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.

May 29, 2020

Universities Adapt and Thrive
Research, education, and community activities

Campus classrooms, artistic presentations, and sports venues have been quiet the past few months, but universities have remained relevant and important in many ways. Education continues in varied forms; research remains vital in the search for COVID-19 solutions and many other areas; and staff members and students have been actively involved in community activities such as health, safety, and food supplies. The following links provide a sampling of the many positive stories coming from universities.

1) University of Georgia faculty members helped produce a COVID-19 safety video in Spanish that could be incorporated into farm employee training. (2) Mississippi State University officials are supporting emergency management plans and participating in food drives. (3) A student from the Tuskegee University School of Veterinary Medicine points out how diversity in the program has been especially beneficial. (4) University of Arkansas legal experts offer information resources on COVID-19. (5) UC-Davis researchers are using CRISPR on a fish identification study, and hoping this can revolutionize environmental monitoring. (6) A University of Kentucky researcher is part of an international team of scientists that have discovered how plants forget—and yes, they need to for certain flowering purposes.

Watch for more stories and announcements from universities throughout this newsletter and every week in Friday Notes.

News and Views

USDA Information: (1) Farmers can begin signing up for the USDA's Coronavirus Food Assistance Program, and (2) the department is investing in 106 projects to improve water and wastewater infrastructure in rural communities in 36 states and Puerto Rico.

Market Volatility: There is increasing concern the phase one trade deal could unravel as tensions rise between the U.S. and China. Grain markets could be affected. For example, China currently imports more
A web-based service developed by Cal Poly students is connecting consumers with local farmers.

The hysteria about murder hornets has died down, and this Ohio State University expert has calm, scientific insight into the insect.

With a lot of work, creativity, and collaboration, the University of Nevada-Reno has managed to make resources available to students, staff, and faculty during quarantine.

A USDA-NIFA program provided financial support for agricultural students at North Carolina A&T State University.

University of Missouri researchers discovered spiny pollen from a native wild dandelion species in the Rocky Mountains has evolved to attach to traveling bumblebees.

CAST welcomes ideas for future publications and projects.

CAST Social Media

Dylana Luett Joins CAST

Recent ISU graduate takes on communications and social media tasks

Dylana Luett recently graduated from Iowa State University with a degree in agricultural business, and minors in animal science and entrepreneurial studies. That was part of the plan, but what has followed was not. She had expected to be with fellow study abroad students in Germany this spring, but the world changed for us all, and Dylana has shifted gears with ease. Only days out of college, she is putting her background and education to use as the new communications and social media specialist at CAST.

Her farm background and nine years in 4-H helped her develop a love of horses, dogs, and cattle--and she has spent plenty of time in show rings. Dylana joined several agriculture-related organizations during college, and she also enjoys entrepreneurial pursuits, with an internship focused on a gardening company.

Dylana brings her experience and enthusiasm to her new position at CAST. As she points out, "I believe that an organization like this is necessary to bridge the gap between science and the public." Click here for more about Dylana.

Research to the Public: Joining with other scientists, Frank Mitloehner (2019 BCCA winner) emphasizes that research about emissions from cattle should be translated and communicated with the public sector.

Science Communication (audio): Kevin Folta (2015 BCCA winner) interviews communications specialist Vance Crowe, with a focus on agriculture, science, and Crowe's years working with Monsanto.

News from the Far Side of the Barn

"Boaring," not Boring (video): If your lunch break seems boring, add a wild boar to the menu.

Rube Goldberg Meets MJ (video): This homemade contraption took a month to build, but after 70 precise steps, the ball swishes through the net.

Wild Things (video): With elephants cruising the streets and monkeys jumping into swimming pools, wild animals are moving into human habitat. Some think this is a good trend; some might think rewilding goes too far.

Dylana brings her love of horses, cattle, and communications to CAST---but not the alligator.
Upcoming Publications (watch for access to downloads and webinars)

** Agriculture and the Microbiome; Task Force Co-Chairs Ignazio Carbone and Megan Andrews, North Carolina State University (Issue Paper, June 2020 rollout)

** Economic Impacts of COVID-19 on Food and Agricultural Markets in cooperation with the Agricultural & Applied Economics Association (Commentary, June or July rollout)

** Naturally Occurring Hormones in Meat, Milk, and Eggs and Use of Supplemental Hormones in Animal Production; Task Force Chair Robert Collier, The University of Arizona (Issue Paper, July 2020 rollout)

** The Importance of Communicating Empirically Based Science for Society; Task Force Chair Stuart Smyth, University of Saskatchewan (September 2020 rollout)

Recent Papers, Webinars, and Study Guides--and New Research from Dr. Lamm

** The annual announcement of the Borlaug CAST Communication Award is always a celebrated occasion, and CAST welcomes Dr. Alexa Lamm as this year’s winner. Lamm just had an article published in the Journal of Applied Communications about testing the impact of animating infographics when communicating about genetic modification. It was part of a USDA-funded project focused on finding a solution to citrus greening. As Lamm said, “My role was to determine how we get consumers to accept GM if it is the only solution.”

** CAST’s recent webinar focused on Stewardship Challenges for New Pest Management Technologies in Agriculture. Click here for the paper, the Ag quickCAST, the student study guide, and the webinar

** CAST’s commentary, Producing Food Products from Cultured Animal Tissues examines many factors about this rapidly developing issue. The webinar is available here, and this link leads to free downloads of the paper, the one-page summary Ag quickCAST, and the student study guide.

** An April 7 webinar hosted by CAST focused on highlights from the important new publication, Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply. A YouTube video of the webinar is available here, and the paper, a one-page Ag quickCAST summary, and a student study guide are available here (all free).

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 space pic from nbcnews.com, hornet pic from vox.com, and baby photo from youtube.com. Food Sec. photos from collage.com. Plant Sec. mud pic from pinterest.com. Inter. Sec. koala pic from can.com. Gen. Sec. plow pic from hometownsource.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.

Animal Agriculture and Environmental News

Cattle, Hotdogs, and Hard Work (video): This veteran-owned Kansas City cattle company has had booming sales because of hard work and a “hotdog catastrophe.”

Avian Feather Growth: This study looks at the pathways involved in regulating feather growth of embryonic chicks

Tough Decisions and Harsh Realities: The realities of pork production now include the many ways farmers are trying to avoid euthanizing pigs and the problems that occur when animals must be destroyed.

How to Handle Bulls: The answer--very carefully--and with advice from Kansas State University experts who share tips on how to manage bulls for optimum performance.

Another Pandemic: While the world is focused on a different pandemic, African swine fever is continuing to cause huge problems.

Fighting Swine Disease (related to above): University of Nebraska-Lincoln scientists received funding to continue
Salmon Fishing in the Pandemic Era: Coronavirus recently arrived in this Alaska bay city, and locals are trying to decide how to deal with the salmon harvest season.

Pork Processing Challenges (audio): This episode of NC-State's Farms, Food, and You looks at how slowdowns at processing plants could affect farmers and consumers for months to come.

Food Science and Safety News

Bolstering the Food Chain: Some states are providing more money to help pay for food that might otherwise go to waste, and the USDA is spending $3 billion to help get farm products to food banks.

Food Donations: This pandemic spring has changed some pathways of getting food to hungry people, but in many places, donations are helping to meet the increased need.

Try a Little Tenderness: As this study shows, many factors contribute to the act of making beef tender.

Safe Vitamin D Use: Scientists from the UK, Europe, and the USA published a vitamin D consensus paper warning against high doses of vitamin D supplement use, and they say there is no evidence vitamin D prevents COVID-19.

Heart-Healthy Nuts: Texas A&M scientists demonstrated the use of Raman spectroscopy to quickly scan the levels of oleic acid in peanuts.

Who's Eating All That Guac? Mushroom Lovers? Avocados continue to do well as sales saw a resurgence in early May. However, some are predicting mushroom shortages as production catches up to shifts in demand brought on by the COVID-19 pandemic.

Plant Agriculture and Environmental News

Pay-to-Play? (opinion): Some think farmers should get paid for practices that promote ecosystems—from carbon sequestration to water retention and more.

Ethanol on the Move? China recently waived tariffs on several U.S. products including ethanol, and some are optimistic that more imports will follow.

Supply Up, Prices Down: Corn prices keep slumping, and farmers keep planting; with supply outpacing demand, another huge crop is projected in 2020.

Helping Fruit Hang On: University of Florida researchers are trying to reduce the amount of fruit that drops from Hamlin and Valencia trees prior to harvest.

Wetland Research: In the longest running project of its kind, Iowa State University experts look at wetlands and their performance as beneficial systems for reducing nitrogen pollution.

Cover Crops and Water Quality: Cereal rye cover crops "play nice" with water quality, according to this research.

Beating These Sap-sucking Insects: Some aphids feed on the leaves of young wheat plants, resulting in lower yields. Research is developing wheat varieties resistant to all types of aphids.

Capturing Unidentified Flying Insects--and Data (related to above): Fan-driven devices are whirring away in 10 states as part of a network to gather yearly seasonal data on the migratory flight patterns and geographic
A wildlife park in Australia is celebrating the arrival of its first baby koala since bushfires devastated the area last year.

**International News**

**An Insect Plague (video):** The desert locust is considered the most dangerous of all migratory pest species, and they are doing damage in various places, especially Africa.

**Fighting the Swarms (related to above):** The World Bank Group approved a $500 million program to help countries in Africa and the Middle East fight the locust swarms.

**Rural Youth:** Canadian turkey farmers donated yet again to the “Kids Help Phone” and “4-H Canada,” two groups assisting youth in rural communities.

**Rural Education:** Because of quarantine disruptions to education in rural Peru, a UNESCO program has been helping teach organic agriculture for secondary school students.

**Turkish Delight:** Turkey hopes to export dairy products to China now that certain barriers have been removed.

**Ban on Bushmeat?** Governments and agencies face pressure to ban commercial trade in wild animals, but some say this would criminalize a way of life for millions of people.

**General Interest News**

**Robots Doin’ the Work (video):** Drones, robots, and driverless cars are being deployed to deliver essential medical supplies, prescriptions, groceries, and more while humans are staying at home.

**Ploughing or Plowing, It’s a Big Sport:** No-till practices have changed plowing, and the competition is on hold because of the pandemic, but a Minnesota man was a recent champion and his daughter (at right) is following in his furrow.

**Everything I Needed to Know I Learned in a Barn:** This blogger lists some quarantine lessons that can only be learned in a barn.

**Ag Startups:** The Wells Fargo Innovation Incubator Program has selected six new participating startups focused on agriculture technology solutions.

**The Many Uses of Cornstarch:** ARS scientists are using the versatile commodity to make products that can fight insect pests, prevent disease, and impart water resistance to surfaces.

**Farms Beneath Our Cities:** Indoor farms have been popping up from Japan to Scotland, and the “Growing Underground” site is in a World War II air raid shelter in London.

**Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives**

* Agricultural & Applied Economics Association
* American Association of Avian Pathologists
* American Association of Bovine Practitioners
* American Bar Association, Section of Environment, Energy, & Resources-Agricultural Management
* American Dairy Science Association
* American Farm Bureau Federation
* American Meat Science Association
* American Meteorological Society, Committee on Agricultural and Forest Meteorology
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.

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* The Ohio State University
* Tuskegee University
* University of Arkansas System Division of Agriculture
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* University of Kentucky
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* University of Nebraska Agricultural Research Division
* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources

Note: Land O'Lakes supports the delivery of Friday Notes to NAAE

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