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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November 12, 2021

Harvest Time
Essential, Efficient, and Evolving

For most food producers, harvest time is filled with anticipation, worry, and a certain amount of frenzy. Prices fluctuate, yields vary, and harvest methods evolve. Farmers accept that some things—such as the weather, government policy, and mechanical breakdowns—are out of their control. The following stories provide examples of the harvest smorgasbord:

1) The recent WASDE crop report provided a few surprises and some market fluctuations. 2) The USDA says corn and soybean crops are well over 80% harvested. 3) According to NASA, climate change may affect the production of corn, wheat, and other crops within a decade.

In some ways, harvest time has become the techno future once envisioned. Electrification, autonomy, and artificial intelligence are common. Huge machines cast shadows in fields once worked with steel-wheel tractors or teams of horses. Harvesting is advancing in all areas, including automated fruit pickers and robotic tractors in vineyards. UC Davis researchers show that tech advances in wine country can help in various ways including with worker shortage problems.

Norman Borlaug once said, “There are no miracles in agricultural production.” Of course, he meant hard work and ingenuity make it happen. But in some ways, all harvests are miracles—they sustain life.

News and Views

USDA and Veterans: This department website includes information for veterans about employment, education, and entrepreneurship on or beyond the farm.

USDA Scholars: The department announced the Fiscal Year 2022 scholarship application cycle for the 1890 National Scholars Program and the 1994 Tribal Scholars Program.

COP26 and Ag: As the COP26 Conference closes, statements...
celebrating 50 years as the trusted source for credible, balanced, science-based information in 2022. Click here to access an impressive commemorative publication.

CAST College Corner

Tuskegee University won the Education Advisory Board’s Student Success Collaborative—Return to Education Award.

North Carolina A&T State University’s nursing school was named the best at a public historically Black college or university for 2022.

The University of Kentucky will hold the 2021 Kentucky Invasive Plant Conference November 16.

The University of Arkansas will celebrate International Education Week November 15-19 with in-person and virtual events.

CAST Social Media

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CAST welcomes ideas for future publications and projects.

CAST Updates

New Board of Directors Positions

Two positions have been filled on the CAST Board of Directors.

- Sara Crawford is the new work group liaison for Animal Agriculture and Environmental Issues. Crawford is the Assistant Vice President-Sustainability for the National Pork Board.

- Juan Tricarico is the new nonprofit liaison. Tricarico is the Vice President-Sustainability Research at Dairy Management, Inc. He has been with CAST since 2014, and was the 47th president of CAST.

ICYMI: Student Scholars

This year, eight graduate and veterinary medicine students from The Ohio State University received the CAST Science Communication Scholarship on October 27 during the CAST Annual Meeting in Columbus, Ohio. The recipients could choose to

Infrastructure: Commodity and ag group leaders support the $20 billion in the recently passed infrastructure bill that will go toward lock, dam, port, and inland waterway improvements.

Misinformation: A new poll says almost 8 in 10 U.S. adults believe or are unsure of at least one false statement about COVID-19. A Mississippi State University expert suggested ways to avoid becoming a misinformation superspreader, and a CAST Commentary looked at The Importance of Communicating Empirically Based Science for Society.

Far Side of the Barn

Marathon Waddle (video): A duck named Wrinkles wore red shoes and joined the New York City Marathon.

UP--for a Cause (video): A French hot-air balloonist broke the world record and raised money for medical research when he stood atop the balloon at 11,932 feet.

Ketchup on the Red Planet: A team of 14 astrobiologists worked for nine months to make ketchup from tomatoes produced on Earth in Mars-like conditions.
The CAST Science Communications Award is supported by individual donors of CAST.

Animal Agriculture and Environmental News

**Cattle Research**: The University of Missouri’s Thompson Research Center emphasizes premium cattle genetics.

**Talking Turkey**: Texas A&M experts look at the challenges of selecting and cooking a holiday bird.

**Living in a Pigsty (video)**: A former pig farmer and Emmy-award winning actor looks at modern hog operations and consumer misconceptions.

**Poultry Convention**: The Midwest Poultry Federation is hosting its annual trade show and convention, "Back to the Future," in Minneapolis, March 2022.

**Healthy Baby Pigs**: Kansas State University swine researchers and graduate students are reporting findings that could help the survival rates of newly weaned pigs.

**Where the Bison Roam**: Ranchers raise thousands of bison on tribal lands, public parks, and private preserves—as many as 50 million roamed the West in the 1800s.

**Mammal mothers display wide diversity in how they undergo pregnancy**—from elephants that carry their babies for two years to opossums that carry young for only 12 days.

Food Science and Safety News

**Global Prices**: A United Nations index shows that global food costs and agricultural commodity prices are rising.

**Food Supply and Prices**: On his blog site, Jayson Lusk (Purdue and 2017 BCCA) looks at 1) problems for the food supply chain and 2) rising food prices.

**Inflating the Turkey**: The American Farm Bureau Federation is giving early indications that the Thanksgiving feast will be the most expensive ever.

**Organic Food**: The pandemic was good for organic produce demand. Research from Rabobank looks at the reasons behind that surge and what may come next.

**RNA Innovation**: Some think sprays made from RNA might offer a more effective way to protect food in the fight against pests and fungus.

**Looking for Good Fat**: This study says eating fat can lower stroke risks, as long as it's the right kind.

To cut waste and enliven food choices, the “shelf love” trend encourages experimenting with recipes and making dishes with ingredients already at home.
Plant Agriculture and Environmental News

Saving Your Orange Juice: University of Florida researchers are helping groves infected with citrus greening by managing the timing of their fertilization.

Row Crops and Prairie Strips: Iowa State University researchers looked at the effects of converting 10% of a crop field to diverse, native perennial vegetation, and they found that it greatly reduced sediment movement.

Natural Plant Protection: Many producers are developing sustainable crop practices, including biological products known as biopesticides.

Big Dry Forces Gambling Moves: The drought in Colorado and many parts of the West is forcing farmers and ranchers to make tough decisions.

Biostimulants: These university researchers are looking for ways to help crops alongside traditional fertilizer.

Green Chili Crop: Growers of New Mexico's iconic crop are wrestling with drought, water rights, and labor shortages.

With nearly 40 million acres of lawns in the United States some are switching to sustainable landscaping with native grasses, flowers, and shrubs. Goats might be a more entertaining option.

International News

Opportunities Missed: Canadian researchers looked at the potential economic losses caused by the delay in GM crop commercialization, and some say Mexico's struggling corn production needs GMOs to improve.

CAST Commentary (related to above): A publication, Gains Foregone by Going GMO Free: Potential Impacts on Consumers, the Environment, and Agricultural Producers, will be available November 15, with a webinar presentation/Q&A panel occurring on November 16—registration details here.

Flocking to an Ancient Ritual (video): The streets of Madrid were filled with sheep as shepherds guided their flocks through the Spanish capital.

Lower Pesticide Use: A United Kingdom report says many countries benefit from improved economies and healthier populations by farming genetically modified crops.

Bird Flu in Europe: Poland has reported several outbreaks of highly pathogenic H5N1 bird flu at poultry farms.

A New Zealand couple dug up "Doug," potentially the world's heaviest potato.

General Interest News

Food Security Advocate: Catherine Bertini (2011 BCCA) is a global advocate for global food security, and she helped draft recommendations for the U.S. government regarding how to build a strong foundation for nutrition programs.

Carbon Sequestration: So far, few of America’s largest farmers and ranchers are pursuing carbon contracts.

Lithium-ion Battery "Graveyard": Electric vehicle use means lithium-ion batteries and disposal challenges. A Cornell-led study is working on the problem by considering
Veterans and Ag: A veterans’ agricultural apprenticeship program at North Carolina State University will increase the impact of farmer veteran programs across the state.

Probing the Massive Red Spot: NASA scientists are using microwave sensors to probe into the 10,000-mile wide storm on Jupiter’s surface.

Some college football stadiums feature real grass, and they provide training grounds for students seeking turf grass careers.

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* Bayer
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* National Corn Growers Association/Iowa Corn Promotion Board
* National Milk Producers Federation
* National Pork Board
* National Turkey Federation
* North Central Weed Science Society
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* Poultry Science Association
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* United Soybean Board
* 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.

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