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

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**November 19, 2021**

### Impacts of Going GMO Free

**CAST paper and webinar look at the issues**

On November 15, CAST released its latest Commentary, **Gains Foregone by Going GMO Free: Potential Impacts on Consumers, the Environment, and Agricultural Producers.** For free access to the paper and the Ag quickCAST, [click here](#).

During a November 16 webinar (video here), Task Force Chair Brandon McFadden emphasized key scientific points and current realities: GMOs are safe, efficient, and environmentally friendly. According to the publication, they also boost yields, cut pesticide use, and help lessen food insecurity. McFadden made it clear that misinformation and cumbersome regulations are hindering these potential benefits.

During the Q&A session, panelists—consisting of the paper’s task force authors—reinforced McFadden’s call for positive communication efforts. Stewart Smyth pointed out that the responsibility for spreading the message runs across the board. All sectors need to join the effort. Jayson Lusk said, “Science alone is not enough.” Consumers need to feel comfortable “in their own culture” about such issues, and education will help. Ellen Goddard noted that messages have sometimes been too iconoclastic; positive information is needed. Alison Van Eenennaam explained that the term “GMO” is often used as an umbrella to include many genetic-based techniques. Focused especially on animal bioscience, Van Eenennaam shared concerns that some detractors use “fear mongering” that is easy, damaging, and not based on sound science.

The task force members are communicators as well as scientists, so they all have methods to help spread credible information. For example, Jill McClusky says that consumers are often skeptical of “the industry,” but they might listen to the insights of farmers who explain why they chose to grow GMO crops. McFadden used specific fruit to show that we need to “connect on values.” We all want bananas and papayas that are nutritious and tasty—maybe we can all agree that biotech is one way to save and even improve the food we eat. See page two below for more on this issue.

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As CAST prepares for its 50th anniversary, consider a donation on Giving Tuesday, November 30, to help the organization continue its important mission of communicating science-based information. [Click here to access the 50th anniversary]
The AAVMC Catalyze 2022 Annual Conference will be March 3-5 in Washington, D.C.

A recent IFIC conference featured women impacting science, food systems, and the public—event recordings available here.

CAST College Corner

The North Carolina State University ASABE chapter works with sweet potato farmers for fundraising opportunities. Cal Poly ranks first in the nation in a recent survey about Study Abroad Programs.

A University of Nebraska-Lincoln presentation focused on how diversity in research is integral to producing quality results. Penn State University educators examined how volunteers might be encouraged to take action regarding climate change.

CAST Social Media

Visit our website

CAST welcomes ideas for future publications and projects.

CAST Updates

The latest CAST Commentary, Gains Foregone by Going GMO Free: Potential Impacts on Consumers, the Environment, and Agricultural Producers, was released on Nov. 15, with the webinar held on Nov. 16. The objective of this commentary is to communicate the benefits of GMOs and the potential cost to society if the technology were removed from the marketplace. It looks at the benefits of GMOs to consumers, the environment, and crop and livestock producers, and it discusses realized and potential costs of restricting GMO applications. The research cited in this paper shows that GMOs use less land, energy, and chemicals, and the carbon footprint of agriculture would certainly increase without GMOs.

News and Views

USDA Positions: 1) The Senate confirmed Robert Bonnie to be undersecretary for farm production and conservation, 2) the department stated the intention to nominate Dr. Jose Emilio Esteban to serve as Under Secretary for Food Safety, and 3) it announced several individuals who will hold senior positions.

USDA Updates: The department will 1) take action to strengthen tribal co-stewardship of public lands and waters, and 2) buy 2.14 million 10- to 12-pound boxes of mixed fresh produce for the Emergency Food Assistance Program.

A Farmer’s Reflections from COP 26: A.G. Kawamura—Solutions from the Land Co-Chair, former Secretary of Agriculture in California, and former CAST Board of Trustees member—emphasizes why agriculture needs to be at the table.

Classic Meal Costs Rising: The annual Farm Bureau survey indicates the average cost of this year’s classic Thanksgiving feast for 10 is $53.31 or less than $6.00 per person. This is a 14% increase from last year.

Far Side of the Barn

Arachnophobia (video): A massive funnel-web spider, with fangs capable of piercing human fingernails, was donated to an antivenom program in Australia.

The Grinch Has Helpers (video): Supply chain issues and climate change are affecting the supply of Christmas trees.

Accidental Text Makes Thanksgiving Bond: A misdirected text message from a hospitable grandma started one of the sweetest Thanksgiving traditions this side of candied yams.
The publication, Ag quickCAST, and recording of the webinar with the Q&A session are all available for viewing on the CAST website.

Thank you to the task force authors:
- Dr. Brandon McFadden, Chair, University of Delaware
- Dr. Alison Van Eenennaam, University of California, Davis
- Dr. Ellen Goddard, University of Alberta
- Dr. Jayson Lusk, Purdue University
- Dr. Jill McCluskey, Washington State University
- Dr. Stuart J. Smyth, University of Saskatchewan
- Dr. Farzad Taheripour, Purdue University
- Dr. Wallace E. Tyner, Purdue University

New Board Updates

During the next few weeks, CAST will be welcoming newcomers onto the CAST Board of Representatives. This week we are featuring Eduardo Alvarez Santos and Eric Gonder:

- **Eduardo Alvarez Santos** is the incoming rep for the American Meteorological Society and is replacing Stephan de Wekker. He is involved with the Plant Agriculture and Environmental Issues work group.
- **Eric Gonder** is the incoming rep for the American Veterinary Medical Association and is replacing Don Sanders. He is involved with the Animal Agriculture and Environmental Issues work group.

Student Worker Blog

Daniel Richter recently joined CAST as the new student administrative assistant. He is looking forward to learning more about various aspects of finance and accounting, but also helping out around the office.

Daniel brings diverse experiences with him—including his work with a nonprofit organization that build vegetable-producing plant beds for those affected by the derecho that hit portions of Iowa in August, 2020. Read more about him on the CAST blog.

Animal Agriculture and Environmental News

**Celebrity Turkeys:** The National Turkey Federation hosted a press conference to welcome two Indiana turkeys to the nation’s capital. The birds, named Peanut Butter and Jelly, will receive a presidential pardon.

**Pork Processing:** The USDA invited nine pork processing plants to participate in a trial that allows faster line speeds.

**Win-win Situation:** This livestock expert explains how allowing cattle to graze on cover crops is beneficial for the animals and the soil.

**Methane and Ag:** A Global Methane Pledge was announced early during COP26. Even though Jeff Simmons (Elanco CEO and 2013 BCCA) admits a focus on methane is correct, he says, "Don’t scapegoat animal agriculture on the altar of climate change."

**Cattle and Methane:** Cornell University is installing four respiration chambers to see what feeds and additives can reduce methane emissions from cattle.

**U.S. poultry and egg exports** have seen significant increases in 2021.

**U.S. pork exports** are looking at ways to expand and diversify export markets.
**Food Science and Safety News**

**Better Barley, Better Beer:** To achieve the perfect barley, scientists looked to CRISPR/Cas9-based gene editing.

**Going Up:** Jayson Lusk (Purdue and 2017 BCCA) explains that consumers are facing the highest annual grocery price increases in a decade and the highest annual restaurant price increases since the early 1980s.

**Avoiding Foodborne Illness:** The USDA makes suggestions about how to lessen the chances of having a foodborne illness during Thanksgiving time.

**Holiday Food Safety:** Mississippi State University food processing specialists provide food safety specifics, including some thoughts about those ubiquitous leftovers.

**Big Plan for a Small Berry:** The University of Missouri received a USDA grant to study how to make elderberries more mainstream—the native plant is found all over the Midwest and eastern United States.

**Plant Agriculture and Environmental News**

**Biofuels:** Ethanol industry leaders continue to make the case ethanol is part of the climate solution, and they petition the administration to take action on the RFS issue. The EPA proposes giving oil refineries more time to meet a federal mandate—some biofuel groups criticized the decision.

**Soil Carbon:** An article in the *Journal of Environmental Quality* looks at how stocks of soil carbon have changed.

**Producing and Learning:** Finished with this year's harvest, these farmers try to apply what they've learned to decisions they must make for the 2022 growing season.

**Immortal Trees?** (related links below and in caption): University of Nevada-Reno researchers collaborated on a paper showing that some trees have the potential to live extremely long.

**Up in Smoke** (related links above and in caption): Some scientists warn that logging forests for bioenergy undermines the fight against climate change.

**International News**

**Cattle Rescue (video):** Community members worked together to rescue stranded cattle from farms after rainstorms caused flooding and landslides in Canada.

**Ag Ed in Africa:** A case study by Alexa Lamm (Univ. of Georgia and 2020 BCCA) and colleagues shows that a lack of extension agents impedes the effective delivery of agricultural extension services in Malawi and many other developing nations.

**Hundreds Hospitalized in Scorpion Invasion (video):** A
city in southern Egypt was hit by heavy rain, thunder, and flash floods—followed by a plague of scorpions driven from their burrows.

**Rebirth:** Decades ago, parts of the River Thames were declared biologically dead, but London’s river is now home to hundreds of species, such as sea horses and sharks.

After Russia conducted a missile test targeting an old space satellite, the International Space Station went on alert for “space junk,” and the United States voiced concern.

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**General Interest News**

**Ag Work Force:** With some American farmers relying on foreign agricultural workers, the Labor Department approved a record number of H-2A guest-worker visas.

**Swarming:** Texas A&M researchers are working to establish a configurable, adaptive, and scalable swarm system consisting of unmanned ground and aerial robots designed to assist in collaborative smart agriculture tasks.

**Robots and Ag (related to above):** Click here to access the CAST Issue Paper Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges.

**Drone Drop from Above (video):** Walmart is using autonomous drone technology in a new delivery service.

**Hotter Than the Used Car Market:** According to Bloomberg, used ag equipment prices are soaring thanks to supply chain issues, an ongoing strike, and repair difficulties of new equipment.

Ag companies and start-ups are connecting to bring technology to market more quickly, and now they are engaging farmers sooner in the process.

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**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
- American Seed Trade Association
- American Society of Agronomy
- American Society of Animal Science
- American Society of Plant Biologists
- American Veterinary Medical Association
- Agricultural & Applied Economics Association
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- American Society of Agronomy
- American Society of Animal Science
- American Society of Plant Biologists
- American Veterinary Medical Association
- *Crop Science Society of America
- *Innovation Center for U.S. Dairy
- *Bayer
- *National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- *National Corn Growers Association/Iowa Corn Promotion Board
- *National Milk Producers Federation
- *National Pork Board
- *National Turkey Federation
- *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

* indicates a non-profit society, company, or organization.
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