In This Issue....

Animal Agriculture News
Food Science & Safety News
Plant & Environmental News
International News
General Interest News

Announcements

 Cosmic discoveries, images, and space travel provided many bright spots in 2020.

 The Agri-Pulse Ag and Food Policy Summit in March will focus on “Climate Risks, Rewards and Uncertainties.”

 Agricultural businesses and aspiring ag entrepreneurs can join free business workshops during the virtual 2021 Pennsylvania Farm Show—January 11-15.

CAST College Corner

 Texas A&M University's Norman Borlaug Institute for International Agriculture seeks participants to work on hunger and poverty reduction. Applications due by February 1.

 Iowa State University's CropsTV program includes live broadcasts and chances to interact with various experts.

 UC-Davis biology students received seeds, soils, and even tiny microscopes by mail so January 8, 2021

Food Issues and Dietary Guidelines

The pandemic has intensified hunger issues and put demands on the food chain. Check throughout this edition of Friday Notes for links about food insecurity and the measures underway to help alleviate the needs.

Also, U.S. government officials have provided information about food production and consumption, including the following: (1) A USDA report about retail price changes for food categories during the pandemic, (2) an overview of agriculture and nutrition provisions in the recent COVID Relief Package, and (3) the USDA and HHS release of the Dietary Guidelines for Americans, 2020-2025. These guidelines evoked positive reactions from the NCBA, from dairy organizations, and from a coalition of stakeholders in the grain industry sector.

Many universities are contributing to make food supplies more secure. Cal Poly students provide food for families in a San Luis Obispo County school district, and the award-winning University of Kentucky "Food Connection" program is a good example of how to involve local farms and businesses in the food chain.

News and Views

COVID-19 Vaccinations: Some agriculture groups are requesting that frontline food and farm workers be prioritized soon for COVID-19 vaccinations.

Coming Ag Issue: Senator Debbie Stabenow—now expected to take back the chairmanship of the Senate Agriculture Committee—plans to work on the agricultural carbon market.

Head of NIFA: Dr. Carrie Castille was named for a six-year term as Director of the National Institute of Food and Agriculture.

Rural Issues: (1) This USDA website looks at economic issues in rural America resulting from the pandemic, (2) many rural counties do not have a pharmacy to facilitate COVID-19 vaccinations, and (3) a study shows that rural areas may lack specialty care for certain neurologic conditions.
“hands-on labs” can continue during the pandemic.

North Carolina A&T State University joined with the Environmental Defense Fund to support a summer internship program for students interested in sustainable agriculture and environmental policy.

Kansas State University launched a self-paced online course—Finances and the Farm.

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

CAST Social Media

CAST welcomes ideas for future publications and projects.

EPA Ruling: The EPA finalized a controversial rule that limits the types of studies it uses when crafting its policies, and the department did not meet a deadline to propose rules about the amount of biofuels refiners must blend into their fuel mix.

News from the Far Side of the Barn

Dancing with the Robotic Stars (video): The Boston Dynamics robots are back, showing off dance moves—and the robotic dog actually has a type of head this time!

On Thin Ice (video): A Wisconsin cranberry grower gained fame and praise for helping a doe trapped on ice.

Llama on the Loose: Two llamas spent less than a day on their new farm before they both jumped a fence. One was caught easily, but the other was lassoed 17 days later and found by using infrared drones and search parties.

CAST Updates

Meet the New CAST President

In the latest blog, you can learn about Dr. David Baltensperger and his involvement with CAST since 2014, when he joined the Board of Directors as the Society Liaison for the Crop Science Society of America. He also shares his vision for CAST with the readers.

2021 Borlaug CAST Communication Award
Nominations Open--Applications Due February 1

The Borlaug CAST Communication Award (BCCA) is an honor that recognizes professionals actively working in the agricultural, environmental, or food sectors who are promoting agricultural science in the public policy arena. This award has become an influential component in the efforts to keep agricultural issues and programs in the public eye and in front of national and world policymakers.

You can learn how to nominate and download the nomination packet on the CAST website. The BCCA has been awarded to 11 outstanding professionals.

Animal Agriculture and Environmental News
Poultry Issues (video): This site includes videos and information about how the poultry industry affects communities, and this article looks at ways to improve brooding management, poultry welfare, and production.

GE Regulations for Livestock: The USDA announced the modernizing regulations of agricultural animals modified or produced by genetic engineering.

Pork Industry Insights: The Pig Progress media group provides podcasts from around the world regarding pork topics from last year and looking ahead to 2021.

Sustainability Practices: This article looks at how farmers and ranchers produce beef in ways that prioritize the planet, people, and animals.

Poultry Line Speeds: The National Chicken Council provides information about poultry processing line speeds, although some workers claim certain practices are unsafe.

Bioinformatics and Beef: University of Nevada-Reno scientists are investigating how cattle microRNAs and the genes they influence affect the human body and health.

Pig Health: Researchers found that pigs can become infected with coronavirus, but so far no cases have been reported in domestic livestock herds.

The world's largest insect protein facility is under construction in Illinois. A Texas A&M expert explains that the livestock feed will be mainly made from black soldier flies. A pilot project in Australia also involves using black soldier fly larvae meal for livestock feed.

For a variety of reasons, more companies are offering commercial cloning services—including camels, cats, cattle, and more.

Food Science and Safety News

Before Diving In (video): North Carolina State Extension experts say that fish eaters need to consider safe preparation and storage of seafood.

Food Program: The USDA is making another $1.5 billion available for distributing fresh produce, dairy, and meat products through the Farmers to Food Box Program.

Labeling GMO Food: The deadline for compliance with the USDA labeling regulation about foods made with GMO ingredients is the end of 2021.


Cutting Waste and Hunger: These 18 organizations are recovering and redistributing food. Also, check out the CAST Issue Paper titled Food Loss and Waste.

Snake on the Menu: Florida scientists are trying to confirm that Burmese pythons are safe to eat. They hope snake on the menu will help battle this extremely invasive species.

Types of coffee, bread, and charcuterie made this list of ten food trends in 2020, while America’s largest grocery retailer said current and future trends include items that are high protein, global, fresh, and environmental.

From the sweet to the offbeat, there are many rare and beautiful apple varieties around the world.

Plant Agriculture and Environmental News

Buzz about Grass Flowers: A study from ARS and the University of Georgia looks at turf grasses and their relationship with pollinators.

Paying Farmers for Environment Protection: Big ag
companies and startups are encouraging crop producers to adopt climate-friendly practices and develop farming-driven carbon markets.

**Quality Loss Adjustment Program**: Crop and forage farmers in areas hit by natural disasters in 2018 or 2019 can apply for a new USDA ad-hoc program.

**Pest Fighters**: The USDA is allocating more than $70 million to support 383 projects under the Plant Protection Act to strengthen the nation’s infrastructure to fight pests.

**Corn Residue and Cattle**: This University of Nebraska-Lincoln grad student presented information about the interactions of cattle grazing and crop productivity.

**Grapes, Wine, and Climate**: Climate change could make some grape-growing regions too hot and dry to produce high-quality wine, but scientists are working on solutions.

**A UC-Davis professor and others are working on ways the agriculture industry can conserve water—including various probes, sensors, and automated irrigation systems.**

Many universities offer eco-friendly programs, such as these from the University of Florida.

---

**International News**

**Drone Versus Farmer (video)**: This biotech advertisement is in German, but the farmer’s aim is not lost in translation.

**Organic Equivalency Agreement**: With the new year, all products certified by the USDA as organic can be marketed as such in the United Kingdom, and the regulations are reciprocal.

**Gatekeepers and Research Analysis**: These experts say it is important to understand the implications of conducting studies in countries where gatekeepers are involved in the research process.

**Genetic Diversity**: A Cameroonian geneticist is using Africa’s livestock genetic diversity to help the 1.3 billion people who depend on livestock for food and income.

**Modified Eggplants**: This study indicates that Bangladeshi farmers reduced pesticide use and increased profits by growing genetically modified eggplants.

**Soil, Seeds, and Sowing**: German researchers explain how farmers grow crops in more coarse (rocky) soils.

The giant whirling machine in the Netherlands is a test model for a new series of giant offshore wind turbines that have the potential to power cities.

---

**General Interest News**

**Robots in the Air and on the Water**: North Carolina State University researchers are using robots to increase marine aquaculture yields, ensure food safety, and decrease the pressure to harvest wild seafood.

**There’s an App(s) for 2021**: This list of *best ag apps for 2021* looks at innovative ways to solve problems, increase knowledge, and connect businesses to customers.

**Adding Muscle to Protecting Mussels**: As reported by the University of Missouri, some Midwest freshwater mussel species are endangered, and the U.S. Fish and Wildlife Service is trying to help.

The online game FarmVille has been
Helping Hands: These Maine farmers are helping others in the community get through the pandemic.

Food Bank Aid: This farm couple has been selected as the Cornell Alliance for Science 2020 Farmer of the Year for the food bank they have set up during the pandemic.

"foreclosed"—and there is some discussion about the mixed legacy of this decade-old digital phenomenon.

Photo Credits

P. 1 space pics from cnn.com, food map graphic from nycfoodpolicy.org, and robot pic from dailymail.co.uk. Animal Sec. cow pic from pinterest.com. Food Sec. food trends pic from washingtonpost.com. Plant Sec. water diagram from thepacker.com. Inter. Sec. wind turbine pic from bizjournals.com. Gen Sec. Farmville graphic from voi.id.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.

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 for Nutrition Nutritional Sciences Council
* American Society of Agricultural and Biological Engineers
* American Society of Agronomy
* American Society of Animal Science
* American Society of Plant Biologists
* American Veterinary Medical Association
* Aquatic Plant Management Society
* BASF Corporation
* Cal Poly State University
* Corteva Agriscience
* CropLife America
* Crop Science Society of America
* Entomological 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
* 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

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.

Members of CAST’s Education Program

* Cal Poly-San Luis Obispo
* Cornell University
* Iowa State University
* Kansas State University
* Mississippi State University
* North Carolina Agricultural and Technical State University
* North Carolina State University
* Penn State University
* Texas A&M University College of Ag & Life Sciences
* The Ohio State University
* Tuskegee University
* University of Arkansas System Division of Agriculture
* University of California-Davis
* University of Florida Institute of Food and Agricultural Sciences
* University of Kentucky
* University of Missouri-Columbia
* University of Nebraska Agricultural Research Division
* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources
** With assistance from Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)

CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Colleen Hamilton at 515-292-2125 or chamilton@cast-science.org, or CLICK HERE for CAST membership information.