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
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- Plant & Environmental News
- International News
- General Interest News

Announcements

This year’s Comedy Wildlife Photography Awards show anthropomorphic expressions from the animal kingdom.

The first all-civilian crew launched into orbit aboard a SpaceX rocket ship. As one comment said, “They are where few have come before and many are about to follow.”

The 2021 Ag Outlook Forum September 20 will gather in Kansas City—details here.

The World Food Prize community expressed its sadness on the loss of John Ruan III, the Foundation’s Chairman.

Check here for information about the 2021 Borlaug Dialogue Agenda in October.

The BIO IMPACT Webinar Series will cover important global challenges regarding the move toward a sustainable future.

CAST EVP & CEO Kent Schescke was a guest speaker on Seed Speaks, where they discussed buzz words in agriculture.

September 17, 2021

Under a Harvest Moon

"Don’t judge each day by the harvest you reap but by the seeds that you plant." Robert Louis Stevenson’s words are profound, but this time of year places a focus on grain harvesting. Producers will judge themselves by what they bring in from the fields. The recent World Agricultural Supply and Demand Estimates report gives projections, pundits speculate about yields, and scientists produce research about crop production. For example, UC Davis specialists are working with various plant varieties, micro-drip irrigation, and more. Also, CAST produces publications such as this one about integrated plant protection technologies.

The harvest will feel the effects of drought and other weather extremes, labor shortages in many sectors, and supply chain issues including hurricane-affected barge traffic. Global production issues are key also—this ASA, CSSA, and SSSA website looks at the interface of climate, agriculture, and the environment. Norman Borlaug said, "Food is the moral right of all who are born into this world.” We can join in with that sentiment: may the harvest be bountiful.

News and Views

USDA Positions: The USDA introduced more individuals who will hold key staff positions in Washington, D.C.

Meat Production Debate: USDA Secretary Tom Vilsack questions meatpacking profits and practices, but some groups dispute his comments. Many also have opinions about how the USDA should spend $500M on meat sector capacity.

NASDA Announcement: The National Association of State Departments of Agriculture announced Ted McKinney as Chief Executive Officer.

COVID Update: This regularly updated site shows how the vaccination campaign is going state-by-state. And this article provides information from North Carolina State medical experts about the effectiveness and future uses of mRNA vaccines.
CAST College Corner

University of Missouri researchers looked at worker performance and job break times.

The Iowa State University Nutrient Research Center announces funding to support water management projects.

The University of Florida is involved with a CDC study about the differences in COVID-19 severity internationally.

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CAST welcomes ideas for future publications and projects.

CAST Updates

The Impact of BCCA Recipients

Here's a look at an update of the current BCCA title holder and a combination effort she has with Tuskegee University and FFAR.

The Foundation for Food & Agriculture Research (FFAR) awarded a $189,794 grant to the Alliance for Science at the Boyce Thompson Institute (BTI) to effectively communicate the advances being made by researchers using gene editing tools to improve sustainable agriculture. “Much of our communications and outreach work has focused on South Asia and sub-Saharan Africa,” said Dr. Sarah Evanega, a BTI professor who founded and directs the Alliance for Science (and the 2021 BCCA recipient). “We’re excited to turn our attention to our own backyard, helping Americans understand the pivotal role that biotechnology can play in addressing key challenges of our time.”

FFAR and the Alliance are collaborating on a training session at Tuskegee University, an 1890 Land-Grant Institution, to engage young people in science communication and inspire them to pursue careers in plant biotechnology. “Tuskegee University is delighted to partner with the Alliance for Science in their FFAR-funded project to communicate the potential of gene editing in agriculture to stakeholders,” said Channa Prakash, dean of Tuskegee’s College of Arts & Sciences (and the 2015 BCCA recipient). “We have a long history of outreach on farming since the time of George Washington Carver here. We will especially reach out to underserved communities of color, and network with other 1890-land grant universities in this effort.”

Prakash will also be speaking at the "Changing Hearts & Minds: Talking to the Skeptical Indian Public about GMOs and Gene-Edited Food" online event on Wednesday, September 22nd. You can learn more about the event and register here.

Interactive Student Study Guides

Assistant professors, Rebecca Mott and Amy Leman, from the University of Missouri and the University of Illinois, respectively, worked together to make their students’ classroom experiences as engaging, interactive, and applicable to real life as possible while teaching during the pandemic. "We wanted to provide our students..."
with as many opportunities and connections as we possibly could considering the circumstances. We knew our students still wouldn’t have the opportunity to network or interact with each other or with industry leaders at conferences or events like they normally would because of COVID,” Mott said.

To accomplish this, both professors brought students together in virtual teams to build a program with an outside stakeholder, and CAST was chosen as one of the stakeholders. This spring, CAST staff worked with a group of their students by answering questions about CAST publications and discussing how to best utilize the interactive student study guides in the future. The students chose two CAST papers to create interactive study guides from—Producing Food Products from Cultured Animal Tissues and Food Loss and Waste. These guides will be hosted on Articulate 360. (CAST will still be offering the original student study guides released in 2020 covering its publications.) These interactive study guides aren't available yet, but watch Friday Notes and other social media platforms for their release date sometime this fall.

### Animal Agriculture and Environmental News

**Animal Agriculture in Focus:** Livestock industry leaders joined producers and government officials in a virtual forum to examine the question of how animal agriculture can sustainably feed a growing world.

**Poultry Litter:** An energy company will be adding a new renewable natural gas made out of poultry litter.

**Range Cattle Research:** This Kansas State University professor outlines current research evaluating the benefits of prescribed burning on cattle-grazing land.

"**Lay Away** Program:** Genetic engineering could generate a layer breed that produces only non-GMO layer hens, and that could help reduce male chick culling.

**Horses:** University of Kentucky specialists provide lush paddocks for the horses of a career and technical program.

### Food Science and Safety News

**Hunger Watch:** A USDA report says expansions in federal spending and charitable aid during the pandemic kept hunger levels from skyrocketing—although not all groups enjoyed the benefits equally.

**Fighting Food Deserts:** This couple is producing fresh food to promote food sovereignty in Harlem and the Bronx.

**Obesity Insights:** This article says the obesity epidemic involves not only how much is eaten, but also how the foods affect hormones and metabolism.

**Apple a Day:** Ohio State University scientists combined the genetics behind specific traits and information on chemical compounds to boost the health benefits of apples.

**Potato Healing:** A University of Nevada-Reno specialist uses biochemistry to identify genetic characteristics of the wound-healing process in potatoes to help with the damage the vegetable receives in handling and storage.

### Plant Agriculture and Environmental News

**A Crop Design Not by Space Aliens:** A University of Arkansas alum used his soybean field for a crop design to highlight the 150th anniversary of the school's founding.
With the Program: The USDA accepted offers from landowners to enroll 2.5 million acres in the Conservation Reserve—double the amount accepted last year.

Short Stature Corn: University specialists look at the advantages of short stature corn.

Field of Dreams with Good Soil: This opinion article looks at how farmers are improving their land through the use of soil health practices.

Urban Agroforestry: Urban landscapes combining trees and crops offer ecological, cultural, and economic benefits.

Linking Molecules: University of Nebraska-Lincoln chemists used a hemp-fiber mix to form multifunctional biocomposites suitable for growing plants via hydroponics.

With drought affecting many producers, some are growing crops that require less water, investing in more efficient irrigation systems, and replacing cash crops with livestock and pasturage.

International News

Goodbye Tiger (video): The National Film & Sound Archive of Australia released an upgraded version of a video of the last known surviving Tasmanian Tiger.

Hugh Carbon Intake: The world’s largest factory to capture carbon dioxide from the air began operations in Iceland.

GM Crops in Ghana: The first genetically modified crop—the pod borer resistant cowpea—will help the country deal with protein deficiencies.

Multidisciplinary Produce Project: Students in Australia are using a shipping container as a place to grow produce—and learn farming techniques, technology practices, and food preparation methods.

Going Green: The Costa Rica environmental minister has plans to build a green economy.

South Korea is enjoying a pet boom and owners are spending lavishly on their four-legged friends.

General Interest News

Tractor Time: U.S. tractor sales increased last month compared to 2020 while combine sales jumped 19.8% according to the Association of Equipment Manufacturers.

Student Power on Campus: Cal Poly engineering students have been doing research to better predict power output for different solar tracking settings—and generate more power for campus over time.

Lighter in the Sky: Penn State researchers are investigating a low-cost carbon fiber-reinforced plastic that could replace heavier material in airplanes to help reduce the amount of environmentally damaging fuel burned.

Sustainable and Tasty: According to this report, sea scallops farmed in Maine are good for the habitat.

Farming Game: This new video game gives players an introduction to modern agriculture.

Shades of Jurassic Park! A team of scientists and entrepreneurs wants to revive the long-extinct woolly mammoth.
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* National Corn Growers Association/Iowa Corn Promotion Board
* National Milk Producers Federation
* National Pork Board
* 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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