

# Friday Notes

Council for Agricultural Science and Technology

The Science Source for Food, Agricultural, and Environmental Issues

ICAST

*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

[CAST Report on Gene Flow in Alfalfa Now Available in Spanish--P. 2](#)

[Animal Agriculture News](#)

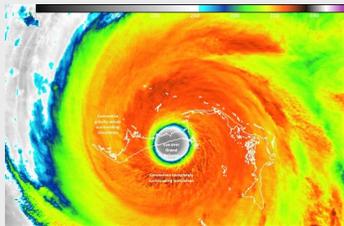
[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

## Dorian from Above



These [videos and photos taken from above](#) show the destructive reach of Hurricane Dorian.

## Scholarship Recipient

The Poultry Science Association Foundation announced [Laney Froebel \(Texas A&M\)](#) as the recipient of the 2019 Dr. James H. and Shirley H. Denton Endowed Memorial Scholarship.

## Coming Events

NC State's [Food Animal Initiative](#) is hosting the first international symposium on *Precision Systems and Data Analysis in Animal Agriculture*--September 9-10 in Raleigh, North Carolina.



College students can check out the Animal Agriculture Alliance's annual [College Aggies Online Scholarship](#)

September 6, 2019

## In the Hurricane's Path

### Storms Affect Humans, Property, and Agriculture

Hurricane Dorian added the Bahamas to the list of areas that have experienced [tragic death tolls and property losses](#) from massive storms. This "[before and after](#)" article shows some of the horrors of the event.



Hurricane Dorian [ravaged the Bahamas](#) and continued up the [east coast of the United States](#).

During the past few years, the U.S. Southeast has been hit by powerful hurricanes and devastating floods that caused more than \$37 billion in damage, according to the U.S. National Centers for Environmental Information. Many speculate about the severity of recent storms. This [research from the American Meteorological Society's website and NOAA](#) provides information about climate change, weather patterns, and hurricane activity.

These events affect all sectors of the communities in their paths, and that includes agriculture and food production. Dorian's wrath did not move over Florida's orange groves as badly as had been predicted, but [concerns turned to soy, corn, cotton and livestock](#) to the north. Losses are often hard to gauge until much later. The [USDA provides reports, charts, and articles](#) about the impacts hurricanes have on agriculture.

Many groups [work hard to prepare for the storms](#), and agricultural organizations try to inform the public. For example, the North Carolina Pork Council says the state's pork industry has been the [victim of misinformation](#) during past hurricanes. As the waters recede and the wind speeds drop, livestock and other food-production interests will join with the rest of the community to recover and rebuild.

## News and Views

**Farmer Confidence Falls:** Although government payments to farmers seem to be helping, overall [farmer confidence is plummeting](#), according to a Purdue University poll.

**Trade Possibilities:** [China and the United States](#) agreed to hold high-level talks in early October, and U.S. farmers hope the [announced trade deal with Japan](#) will yield benefits, as they cope with international markets that have been affected by tariffs.

**Light Bulb Regulations Change:** The Trump administration continued its deregulatory focus by [scrapping a rule](#) that would have phased out less energy-efficient incandescent bulbs.

[Competition](#) starting September 16.

A [September 19 webinar](#) (from CAST, the American Society of Agronomy, and the United Soybean Board) focuses on the publication titled *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape*.

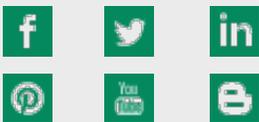
Later this month, CAST will roll out the publication [Protecting Food Animal Gene Pools for Future Generations](#)--A Series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*. September 30 on Capital Hill--details next week.

Iowa State University's [global seed symposium](#)--in collaboration with the World Food Prize--will occur October 14-15 in Ames, Iowa.

### Send in Ideas

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

### CAST Social Media



**News on the Air:** This week's [USDA radio podcast stories](#) are heavily focused on the weather--from drought to hurricanes.

## News from the Far Side of the Barn

**Better Than New York's Pizza Rat:** A rat story from the 1950s captivated the scientific community and [become one of biology's most beloved hoaxes](#).

**Two Tusks Better Than One (video):** This elephant decided the rhino and its baby were [not going to use his waterhole](#). **Note:** The classic [Battle at Kruger](#) video features lions, crocodiles, and an amazing water buffalo rescue.

**Live Fast, Die Young:** Male kalutas, small mouse-like marsupials found in Australia, are semelparous--meaning that [shortly after they mate, they drop dead](#).



The famous "snouter rat" could hop around on its nose and catch prey with sticky tendrils--or not. See the link at upper left.

## CAST Report Now Available in Spanish *Gene Flow in Alfalfa*

This influential CAST report describes the biology and agronomic practices in alfalfa that should be considered in developing coexistence strategies to allow growers to have choices, specifically between genetically engineered (GE), conventional, and GE-sensitive markets in the United States. The original report was released in English in September 2008 and is [now available in Spanish](#). Both versions are available as free downloads from the CAST website.



**Flujo de Genes en Alfalfa**  
*Biología, Mitigación y Efectos Potenciales en la Producción*

Spanish Version: [Flujo de Genes en Alfalfa](#) *Biología, Mitigación y Efectos Potenciales en la Producción*

English Version: [Gene Flow in Alfalfa](#): *Biology, Mitigation, and Potential Impact on Production*



### Translator Susana Fredin



Susana Fredin received the CAST President's Award from Kent Schescke, CAST EVP, in Washington, D.C., on April 21, 2016. Susana has translated many CAST publications into Spanish, from 12-page commentaries to lengthy issue papers, as well as several one-page Ag quickCAST documents. By doing so, she has enabled CAST to reach a range of readers around the globe with credible science-based information, readers who otherwise might not have been able to benefit from our publications. The President's Award recognizes those individuals who have personally contributed to the advancement of CAST and who have furthered the cause of agriculture, science, and technology in a world so dependent

on all three disciplines.

[Click here to read various translations from Fredin](#)--plus translated papers from other experts.

# Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 weather pic from nasa.com, Bahama pic from nypost.com, and mouse pic from M.Bertola. Animal Sec. cattle pic from cattle.jpg and Hawaii pic from koloalandingresort.com. Food Sec. Belushi photo from homevideos.jpg. Plant Sec. chicken lot photo from rodalinstitute.org and corn pic from cnsnews.com. Inter. Sec. Bangladesh photo from IgnacioMerinInstitute and student photo from foodtank.com. Gen. Sec. river pic from harvestpublicmedia.org and group photo from calpoly.edu. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



## Animal Agriculture and Environmental News

**Livestock and Climate (video):** Dr. Frank Mitloehner explains how [greenhouse gas emissions](#) from burning fossil fuels differ from those produced by livestock. **Note:** Mitloehner is the [2019 BCCA recipient](#), and he will present at a CAST breakfast event during the World Food Prize October 16. Watch for details coming soon.

**What Makes a Chick Tick? (video):** According to this veterinarian, it is [important to educate non-farm audiences](#) about a chicken's inherent needs and preferences.

**VFD Regulations:** The USDA published a [summary assessment of inspection activities](#) related to its Veterinary Feed Directive (VFD) regulations--looking at the use of antimicrobial drugs.

**Egg Safety:** With the help of the egg industry, the USDA, and academia, USPOULTRY is introducing a [new shell egg-washing training module](#).

**A Look at the Unpredictable Hog Market:** Summer is ending and the [big productive capacity of the U.S. pork industry](#) will kick into high gear as temperatures moderate and new-crop corn makes its way into feed.

**Calculators, Sugar, and Enzymes:** This corporation developed an [online calculator to help dairies](#) develop products with less sugar.



**Cattle in Paradise:** Hawaii's cattle industry dates back more than two centuries, and producers are now interested in getting their story across about [how beef production weaves in with the community](#) and land conservation.



With prompting from the United States Cattlemen's Association and others, the USDA is [investigating possible price manipulation](#) after a highly publicized fire at a beef processing plant.

## Food Science and Safety News

**A Growing Problem (video):** A report in *The Atlantic* attempts to explain why there are more obese Americans today than in the 1980s--and why even if people eat healthy and exercise, it is [easier to be obese today](#).

**We'll Have What They're Having (video):** Students [turn the dining hall into a dance floor](#) at North Carolina A&T State University (related links in caption at right).

**Blinded by Diet?** Researchers concluded that a young man's "junk food" diet and limited intake of nutritional vitamins and minerals [resulted in the onset of nutritional optic neuropathy](#).

**Focus on Diets:** This systematic global analysis examines dietary risks and



Even Belushi might be impressed with modern-day university cafeterias. This reviewer explains how the University of Hawaii at Manoa turned [campus food into a](#)

[champions balanced diets](#) that include animal proteins. The study focused on 195 countries during 28 years.

[delight](#), and this ranking system combines five other surveys to select the "[best universities for food](#)." Bowdoin comes in first, Cornell is in the top ten, and no doubt your school should also be on the list!

**Dietary Guidelines Debate (opinion):** Regarding the 2020 dietary guidelines, some experts say the administration is [narrowing the research that can be used](#) and potentially leaving key information out.



**Target, Measure, Act:** Instead of a one-size-fits-all solution to solving the food waste crisis, this report [proposes a simple three-step system](#) that they say can be implemented across the planet.

**Eyes Bigger Than Stomachs:** Ohio State researchers found that people [overestimate how much food they will eat](#) from their refrigerators, adding to the nation's food-waste problem.

**Waste Research:** Click here to [access the CAST Issue Paper Food Loss and Waste](#), a paper in the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*.

## Plant Agriculture and Environmental News

**Informing the Public (video):** This new video from *GMO Answers* explains how the organization [communicates information about genetically modified organisms](#).

**Support for Soy Checkoff:** With resounding support from U.S. soybean farmers for their soy checkoff, the USDA will not conduct a referendum this year but instead will [continue the organization's research and promotion efforts](#).

**Feedback from the Fields:** This [interactive map provides reports about crop conditions](#) and yields.

**Carbon Questions:** A new Iowa State study on agricultural land use [calls into question conclusions made by previous studies](#) that say recent land-use changes have caused the United States to take up more carbon than it emits.

**Capturing Phosphate:** A Cornell University researcher's work uncovered the function of a pair of plant genes that could help farmers [improve phosphate capture](#), potentially reducing the environmental harm associated with fertilization.



[Integrated crop-livestock management comes in many forms, and this article looks at some of the best management practices.](#)



**Crop Conditions from a Farmer's Perspective (podcast):** The National Corn Growers Association spoke with an Illinois grain farmer about [yields, crop quality, and the difficult growing conditions](#) this year.

**A Sinister Corn Maze:** A cornfield can turn into a death trap if a young child gets lost in its tall stalks. This blog looks at an incident from the past that [pulled the community together in a rescue effort](#).

## International News

**Herbicide Ban (video):** The German government will join Austria in a [ban of glyphosate](#). The makers of the herbicide say [extensive research](#) confirms the chemical is not carcinogenic if used properly.

**Unintended Consequences?** Carbon and biodiversity losses in Asia resulting from palm oil development have spurred calls to slow sales and limit forest losses. This Purdue University study looks at the [various repercussions these actions could incur](#).

**Tariff Easing, But?** Though the Brazilian

government announced an [easing regarding tariffs on certain ethanol imports](#), ethanol and grain-interest groups said Brazil should fully open its doors.

**The Greening of Paris:** France's rooftop vistas are changing, and one development in Paris is turning a [flat roof into the world's largest urban farm](#).

**Ag Tech in the Sub Continent:** This report looks at the ways [India has been turning to technology](#) to improve dairy productivity and animal health.

**Beaked Whale (video):** While headlines announce that Japan has resumed whale hunting, a [new beaked whale species has been discovered](#) there.



### Schools and Food

**Systems:** From Bali to Brazil to Big Green (U.S.), various initiatives are [helping students understand the food system](#) by using school gardens to boost lunchtime meal programs.



People in flood-prone Bangladesh are coping with rising water levels by using innovation and resilience. The [changing climate is affecting crops, habitats, and careers](#).

## General Interest News

**Preserving the Past (video):** Tuskegee University participated in a program this summer that aims to bring students working toward architecture degrees into [historic preservation and related career paths](#).

**Tagging Bees for Research:** This Purdue University lab has thousands of honey bees tagged. Using radio waves, sensors can [capture simple data to learn about bee colonies](#).

**Community Health:** This University of Nevada-Reno graduate works with the community by [teaching nutrition programs](#) to low-income families.



**Locks, Dams, and Ag:** A USDA report shows investing in the Mississippi and Illinois River lock and dam system [can boost agricultural sales and improve prices](#) for farmers.



In a Star Wars-like setting in the Mojave Desert, a [solar car created by a team of Cal Poly students](#) eclipsed 50 mph, just shy of a world record.

**Wind Energy Challenges:** Wind turbines are made to be sturdy, but they don't last forever. Recycling some of the material [can be a challenge](#).

## 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 [mshly@cast-science.org](mailto:mshly@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



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- \* American Veterinary Medical Association
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- \* 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

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