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
Plant & Environmental News
International News
General Interest News

Events and Announcements

CAST released the issue paper Agriculture and the Microbiome and hosted an insightful discussion and informative Q&A session—see page two below for information.

As reported in the NAAE Monday Morning Monitor, the National FFA Organization and RFD-TV will ensure FFA members and supporters are able to view the 93rd National FFA Convention & Expo—October 27-29.

The University of Nebraska Extension offers open access to its weed management and cover crop field day information.

Check the World Food Prize website for general information and registration forms for its International Borlaug Dialogue October 12-16.

CAST College Corner

Iowa State University researchers

Back-to-School Complications
Fire, Floods, and Virus

From preschool to postgrad, education programs are gearing up, but the old back-to-school slogan has taken on unwelcome connotations this year.

For example, the agriculture/science university members of the CAST education program are dealing with a variety of challenges.

UC-Davis staff and students (above) have been putting out fires, caring for injured people and animals, and providing emergency housing. Texas A&M-Galveston students followed a mandatory evacuation due to the emergencies caused by Hurricane Laura. Of course, the pandemic is affecting schools worldwide, and as this article points out, universities are often scrambling to react to infections that emerge as classes are starting. Many schools, such as the University of Nevada-Reno, will provide fully online programs for those who choose them, and some schools, such as Cornell University and Texas A&M, feature COVID-19 tracking dashboards.

News and Views

Powerful Storm Affects United States: Hurricane Laura left at least six dead and a trail of destruction in Louisiana, while many states are suffering property, agricultural, and environmental effects. Recovery efforts are underway.

USDA, EPA, and Sustainability: The USDA and the EPA announced the Next Gen Fertilizer Challenges, a competition to advance agricultural sustainability in the United States.

Food Aid: The administration announced an additional $1 billion for the Farmers to Families Food Box program.

Herbicide Resistant Weeds: New information about genome research regarding waterhemp, smooth pigweed, and Palmer amaranth is now available to help with product development in...
received a grant to further genetic improvement of livestock. University of Florida research is looking at the science behind the well-known 6-feet social distancing guideline. Kansas State University researchers study wheat for grazing and grain—known as a dual-purpose system.

Check throughout Friday Notes to see more featured articles from member universities.

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CAST welcomes ideas for future publications and projects.

CAST Updates

Agriculture and the Microbiome

CAST Issue Paper 68

Thank you to everyone who made the paper and webinar a success!

Megan Andrews, Co-chair, North Carolina State University
Ignazio Carbone, Co-chair, North Carolina State University
Andrew Binder, North Carolina State University
Natalie Breakfield, NewLeaf Symbiotics
Owen Duckworth, North Carolina State University
Kirk Francis, BASF
Susanna L. Harris, University of North Carolina at Chapel Hill
Linda Kinkel, University of Minnesota
Jan Leach, Colorado State University
Gregory Maloney, Q&A Panelist, Novozymes North America, Inc.
Keclu Milcaus, SAS Institute, Inc.
Elizabeth Shank, University of Massachusetts Medical School
Elizabeth Stulberg, Q&A Panelist, Alliance of Crop, Soil, and Environmental Science Societies
Carolyn Young, Q&A Panelist, Noble Research Institute
Sherryf Yu-Su, Novozymes North America, Inc.

The new CAST Issue Paper, Agriculture and the Microbiome, was released on Monday. The webinar on Tuesday had 653 registrants. You can find the recorded webinar, issue paper, Ag quickCAST, and student study guide on the website.

The newest blog covers the Agriculture and the Microbiome issue paper and highlights the topics discussed during the webinar. There will be a document posted in the near future that covers the webinar Q&A discussion.

Upcoming Publications

- The Importance of Communicating Empirically Based Science for Society (Available September 21 with a webinar on September 22)
- 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

Poultry Production: North Carolina A&T State is part of a USDA-funded research team studying the sustainability of antibiotic-restricted poultry production.

A Call for Biotech Innovation for Animals (opinion): This editorial says the system for regulating animal biotechnology is driving innovations to other countries.

Raspberry Delight: Apparently, mixing fruity flavors such as raspberry through the feed encourages a pig's appetite.

Communicator: Dr. Frank Mitloehner (UC-Davis and 2019 BCCA winner) is setting the record straight on cows and climate change. His twitter handle has garnered 19,000 followers and millions of impressions a month.

Here’s the Beef: The Beef Quality Assurance Program provides beef producers the tools needed to produce a safe and nutritious beef supply.

Artificial Intelligence and Livestock: Farmers are adopting tools that help them monitor their livestock, and the AI market size is expanding rapidly as a result.

Crossbreeding Cows: New research has found strategic crossbreeding of cows can improve fertility and result in more efficient milk production in dairy herds.

Food Science and Safety News

A Hunger Pandemic: The coronavirus pandemic could double the number of people around the world who face severe hunger every day, according to a report from CARE.

Food Supply Chains: This recent Jayson Lusk (Purdue and 2017 BCCA winner) blog focuses on unscrambling COVID-19 food supply chains.

Food and the Virus: While Chinese authorities are requiring additional tests on frozen meat and poultry for traces of the virus that causes COVID-19, this scientific review by researchers from North Carolina State and the American Frozen Food Institute finds that SARS-CoV-2 cannot be spread by foodborne routes.


Stamp Your Pork Passport: The Real Pork Program will begin in September and focus on “Pork as a Passport”—a culturally relevant protein around the world.

Plant Agriculture and Environmental News

Mother of the Forest (video): A wildfire swept through California’s oldest state park, but many ancient redwoods, some 2,000 years old, appear to have survived—including one called the "Mother of the Forest."
Corn Woes: Hot, dry weather across the Midwest in recent weeks is causing premature corn death in some areas.

Wheat Yields: A five-year study in North Carolina tested full-season crop yields compared to double-crops.

Hot Potato: A new potato variety will be available on store shelves this fall.

Tracing Biofortified Seeds: Scientists assess the use of blockchain to track the impact of biofortified seeds to improve trust.

Plant Gene Editing: Iowa State University researchers received a grant to develop a gene editing technique to improve switchgrass and sorghum.

Tree Fruit Guide: A Penn State publication provides growers a one-stop information source on the production, regulatory, and social complex of producing tree fruit.

Researchers are seeking approval to restore the iconic chestnut to American forests by using a genetically engineered variety that can tolerate the blight that has killed billions of wild trees.

International News


Wildlife Corridors: Experts propose wildlife corridors linking protected reserves to promote the survival of animals such as leopards in South Africa.

Making the Most of Muck: A livestock farm in Japan is improving the environment and revitalizing local industries by producing biogas from livestock excreta to “create sustainable and vibrant industries.”

Salty Seaweed: Australia's CSIRO announced a company that will bring methane-busting seaweed to market.

An Icelandic Mania: Most Icelandic pools are outdoors--heated geothermally--allowing Icelanders to enjoy their daily swim no matter the weather.

Gains from Biotech Seeds: This report says biotechnology remains a strong investment for African farmers.

A family in Australia hit the jackpot after finding two gold nuggets worth more than a quarter of a million dollars.

General Interest News

Pepperoni and Cheese, Please (video): During the pandemic, people have been turning to comfort food, including pizza. Some restaurants are seeing a boost in prices for some of the key ingredients.

Wild Birds and Food Safety: A University of Georgia researcher says natural habitats around farms should be preserved, as they may be beneficial for both food safety and wildlife conservation efforts.
Soybean Oil Making the Cut: Missouri University professors are working on using soybean oil to replace a mixture of water and petroleum in industrial metal cutting.

Robot-proof Jobs? According to this expert, artificial intelligence has become so technologically advanced even some high-skilled biomedical jobs are being influenced.

Preserving Biodiversity: New Guinea hosts more than 13,600 vascular plant species.

Oooh, That Smell! At Cal Poly, a rare corpse flower created a learning opportunity for students and the community.

Digging for Bones: Undergraduate researchers found a 1.5 ton triceratops skull in South Dakota.

This profile of Dr. Khali Jones explains how she achieved her childhood dream of being a veterinarian by studying at Tuskegee University and now working with the USDA Food Safety and Inspection Service in Atlanta.

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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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* 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
* Western Society of Weed Science
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