**February 5, 2021**

### Agriculture in the Era of COVID-19

Food producers face many challenges, but the pandemic added an unexpected twist. From crowded processing plants to the legendary wide-open spaces, the important mission of getting enough food to consumers carries on.

These links provide a sample of the issues facing the world of agriculture: (1) The USDA provides information about coronavirus and assistance available for farmers. (2) This site lists many articles about coronavirus on the farm—including such topics as individual farmer practices, pertinent research, and government programs. (3) Agriculture organizations such as the AFBE and the NFU post websites with coronavirus information. (4) This USDA report indicates that rural residents appear to be more vulnerable to the effects of coronavirus. (5) Health officials and activists are trying to get vaccines to those they consider essential farm laborers. (6) Many local markets with direct-to-consumer sales have prospered during the pandemic.

### News and Views

**Vaccine News**: Johnson and Johnson requested emergency use authorization from the FDA for a third coronavirus vaccine. It has appealing aspects regarding storage and its effectiveness at keeping recipients out of hospital.

**New Appointees and Rural America**: This article includes varied insights about what the new administration’s appointments might mean for rural America.

**EPA and Science**: A federal judge ruled on the issue of which scientific studies the EPA can use for public health decisions.

**Farmside Chat (video)**: Beth Ford and Zippy Duvall discuss challenges facing agriculture and the food supply chain.

**Campus Update**: Colleges, universities, and community colleges are mixing in-person and online education.
Veterinary Medicine study analyzed the effects of transporting tranquilized rhinos upside-down.

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

CAST Social Media

Visit our website

CAST welcomes ideas for future publications and projects.

CAST Updates

Student Study Guides

Are you a professor looking to refresh your course with some up-to-date content? Are you teaching online this semester? Do you know someone who could benefit from using CAST publications? We have you covered. All of our 2020 publications have a webinar and student study guide available to download for free. Check out the list of nine publications and student study guides we rolled out last year.

Click. Contribute. Communicate.

Please support CAST's efforts to communicate credible science through membership or a donation today. CAST's success in countering misinformation and continuing as a voice for sound science in the future—as we have in the past—depends on your membership and donations. If you are already a CAST member—and haven’t renewed yet for 2021—please renew today!

Animal Agriculture and Environmental News

Egg Production (audio): This edition of North Carolina State's “Farm, Food and You” involves a fourth-generation egg producer who builds on long-held family values.

Beef Biosecurity: As explained by a beef specialist from The Ohio State University, producers could benefit from the Daily Biosecurity Plan for Disease Prevention—links to resources here.

Pig Performance: This article looks at how pig performance can be helped by proper management and proactive responses that are enhanced by online data and support.

Where the Cattle Roam: A University of Missouri livestock economist examines the latest USDA Cattle Inventory
Report and the changes on a state-by-state basis.

**Pork News:** The Iowa Pork Producers Association announced the winners of its pork producers awards, and this site covers some updates about pork companies.

**Lofty Dairy Goals:** The dairy industry set a bold agenda to reach the goal of net zero GHG emissions by 2050.

**Cattle Disease Research:** A new project involving experts from Cornell and Texas A&M aims to mitigate risks certain diseases pose to the cattle industry.

---

**Food Science and Safety News**

**Waste Not (video):** Tossing leftovers isn't just wasting food—it also affects land, water, and energy use.

**Issue Paper Resource** (see above): Click here to access the CAST publication Food Loss and Waste.

**Try a Little Tenderness:** Kansas State meat scientists studied beef cuts to see how fat content, connective tissue characteristics, and muscle structure influence tenderness.

**Cherry Tomato Upgrade:** Cornell University researchers produced a new variety of cherry tomatoes with improved yield, shelf-life, and visual appeal.

**Soy and Dietary Guidelines:** The Soy Nutrition Institute issued a statement about the USDA Dietary Guidelines that highlight the benefits of soy products.

**Super Bowl Food Safety (related links at right):** The USDA shared their game plan to avoid foodborne illnesses during the preparation of Super Bowl snacks.

**A Cellular Fish Story:** A cell-based seafood producer raised $60 million as it preps for market launch. Click here to access the CAST Commentary Producing Food Products from Cultured Animal Tissues.

---

**Plant Agriculture and Environmental News**

**New EPA Head and Biofuels:** The administration’s appointee to lead the EPA spoke about a program that exempts small refiners from biofuel blending obligations.

**Into the Woods:** According to this article, when forest management is done well, it makes our forests more resilient, provides incredible habitat for wildlife, and produces...
local, renewable resources.

**Soil Modification:** This Soil Science Society of America blog explores [plant roots and how plants modify soil](https://www.soilsci.org/blogs) in substantive ways.

**Soybean Nutrients and Soil Health:** University of Georgia researchers identified an organic practice that can increase [nutrient density in soybeans and improve soil health](https://www.uga.edu/publications/online/soybean-nutrients-soil-health.html).

**Crop Protection:** Two international companies are developing [biological enzyme-based crop protection](https://www.agronomy.org/education/online-learning/1215) solutions for growers around the world.

Cover crops provide many benefits, but costs can be daunting. Farmers are looking at [several programs underway in the Midwest](https://www.extension.iastate.edu/ag-cropnews/crop-weather/spring-soil-cover-crop) that could help with expenses.

---

**International News**

**Container "Perfect Storm" (video):** The [difficult shipping logistics](https://www.ocnresearch.com/) about food containers could affect food costs.

**Good—and Perplexing—News:** [COVID-19 cases have dropped in India](https://www.cnn.com/2021/07/27/health/coronavirus-cases-india/index.html)—and health officials wonder why.

**Green Ammonia:** Australian chemical engineers found a way to make [ammonia from air, water, and renewable electricity](https://www.theconversation.com/australian-chemists-have-invented-a-new-way-to-make-ammonia-from-air-water-and-renewable-electricity-161859) in a more sustainable way.

**Canadian Canola Shortage:** Canada, the world’s biggest canola grower, is [running short of the oilseed](https://www.cbc.ca/news/business/canada-is-running-short-of-canola-oilseed-1.5842225), as strong export demand drives prices to nearly 13-year highs.

**Bovine Attacks:** Although occurrences are rare, charging cows in England [trampled a man to death](https://www.bbc.com/news/world/europe/54980886) in the second such attack in 10 days.

**Food Insecurity and AI:** This Canadian “Autonomous Greenhouse Challenge” shows that [artificial intelligence could help](https://www.iaea.org) with food security.

The Cornell Alliance for Science reports that Kenya, Nigeria, and Eswatini are [taking the lead on genome editing](https://www.cornell.edu/news/2021/07/07/cornell-alliance-science-helping-african-farmers) in Africa.

---

**General Interest News**

**On the Scent (video):** Dogs have been [trained to detect the coronavirus](https://www.cnn.com/2021/07/01/health/dogs-coronavirus-video-lifestyle-nation-lead/index.html) at the entrances of sports venues and theme parks in Central Florida.

**Climate Solutions and Agriculture:** The administration—and most farmers and ranchers—have environmental goals in mind, but the challenges come when [finding the best practices that suit varied situations](https://www.extension.iastate.edu/ag-cropnews/crop-weather/spring-soil-cover-crop).

**Fast-Food Flourishing:** Some [fast-food chains are performing](https://www.forbes.com/sites/forbeschina/2021/06/28/china-fast-food-growth/) better than expected during the pandemic.

**Increasing Land Sales:** During the fall of 2020, a trifecta of factors led to increasing [interest for farmers to buy farmland](https://www.bloomberg.com/news/articles/2021-07-08/americans-shirt-land-has-a-decline-as-pandemic-spurs-an-uptick-in-sales).

**Gone Nuts for Heart Health:** The California Walnut Board is launching its fourth consecutive [American Heart Month campaign](https://www.calwalnuts.com/) this February.

As these videos show, the third-largest [indoor farm show](https://www.extension.iastate.edu/ag-cropnews/crop-weather/spring-soil-cover-crop) in the United States occurred last week with 760 companies in attendance.
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 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
* 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

Dan Gogerty (Communications and Friday Notes Editor)
dgogerty@cast-science.org
Dylana Luett (Communications and Social Media Specialist)
dluett@cast-science.org
The Council for Agricultural Science and Technology
4420 West Lincoln Way
Ames, Iowa 50014-3447
Phone: 515-292-2125
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.