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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 Welcomes New Membership Specialist--P. 2
Animal Agriculture News
Food Science and Safety News
Plant and Environment News
International News
General Interest News

Melting Glacial Art
Melted glaciers in the Arctic have unearthed land that has been covered in ice for more than 40,000 years.

Water Research
Aquifer Depletion and Potential Impacts on Long-term Irrigated Agricultural Productivity--CAST Issue Paper 63 will be presented at a set of rollouts in Washington, D.C., during the last week of February. Watch for details.

BCCA Nominations
Borlaug CAST Communication Award--forms and instructions here.

February 1, 2019

The Big Chill
Polar vortex affects all--including agriculture

Search the words "polar vortex," and you get a blizzard of links. As a large part of the country went into a cryogenic mode, universities closed, mail carriers were sidelined, and meteorologists hyperventilated. The Big Freeze also had many effects on agriculture. Check the following links:

** Some "really cool" maps of the polar vortex and its attack from the north.

** Three of the many articles about farmers fighting the cold: (1) Livestock farmers protecting animals, (2) workers taking special precautions while outside, and (3) protecting chickens with Vaseline and tiny igloos.

** A blog looking at this year's cold, the horrid winter of 1940, and the deadly blizzard of 1888--also a link about how dogs react to winter. Yes, even Fido gets the winter blues.

The recent polar vortex caused damage and death, but a big change is forecast in the next few days. For example, Chicago may have a 70-degree rise in temperatures by the weekend. Bi-polar weather indeed.

News and Views
**Diggin' In**

Last fall, Tuskegee University students got down and dirty as part of the 2018 Region II Southeastern Collegiate Soil Judging Contest.

**Send In Ideas**

CAST welcomes suggestions for future publications and projects.

**Think Summer**

This North Carolina State article gives us a perspective on why 4-H summer camps can be so important.

**Farm-to-Fork**

At the University of Kentucky, students line up once a week to sample food cooked by fellow students in a Farm-to-Fork program.

**AgriLife at Texas A&M**

From technology to cultural events, this site provides a look at stories coming from the Texas A&M agriculture education system.

**CAST Social Media**

![Facebook icon](image1.png) ![Twitter icon](image2.png) ![LinkedIn icon](image3.png) ![Pinterest icon](image4.png) ![YouTube icon](image5.png) ![RSS Feed icon](image6.png)

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**CAST Welcomes New Membership Specialist**

*Alyssa Yanni brings varied experiences to her new position*

Alyssa Yanni has a curious mind.

She is a self-proclaimed news junkie, consuming an assortment of articles published across the media spectrum, and a history buff--she reads historic news articles, too. (The latter is possibly for fun, but they are an integral part of her master's thesis at Iowa State University.)

Alyssa's curiosity translates into her personal life as well. The Pennsylvania native uprooted herself and moved to Ames in order to try something new. Since then, Alyssa has experienced a lot of new things: she worked with veterans through AmeriCorps, enrolled in a history graduate program, met her life partner, and became a devoted mini-golfer (seriously, 16-degree-weather-doesn't-phase-me devoted).

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**High-level Trade Talks**: Both China and the United States reported "important progress" after meeting to discuss a comprehensive trade deal. President Trump indicated that China would buy more U.S. soybeans. No specific plans were announced, but the two sides are working on subsequent meetings.

**Bowed Over**: With Super Bowl Sunday in the works, check out pertinent articles about (1) food safety from the USDA, (2) the "best food" in the Atlanta stadium, and (3) thoughts from Jayson Lusk about chicken wings and the markets.

**Shutdown Effects**: The USDA posted a list of program dates affected by the partial government shutdown.

**Farm Bill Potential**: The president of the American Farm Bureau says the 2018 Farm Bill will bring many benefits to farmers and ranchers.

**News from the Far Side of the Barn**

**Fast-frozen Gators** *(video)*: Alligators in North Carolina are again freezing themselves up to their noses to survive the winter.

**An Inflatable Dances with Wolves**: An Oregon rancher is using a lime-green inflatable dancing man to keep wolves from attacking his livestock.

**Dolphins by My Side** *(video)*: Playful dolphins join in with this tourist who is getting towed on an underwater surfboard.

"Loneliest Duck in the World": Trevor was the only duck on this Pacific island, but he was loved by locals and FB admirers--until a dog ended his puddle jumping.
Read more about Alyssa’s background and her move into the CAST community.

Friday Notes News Categories
Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 glacier pic from usatoday.com, collage from indystar.com, farmweek.com, and buzzfeed.com, vortex map from nasa.gov, helmet pic from cnn.com, and duck pic from onenewspage.com. Animal Sec. pig pic from wsj.net and goat pic from firefighterclosecalls.net. Food Sec. lab photo from newfoodmagazine.com. Plant Sec. robot pic from businessinsider.com and meme from pinterest.com. Inter. Sec. chicken feet pic from atlasobscura.com and robot pic from welovebudapest.com. Gen. Sec. science photo from npr.org and milkman photo from edgecastedn.net. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.

Animal Agriculture and Environmental News

Chickens on Parade and in the Backyard (videos): This brief clip shows a chicken wannabe walking a real hen, and this longer video provides backyard poultry-care hints.

Early Calf Health: Ensuring a healthy start for a calf may happen earlier than expected. This article discusses management practices that can help.

Preventing a Disaster: A veterinarian speaking at the Pork Congress explained the risks of African swine fever.

Bio-eggs Add Protein: Chickens that are genetically modified to produce human proteins in their eggs can offer a cost-effective method of producing certain types of drugs, according to this research.

Genetics, Cattle, and Water Intake: Kansas State and Oklahoma State researchers say genetics plays a big role in beef herd selection, from reproductive performance to body measurements.

It'll Grow on You? The axolotl is an odd, "smiling" salamander that regrows body parts--and researchers are using it to study human regenerative medicine.

Iowa Pork Conference: More than 5,000 people from a dozen-plus states descended on Des Moines for the largest U.S. winter swine show.

Depends Which Way the Wind Blows: The controversial hog confinement issue might include a "scratch-and-sniff factor."

Food Science and Safety News
Nugget Recall (video): Two major companies are reporting recalls of chicken meat—with a special focus on concerns that some chicken nuggets may be contaminated with rubber.

Food for Thought: Iowa State researchers discovered a satiety hormone that, at higher levels, might decrease a person’s likelihood of developing Alzheimer’s disease.

Meat in Many Forms: As this article points out, we will always eat meat, but some of it will be “meat.”

The Name Game: Following Missouri, Nebraska is the second state legislature to express interest in preventing meat substitutes from being labeled as meat.

Millennial Power (opinion): This writer says millennials have been unfairly stereotyped. She thinks the group is affecting global spending, and brands have to consider their preferences—including labels and sustainability.

Weight-loss Woes: From cigarettes to tapeworms, some of the oddest weight-loss schemes of the past were also unhealthy.

Label Literacy: This article looks at why label literacy is a key to healthier food choices.

Process Labeling of Food: Check out this CAST science-based issue paper about the impacts labeling has on the food industry.

Plant Agriculture and Environmental News

Seed Research: At Purdue University, an innovative seed grant program is meeting its goal of encouraging collaboration among researchers.

Shovel in the Corn Cobs: This pilot-scale system for bioreactor research is unlike any other, as Iowa State scientists are using corn cobs instead of wood chips to produce results.

Soybeans for Biofuels: The European Union approved U.S. soybean exports to be used in the production of biofuels.

Ethanol on the Move: Exports of U.S. ethanol could hit a record 4 billion gallons a year in 2020, according to this economist.

Freezing Out Pests: As this Cornell article points out, freezing temperatures might actually be good for crop farmers—the cold helps manage pests.

Sniff, Sniff: Plants don't need noses to smell. Research suggests that the ability is in their genes, and the discovery might lead to new ways of influencing plant behavior.

The Power of Prairie Strips: Monoculture fields can affect soil, nutrients, groundwater, pollinators, wildlife diversity, and habitat—some say prairie strips can help modify negative effects.
**International News**

**Gobbling Up the Snow (video):** Called the "pawed snow loader," this loud, hissing machine comes out when the Russian snows get especially deep.

**Using Tech to Save Elephants:** These wildlife enthusiasts leverage technology on behalf of elephant survival, with the aim of locating elephants and the poachers who seek to kill them.

**Exotic Cow Feed:** Adding a blend of clove, eugenol, thymol, and vanillin oils to the diets of feedlot-raised cows may improve animal performance and feed intake without antibiotic use, say researchers in Brazil.

**Bio Beans:** The Nigerian government approved the environmental release of the nation's first genetically modified food crop--pod borer-resistant cowpea, popularly called beans.

**Chicken Feet on the Menu?** International squabbles have stopped a once-mighty chicken-foot trade.

**Tapping Yogurt Market:** Australian yogurt firms are going flat out to tap into Southeast Asia’s growing yogurt market, with their eyes on the biggest prize of all--China.

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**General Interest News**

**Beating Strokes:** Researchers at the University of Nebraska-Lincoln are preparing to bring a revolution to acute ischemic stroke care.

**More Exercise, Better Choices:** This extensive study found that after these young adults exercised for several weeks, they made better nutritional choices.

**Slam-dunk for Beef:** In partnership with the Oklahoma Beef Council, NBA player Steven Adams is promoting beef in the diet and explaining the role ranchers play in getting protein to the dinner table.

**Eyes on Mutant Coyotes:** Five coyotes with baby blues, an eye color not seen elsewhere, were photographed in California--suggesting the rare trait is proliferating.

**Old-fashioned Deliveries Today?** Major corporations are testing containers that are used and then picked up by a delivery service to be cleaned, refilled, and shipped out to consumers again.

**Old-fashioned Deliveries for Real:** This blog, Amazon Left a Pig on My Doorstep, includes a look at delivery services in the "good old days."
CAST Information

Check out CAST's page at the [YouTube site](https://www.youtube.com) 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.

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- American Meteorological Society, Committee on Agricultural and Forest Meteorology
- American Seed Trade Association
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- American Society of Agronomy
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- American Veterinary Medical Association
- Aquatic Plant Management Society
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- Corteva Agriscience, Agriculture Division of DowDuPont
- CropLife America
- Crop Science Society of America
- Entomological Society of America
- Innovation Center for U.S. Dairy
- Land O'Lakes
- Bayer
- 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

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