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 CAST.

**In This Issue...... Click to Read**

**Old and New Communication Modes at CAST**--P. 2

**Animal Agriculture News**

**Food Science and Safety News**

**Plant and Environment News**

**International News**

**General Interest News**

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**As the World Turns**

With all due respect to flat-earthers, this time-lapse clip shows Earth's rotation relative to the Milky Way.

**Nutrient Loss Webinar**

Click here for information about a September 19 webinar presented by CAST and the American Society of Agronomy, with support from the United Soybean Board: Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape.

**Borlaug Dialogue**

As part of the World Food Prize, the Borlaug Dialogue brings together more than 1,200 people from 65 countries to address cutting-edge issues related to global food security and nutrition. Registration is open for the October event held in Des Moines, Iowa.

**Writing Emphasis**

North Carolina Agricultural and Technical State University hosted its

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**August 23, 2019**

**Students Migrate Back to School**

*Agriculture Programs Support the Entire Food Production System*

Most university campuses stay vibrant during the summer with classes, research projects, and special programs, but from now until late September, the traditional march back to the halls of learning occurs. Students scramble to move, gather resources, and adjust to new courses--while also trying to stay afloat socially and financially.

Through its Education Program, CAST is directly involved with 18 universities that have high-powered agricultural programs. In each Friday Notes edition, we link to articles about student research, college programs, science on campus, and many other ag-related items. CAST is always happy to communicate stories about its member schools and other universities that are promoting science, agriculture, and food production. CAST also stays in touch with secondary schools through the National Association of Agricultural Educators. Students and educators can contact Friday Notes at knelson@cast-science.org or dgogerty@cast-science.org.

**News and Views**

**Heated Reaction to Waivers:** The Trump administration is trying to deal with rising anger in Farm Belt states after its decision to allow numerous oil refineries to mix less ethanol into their gasoline.

**Tomato Agreement:** The U.S. Department of Commerce initiated a draft agreement with Mexican tomato growers to suspend the ongoing anti-dumping investigation (related story in the Plant Section below).
Leadership Roles at the USDA: Brandon Lipps and Pam Miller have new roles at the Department of Agriculture. While three USDA nominations are currently awaiting Senate confirmation, positions continue to be filled by deputy undersecretary designations.

Action Plan from a WFP Laureate: David Nabarro—a medical doctor, longtime public health diplomat, and 2018 World Food Prize laureate—started a social enterprise to give leaders the tools they will need to put the 2030 Sustainable Development Goals agenda into action.

Blockchain and Agriculture: Experts are still speculating about whether blockchain technology can move beyond the hype and deliver real value for farmers and producers in the near term.

News from the Far Side of the Barn

Resolution Revolution: This “blobology” image and mapping technique could provide new views from inside the body and help develop more effective medicines.

Squakzilla (video): A fossil discovery in New Zealand has revealed what seems to be the biggest parrot ever—a meter-tall bird that would probably not sit on a perch and say, “Polly want a cracker.”

Do Your Wurst: As this article sprouts and ripens, food-pun haters will realize the yolks on them. Lettuce just smile and play along with the culinary punderdome.

The Changing Modes of CAST Communication

While CAST’s communication methods heavily rely on print, a look at our history shows we’re no strangers to communicating with our audiences through other means. Digital platforms dominate now—from downloads to social media to e-newsletters. But even in the analog days of the past, CAST employed varied techniques to spread ag/science information.

In 1973, CAST hosted a “Pesticide Dial-ogue” with 20 scientists answering questions from telephone callers. People participated from all over the United States. CAST brought back the phone event in 1976 and changed its name (and focus) to “Food Day Dial-ogue.” Twenty-eight scientists answered nearly 1,800 questions that day. It was so successful, CAST held the event for five more years. The organization also took to the screen--television, that is--for some conversations about local agricultural issues.

While CAST hasn't used radio or podcasts extensively, we do feature links from scientists and officials who use these formats. A recently compiled list includes some of our picks from 2019 so far. You can check them out on our blog.
Animal Agriculture and Environmental News

**Egg Debate:** Major retail chains have [made future cage-free purchase pledges](#), but many consumers still prefer less expensive eggs from cage-housed hens.

**Responsible Animal Stewards:** As part of the "One Health" series, this writer says livestock [producers should be transparent and stay proud](#) of their efforts to be good stewards.

**Anthrax:** Veterinarians are [urging cattlemen to be vigilant for anthrax](#), as certain areas have seen a spike in confirmed cases.

**Poultry Health:** To help [improve the control of Marek's disease in poultry](#), veterinary medical officers from the Agricultural Research Service are studying the genes most associated with virulence.

**Researcher Says His Students Bring Him Joy:** This poultry expert known as the "Chicken Guy" reflects on [decades of work as a researcher and teacher](#).

**Employee Motivation and the Pork Industry:** [Company culture is the driving force](#) that motivates employees to do their jobs well and stay with a company, according to a recent *PORK* poll of workers in the swine industry.

**Animal Health Products:** Elanco Animal Health will buy Bayer's veterinary drugs unit, creating the [second largest animal health business](#).

**Grazing Management and Economics:** This writer contends that the [problem with wild horses remains the same](#)--credible analysis is needed.

**On the Fence about Grass-fed Versus Feedlot Beef?** The grass-fed movement contends that grazing ruminant livestock is a key to a healthy ecosystem. Feedlot proponents say their system actually produces fewer greenhouse-gas emissions. Dr. Alison Van Eenennaam (UC-Davis) points out that [it might depend on location](#).
**Food Science and Safety News**

**What's Number One? (slideshow):** From PB&J and grilled cheese to a BLT or a burger, **sandwiches loom large as a go-to food for Americans**. This article ranks 20 choices and says which one pulls in the number one spot.

**Food Management:** Gut health is emerging as a new **lifestyle** approach that could drive changes in the food and beverage industry.

**Talking Biotech (podcast series):** In this episode, Kevin Folta explains the significance of his series and then **speaks with Robert Saik**, an agronomist and entrepreneur with much experience in farming.

**Food Prep Research:** The USDA and North Carolina State University are conducting meal preparation experiments to **evaluate consumer food-handling behaviors** in a test kitchen—with a special focus on poultry washing.

**Tomato Breakthrough?** The **tomato trade war may be easing** as the United States agreed to suspend some tariffs on Mexico and implement import restrictions demanded by Florida growers to protect their industry.

**Rejected Produce Can Gain Acceptance:** The food-waste folks are focused on **ugly produce again**—and that's a good thing.

**Food Waste Research:** For quick, credible information, check out the **Ag quickCAST one-page version** of the issue paper **Food Loss and Waste**.

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**Plant Agriculture and Environmental News**

**Supersized (video):** Bizarre-looking, long-neck avocados have gone viral. This article provides a **primer about this jumbo-sized fruit**.

**Keeping It Green:** A Purdue professor received a grant to research the avocado and **characteristics that could maintain its longevity**.

**Carbon Farmers?** University experts, government officials, and farmers are looking into "carbon farming" as a solution for climate-change problems hitting the state of Florida.

**Working on Emissions:** Tuskegee University researchers discovered new bio-based natural materials that could eliminate the harmful buildup of carbon dioxide in the atmosphere.

**Weed Control:** A University of Missouri specialist is looking at techniques using cereal rye as a **cover crop to suppress weed emergence**.

**Hemp Research:** Kansas State researchers are seeking answers to many questions about growing **hemp for grain, fiber, or cannabidiol oil**.

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A Whole Lotta Guac! We're skeptical about the avocadzilla above, but big avocados are real—and so is the scientific research underway about this popular food. See links at upper left.
The Rising "Pulse" of Peas: Some are touting *the pea as a major food source*. The plant requires less water, and it reduces the need for nitrogen fertilizers.

Zombie Fungus Uses "Mind Control" (video): A parasitic fungus called *cordyceps infects ants and other insects* in order to reproduce.

Hey, Shorty: Scientists are looking at the possible benefits from *short-stature corn,* plants grown on stalks about two-thirds the height of conventional varieties.

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**International News**

What’s in Your Lunchbox? (slideshow): Whether provided by school or packed at home, *school lunches can reflect a lot* about a country's culture.

Yes, We Have No Bananas: A *banana-killing fungus* that has been laying waste to crops in Asia and Australia for decades is now in the Americas.

GMO Fears Overblown? A survey indicates that Europeans are more *concerned about the use of antibiotics, pesticides, and additives* than they are about GMOs.

Trying Biotech Plants: Ghana plans to release *genetically modified cowpea seeds* this year or next, and biotech proponents hope this will benefit small farmers.

Another ASF Concern: Pig *cullings are ongoing in the Philippines* in what may be the first outbreaks of African swine fever in the country.

On Fire (video): Brazil's Amazon rainforest is undergoing a *record number of fires this year*. This raises concerns about emissions and global warming.

Alaska Turns up the Heat: Raging wildfires have been stoked by *record-setting heat, dry conditions, and high winds* in Alaska. Some scientists and officials are looking at climate change as a key factor.

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**General Interest News**
**Toxic Algae Update:** A Texas A&M aquaculture specialist gives an update about algae-related dog deaths.

**Bees and Salmon Help to Get the Lead Out:** Scientists combined analyses from honey and salmon to show how lead from natural and industrial sources gets distributed throughout the environment.

**Researcher and Aspiring Teacher:** This Mississippi State University doctoral student is trying to develop a product to protect dry-cured ham. She loves doing research, but she also has her goals set on teaching.

**That’s Some Pig--and Some Generous Young Man:** One hog at an Ohio livestock auction fetched $15,000, and the seventh-grade owner donated all the money to the St. Jude Children’s Research Hospital.

**High Tech and Invasive Fish:** Fish scientists are using an array of sophisticated techniques—including high-tech databases, storm maps, and DNA samples—to track destructive newcomers to U.S. waterways.

**Wildcat Water Project:** The first phase of a stream-restoration project on the University of Kentucky campus has begun—with sights set on water quality, beautification, and outdoor learning.

**Water Quality:** Microplastics have been found in drinking water everywhere, but the World Health Organization says the current levels do not appear to pose a health risk. At this time, human and animal waste contamination cause bigger problems.

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**CAST Information**

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.

CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Melissa Sly at 515-292-2125, ext. 232 or msly@cast-science.org, or [CLICK HERE](https://cast-science.org) for CAST membership information.

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* American Association of Bovine Practitioners
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* American Dairy Science Association
* American Farm Bureau Federation
* American Meat Science Association
* American Meteorological Society, Committee on Agricultural and Forest Meteorology
* American Seed Trade Association
* American Society for Nutrition Nutritional Sciences Council
* American Society of Agricultural and Biological Engineers
* American Society of Agronomy
* American Society of Animal Science
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* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

Dan Gogerty (Managing Communications Editor)
Kimberly Nelson (Communications and Social Media Specialist)
The Council for Agricultural Science and Technology
4420 West Lincoln Way
Ames, Iowa 50014-3447
Phone: 515-292-2125, ext. 222 (Dan) and 230 (Kimberly)
E-mail: dgogerty@cast-science.org and knelson@cast-science.org

** With assistance from Megan Wickham (Managing Scientific Editor)