



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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Announcements



Four SpaceX astronauts docked with the International Space Station for a [record-setting, six-month science mission](#)--and Baby Yoda hitched a ride with the crew!

NC-State University's CERSA is hosting a virtual workshop on Advances in Regulatory Risk Assessment of [Pesticide Drift from Unmanned Application Systems and Manned Aerial Application](#) December 1-3. See page 2 below for related information about CAST's [publication and webinar](#) regarding ground and aerial robots.

Registration is open for the [USDA's 97th Agricultural Outlook Forum](#), "Building on Innovation: A Pathway to Resilience" February 18-19, 2021.

Happy Thanksgiving—the next edition of *Friday Notes* will be sent on December 4.

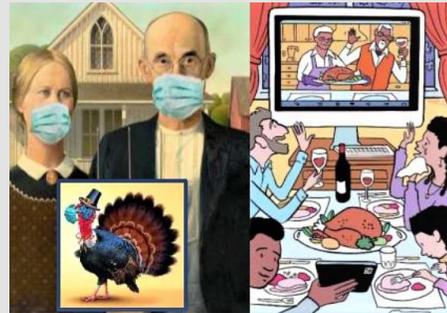
CAST College Corner

[North Carolina A&T State](#)

November 20, 2020

Holiday Changes for Food, Travel, and Gatherings

Some long-standing holiday traditions will be altered this year as the pandemic affects the way we eat, travel, and gather. The following links provide a look at a few of the many adjustments:



[Food safety tips](#)

have always been important, but this year, the CDC adds [advice about gatherings](#) and a [warning about travel](#) --including a [caution for university students](#). As an example of university actions, UC-Davis is [expanding COVID-19 testing](#) to include all students and employees. Many restaurants are using [digital kitchens, apps, and deliveries](#).

This [article includes information and videos](#) about lessons learned from Canada's Thanksgiving last month—and the American Automobile Association's holiday travel forecast.

Jayson Lusk (Purdue) provides [insights about Thanksgiving food prices](#), and the American Farm Bureau Federation's 35th annual survey indicates the [average cost of this year's Thanksgiving feast](#) is down 4%.

News and Views

Vaccine Updates: Moderna announced positive results and Pfizer/BioNTech confirmed successes as companies [hope to make vaccines available](#) soon. The University of [Oxford and AstraZeneca vaccine](#) also shows promise.

Food Chain: The [food and beverage industry](#) is asking the White House for priority when a vaccine becomes available. A University of Missouri professor says the pandemic has highlighted issues in the food chain--and [multiple approaches are needed](#) to create a diverse and efficient production system.

Rural Hospitals: Many small-town hospitals have been [overwhelmed by COVID-19 cases](#). The CAST Commentary *Economic Impacts of COVID-19 on Food and Agricultural*

[University](#) and Walmart are launching the Equity in Education Initiative.

A [University of Arkansas](#) geologist found that holes in the Greenland ice sheet are larger than previously thought.

[Cal Poly](#) received \$5 million from Grimmway for organic research.

[Cornell University's](#) food safety lab granted \$2.9 million for new global projects.

Check throughout *Friday Notes* to see more featured articles from member universities.

CAST Social Media

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

Markets looks at [rural health and many more topics](#)

Trade: Fifteen countries are forming the [world's largest trading bloc](#), the Regional Comprehensive Economic Partnership, and this Ohio State University expert discusses [agriculture trade policy he expects](#) under a new U.S. administration.

News from the Far Side of the Barn

Prehistoric Golf Hazard (video): This huge alligator was allowed to play through as [it took a stroll across a Florida golf course](#).



Saving Their Bacon (video): A woman watching a chill pig on livestream [jumped into action after the barn caught fire](#).

Cut That Duck (video): Duck cutting is a play off of traditional cutting that showcases the athleticism of a horse to separate cattle from the herd in a show ring. This time, people tried [separating a duck out from the flock](#).

CAST Updates

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges
CAST Issue Paper 70

 Santosh Pitla, Ph.D. Biological Systems Engineering, University of Nebraska-Lincoln	 Tami Brown-Brandl, Ph.D. Biological Systems Engineering, University of Nebraska-Lincoln	 Dennis Buckmaster, Ph.D. Ag and Biological Engineering, Purdue University
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The new CAST Issue Paper, *Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges*, was released on November 16, with a webinar on November 17. The paper, Ag quickCAST, and Student Study Guide can be found [on the CAST website](#). There were a lot of great questions asked during the Q&A session—the panelists are working on answering them and there will be a document covering them available in the next few weeks. The recorded webinar can be viewed on the CAST website and [on YouTube](#).

CAST Board of Directors



Amit Dhingra
Work Group Liaison Nonprofit Liaison



Sally Flis
Nonprofit Liaison



Melissa Johnson
Company Liaison



George Potacka
Society Liaison

During the 2020 CAST Board Meeting, there were some updates to the [Board of Directors](#). Amit Dhingra is the Plant Ag and Environmental Issues Work Group Liaison, Sally Flis is the Nonprofit Liaison, Melissa Johnson is the Company Liaison, and George Potacka is the Society Liaison.

Be sure to check out the [new CAST mission and vision](#) statements on the website.

Nominations Open for 2021 Borlaug CAST Communication Award

Nominations are now open for the 2021 Borlaug CAST Communication Award, an honor that recognizes professionals actively working in the agricultural, environmental, or food sectors who are promoting agricultural science in the public policy arena. Learn [how to nominate](#) someone for the 2021 BCCA and download the 2021 [nomination packet form here](#).

Animal Agriculture and Environmental News

Egg Supply and Demand: Despite what is likely to be an uncertain holiday season this year, USDA economists note that U.S. producers have [built large egg inventories](#).

Hog Company Court Cast: A federal appeals court upheld a jury verdict that a North Carolina [hog farm constituted a nuisance but threw out most](#) of a multimillion-dollar jury award to a nearby resident.

Cattle Production and the Pandemic (video): This story looks at the discussions, finger pointing, and possible legislation focused on the [pandemic and the apparent inequities involved with cattle production](#).

Biosecurity Lessons Learned from ASF: A renewed emphasis has been placed on biosecurity practices implemented [within the swine feed sector](#).

Rural Veterinarians: Texas A&M AgriLife faculty members are providing education and assistance with a goal of [making rural veterinary practices sustainable](#).

Veterinarians Report: The AVMA's annual [Economic State of the Veterinary Profession report](#) highlights strong growth, continued demographic shifts, and the impact of COVID-19. **Note:** [click here to access](#) CAST's Issue Paper *Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply*.

Hummus for Herds: Chickpea production is increasing globally, and nutritionists are looking into [using some of it as cattle feed](#).

Meal Frequency: Kansas State research shows [feeding sows two to four meals](#) a day results in better performance.



Fragrant Manure and Visiting Foul

An Iowa State University study shows that carbon-rich biochar could be used to mitigate many odors and potentially toxic volatile organic compounds emitted from swine manure.

And for the first time, Iowa State will host the National Thanksgiving Turkey following the ceremony at the White House.

Food Science and Safety News

Old-fashioned, But Still Trendy: Many say oatmeal is the [best performance breakfast](#)—either plain or with a variety of extras added.

Banner Year for Butter: The pandemic means more Americans are [baking and cooking to pass the time](#) consequently, this has been a banner year for butter.

Poultry Meat Quality: The University of Arkansas is preparing graduate students for [careers focused on poultry meat quality](#) and consumer satisfaction.

Pork Cuts: Research shows that consumers have been interested in [non-traditional cuts](#) of meat in recent months.

Grocers and Customers: Grocers have won over stomachs and wallets as people cook meals at home during the pandemic, but this report suggests they need to [work hard to maintain customer loyalty](#).

Mediterranean Diet: According to this university study, eating a [Mediterranean diet may provide a way](#) to help lessen stress and promote healthy aging.



Can He Dance Too?

An [Oregon farmer went viral](#) on the controversial social media platform TikTok to explain some aspects about onions.

Plant Agriculture and Environmental News

Cranberry Campaign (video): Amazingly, [100 billion cranberries get to grocery shelves](#) before Thanksgiving.

Important Cellulose Finding: Penn State researchers showed how cellulose crystals orient themselves relative to the cell wall in plants, with [potential implications for chemical and energy development](#).

Integrated Pest Management: The American Society of Agronomy is strengthening their [Certified Crop Adviser platform](#) by offering this new program.

Tech and Pest Management (related to above): Click here to [access the CAST Commentary Stewardship Challenges for New Pest Management Technologies in Agriculture](#).

Carbon Credits: Research projects—with sponsors ranging from the Energy Department to multinational food industry giants—will help determine [whether or not carbon credit markets can become sources of income](#) for farmers.

Hemp in the Desert: University of Nevada-Reno Extension specialists are [researching hemp varieties and best practices](#) for growing it in Nevada—and they will offer online classes on the research findings.

CRISPR: This scientist has been using CRISPR gene-editing technology to protect bananas and other staple crops across [Africa against killer pathogens](#).



Robots in the Field

University of Nebraska-Lincoln professor Santosh Pitla is developing Flex-Ro, an [autonomous field robot designed to identify and study crops in the field](#), with abilities expanding to seeding crops, managing weeds, and target-spraying pesticides.

Dr. Pitla was the task force chair of [CAST's new publication and webinar about robotics and agriculture](#).

International News

Record Hurricane: [Hurricane Iota raged](#) in Central America and added to a [record-breaking storm season](#).

Contested Vote Selects Chubby Parrot (video): After allegations of election rigging, the [New Zealand Bird of the Year election](#) went to the kakapo—a plump parrot.

Rice, Genomes, and Diversity: University of Queensland scientists studied 3,000 rice genotypes and found [diversity was inherited](#) through two maternal genomes.

Cutting Plastic Waste: This British company is changing the packaging of its own labels of hard cheeses to [save 260 tons of plastic annually](#).

Wetlands on Fire: South America's Pantanal region—the largest tropical wetland on earth—has been hit by the [worst wildfires in decades](#).

Selling Out: Walmart has [sold most of its stake](#) in Japan supermarkets.

Tourism in the Age of COVID: This small New Zealand island is having a [tourism boom during the pandemic](#).



Floating Ghost Hotel

[A one-time, five-star floating hotel](#) in the Great Barrier Reef now sits as an abandoned ghost hotel—rusting just north of the Korean demilitarized zone.

General Interest News

From Wily Coyote to Paw Patrol (video): A farm security camera shows the [animals showing up for the nightlife](#).

Pie as Art (photos): A self-taught baker has [gone viral with her pie art](#).

Airport Economics: The pandemic is inflicting economic impacts on all airports; the smaller facilities in the Midwest could [take a long time to recover](#).

Spiderweb Strong: Scientists are figuring out the chemical triggers that turn the liquid stored in spider silk glands into [a solid that's tougher than steel](#).

Curing your Arachnophobia (related to above): This entomologist explains that [spiders are an important part of nature](#) and our indoor ecosystem. Spiders as roommates?

The Benefits of Nature: A European study cites scientists who say there is a strong relationship between growing up with [the natural world and aspects of mental health](#).



Igloo Dining

A New Hampshire [restaurant is providing igloos](#) for special occasions. And in another video, an infectious disease doctor discusses the safety (or not) of [dining in tents, igloos, and greenhouses](#).

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* Agricultural & Applied Economics Association
* American Association of Avian Pathologists

* Crop Science Society of America
* Entomological Society of America

- * 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

- * Innovation Center for U.S. Dairy
- * 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
- * United Soybean Board
- * University of Nevada-Reno
- * U.S. Poultry and Egg Association
- * Weed Science Society of America
- * Western Society of Weed Science

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The Science Source for Food,
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