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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October 21, 2016

Communicating in Tense Times  "Science in the Crosshairs"

Scientists have come under fire for pursuing research and technology advancements, especially from certain activist groups and science deniers. This recent radio segment of Science Friday looks at the situation, with a special focus on climate science.

In a companion radio interview, University of California-Davis animal geneticist Alison Van Eenennaam (2014 Borlaug CAST Communication Award winner) and North Carolina State University genetic engineer Jennifer Kuzma talk about the future of biotechnology in agriculture, what defines a genetically modified organism, and how these technologies might be regulated.

Recent World Food Prize sessions also focused on agriculture, science, and communication. The CAST breakfast event honoring Kevin Folta (2016 Borlaug CAST Communication Award recipient) featured comments from many experts about—as Dr. Folta phrased it—the need to "listen, understand, and explain." Scroll down to page two for more about the positive responses to Folta's speech and the related observations of other ag/science experts.

News and Views

**Food Security, Science, and Youth:** Surrounded by international leaders focused on global food security, Agriculture Secretary Tom Vilsack said that one of the biggest concerns he has about addressing future food challenges is "our ability to embrace science.

Note: Vilsack also addressed the National FFA Convention: "Be the generation that opens up the doors of agriculture for all." And in this blog, a young person comments about Moments in Blue--FFA Reflections.
**Hunger Summit at the World Food Prize:** In his keynote speech during the Iowa Hunger Summit, Roger Thurow explained the long-term impacts of poor maternal and child nutrition. Jim Yong Kim, President of the World Bank, also spoke about hunger and the importance of investing in children.

**Farm-to-School:** In the midst of harvest season, these farmers are pausing to share the fruits of their labor with local kids in a *Farm-to-School Month* program.

**GiPSA Concerns:** The USDA acknowledged that the agency would continue the rule-making process on the 2010 Grain Inspection, Packers and Stockyards Act proposed rules—and this raises concerns from the National Cattlemen’s Beef Association.

**TPP on the Hill:** Getting a vote on the Trans-Pacific Partnership agreement was the top issue for these pork producers as they lobbied their congressional lawmakers. Senator John Kasich thinks that refusing to ratify TPP risks America’s role as the world leader.

**Regs for Ag Conservation Program:** Fewer acres would be purchased as easements to protect wetlands under the new Agricultural Conservation Easement Program.

**Veterinary Program**
A large monetary gift establishes a scholarship program for Mississippi State University veterinary students.

**Swine Day**
Kansas State University's Swine Day 2016 program—Nov. 17—will kick off with a technology trade show.

**Autumn's Colors**
Like many college campuses this time of year, The Ohio State University becomes a masterpiece of colorful leaves and autumn skies.

**Feed the Future**
The University of California-Davis leads five Feed the Future Innovation Labs—developing climate-resilient crops and improving poultry production.

**Aquaculture Conference**
Iowa State University will host the 2016 Iowa Aquaculture Conference on Nov. 17 to provide farmers information about the state’s newest livestock industry.

**CAST Social Media**
Click here for links to CAST sites: Twitter, Facebook, Pinterest, LinkedIn, videos, and blogs.

**News from the Far Side of the Barn**

**An Elephant Never Forgets (video):** A baby Asian elephant jumps into a river to save the man who rescued her last year—even though he didn’t really need saving.

**And They’re Cute Too! (video):** Naked mole rats are freaky mammals indeed—coldblooded, hairless, but also long-living and amazingly free of cancer. Now scientists want to study their abilities to withstand certain types of pain.

**My Broccoli Tastes Like Chocolate:** British scientists say they’re on the verge of a food-lover’s miracle—a spoon that can reportedly change the taste of any food being consumed. The “Taste Buddy” produces a low-level electrical current that stimulates the appropriate taste buds so that the mouth perceives sweet or salty flavors and sends those signals to the brain.

**Ag/Science Experts Agree**
After receiving the 2016 Borlaug CAST Communication Award, Kevin Folta gave a memorable keynote address: *Unveiling Our Halo--Building Trust with a Concerned Consumer*. Many organizations and media outlets covered the event and Dr. Folta's messages. In this *article from Successful Farming*--"Six Ways to Build Trust With a Concerned Consumer"--Jessica Scott says, "After agvocating for 16 years, Kevin Folta has learned a few tips and tricks about connecting with consumers." And in this *recent blog*--"Be Passionate, But Be a Listener Too"--Hannah Pagel points out what she has learned about ag communication from Folta, Julie Borlaug Larson, and others.

**This statement from CAST’s President Mark Armfelt** refers to the overall connections about agriculture, active communication, and CAST.

At the World Food Prize there is tremendous support for science and innovation--for everything from bio-fortified foods to drought resistant crops. The 2016 Global Agricultural Productivity Report summarized how we will feed the growing population, "with a long-term commitment to the right policies, investments, and science-based technologies and practices."

I heard from many people--including Julie Borlaug Larson--that we now have to add "Take it (science) to the people" to Dr. Norman Borlaug's admonishment to "Take it to the farmer." Dr. Kevin Folta, winner of the 2016 Borlaug CAST Communication Award, reminded us in his presentation that for every one person active in social media, there are 95 who are watching the discussion. FAO Director-General Jose Graziano recently stated that we need to be willing to listen and to bridge the trust gap between all parts of the agriculture and food value chain.

We all need to take an active role in the communication effort described above. Our CAST issue papers and Ag quickCAST's offer factual information about science and innovation in language that the public can understand. They can be very helpful to you in your efforts to communicate the truth about science and innovation in agriculture.

by Mark Armfelt (Dairy Technical Advisor, Elanco Dairy Business)
**Ag Methods and Sustainability (video):** This USFRA animated film clip gives information about advanced farming methods that allow farmers to be more sustainable.

**A Bovine Point of View (infographic):** This dairy organization asked a cow to explain the way robotic milkers work.

**Sustainability Debate (opinion):** Many top farming organizations told food companies that their sustainability goals can only be achieved with the use of modern agricultural practices, despite certain misleading assertions.

**Round Two--Sustaining a Debate (related to above):** A major food company responds to accusations from farming groups about sustainability and consumer preferences.

**Healthier Poultry:** USDA scientists and colleagues around the world are working to find dietary supplements that strengthen the poultry immune system.

**Is That Cow Always Pregnant?** This dairy farmer answers some questions about heifers, cows, and bovine pregnancy—as part of USFRA's Food Dialogues.

**Animal Disease and Food Waste:** An estimated one-fifth of livestock around the world are lost to disease, according to the executive director of the Global Harvest Initiative--she calls it an "untold story of food waste."

**Pork Quick Facts:** From costs and prices to exports and industry practices, this site offers information for those with inquiring minds about pork production.

**Sheep News:** The Sheep Industry News is a monthly publication of the American Sheep Industry Association—with relevant stories for farmers, ranchers, and producers.

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**Food Science and Safety News**

**Supermarket Waste Becomes Compost (video):** A supermarket chain is reducing landfill growth by turning waste into cash as it sends organic waste to a regional recycling center making compost.

**Magic Manure (related to above):** This blog looks at a home-grown compost mixture—Zucchini, Kale, and Magic Manure.

**When Ketchup Was a Vegetable:** What did school lunch look like during each decade of the past century?

**Plastic Trays and Waxy Cartons (related to above):** Check this blog for a look at school food in the old days—Lunchroom Milk, Wedgies, and Humble Pie.

**Absurd Fried Food in the Lone Star State (opinion):** This outspoken Dallas chef takes a turn as the State Fair's unofficial food critic.

**Waste Is a Terrible Thing to Mind:** According to this survey, Americans do not know how much food they waste.

**Cleaning Up at the Buffet (related to above):** A new company thinks they can connect consumers with deliciously cheap grub while simultaneously combating food waste.
waste—this one sells buffet food about to go to the dumpster.

**Home-grown Fast Food:** A home appliance that grows the ingredients for a healthy meal within a week from plant cells is no longer science fiction.

**Cuckoo for Quisp?** Which 20th century cereal brands have been the most beloved? Cheerios, Wheaties, Frosted Flakes, and even Cap'n Crunch, sure--but Quisp at number one?

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**Plant Agriculture and Environmental News**

**Keen on Quinoa (video):** The South American staple grain called quinoa is known for its high omega-3 content--and some U.S farmers are taking a shot at growing it.

**Cover Crops, Herbicides, and Livestock Grazing (video):** This Nebraska Extension weed management educator talks about herbicide label rotation restrictions with cover crops used for grazing purposes.

**Rice Farming’s High-tech Makeover (video):** During the growing season, water management is a huge part of what these Arkansas rice farmers do on a daily basis.

**CRISPR Citrus:** This University of Florida CRISPR research team hopes that the tool will cut decades from reaching the holy grail of citrus research--producing varieties immune to citrus greening.

**Biotech Backers:** These Tufts scientists reviewed 900 research publications and concluded in their 398-page report that “genetically engineered crops are as safe as conventionally grown crops.”

**Fortified Rice:** While the controversy over golden rice continues, the U.S. rice industry has been devoting research and money to a processing method that can enrich regular rice to provide essential nutrients.

**Pesticides 101 (infographics-opinion):** This visual provides a fast way to learn more about what pesticides are and how they are used safely for food production--and this site looks at common pesticide myths.

**Forestry:** To celebrate National Forest Products Week, the USDA is highlighting five popular agroforestry practices that produce a diverse set of forest products while benefiting land, economics, and wildlife.

**Can See the Forest for the Trees (related to above):** The University of Kentucky forestry department apparently celebrates National Forest Products Week all year long.

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**International News**

**A Sailor and his Chicken--Update (video):** This twenty-four-year-old Frenchman is seeing the world from a different vantage point--his 30-foot sailboat. Oh yes--his pet chicken, Monique, is still at his side.

**Food Fraud Detectives (video):** This Irish university has a worldwide reputation for detecting whether or not the food you’re eating is the food that's advertised.
**Food Etiquette:** Don't make these food etiquette mistakes when traveling abroad—for example, in Asia don't point at anyone with chopsticks.

**Chicken, Beer, and a TV Drama:** Delivery services shuttle freshly fried chicken and beer to homes, offices, and picnics in South Korea—a hit TV show is responsible for the trend.

**Sunshine and Seawater:** This futuristic-looking greenhouse produces 15,000 tons of tomatoes per year in the South Australian desert—using no soil, pesticides, fossil fuels, or groundwater.

**Flowerless Flowers:** A new parasitic plant discovered in Japan doesn't use photosynthesis, and its flowers never bloom.

**Top Food Trends:** The Japanese economy may be sluggish, but the country's health food, nutrition, and functional foods sectors are holding steady, with ten key trends affecting the market.

**Livestock Programs with Positive Effects:** These research papers point to the wealth of positive effects that direct livestock transfer programs have on impoverished communities in rural Africa.

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**General Interest News**

**Drone Serendipity—Chance Photo Comes to the Rescue (video):** A man in Texas sees drone photography from the North Carolina floods and alerts rescuers to his brother's plight.

**Rescue Tubes and Rescue Heroism (video):** Many grain bin emergencies end on a negative note, but these two successful rescues in a small community are thanks to new equipment and human teamwork.

**Hydrofluorocarbon Curbs:** Nearly 200 nations have struck a legally binding deal to limit greenhouse gases of high global warming potential used in refrigerators and air conditioners.

**Student Leadership:** Nearly 100 Native American, Alaska Native, and Native Hawaiian students from 51 tribes met at the University of Arkansas for a leadership summit to learn how food and agriculture policy impacts tribal communities.

**Mighty Mice:** Scientists create live animals from artificial eggs in a breakthrough some consider remarkable.

"I'm Melting!" (opinion): The shrinking of Greenland's ice sheet is triggering feedback loops that accelerate the global crisis. According to this writer, the floodgates may already be open.

**A Mighty Wind?** According to the American Wind Energy Association, Iowa consumers could save $12.6 billion over 25 years by doubling the amount of wind generation in the state.
Check out CAST’s page at the [YouTube site](https://www.youtube.com) 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.”](mailto:kschescke@cast-science.org)

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