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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Science--Something Incredible

Yes, science can be frustrating, disruptive, or even dangerous. But Carl Sagan once said, "Somewhere, something incredible is waiting to be known." Scientists are searching for the incredible--and the practical.

The current pandemic has brought out even more of a focus on science and technology, not only in the fields of medicine, but in all areas--including agriculture. Through its publications and social media, CAST constantly emphasizes science--see page two below for the latest. Friday Notes editions feature many links to science-related stories throughout the newsletter--the following are just a few examples:

1. As the Cornell Alliance for Science points out, many are worried about the strong presence of a "general anti-science buzz" in the United States.
2. A branch of the National Institutes of Health is establishing a clinical trials network to test vaccines for COVID-19.
3. Groundbreaking discoveries in livestock breeding are taking place at UC-Davis.
4. Penn State researchers are using flavonoids from a specific line of corn to act as anti-inflammatory agents in mice with an inflammatory-bowel-disease-like condition.
5. In this research, a machine-learning algorithm uses features of resistant proteins to identify drug-resistant genes in bacteria.

Events and Announcements

The annual Texas A&M Beef Cattle Short Course set for Aug. 3-5 has extended the early registration deadline to July 15--the event features live demonstrations.

The newsletter from the Association of American Veterinary Medical Colleges includes stories about antiracism in academic veterinary medicine, the strong demand for veterinary education, and more.

The Successful Farming media outlet posted its top ten news stories of the first half of this year.

The 2020 Farm Progress Show and Husker Harvest Days have been canceled due to "changing conditions related to the pandemic.

News and Views

USDA Coronavirus Assistance Program: The USDA announced an initial list of additional commodities that have been added to the Coronavirus Food Assistance Program--and the department has made certain adjustments to the program.

USMCA Optimism: Many are hoping the new USMCA trade deal will provide U.S. agricultural sectors a substantial boost.

Dakota Pipeline Ruling: A federal judge ordered the Dakota Access pipeline to shut down until more environmental review is done. This spokesperson from the Standing Rock Sioux Tribe praises the decision; some North Dakota officials say the move is detrimental.

News from the Far Side of the Barn

A Little Respect for the Naked Mole Rat

Naked mole rats are not known for their beauty, but they live surprisingly long lifespans, have organized colonies, feel
No longer so cute and cuddly, Chance the Snapper—the famous Chicago gator—is now big and “friendly” at his new Florida home.

The Kentucky Beef Quality and Care Assurance Program is moving online.

CAST welcomes ideas for future publications and projects.

CAST Social Media

CAST Student Study Guides and Upcoming Publications

CAST offers student study guides for the four papers shown in the graphic above. Each study guide can be found by going to the paper's landing page on our website, under the "Publications" tab. Dr. Anna Dilger (University of Illinois and CAST incoming President-Elect) had the idea for the student study guides. She said, "When schools nationwide moved to remote learning this spring, there were so many teachers scrambling to find resources to use in their newly online classrooms. Our CAST commentaries and issue papers are certainly great resources, but with everything else going on, they might be a little difficult for a teacher to pick up and use right away. The goal of the study guides was to help shortcut that process. Through the study guides, we highlight the main topics of newly released CAST papers, and then provide questions that ask students to think more deeply about the issues. We hope that teachers and students alike find them useful and that this tool attracts even more people to engage with CAST."

The webinar for Economic Impacts of COVID-19 on Food and Agricultural Markets was recorded and is available online, along with the commentary, Ag quickCAST, and Student Study Guide. You can view the COVID-19 webinar update here.

On Monday, July 27, the new CAST commentary, Impacts on Human Health and Safety of Naturally Occurring and Supplemental Hormones in Food Animals, will be released. On July 28, there will be a webinar session featuring the authors. The registration link for the webinar will be available next week.

Upcoming Publications

- Impacts on Human Health and Safety of Naturally Occurring and Supplemental Hormones in Food Animals
In addition to raising bison for their meat, an Indiana farm gives tours. In the wild, bison can be dangerous, as a tourist in Yellowstone recently discovered the hard way.

This CAST Issue Paper looks at Food Loss and Waste. One topic focuses on packaging dates—see related links at left.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 science visual from nature.com and gator pic from blockclubchicago.org. Animal Sec. buffalo collage from dailymail.co.uk and kdit.com. Plant Sec. woman photo from spokesman.com. Inter. Sec. computer pic from rollingstone.com. Gen. Sec. tractor pic from fginsight.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.

Animal Agriculture and Environmental News

Proper Management (video): A Minnesota rancher explains how proper management of his cattle has increased the organic matter in the soil—improving the health of his cattle, the abundance of wildlife species, and his corn production.

Beef Embryos and Dairy Cows: Touting a new alternative to dairies, these companies are now selling $55 beef embryos to be put in dairy cows that don't produce well.

Colorado Poultry Law: Colorado egg producers were given a deadline by the state legislature to convert all hen housing to cage free by 2025.

Pig Guide: Kansas State University swine specialists updated their popular nutrition guide with the latest recommendations for nursery pigs, sows, and finishing hogs.

Packing Plant Workers: CDC information indicates that Latino workers at meat and chicken processing plants have been the hardest hit by the coronavirus. And while the country's largest meat processor defends its practices, it is drawing criticism from many advocacy groups.

Beef Niche Market: Navajo ranchers are raising premium beef—a niche market creating high demand.

Swine Genome: Scientists decoded the whole genetic make-up of pigs, and they say it will facilitate the discovery of genetic variations linked to key traits.

Food Science and Safety News

Government Food Program: The USDA praises its Farmers to Families Food Box Program, and this editorial calls it a win-win situation. However, it has drawn criticism from some food banks, analysts, and officials.

United We Steak: This summer grilling campaign showcases 50 steaks and all 50 states, celebrating shared traditions.

Consumer Preferences: A publication from Jayson Lusk, Ellen Van Loo, and Vincenzina Caputo looks at consumer preferences for farm-raised meat, lab-grown meat, and plant-based meat alternatives.

"Out There" Ice Cream Flavors: If you thought bacon ice cream was cool, wait until you hear about these ice cream flavors you can make at home!

Berry Good: Raspberries and blackberries were the fastest-growing fruit categories in the produce department during the period from 2006-08 to 2016-18, based on average annual per capita consumption.

Use-by Dates: A Food Safety News survey indicates that consumers are changing their behavior related to "use-by dates" during the pandemic.
Plant Agriculture and Environmental News

**Fluctuating Corn Projections**: Although a recent USDA report says corn acreage is above average, the estimates are now well below the intended planting projections from March. Note: Many eyes will be on the USDA's monthly supply and demand report (WASDE) that comes out later today, July 10.

**Conservation Options**: A think tank based at Iowa State University published the *Whole Farm Conservation Best Practices Manual* to aid farmers in selecting the appropriate conservation measures.

**Pesticide Decisions**: Agronomists and farmers use integrated pest management to decide whether or not pesticide application is warranted.

**Urban Agriculture and Pesticides**: Tuskegee University faculty entered a new partnership that will study pesticide risks near urban agricultural communities.

**Cookin' Up Plastics**: Scientists are using a sophisticated version of the household microwave to "cook up" biobased plastics made from corn, soybeans, and other renewable sources.

**Improving Plant Vitality**: University of Nevada-Reno scientists are working on plant tissue engineering that improves drought and salinity tolerance.

International News

**Grocery Shopping in a Pandemic**: This Canadian company believes it has come up with a potential solution to the grocery store conundrum—a mobile supermarket in a semi-open truck that offers shoppers social distancing measures.

**Global Farm Subsidies**: The OECD said the 54 leading countries of the world spend roughly $700 billion a year on farm subsidies, equal to 12% of gross farm revenues.

**Study Shows Plant-based Milk Lacking Nutrients**: A study of 115 plant-based milk products sold in Australia were found to have less vitamins, calcium, and protein than milk from cows.

**Pork Import Problems**: China has suspended imports from two Brazilian pork plants because of coronavirus concerns.

**Water Quality**: A research team at Swansea University developed a new method for fast removal and detection of wastewater pollutants that come from everyday pharmaceuticals.

**Pandemic Updates from India**: Coronavirus lockdowns continue in India, and two firms indicate positive developments for a COVID-19 vaccine—although many experts downplay certain medical claims.

General Interest News

**Swarming and Destroying (video)**: This close-up look at the locusts devouring the world's crops uses 3D and augmented reality to enhance the experience.

**Animals and Social Distancing**: Researchers from the University of Florida and other schools have found that lobsters, birds, and some primates are using the quarantine to ward off infections.
**Eco-friendly Packaging:** Many retailers have adopted environmental communication via the How2Recycle program label, a standardized labeling system that communicates recycling instructions to consumers.

**Marine Life:** Worldwide commercial fishing has dipped during the pandemic, but scientists and conservation experts say it's unclear if the slowdown will help endangered species of marine life recover.

**How Does Your Oyster Grow?** Underwater soils are involved as oyster aquaculture is stirring up the conventional definition of agriculture. These university researchers add data to the "life aquatic."

This study used a new methodology to calculate spatial coverage efficiency from tractor guidance systems.

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* American Meat Science Association  
* American Meteorological Society, Committee on Agricultural and Forest Meteorology  
* American Seed Trade Association  
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* Bayer  
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* National Corn Growers Association/Iowa Corn Promotion Board  
* National Milk Producers Federation  
* National Pork Board  
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* University of Nevada-Reno  
* U.S. Poultry and Egg Association  
* 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**
Note: Land O'Lakes supports the delivery of Friday Notes to NAAE

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