



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....

- [Animal Agriculture News](#)
- [Food Science & Safety News](#)
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## Events and Announcements



On Monday, CAST will release the issue paper [Agriculture and the Microbiome](#), and a webinar discussion will occur Tuesday. See page two below for information.

The United Soybean Board and the National Biodiesel Board will host a September 10 Zoom event focused on "[Biodiesel Scientists Making an Impact](#)."

The Association of American Veterinary Medical Colleges will [accept session proposals](#) until September 11 for its March 2021 conference called "Catalyze 2021: Connect & Innovate in the Face of Global Challenges."

The [2020 Borlaug Dialogue](#) *Breaking New Ground--Building Resilience Today for Improved Global Food Systems Tomorrow* will occur virtually [October 12-16](#).

## August 21, 2020

# Ag/Science Part of a News Cycle on Fast Mode

The news cycle usually slows down in August, but 2020 continues to throw curve balls, as pandemic and political headlines compete with hurricanes, crop disasters, and raging fires. Good news slides in too, from reports of a faster saliva test for the virus to the stories of people chipping in to help others. Check for key stories and updates below.



## News and Views

**Fires in the West:** Wildfires rage through Northern California (and [many other parts of the West](#)), threatening thousands of homes and eventually [affecting lives, businesses, and agriculture](#). UC-Davis fire crews are joining the [fight against wildfires](#). A University of Nevada-Reno expert is joining with efforts to [improve wildfire risk assessment](#) and mitigation tools.

**Storm Crop Damage (videos and photos):** Farmers in the Midwest face the [aftermath of a powerful derecho windstorm](#) that ravaged the Heartland. The Iowa Secretary of Agriculture released statistics about the [widespread crop damage](#), and the state is asking federal officials to give Iowa farmers [special harvest options](#) because of the storm.

**Food Safety Committees:** The USDA announced the [appointment of 10 new members](#) to food safety advisory committees, including experts from companies and universities such as Mississippi State, The Ohio State, and North Carolina State.

**Virus Updates:** The FDA authorized a [saliva-based diagnostic test for COVID-19](#) that could be cheap, fast, and accurate--while the Australian government [touts a promising vaccine](#).

**Helping Hands:** Companies continue to find ways to [help families during the pandemic](#) across the country, and many universities have food assistance projects like North Carolina

## CAST College Corner

[Cornell University](#) has launched a New York solar farm study.

A [University of Missouri](#) assistant professor has received \$2.4 million in grants to track wild turkeys and black ducks.

The [University of Florida](#) pulled in record amounts of research awards—including one to make sweet corn even better!

Check throughout [Friday Notes](#) to see more featured articles from member universities.

## CAST Social Media

Visit our website



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

A&T State's "[Swipe Out Hunger](#)" program that helps students assist those who are food insecure.

## News from the Far Side of the Barn

**Fistfight with a Shark (photo collage at right):** As this video shows, a man [punched out a great white shark](#) that attacked his wife while they were surfing off an Australian beach.



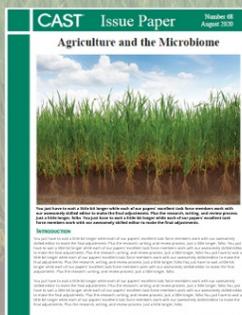
**Weight Limit:** A trucker tried to drive a 70,000 pound load of feed over a bridge that posted a limit of 10,000 pounds. [It did not end well](#)—but no one was injured.

**Doggone Debate--In German:** A new [rule forcing Germans to take their dog for a walk](#) twice a day has unleashed quite a discussion.

## CAST Updates

### Agriculture and the Microbiome

CAST Issue Paper 68



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On Monday, August 24, the new CAST Issue Paper, *Agriculture and the Microbiome*, will be released. The webinar will take place noon CDT, Tuesday, August 25. You can [register for the free webinar here](#).

Agriculture is one of the keystones of human civilization, providing a reliable, stationary source of food that allowed ancient populations to grow and eventually build cities. Modern agriculture is successful today because of advances in mechanization, breeding, nutrients (e.g., fertilization), and pest and disease management, all of which enhance crop productivity and provide greater food security. Even with this progress, the amount of cropland per capita has declined, available farmland is being consumed by urban development at unprecedented rates, and crop yields are plateauing. Crop yields must continue to increase and the gap between plant productivity and consumption must be bridged. Expanding the use of crop microbiomes to improve plant production is that next agricultural revolution.

### Meet Pam Marrone--A BioAg Entrepreneur

Dr. Pam Marrone is a long-time supporter of CAST as an individual

member. In 2006 she founded Marrone Bio Innovations, a company that offers sustainable and effective bio-based solutions for pest management and plant health. In [a previous interview](#), Marrone stated, "Post Marrone Bio Innovations, I wanted to continue to have an impact in moving agriculture to become more sustainable and bio-intensive." Marrone has started several other companies, and she has some great insights into corporate culture. CAST was able to [interview her for our newest blog](#).



## Upcoming Publications

- *Agriculture and the Microbiome* (August 24 release, webinar at Noon Central on August 25)
- *The Importance of Communicating Empirically Based Science for Society* (September release)
- *Food Biofortification--Reaping the Benefits of Science to Overcome Hidden Hunger* (October release)
- *Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges* (November release)

## Animal Agriculture and Environmental News

**Fighting Antimicrobial Resistance:** A new strategic plan from the [FDA calls for enhanced monitoring of pathogens](#), including in animal feed and pet food, to combat antimicrobial resistance.

**Poultry Production:** The University of Arkansas and the USDA-ARS are joining to find new ways to keep the [poultry industry sustainable](#).

**Regenerative Ag in Dairies:** General Mills has chosen a few dairies to try out their [three-year pilot program](#) to test regenerative ag practices.

**Swine Health:** A Kansas State University researcher was awarded a \$500,000 grant to [examine the swine microbiome](#) to control porcine reproductive and respiratory syndrome virus.

**Better Animals? (editorial):** Gene editing will lead to [animals that are more disease-resistant](#) require fewer antibiotics, and have a better environmental footprint.



**Small Poultry:** This "home brew" chicken raiser says her birds have "[chickenality](#)."

**Large Poultry:** This article looks at the immense, [successful U.S. broiler industry](#) and the part that antibiotic growth promoters play.

## Food Science and Safety News

**Mending Damaged Nerves:** A recent study found a chemical compound in the shell of cashew nuts that [promotes the repair of myelin](#).

**Time for a Good Laugh (video):** With pandemic woes in the news, several [brands have released humorous ads](#) this year to win consumers back. A more critical article editorializes why [junk-food ads aimed at children](#) should be regulated.

**Even Healthier Chocolate Milk?** Researchers report a new way to combine milk chocolate with waste products--such as peanut skins--to [boost its antioxidant properties](#).

**Microbes in Your Intestine:** Researchers show how [beneficial microbes can help](#) counter infections.

**Good Taste with Fewer Stab Wounds:** A thorn-less blackberry variety from the University of Arkansas received a prestigious [horticulture award](#).

**Beef Flavor:** Researchers investigated [how beef volatile](#)



The [breakfast table might be making a comeback](#). The pandemic has disrupted morning routines but a survey shows more parents are spending time with their children before starting work or daily duties.

Many American households report

[flavor compounds are impacted](#) by various factors.

a [decrease in food waste](#) since the pandemic began.

## Plant Agriculture and Environmental News

**Vertical Venture:** A new company hopes to improve the quality, efficiency, and [sustainability in vertical farming](#).

**Drilling in the Arctic:** The Administration finalized its controversial plan to open part of the [Arctic National Wildlife Refuge in Alaska](#) to oil and gas development.

**Putting the Fun in Fungal Research:** A Penn State two-year study gives us a [new way of looking at the fungal pathogen](#), *Colletotrichum fioriniae*.

**To Fumigate or Not:** Prunus replant disease can usually be taken care of by [fumigating the soil](#), but other ways of treating it are being found.

**Organic Standards:** The USDA's National Organic Program released a [proposal to combat organic fraud](#)

**Planting Green:** These Minnesota farmers are trying to [improve cover crop techniques](#), and a survey showed many farmers see [benefits in adopting environmental practices](#)



A Michigan farm is making headlines for its corn maze that says what everyone is thinking: "[COVID Go Away](#)."

## International News

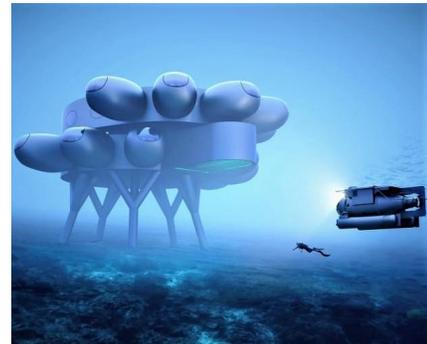
**Plastic Ocean (video):** A British study says 12-21 million tons of [plastic fragments are floating in the Atlantic Ocean](#)

**Snowing Chocolate:** A defect in a company's ventilation system resulted in a [dusting of chocolate](#) in a Swiss town.

**Bird Ban:** The Philippines said it [temporarily banned the importation of domestic and wild birds](#) from Australia after the presence of the highly pathogenic H7N7 avian flu virus was detected at an egg farm in Victoria.

**Food and Coronavirus:** Evidence shows that food is an unlikely transmitter of coronavirus, but [contaminated items continue to grab headlines](#), especially in China.

**Omega-3 Canola Oil:** A Canadian company has received [approval for human consumption](#) of its proprietary DHA refined canola oil.



Aquanaut Fabien Cousteau is involved with setting up the world's largest [underwater research station](#)—near Curacao in the Caribbean Sea.

## General Interest News

**Food for Health and Justice (video):** This nonprofit producer is using her farm to [fight against racial injustice, health disparities, and inequalities in the food system](#).

**Toxic Swim (video):** Swimming is prohibited at a New Jersey beach due to [warnings of toxic algae blooming](#).

**Climate Change Brew:** A North Carolina State associate professor says the [taste of beer will be altered](#) because of changes in temperature and rainfall.

**Genetically Scrambled Squid:** With the [first genetically altered squid](#) at the Marine Biological Laboratory, scientists have new options for cephalopod research.

**Sunday Scorcher:** The temperature [reached 130 degrees](#) on Sunday, August 17, in Death Valley National Park.

**Understanding Underwater Environments:** Researchers at Penn State have been awarded a grant to better understand [underwater locomotion and sensing](#).

**Vertical Community Garden (video):** A 4-H teen uses her garden to [feed families and teach others](#) how to grow produce in her community.



Sea otters were locally extinct in British Columbian waters until a plane containing a romp of otters arrived and set off a population boom--[with unintended consequences](#).

Authorities in the Florida Keys gave their approval to a [release of 750 million genetically modified mosquitoes](#) to prevent the spread of dengue fever and other diseases.

## Photo Credits

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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
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- \* American Society of Animal Science
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- \* Crop Science Society of America
- \* Entomological Society of 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

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- \* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

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The Science Source for Food,  
Agricultural, and Environmental Issues

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