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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.

#### In This Issue..... Click to Read

[The Complexities of Science and Ag Communication: P. 2](#)

[Animal Agriculture News](#)

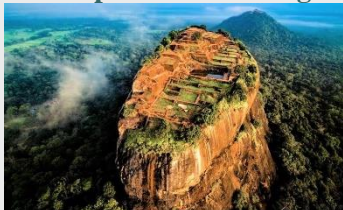
[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

#### Insta-pics from On High



Some [more eye-catching images](#) and the stories behind them.

#### Cattle Conference

Kansas State University will host [Cattlemen's Day 2017](#) on Friday, March 3.

#### Pork Award Nominations

The National Pork Board is searching for the next America's [Pig Farmer of the Year](#), with applications now open through March 13.

#### The "Delivering Genetic Gain in Wheat" Project



Cornell University will receive \$10.5 million in aid investment from

*January 27, 2017*

## Science Communication

*Is the "deficit model" deficient?*

Writing in *Feedstuffs* magazine, Tim Lundeen cites research that "highlights the [complexity of communicating about science](#) effectively, especially when dealing with contentious issues."

Many propose an agenda to help science communicators and researchers identify effective methods. They say the deficit model of simply transferring information is outdated, and research needs to take a systems approach, one that understands that science communication is a complex system of many interrelated parts.



**Scroll down to page two for more about ag/science communication.**

## News and Views

**\*\*Government Websites and News Releases:** The USDA says an internal email sent to staff at its ARS unit calling for a suspension of news releases was flawed, and [guidance has been sent out to replace it](#). The *Science Magazine* reports that administration officials [appear to have walked back plans](#) to scrub climate change references from EPA websites. And this editorial writer thinks reports of a blackout on public information from the USDA/ARS [were overblown](#).

**\*\*Trade Negotiations:** President Trump signed an [executive order to drop TPP negotiations](#) saying he could do better. Several farm organizations reacted. And regarding a current trade agreement, more than 130 farm groups and agribusinesses asked the administration to involve them when the [process of renegotiating the North America Free Trade Agreement](#) (NAFTA) begins.

**\*\*Immigration and Ag:** President Trump signed two executive actions to boost immigration enforcement--some in the farming sector are on edge because of the industry's [reliance on foreign labor](#).

Great Britain to help an international consortium of plant breeders, pathologists, and surveillance experts [overcome diseases hindering global food security](#) efforts.

### NC State Global

This video shows the impact of [North Carolina State efforts in many countries](#) around the world.

### Farm Progress

Iowa State University's 13 [Research and Demonstration Farms](#) have served for decades as models of agricultural and scientific progress for farmers and landowners.

### Wildcat Websites

The University of Kentucky Department of Veterinary Science [launched three new websites](#), with a focus on informational access and ease of use for visitors.



### CAST Social Media

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

**\*\*Pipeline Leak:** The 138,600 gallons of diesel fuel that leaked from a ruptured pipeline in Iowa is the [largest U.S. diesel spill since 2010](#), according to the Associated Press.

**\*\*Support for Vaccinations:** This scientist shares what he calls the major peer-reviewed articles that show there is [no link between vaccinations and autism](#).

## News from the Far Side of the Barn

**Snake Catchers (video):** A pair of singing [snake catchers from India](#) is trying to help with Florida's Burmese python problem.



"And the featured entertainment is the Kevin Bacon film night!"

**Ag Words--Good, Bad, Terrible (video):** Bacon Fest may be a good name for pork lovers, but it is a [terrible destination for pigs on vacation](#).

**Before They Were Famous:** Jennifer Hudson, James Franco, and other [celebrities worked in fast food joints](#) before moving on--Madonna only lasted one day at Dunkin' Donuts.

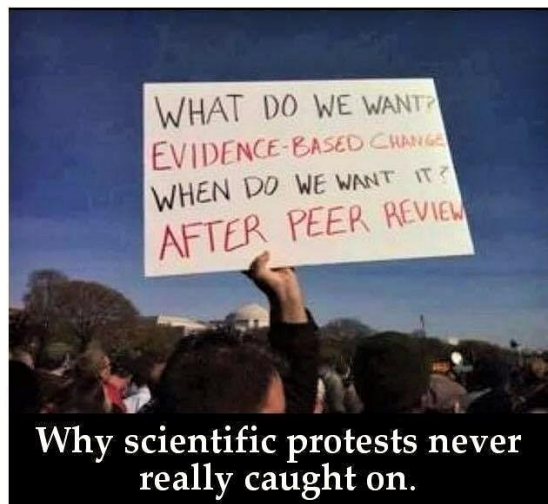
## Getting the Message Across

*Avoiding the "failure to communicate"*

As mentioned in the [headline story](#) on page one, Tim Lundeen thinks ag/science communication is complex, and he points out a 4-step method to succeed: the content, the communicator, the audience, and the communication channel. [Click here to read examples of how this might work](#)--including a present day focus on biotech and a flashback to what scientists faced in analog days when they tried to convince a skeptical public.

CAST publishes science-based content and uses complex methods to spread the information to the public, students, and policymakers. Many other organizations also work on ways to understand the complicated nature of what influences the public.

This program is one example: A [new research approach from The Center for Food Integrity](#) identifies influential consumer groups and the motivations that not only dictate food trends, but also drive



**Why scientific protests never really caught on.**

conversations that impact the decisions of others as they make choices at the grocery store or form opinions about the products, processes, people, and brands that define today's food system. As the organization's CEO, Charlie Arnot, said, "Digital ethnography pinpoints why consumers form beliefs and develop behaviors around food, and the why speaks to what they value."

Social media is the proverbial double-edged cyber sword when it comes to communication. Scientists, companies, news outlets, and organizations are dealing with exaggeration, hidden slant, doublespeak, and "alternative facts" all the time--sometimes they are even guilty of producing them. This editorial writer points out that fake news is nothing new to agriculture. She says social media helps these stories that are [designed to mislead](#) for political or financial gain.

## Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 drone pic from [jeromecourtail.npr.com](#), science cartoon from [blogs.nature.com](#), and pig cartoon from [edizon.net](#). P. 2 protest poster from [linkedin.com](#). Animal Sec. cow pic from [dontwastethecrumbs.com](#). Food Sec. infographic from [nurselovesfarmer.com](#). Plant Sec. coffee pic from [precisionnutrition.jpg](#). Inter. Sec. eagle pic from [bbc.com](#). Gen. Sec. barn pic from [torontoarchives.jpg](#). Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



### *Animal Agriculture and Environmental News*

**The Macro/Micro Approach (video):** This cattle rancher's [goal about animal welfare](#) is "macro," but her specific plan involves the "micros" needed to succeed.

**Controversial Proposal to Ease the Organ Waiting List:** Animals [designed to grow organs for humans](#) are a step closer.

**The Buzz on Bees in Winter (video):** This apiarist says that [bees survive winter the same way we do](#). They cuddle up, eat as much as they can, and hope it'll all be over soon.

**Cows Get to "Taste the Rainbow":** Hundreds of thousands of red Skittles were found spilled on a road in Wisconsin, and authorities confirm that [some farmers are feeding candy to cows](#).

**Animal Biotech (opinion):** Dr. Alison Van Eenennaam says, "While regulation to ensure the safety of new technologies is necessary, the recent [FDA guidance for producers and developers](#) of genetically improved animals is nonsensical."

**A Source of Hog Disease?** University research shows that imported feed ingredients are capable of [harboring pathogens](#) that cause disease in swine.



Skittles are fine, but I'm going for the chocolate.

**Hog Demand Update:** According to the National Hog Farmer site, trends appear to confirm the outlook that [demand for U.S. pork has shifted upward](#).

**Antibiotic Withdrawal Effects:** According to this study, increased use of vaccines, better sanitation, and biosecurity are changes producers make in [response to the loss of shared-use antibiotics](#).



**Chicken Scratchings:** The federal government decided just [how much living space an organic chicken should have](#)--part of a new set of rules that cover many aspects of animal welfare in the organic food industry.

**Slow-grow Chickens (opinion):** A campaign promotes going back to older, slower-growing chicken breeds--and [some say this is not a good idea](#).

**Detecting Toxins:** USDA scientists developed a highly sensitive test that, for the first time, is [able to detect all known Shiga toxin-producing \*E. coli\*](#) (STEC).



## Food Science and Safety News

**Biotech Apple Could Be Game Changer:** Critics and advocates of genetic engineering say the Arctic Apple could be a turning point in the nation's polarized [debate over genetically modified organisms](#).

**Dirty Dozen, Clean Fifteen, and Mom's Advice (opinion):** Do as you were told as a kid--[consume lots of vegetables and fruit](#).

**Students, Junk Food, and Sports:** Cornell University researchers point out that [selling healthy foods at concession stands](#) turns out to be a win-win situation.

**What's on the Menu?** Every new year brings new trends, and what better way to grab a glimpse of what's to come than to chat with some of the world's [hottest chefs sharing their food forecasts](#).

**Blessing Boxes:** A [new type of food pantry](#) is sprouting in yards across America.

**Fast Food--Good for You?** According to university research, chain restaurants [often demonstrate better food safety](#) practices than their nonchain competition.

**Is the Future of Food Invisible--and Below Our Feet? (opinion):** The explosion of interest in [beneficial microbes for food production](#) is exciting and portends a future when agriculture is less reliant on chemicals.

**Your Memory on Mushrooms:** We regularly hear of miracle foods, and now this study says a diet rich in [mushrooms may help stave off dementia](#).



Not all agree, but some think this could be the apple of your eye.



## Plant Agriculture and Environmental News



**Coffee Genes (video):** UC-Davis researchers provide the first public [genome sequence for a species of coffee](#) responsible for more than 70% of global coffee production.

Still searching for the genome sequence in his morning cuppa.

**Soil--the Foundation of Life (videos):** This website includes information relating to the workshop *Soils: The Foundation of Life*, and it gives access to [many good videos stemming from the gathering](#).

**Raspberry Delight (video):** This contraption is billed as the ultimate [raspberry harvester machine](#) on the market. Not sure about that--but it's berry cool as it wheels around the patch.

**Managing Wheat:** These university experts say [wheat is often responsive to management intensification](#)--methods of selection, application, pest control, and more.

**Wheat Boost (video--related to above):** Scientists tout a synthetic molecule that [increases the size and starch content of wheat grains](#) in the lab, with possible significant implications for global food security.

**Profitable Soybeans?** Growers have the best chance to [make a profit from soybeans](#) when they lower seeding populations to between 103,000 and 112,000 seeds/acre--certain seed treatments can help.

**Ethanol Review (update):** A recent report shows that primary land change from 2004 to 2012 involved [using available land resources more efficiently](#) rather than expanding the amount of land used for farming.

**Weed Woes:** Weed scientists were surprised both by the [dramatic increase of Palmer amaranth](#) identified in Iowa last year and by its cause for expansion--contaminated native seed mixes from out of state.

**What Grows in Las Vegas Stays in Las Vegas:** [Indoor farming might work well](#) in a city with millions of visitors and a local population of around 2 million.



## International News

**Wings of an Eagle (video):** This gorgeous video introduces us to a [young eagle huntress in Western Mongolia](#), along with her beautiful eagle and the stunning land she calls home.

**Members Talk Water:** Agriculture ministers from a group of 20 leading economies said they [commit to approaches that improve sustainability of water use](#) in food and agricultural production.

**Holy Cheese:** Some Benedictine monks in India use their European connections to meet rising demand for fresh, [Italian-style cheese in this South Asian country](#).



The eagle huntress of Mongolia.

**A Scramble for Eggs in South Korea:** U.S. white-shelled eggs landed on South Korean supermarket shelves as the country scrambled to boost imports to [relieve a shortage amid its worst-ever bird flu outbreak](#).

**Flight Turbulence:** Due to concerns about animal welfare on a recent air transport of cattle from Hungary, the Agriculture Ministry has temporarily [grounded all such live shipments to Israel](#).

**A Risky Battle:** New Zealand appears to be taking a calculated risk with its otherwise strict environmental policy by using a [foreign species to fight an invasive and destructive plant](#).

**Trendy Pepper from Cambodia:** Celebrity chefs from Paris to Los Angeles [swear by Kampot pepper](#), a southwestern Cambodian spice with a tragic past that is now reclaiming its global preeminence.

**I'm with Stupid?** Japanese scientists investigated how [horses respond to the state of knowledge or ignorance of their human companions](#), showing that horses possess some cognitive understanding.



## General Interest News

**Barn Narratives (videos available):** *The Barn Raisers* documentary [feature film tells the story of barns](#) in the Midwest by examining them through the lens of architecture--from local farmers to Frank Lloyd Wright.

**Enriching His Heritage:** This farmer upgraded his century-old farm with [practices to protect water quality](#)--building terraces, reducing cropland tillage, adding wetland, and more.

**Land, Farmers, and Apps:** According to the USDA, new mobile phone apps are [helping farmers and land managers balance productivity](#) with conservation.

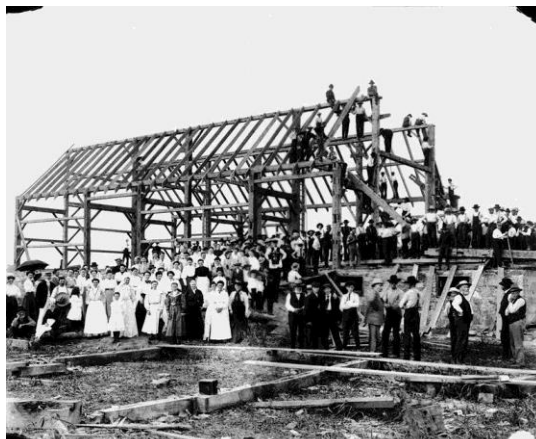
**Horse Diaper Law Needs Changing?** Amish community members in Kentucky cry foul over a town ordinance that [requires horses on public streets to wear bags](#) that catch manure.

**Farmers, Chefs, and Speed Dating:** This annual "speed-dating" event matches farmers with chefs in an [effort to put more local food on restaurant tables](#).

**A Downer Gets Recognized:** Many states have a designated state bird, flower, fish, and even soil. The "Downer" is the [official state soil of New Jersey](#).

**Beans and Fish:** The U.S. Soybean Council and the Soy Aquaculture Alliance joined forces to host the 2017 Aquaculture Educational Opportunity in Panama. AgNewsWire [provides publications from the event](#).

**Passing of an Ag Giant:** In 1964, James Moore [established the fruit breeding program at the University of Arkansas](#), and it quickly became one of the most influential in the world.



Sometimes it takes a village.

## 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](mailto:chamilton@cast-science.org), or [CLICK HERE](#) for CAST membership information.



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- \* American Society of Animal Science
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- \* American Veterinary Medical Association
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- \* Elanco Animal Health
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- \* Monsanto
- \* National Pork Board

- \* North Carolina Biotechnology Center
- \* North Central Weed Science Society
- \* Northeastern Weed Science Society
- \* Poultry Science Association
- \* Society for In Vitro Biology
- \* Soil Science Society of America
- \* Syngenta Crop Protection
- \* The Fertilizer Institute
- \* United Soybean Board
- \* Weed Science Society of America
- \* Western Society of Weed Science
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