

# 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 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](#)

## 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

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.



**Students are starting the fall migration back to campuses across the nation.**



**Time to hit the books again.**

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](mailto:knelson@cast-science.org) or [dgoerty@cast-science.org](mailto:dgoerty@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 refiners 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).



first [Aggie Writing Scholars Summer Experience](#) to help students with the transition into college.

### Global Leaders

The Cornell Alliance for Science announced its 2019 cohort of [Global Leadership Fellows](#)--33 high achievers representing 15 countries.

### Ag Research

The University of Arkansas provides a list of this year's agricultural and [research-based information](#) regarding soil fertility, crops, conservation technology, and more.

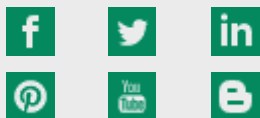
### In the Desert

The University of Reno-Nevada's [Desert Farming Initiative](#) serves as a demonstration, education, outreach, and research program.

### Send in Ideas

CAST [welcomes suggestions](#) for future publications and projects.

### CAST Social Media



**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.

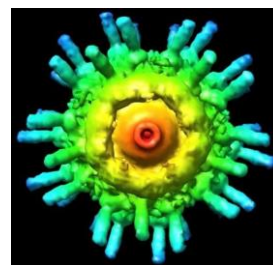
**Blockchain and Agriculture:** Experts are still speculating about [whether blockchain technology can move beyond the hype](#) and deliver real value for farmers and producers in the near term.

## 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.



"Blobology" sounds like the study of a 1958 Steve McQueen movie, but the technique could be transforming biology. See link at upper left.

## The Changing Modes of CAST Communication

*Television, telephone, and interviews in the analog days of the past*

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.



CAST featured on "Country Days" TV in 1978

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](#).

# Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Milky Way pic from akuextphase.com, college pic from isu.edu, book pic from blogtimesunion.com, tomato pic from tomatoesweb.com, and blob graphic from bbc.com. Animal Sec. pig pic from metro.co.uk and cow pic from redbubble.jpg. Food Sec. sniff pic from leaf.tv and carrot pic from kidspot.com. Plant Sec. avocado pic from hotworldreport.com and fungus pic from ranker.com. Inter. Sec. cucumber pic from wired.com and fire pic from independent.co.uk. Gen. Sec. grain barge pic from feedandgrain.com/myokexilelit.com and water project pic from uky.edu. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



## 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](#).



**"Who's a Good Piggy?"** Various cities and towns are [grappling with the legalities of pigs as pets](#). Some see them as good companions, while others view them as nuisances.



## 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](#).



**The Sniff Test Goes High Tech:** To help detect spoilage and reduce food waste for supermarkets and consumers, researchers have developed new [low-cost, smartphone-linked spoilage sensors](#).

## 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](#).



**A Whole Lotta Guac!** We're skeptical about the avocadozilla 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.

## *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.



**Cucumbers in the Air:** This Dutch region--with more than 6,500 experts--is gaining the reputation as a [world capital of innovation in food and agriculture](#).

## *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](#).



High water on the Mississippi River has [made normal agriculture commerce difficult](#) this year.

## 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.



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

## Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- \* Agricultural & Applied Economics Association
- \* American Association of Avian Pathologists
- \* American Association of Bovine Practitioners
- \* American Bar Association, Section of Environment, Energy, & Resources-Agricultural Management
- \* 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



- \* American Society of Plant Biologists
- \* American Veterinary Medical Association
- \* Aquatic Plant Management Society
- \* BASF Corporation
- \* Cal Poly State University
- \* Corteva Agriscience
- \* CropLife America
- \* Crop Science Society of America
- \* Entomological Society of America
- \* Innovation Center for U.S. Dairy
- \* Land O'Lakes
- \* Bayer

- \* National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- \* National Corn Growers Association/Iowa Corn Promotion Board
- \* National Milk Producers Federation
- \* National Pork Board
- \* North Carolina Biotechnology Center
- \* North Central Weed Science Society
- \* Northeastern Weed Science Society
- \* Poultry Science Association
- \* Rural Sociological Society
- \* Society for In Vitro Biology
- \* Soil Science Society of America
- \* Syngenta Crop Protection
- \* The Fertilizer Institute
- \* Tuskegee University
- \* Tyson Foods
- \* United Soybean Board
- \* University of Nevada-Reno
- \* Weed Science Society of America
- \* Western Society of Weed Science

*CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, science-based information to policymakers, the media, the private sector, and the public.*

## Members of CAST's Education Program

- \* Cal Poly-San Luis Obispo
- \* Cornell University
- \* Iowa State University
- \* Kansas State University
- \* Mississippi State University
- \* North Carolina Agricultural and Technical State University
- \* North Carolina State University
- \* Purdue University
- \* Texas A&M University College of Ag & Life Sciences
- \* The Ohio State University
- \* Tuskegee University
- \* University of Arkansas System Division of Agriculture
- \* University of California-Davis
- \* University of Florida Institute of Food and Agricultural Sciences
- \* University of Kentucky
- \* University of Missouri-Columbia
- \* University of Nebraska Agricultural Research Division
- \* 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](mailto:dgogerty@cast-science.org) and [knelson@cast-science.org](mailto:knelson@cast-science.org)**



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

