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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Happy Holidays

Wherever and however you celebrate the season, CAST wishes you a wonderful holiday. Check here for a look at classic winter farm photos. NOTE: The next edition of Friday Notes will be on January 4, 2019.

Nominations Are Open

Nominations are open for the 2019 Borlaug CAST Communication Award.

Blockchain, Ag, and University Students

Participants in a recent Kansas State workshop learned about blockchain technology and food systems.

Send In Ideas

CAST welcomes suggestions for future publications and projects.

December 14, 2018

The Farm Bill Nears Completion

House and Senate Give Approval

The U.S. House voted overwhelmingly to pass the compromise 2018 Farm Bill, following a similar result in the Senate. The bill is headed to President Trump's desk, and he is expected to sign it into law.

Reactions and analysis are coming in, and although some disagree with elements of the bill, most sentiment seems positive so far. This detailed summary of the 2018 Farm Bill was created by the office of House Agriculture Committee Chairman Mike Conaway. The Pennsylvania Farm Bureau announced its strong support for the bill--citing dairy assistance, funding for various programs, and the boosting of hemp production. Senator Chuck Grassley voted no because, according to him, the bill benefits the wealthiest farmers and adds hurdles for new, young farmers.

News and Views

WOTUS Ruling: The EPA and U.S. Army Corps of Engineers released a revised rule defining what constitutes "waters of the United States" for purposes of the Clean Water Act. Various farm groups and government officials praised the move, while some environmental interests did not.

Crystal Ball: The Successful Farming group published 10 predictions for farmers in 2019--dealing with crops, livestock, trade, and economics.

The Big Melt: The National Oceanic and Atmospheric Administration says human-caused climate change is transforming the Arctic.

Importance of Agricultural Research: This article states that agricultural research is geared toward efficient food production--making products plentiful and affordable. It also notes that land-grant universities are a key in this system.

Rural Broadband: The 2018 Farm Bill has provisions designed to spur broadband deployment. This could be good news for the millions of Americans living in rural areas who do not have access to high-speed internet service.

News from the Far Side of the Barn
So maybe it was not quite a Willy Wonka moment, but a German street was repaved when a ton of chocolate flowed out of a factory.

Breeding Seasons Greetings (video): This Canadian cow vet and his team added a little holiday cheer to their daily preg-checking duties.

Cosmic Food Delivery: A shipment of smoked turkey, candied yams, and fruitcake was rocketed to the International Space Station. Crew members come from the USA, Russia, Germany, and Canada.

Doin' the Snake Shuffle (video): A man in Thailand shows how to handle an attacking snake.

Strong Finish to the Year for CAST

Look Back at a Variety of Activities

The recent CAST Summary of Activities includes key events from the final four months of 2018--Marty Matlock's BCCA speech, board meetings, publications, CAST scholarship winners, new university members, and more. Click here for the full list of CAST Summary of Activities releases.

A Message from the President

Click here for the end-of-year message from CAST President Gabe Middleton. As he states, "CAST's legacy of communicating sound science, started by Dr. Norman Borlaug, has never been stronger and more exciting."

Students, Agriculture, Communication

Sarah Klopatek, a research assistant at the University of California-Davis, was one of the five students to receive a scholarship to attend the 2018 CAST Annual Meeting in Sacramento, California. Klopatek says her study at Texas A&M steered her in an ag/science direction, and she explains how her current research helps bridge the gap between cattle ranchers in California and consumers all over the world. For her, science communication is key in successfully accomplishing her goals. Check out Sarah's video here.
**Animal Agriculture and Environmental News**

**Farm-bound (video):** Cows born without horns and pigs that never reach puberty are **two scenarios that could become a reality** thanks to new gene-editing tools.

**“Green” Livestock:** This large livestock operation says it is **possible to slash carbon emissions** on farms—and it is happening now. Also, this video highlights environmental stewardship on poultry and egg farms.

**Crucial Trade Talks:** This writer says getting an agreement in place with Japan is **essential to keep U.S. beef and pork competitive** in that country.

**Antimicrobial Drugs (opinion):** These veterinary associations describe strategies that might be taken to **preserve the effectiveness of antimicrobial drugs** while safeguarding animals, the public, and the environment.

**McPolicy on Antibiotics (related to above):** The McDonald's Corporation says it will **phase out the amount of antibiotics** administered to its beef supply.

**Keeping Them Alive:** A research project involving the National Pork Board, FFAR, Iowa State, Kansas State, and Purdue will seek to increase pork producers' profits by **improving the survivability of their animals.**

**Calf Costs:** According to these Nebraska experts, right after weaning is a good time to analyze the business and see what it **costs to produce a pound of weaned calf.**

**Beefed-up Chickens?** A form of a vitamin associated with healthy aging in humans has been used by Kansas State researchers to **build muscle in chickens.**

**Meat, Allergies, Ticks, and Research:** Becoming **allergic to meat can be devastating.** Researchers consider whether or not the alpha-gal allergy has something to do with ticks.

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**Food Science and Safety News**

**Myth-busting (video):** The liquid sometimes found at **the bottom of a meat package is not blood**, but a combination of water and myoglobin.

**School Lunches:** The USDA is **relaxing school lunch nutrition standards** and giving more menu control back to schools. It focuses on flexibility for milk, whole grains, and sodium standards.

**Lunchroom Wedgies and Humble Pie (related to above):** This blog includes a look at **school cafeterias in the old days.**

**Food Cravings, Diets, and Science:** This article takes a scientific look at some **causes and effects of food craving.**

**Lab Meat?** An Israeli-based lab says it has figured out how to create the structure of **real beef from animal cells** in a Petri dish.

**Improving Use-by Labels:** A **new use-by label for milk bottles** could appear on British supermarket shelves later this year--decomposing as the liquid inside goes sour.

**Fungi as Food, Fun, and Medicine:** The organisms have a plethora of **applications that can benefit humankind** in the production of food, alcohol, medicines, biofuels, washing detergents, and even LEGOs.

**Food Faux Pas:** The USDA and North Carolina State found that Americans are practicing **some disturbing food-handling behaviors** when they prepare food at home.

**Public Opinions about Food:** This survey examines **what American consumers think** about food additives and GMOs.
Cyborg Plant: This plant is interfaced through its own electrochemical signals with a robotic extension that drives it toward light.

Soybean Trends: Reports indicate that Chinese importers have purchased a large amount of American soybeans lately. And as this map shows, U.S. soybean yields have been high this year.

Sorghum Farming (video): This Missouri farmer shows each delicate step of creating sorghum—planting, cutting, pressing, cooking, and finally canning.

All We Have to Fear Is Fear Itself? The winners of this year’s Nobel prize for chemistry say overblown fears about genetically modified foods might prevent society from the benefits the technology could bring.

A Beneficial Cover Up: University of Kentucky researchers are studying the best way to seed cover crops into double-crop soybeans, and they are determining which cover crops provide the greatest nitrogen benefits.

Drug Defense: Cancer-fighting drugs used on humans can help plants fight disease—helping scientists develop new pathways for plants to battle infection.

Microbial Benefits: Scientists say microbial products have the potential to help farmers better manage nutrients and slay pests.

Hog Manure Management: Researchers are looking for new ways to use hog manure for fertilizer—comparing the use of liquid hog manure in side-dressing applications.

International News

Barnyard Karaoke (videos): A singing donkey from India has become an Internet sensation—although some still prefer the goats that sang along with Taylor Swift.

Ag in the Ukraine (video): This Ukrainian release looks at the country’s agriculture sector—its impressive growth and potential.

Cybertongue: A "cybertongue" that rapidly detects lactose and spoiled milk has been developed by Australian scientists. It uses biological sensors to improve food safety.

Beefin' Up in Morocco: U.S. beef has been granted access into Morocco after a previous prohibition on beef imports.

Keeping Pigs Safe (opinion): This pig expert says that the ongoing spread of African swine fever in China points to the use of swill as a culprit.

Genome-edited Foods in Japan: A health ministry panel in Japan said that most foods currently under development using genome editing can be marketed without safety screening by the state.

Water Issues: EU cities and regions are examining the scope of proposed water-use regulations, from agriculture irrigation to urban green spaces—and this link looks at Brazilian farmers who join special environmental water projects.

General Interest News

Student Ingenuity (video): A Milwaukee college student started a company that uses passive solar dehydrators to support agriculture in...
Canine Loyalty: A dog that survived a catastrophic California wildfire guarded the family home for weeks.

Eye in the Sky: Cal Poly drones help farmers monitor strawberry growth from the sky.

Researchers Go Glacial and Go Out on a Limb: Two University of Florida Ph.D. candidates are going to extremes for science. Christina Davis joined a team of scientists to explore Mercer Subglacial Lake in Antarctica, and Jesse Borden climbs trees to study habitat loss and degradation for reptiles and amphibians.

Bee Vaccine: Researchers say they've made the first-ever vaccine for insects—aimed at helping struggling honeybee populations.

The Dangers of Ecotourism: This anthropologist says that travelers' desire for intimate encounters with wildlife may threaten the animals—and the tourists.

Can You Say "Toxic"? The 2018 word of the year refers to poisonous substances, but metaphorically it can relate to workplaces, schools, cultures, relationships, and more.

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.

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* American Meat Science Association
* American Meteorological Society, Committee on Agricultural and Forest Meteorology
* American Seed Trade Association
* American Society for Nutrition Nutritional Sciences Council
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* American Society of Agronomy
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* Monsanto
* National Corn Growers Association/Iowa Corn Promotion Board
* National Milk Producers Federation
* National Pork Board
* North Carolina Biotechnology Center
* North Central Weed Science Society

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CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.

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