 22 to staffers from the House and Senate on Capitol Hill. CAST will then provide the material at an afternoon session cohosted by the Environmental Law Institute.

The presentation and webinar are free and open to the public.

Presentation: Monday, February 22, 2016, 3:30 - 4:30 p.m. EST
Environmental Law Institute, 1730 M Street, NW, Suite 700, Washington, D.C.

Register for [the webinar here](#). RSVP to [attend in person here](#).

Bioenergy is being pursued globally to decrease greenhouse gas emissions and provide a reliable energy source. To lessen conflicts with existing food/feed production, bioenergy crops are bred to grow on marginal lands with minimal inputs. Many are concerned that new invasive species may be introduced as bioenergy crops.

The authors of this commentary show that the risk of invasion can most effectively be prevented through a life-cycle approach that adopts appropriate scientific and policy tools at each step in the production process, from crop selection to field production, feedstock transport and storage, and decommissioning--thus avoiding the "kudzu effect." This paper provides a clear, comprehensive framework to guide regulatory agencies in the selection and permitting of biofuel feedstocks.

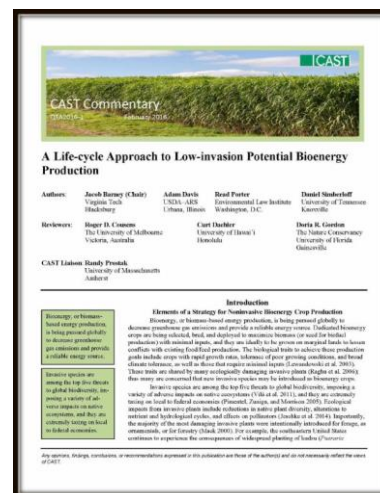
Presenter:

- Dr. Jacob Barney, Assistant Professor of Invasive Plant Ecology, Department of Plant Pathology, Physiology, and Weed Science, Virginia Tech

Panelists:

- Ms. Aviva Glaser, Legislative Representative for Agriculture Policy, National Wildlife Federation
- Mr. Read Porter, Senior Attorney and Director of Invasive Species Programs, Environmental Law Institute
- Representative from USDA-APHIS (TBD)

Note: CAST will release this paper on February 22, 2016. It will be available for free download at that time on [the CAST website](#).



Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 possum pic from pbs.twimg.com, chicken pic from dailygreen.jpg, and sheep pic from buzzfed.jpg. Animal Sec. horse pic from clovislivestockhorsesale.jpg. Food Sec. airline pic from traveldiscountcode.co.uk. Plant Sec. orange pic from winstonwachter.jpg. Inter. Sec. solar pic from turner.com. Gen. Sec. tractor pic from kearneyhub.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.

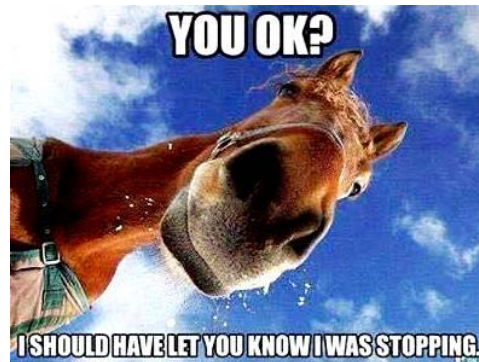


Animal Agriculture and Environmental News

Hey, Why the Long Face? (video): According to this research, [horses are able to discriminate](#) between happy and angry human facial expressions.

High on Hogs--But Still Worried (opinion): This hog production [expert discusses his biggest concerns](#)--disease, food safety, and hog market gluts.

NIMBY (Not In My Back Yard) and Zoning Laws: The arguments surrounding [confinement hog systems](#) raise a stink in this North Dakota community.



Eggs and Diabetes: Researchers at Iowa State University say [adding eggs to the diet](#) could boost vitamin D levels for millions of Americans suffering from Type 2 diabetes.

Less Is More: America's dairy farms are [doing more with less](#)--today's cows are churning out more milk than ever, and part of the increase is due to genetics.

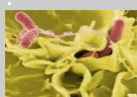
The Environment and the Hog Industry: With the help of University of Arkansas researchers, Pork Checkoff funded a study to [analyze water use in the pork industry](#).

A Woman at Home on the Range: This woman is part of a large cattle ranch in New Mexico. According to the USDA, the [number of women-operated farms increased](#) from 5% to 14% between 1978 and 2007.

More Than Just Chicken Feed: According to this article, the [addition of probiotics to poultry feed](#) will someday assume a greater role in the prevention and mitigation of numerous intestinal conditions.

Protein and Cow Feed: This Texas A&M expert discusses the [importance of protein in maintaining cow health](#) and looks at some basics for determining supplementation levels.

A Decades-old Bee Problem: The global spread of a [virus that deforms the wings of honeybees](#) and kills them in droves was caused by humans, new research has found.



Food Science and Safety News

Burger King Wanting To Be Hot Dog King? This food chain known for its burgers says it plans to put [hot dogs on its menu](#) nationally for the first time.

What Will Be on Your Menu? These experts consider [what trends will affect food production](#) by 2050--from 3-D printing to in vitro products.

2016 Food Safety: This site provides some [food safety developments](#) to watch in 2016.

Dining in the Sky: Airline food comes on the radar again, and this time [we look at five myths](#) about the much-maligned meals.

Fishing for Answers: These researchers say [older adults who eat the most seafood](#) have reduced amounts of Alzheimer's-related damage in their brains; fish oil supplements do not appear to offer similar benefits.

Taking on Hunger: According to the USDA, [one in seven Americans is at risk of hunger](#). Throughout the year, food banks are in need of nutritious food. Also, check out this [blog about hunger from a university student](#).

Spice and Ailments: Tumeric already gets accolades from health groups, and now a university will undertake a clinical trial to see [whether or not it aids with rheumatoid arthritis](#).

Don't Ask--Don't Tell (opinion): This blogger writes about the FDA loophole that allows [possibly dangerous chemicals](#) in food.

Another Possible Plus for Fiber: This study concludes that [eating lots of fiber-rich foods](#) during high school years may significantly reduce a woman's risk of developing breast cancer.



"Coffee, tea, or the gourmet tray?"
Flying in the 60s could not have been this good!



Plant Agriculture and Environmental News

Prairie Rebirth (video): This group thinks that through volunteer projects and education, [prairie grasslands can make a comeback](#).

Time Travel Prairie: This blog takes us to a [digital dead zone](#) where a small virgin prairie reflects the past.

A Blight Problem? Excessive rainfall during the 2015 growing season kept many insects at bay across the Midwest--but not disease. Some experts think cornfields could be affected by [gray leaf spot and leaf blight](#).

Green Is the New Orange? The USDA says it will put \$20.1 million toward [research and extension projects](#) to help producers fight citrus greening disease--it has affected more than 75% of Florida citrus groves.

Producers Unhappy with Decision (opinion): Advocates in the cotton industry are [disappointed with an announcement](#) by the agriculture secretary that he lacks the authority to designate cottonseed as a commodity.

Cover Crop Cash: This rancher explains [how to use cover crops](#) in a profitable way--moving from erosion control and soil health to cash crop.



Probably not the way to solve citrus greening disease.

Cotton Production: U.S. cotton farmers are [expected to boost acreage](#) by 6.2% this year as weak market prices for competing crops lead them to devote more area to the fiber.

Molecular Memory: Researchers have discovered a gene that [allows plants to remember daylight](#) during the long nights of winter, helping them tailor their growth appropriately to the seasons.

Research Funding: Three scientific societies--the ASA, the CSSA, and the SSSA--praise the administration's commitment to doubling [funding for the Agriculture and Food Research Initiative](#).



International News

Pushing Ag Careers (video): These Canadian business students were tasked with creating a [strategy to market agriculture](#) as a career choice to their peers.

Let the Sun Shine: Morocco has switched on what will be the world's [largest concentrated solar power plant](#).

Round-the-clock Pork Chops: France is now [selling raw meat in vending machines](#).

Machines That Have Everything (related to above): Check out links and commentary in this blog, "[The Siren Call of the Vending Machine](#)."



World's largest solar plant--in Morocco. Who has to wipe the sand off each panel?

Arsonist Birds: These Australia birds apparently take embers from one fire and use them to [start another fire to flush out more prey](#).

Seeds of Success: [Women throughout Africa](#) are taking matters into their own hands and kick-starting an enthusiasm for agribusiness among young people.

Forbidden Food Waste: France has become the first country in the world to [ban supermarkets from throwing away](#) or destroying unsold food, forcing them instead to donate it to charities and food banks.

An Aussie Shout-out for Whole Milk: Australian research has called into question international dairy guidelines for toddlers, saying that the consumption of [reduced-fat dairy has no additional health benefits](#).

Post-sanction Ag: Officials say Iran plans to turn itself into a [major food exporter](#), hoping the lifting of sanctions will boost international trade and allow investment in the agricultural sector.



General Interest News

No Bull--But Plenty of Beef in the Message (video): One New Hampshire resident brought her two Scottish Highland beef cattle to the primary to [promote the importance of agriculture](#).



Preventing Disasters on the Farm: This site provides [keys to reducing accidents](#), injuries, and deaths due to farm accidents. This blog includes links about farm accidents and a report about one [community that came together](#) after a farm family tragedy.

Ethanol Exports: U.S. ethanol [exports finished the year on a high note](#), with 81.7 million gallons of product shipping out to both emerging and longtime markets.

Failure to Communicate? (opinion): Farmers need to learn how to better communicate and can't confuse issues because of [internal fighting over what is better](#), according to Fair Oaks founder Michael McCloskey.

Hive Heists and Stinging Costs: Bees are very important for the almond harvest, but [bee rental fees in California are soaring](#).

Rural Broadband: The USDA and the FCC released a report to Congress entitled *Bringing Broadband to Rural America: [Update to Report on a Rural Broadband Strategy](#)*.

The Mindlessly Slim: This Cornell University study looks at those who might unknowingly possess secrets to [helping those who struggle with their weight](#).

If You Love Big Insects: Tiny eggs have started hatching this week at the San Diego Zoo, and scientists there are celebrating the [arrival of baby tree lobsters](#)--large, shiny black insects.

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 Agricultural and Biological Engineers
- * American Society of Animal Science



- * American Society of Plant Biologists
- * American Veterinary Medical Association
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- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science
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