



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.

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Harvest Thanks



As the [United States celebrates](#) its traditional autumn festival, [countries around the world](#)--from Canada to Korea--also honor the harvest time in the Northern Hemisphere. Note: The next edition of *Friday Notes* will be on December 6.



Re:search--a Magazine

This impressive annual magazine (*Re:search*) showcases the [discoveries and inventions](#) from the faculty, staff, and students at North Carolina A&T State University.

Poultry Prize

The University of Arkansas poultry judging team took first place overall at the recent 54th [National Collegiate Poultry Judging Contest](#).

Veterinary Awards

The veterinary departments at Texas A&M and The Ohio State University

November 22, 2019

Antibiotic Awareness

A Focus on the Pros and Cons

The Center for Disease Control and Prevention is promoting the annual [U.S. Antibiotic Awareness Week](#) to emphasize the steps everyone can take to improve antibiotic prescribing and use. The government agency reports that [drug-resistant bacteria and fungi](#) cause almost 3 million infections and 35,000 deaths a year.



The UN Food and Agriculture Organization says antimicrobials are vital, but their [misuse and overuse](#) lead to problems. Agricultural organizations are addressing the situation as explained in this [Animal Agriculture Alliance report](#) and this message from the [National Pork Board](#). Many companies and universities are working on ways to control bacteria. For example, Cornell researchers have uncovered the structure of a regulatory mechanism unique to bacteria, opening the door for designing [new antibiotics targeted to pathogens](#). And for a light-hearted but serious look at germs and food safety, [Dr. Carl Winter's parodies](#) use everything from Queen to Kenny Rogers to remind us that "microbes might kill you."

News and Views

Thanksgiving Costs and Farmers' Share: The American Farm Bureau published its annual "[cost of a Thanksgiving meal](#)" and a look at what food producers actually get from what consumers buy. Also, the graphic at right from the National Farmers Union shows that [farmers and ranchers receive 12.1 cents](#) from every dollar that consumers spend on their Thanksgiving dinner meals.



Click [here to enlarge](#).

MFP Payments: USDA Agriculture Secretary Sonny Perdue announced that the second round of [2019 Market Facilitation Program payments](#) are now being issued.

U.S. and South Korea Rice Trade: United States trade representatives announced that an [agreement has been reached with South Korea](#) on market access for U.S. rice.

received the [2019 Health Professions Higher Education Excellence in Diversity Award](#).

Ag Workshops for Women

Kansas State University will host "Farm Financial Skills for Women in Ag" workshops at 31 locations across the state in early 2020.

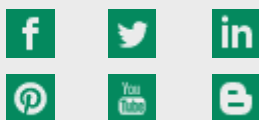
FFA News Release

The National Council for Agricultural Education named Dr. James Woodard the [Director of Agricultural Education, FFA Board Chair, and National FFA Advisor](#).

Send in Ideas

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

CAST Social Media



U.S. and Japan Agriculture Trade: Japan's lower house of parliament approved a trade pact with the United States that opens the country's markets to [American beef and other agricultural products](#), but [some have issues](#) with the precedents set in the agreement.

News from the Far Side of the Barn

This Will Speed Up the Field Work! (video):

The new [king of the fast tractors](#) set an average speed of 135.91 miles per hour, as certified by the Guinness World Records.



The world's fastest tractor--see story link at left.

The Tail Wags the Dog

(video): Narwhal the "unicorn puppy" has an abnormal tail

growth on his head, but rescue groups hope his popularity will [pull attention to other animals in need](#).

Am I Bothering You? (video):

At a time of year when most turkeys become "dinner guests," this bird shows a persistent desire to [become a postal worker](#).

CAST Updates

Leadership

Paul Bredwell (right) is the Vice President of Environmental Programs at the U.S. Poultry and Egg Association, and he will be the first from that group to sit on the CAST Board of Representatives. The U.S. Poultry and Egg Association has supported CAST for decades.



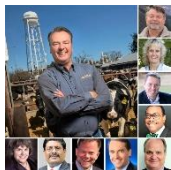
Dwight Tomes (left) served with the Society for In Vitro Biology (SIVB) in different senior positions, on various committees, and as the Editor-in-Chief of *In Vitro Cellular and Developmental Biology*. Dwight is a photographer as well as a scientist, and he has volunteered to take photos at several CAST events. He will serve on the Board of Representatives for SIVB--a longtime society member of CAST.

Publication Impact

It has been approximately a month since the rollout of CAST Issue Paper 66: [Interpreting Pesticide Residues in Food](#). The publication has generated discussion and--as shown in a recent CAST Impact Report--exposure in the media. Total views of the press release--4,271; media outlets that posted the press release--97.



BCCA Nominations



Nominations are open for the [2020 Borlaug CAST Communication Award](#).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Thanksgiving graphic from youtube.com, antibiotic poster from cdc.org, farmer graphic from thefencepost.com, and tractor pic from thedrive.com. Animal Sec. cattle pic from ars.org and pig pic from pbstwing.com. Food Sec. baby photo from pennea.org and indoor farming pic from caterermiddleeast.com. Plant Sec. wind pic from getty.com and crop residue pic from towness.com. Inter. Sec. camel poster from digg.com and koala pic from livescience.com. Gen. Sec. future farm graphic from salon.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



Animal Agriculture and Environmental News

Improving Animal Agriculture (video):

North Carolina State's [Animal Food and Nutrition Consortium](#) brings academic research together with industry partners to address challenges related to animal feed, behavior, and welfare.

The Affordable, Popular Turkey: As this writer says, it's time to [give thanks for an amazing bird](#).

The Many Effects of Cattle: This publication looks at [how cattle production provides ecosystem services to people](#) well beyond upcycling human-inedible protein into a nutrient-rich beef package.



Precision ranching is the focus of a coordinated project led by several universities, including Texas A&M. The [goal is to improve beef production efficiency](#).

Poultry Research: Poultry scientists at the University of Arkansas focus much research on animal health and well being. Those efforts were [on display for agricultural scientists](#) from across the nation during a recent tour.

Beef Production Sustainability: A new white paper authored by Dr. Sara Place details the [minimal environmental footprint of beef production](#) in the United States, and this South Dakota rancher sees beef production as a [solution to climate change](#).



Getting This Little Piggy to Market: An Iowa State professor says one in three pigs born on U.S. farms fails to reach market. [Research is underway](#) to reduce this number.

Research and Our Furry Friends (video): This clip features the [ways animal research helps pets](#) through the development of vaccines, medication, medical devices, and more.

Food Science and Safety News

Twinkies in a Bowl (video): For those who think breakfast needs a shot of sugar and nostalgia, [Twinkies cereal is now available](#). Social media reacted with [mixed reactions](#).

"Most Important Meal of the Day" (video): Graduate student Angela Tacinelli explains her research that [focuses on protein consumption in children](#) during breakfast.

Steak Time (video): This 20-minute film [covers many types of steak](#) and some of the ways to cook them.

Fighting Child Malnutrition: This UC-Davis study finds that [child mortality significantly drops](#) when children receive nutritional supplements rich in vitamins, minerals, and essential fatty acids.



Promise and Practicalities: Some say indoor farming could be the answer to feeding a hungry planet, but for various reasons, [it is not always easy](#).



On any given day, a quarter of American toddlers eat no vegetables. This article examines the many methods used to [get babies to "eat healthy."](#)

Plant Agriculture and Environmental News

The Potential Power of Blackberries (video): CAST scholarship recipient Pauline [describes her research](#) that focuses on the properties of blackberries that give the fruit its taste and smell. These volatiles, as they are known, may play a part in preventing chronic diseases.

National Seed Collection: The Agricultural Research Service says a national collection of plant seeds, now used to restore degraded habitats, could also [help with the improved breeding of food crops](#) and other purposes.

Soil Exploration: Fossilized pollen in the soil can be a [valuable metric for researchers](#) to explore soil organic matter concentration and other properties.

Biodiesel "Hanging by Fingernails": U.S. biodiesel industry officials say they are [struggling to survive](#) without subsidies. Several lawmakers are [petitioning the White House](#) about the issue.



A new study suggests that [global wind speeds have increased since 2010](#) due to changes in the patterns of ocean and atmospheric circulation. This could be good news for the wind energy industry.

Importance of Crop Residue: In order to understand how residue decomposes, researchers are looking at [how degradation processes are influenced](#) by environmental and soil conditions.

CTs and Livestock: Condensed tannins (CTs) are a class of polyphenolic [compounds that can affect nitrogen cycles](#) and help forage livestock retain protein levels during rumen digestion.

International News

International Food Bank: The Global Food Banking Network launched the [Asia Food Bank Incubator program](#), aimed at accelerating the development and scaling of food banking in the Asia-Pacific region.

Livestock Health: Researchers in the United Kingdom were awarded \$5.5 million by the Bill & Melinda Gates Foundation to [establish a Livestock Antibody Hub](#) aimed at improving animal and human health globally.

More Wheat with Less Water: Australian researchers developed a [method to identify drought-resilient wheat](#) quickly, cheaply, and accurately.



This award-winning video follows a [camel's fight for survival in the Australian Outback](#).

Swine Health: After several years of disease and welfare issues in its national pig herd, [Iceland is now following the Norwegian model](#) to increase herd health.



Koala Rescue (video): A [koala was reunited with its bushfire rescuer](#), a woman who used the shirt off her back to save the seriously injured animal.

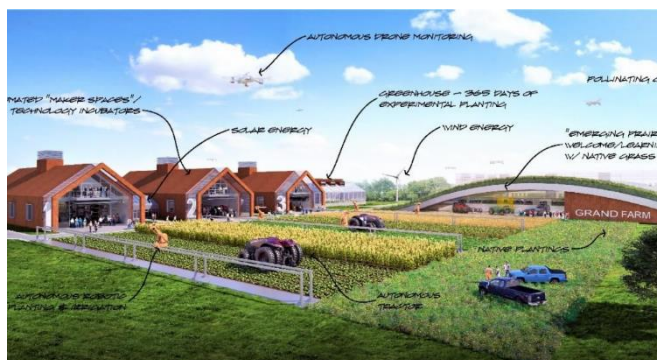
General Interest News

Update on a "Miracle" (video): Miracle, the dog that survived Hurricane Dorian, has a [new home with a loving family](#).

Growing Food in Space: Science experiments aboard the space station are helping researchers figure out [how radiation and the lack of gravity affect plants](#).

Ag, Tech, and "Personalization": While agricultural trends emerge and shift, [core technological changes](#)--such as facial recognition--have profound effects.

Trash to Treasure? This company claims that a new technology turns everyday trash into "[plastic treasure](#)."



A North Dakota farm aims to be the first fully autonomous operation--an attempt to build an "[Agricultural Tomorrowland](#)."



Global Pesticide Use: Most admit that [pesticide use results in pros and cons](#), but this article contends that they are vital to human health and nutrition.

CAST Pesticide Research: Click [here for the full report](#), *Interpreting Pesticide Residues in Food*, and here for the [Ag quickCAST](#), a one-page summary of the paper.

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). 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](#) for CAST membership information.

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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
- * American Society of Plant Biologists
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- * 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
- * U.S. Poultry and Egg Association
- * 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.

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