



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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## Announcements



Join CAST on May 11 for the [announcement of the 2021 Borlaug CAST Communication Award winner](#) and a presentation by Dr. Alexa Lamm (2020 BCCA) on "Bouncing Forward:

Capitalizing on the Current Societal Evolution to Strategically Communicate about Science."

The California State University and University of California systems announced that all 33 campuses will [require students and staff returning for in-person instruction this fall to be fully vaccinated](#) against COVID-19.

This year's [US Poultry seminar](#) about financial management will be a face-to-face event June 28-30 in Florida.

Check here for details about this year's [World Pork Expo](#) June 9-11 in Des Moines.

This university professor says there is continuing strong demand for [college graduates with degrees in agricultural programs](#).

April 23, 2021

## Earth Day and Agriculture

No longer just a one-day observance, [Earth Day](#) has become an all-year reality. [Since 1970, April 22](#) has been a day of action to improve the environment.

[Farmers, ranchers, and conservationists](#) are especially aware of the symbiotic relationships of soil, water, and air. For some, carrying on a [family conservation tradition](#) is just part of smart stewardship. Many universities are also focused on the environment—for example, the University of Kentucky is establishing the world's largest [repository of American white oak trees](#).

The environmental challenges for agriculture are large, but food producers, universities, societies, companies, organizations, governments, and individuals are rising to the challenge. See page two below for a specific focus on Earth Day, and check throughout this week's edition for stories about the efforts to make the world a better place for us all.



## News and Views

**U.S. Government:** (1) U.S. lawmakers are working on an [ag climate bill](#) that might garner bipartisan support. (2) President Biden pledged to reduce U.S. [greenhouse gas emissions](#) 50% by 2030. (3) The U.S. Senate Ag Committee discussed the [Growing Climate Solutions Act](#) to coincide with Earth Day.

**USDA:** (1) The USDA [seeks comments on its effort to improve the supply chains](#) for the production, processing, and distribution of agricultural commodities and food products. (2) The USDA announced \$330 million to help fund 85 [rural conservation partnership projects in 45 states](#). (3) The U.S. government is raising the number of acres eligible to be enrolled in the [Conservation Reserve Program](#). (4) Robert Bonnie will be nominated to [oversee farm and conservation programs at the USDA](#) as well as federal crop insurance.

**Food Production Research:** In this *Agri-Pulse* open mic

## CAST College Corner

The [Ohio State University](#) program Take Flight! is an Earth Day celebration of local and global efforts to protect and restore the monarch butterfly.

The [University of Kentucky](#) used an Earth Day symposium to honor a pathologist who was a pioneer for environmental clinical research.

[Tuskegee University](#) alumni make up a majority of the Black veterinarians in the country. This article looks at the challenges they and others face.

[North Carolina A&T State University](#) hosted a special virtual panel discussion in recognition of Earth Day—with a focus on “Environmental Justice, Equity, and Sustainability.”

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

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interview, Dr. Sally Rockey—executive director for the Foundation for Food and Agriculture Research—speaks about [finding matching funds for research](#) in the food production system.

**Economic Insights:** Ag economists—including Jayson Lusk, Ted McKinney, and others—shared insights during a recent virtual gathering at the [James C. Snyder Memorial Lecture](#).

**Vaccine Decisions:** The [CDC's actions regarding the Johnson & Johnson vaccine](#) were made with an abundance of caution. Many support that, but [some think that such strict adherence can be counterproductive](#). Check out the CAST Issue Paper [Impact of the Precautionary Principle on Feeding Current and Future Generations](#).

## Far Side of the Barn

**Lost and Found (video):** Archaeologists discovered a ["lost golden city" in Egypt](#) that dates back more than 3,000 years.



**From the "Gallery of Regrettable Food" (video):** The latest internet recipe to go viral—a popcorn salad—is getting some love and lots of ["cyber indigestion"](#).

**Turf Wars (videos):** A [territorial turtle](#) doesn't allow these lions to drink from his water hole. The most iconic animal battle is the famous Kruger Park struggle featuring [lions, crocodiles, and water buffaloes](#)—including a baby buffalo at the center of it all. The action gets heated at the two-minute mark in this video.

## CAST Updates

### CAST Blog: Earth Day, Agriculture, & Sustainability

In honor of [Earth Day](#), [CAST's latest blog discusses](#) farmers using cover crops to maintain soil health and research being done using CRISPR technology in cattle. There are also a few facts on livestock sustainability highlighted as well as a look at companies that are doing their part to improve stewardship by creating genetically engineered salmon, saving monarch butterflies, engineering microbes, using precision breeding, and more.



If your member society, company, nonprofit, or university is doing something for Earth Day or finding ways to become more sustainable, please email Dylana or Dan (contact info at bottom of newsletter) a link so that we may include it on the blog or in an edition of *Friday Notes*.

### BCCA Winner Announcement Event May 11

The [Borlaug CAST Communication Award](#) (BCCA) is presented annually for outstanding



achievement by a scientist, engineer, technologist, or other professional working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena. During the past eleven years, this prestigious award has been presented to [accomplished, influential scientists and communicators](#). The announcement for the 2021 BCCA winner will be held [May 11—click here for details](#).

## Animal Agriculture and Environmental News

**Beefed Up Help:** The Beef Cattle Institute at Kansas State University provides [innovative solutions and resources](#) for veterinarians and beef producers.

**Pig Proposition Effects:** California's [Proposition 12](#) [mandates space requirements](#) for all gestating hogs and creates uncertainty for hog producers.

**Dairy Trends:** A large dairy industry concern released its reflection on 2020 with an [analysis of global, national, and local trends](#) for 2021.

**Disease Control for Pigs:** This hog expert looks at lessons learned from the COVID-19 pandemic that have reinforced the [need for improved disease control practices](#) used in the swine industry.

**Pet Rehab Therapy:** Cornell University veterinarians show an example of what [rehabilitation therapy can do for an injured pet](#)—in this case, an exuberant collie.

**Veterinarian First (related to above):** The [first 3D laparoscopic adrenalectomy](#) in veterinary medicine was performed on a Boston terrier at UC-Davis.



USPOULTRY and the USPOULTRY Foundation have approved approximately \$320,000 for [five new research grants at five institutions](#) through the comprehensive research program.

## Food Science and Safety News

**Hand Over Your Money:** Buying something with just a wave of your hand is closer to everyday reality now that retail giant Amazon is trialing its [palm-scanning payment technology](#) in certain Whole Foods locations.

**Food and Climate Change:** This book by a Cornell expert, [Our Changing Menu](#), looks at the increasingly complex relationships between food and climate change

**Kids' Meals:** The USDA issued a broad range of [flexibilities to allow school meal programs](#) and childcare institutions to serve healthy meals in fall 2021 as part of the commitment to reopen schools safely.

**Specialty Crop Changes:** The USDA also announced the termination of 10 U.S. consumer [standards that are obsolete and impede](#) the effective marketing of specialty crops.

**Sugar Levels and Food Consumption:** Research suggests that people who experience big dips in blood sugar levels after eating end up [feeling hungrier and consuming hundreds more calories](#) during the day than others.



Chocolate Mousse? Penn State researchers showed that the [supplementation of cocoa powder in the diet](#) of high-fat-fed mice with liver disease markedly reduced the severity of their condition. They are looking at implications for humans.

## Plant Agriculture and Environmental News

**WOTUS Comment:** EPA Head Michael Regan told

Congress he [does not intend to go back](#) to the Obama administration's definition of Waters of the U.S.

**Water Quality:** A national agricultural conservation nonprofit is working with four cities and the Iowa DNR to develop a model agreement that incentivizes cities and farmers within the same watersheds to [address water quality together](#).

**Forestry Act Proposed:** Two senators introduced the bipartisan [Rural Forest Markets Act](#) to remove barriers for small-scale, family foresters and help them benefit from new economic opportunities through climate solutions.

**Fighting Palmer Amaranth:** A Nebraska research team tries to [develop the best weed control program](#) to help farmers battle Palmer amaranth in their soybean fields.

**Into the Woods:** A University of Florida-led study [established a Forest Global Earth Observatory research plot](#) within a longleaf pine forest.

**Super Cactus:** A University of Nevada-Reno study says the cactus pear is a drought-tolerant crop that can [provide biofuel and livestock feed—and remove carbon](#) from the atmosphere.

**Losing Soil:** Researchers used satellite imaging and surface soil color to find out [how much of the nutrient-rich earth has eroded away](#) in the corn belt.



A Seattle-based robotics company's "autonomous weeder" [uses lasers to kill weeds](#). And French researchers have used cues from Mars rovers to develop [a weed robot for the vineyards](#).

An agronomist says farmers are having some [problems acquiring ag chemicals](#) including glyphosate.

## International News

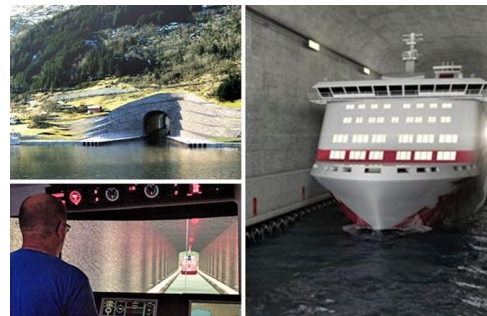
**Carbon Capture in the Land of Ice and Fire (video):** Innovators in Iceland are using a [cutting-edge experiment called direct air capture](#) to help save the environment.

**Tackling Waste and Unemployment (video):** Featuring unsold items from local shops, a popular Tokyo bakery opens at night with a [staff that includes the homeless and unemployed](#).

**Milky River:** A tanker truck crashed into a river in Wales, [spilling thousands of gallons of milk](#) and turning the water white.

**Cuba Opens to Beef and Dairy:** Cuba is [loosening a decades-old ban](#) on the sale of beef and dairy products.

**Pork to Asia:** This National Pork Producers Council official says Asia [offers opportunities](#) for the U.S. Pork industry.



Norway is constructing the [world's first ship tunnel](#)—an engineering marvel large enough for super cruise ships.

## General Interest News

**Historic Flight on Mars (video):** In a "Wright Brothers Moment," the NASA Mars helicopter [Ingenuity made its first flight on the Red Planet](#).

**High Tech Here on Earth (related to above):** Check out the CAST publication [Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges](#).

**Better Rural Broadband:** House Agriculture Committee members heard from those on the ground about the [need to update maps on areas that remain underserved](#)—as well as how to fund better broadband coverage.



**Salty:** Texas A&M research found that the [increasing salinity of the Rio Grande](#) is a problem for agricultural producers.

**Theory and Experimental Measurements:** Penn State researchers joined other scientists to examine a new calculation of the strength of the magnetic field around the [moon—a sub-atomic particle similar to an electron](#).

**T-Rex Hunting in Packs:** A team of researchers—including University of Arkansas scientists—found new evidence that [tyrannosaur dinosaurs may not have been solitary predators](#), but social carnivores similar to wolves.

**Orbiting 250 miles above the Earth, astronauts on the International Space Station [perform scientific studies, enjoy the heavenly view, and learn how to handle daily activities](#) in weightlessness—like exercise, eating, and toiletry. Four astronauts from three countries were launched early Friday morning as part of [NASA's SpaceX Crew-2 mission](#).**

## Photo Credits

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- \* American Seed Trade Association
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- \* 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
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- \* Weed Science Society of America
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The Science Source for Food,  
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