

*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

#### **Announcements**



# Dr. Frederick Patterson—Tuskegee University—helped make veterinary medicine and higher education more accessible for

many minority students.

During Black History Month, Mississippi State University is sponsoring a <u>"28 Days of Service</u> <u>Challenge"</u> and North Carolina State University offers ways to <u>celebrate</u>, educate, and support.

The 2021 Agricultural Outlook Forum is USDA's largest annual gathering and its premiere event—February 18-19.

Check out the USDA's <u>weekly</u> radio features here.

The <u>International Day of Women</u> <u>and Girls in Science</u> is observed annually on February 11.

#### **CAST College Corner**

The <u>University of Nebraska-</u> <u>Lincoln</u> promotes internship awards that help students gain valuable experience in the

## February 12, 2021

# **Finding Solutions**

The world needs problem solvers, and the agriculture community has a bumper crop of those working on food-security challenges. CAST is involved with societies, nonprofits, corporations, universities, and individuals who are making a difference.



An example of those developing new ideas is a group that involves some current and past CAST members: Solutions from the Land. The organization is trying to foster anagricultural renaissance led by innovative and entrepreneurial farmers, ranchers, and foresters. As with many others who are working to feed the world, SFL members are hoping to facilitate those capable of producing nutritious food, feed, fiber, clean energy, healthy ecosystems, quality livelihoods, and strong rural economies.

### **News and Views**

**WASDE Report:** The USDA released its monthly <u>World</u>
<u>Agricultural Supply & Demand Estimates</u>. Comments came from grain sectors and beef interests.

**Economic Ups and Downs:** This USDA economist says an unusual situation could mean overall 2021 <u>net farm income will decline while cash receipts are expected to rise.</u>

**Stimulus Plan:** Democrats moved a \$16.1 billion agriculture stimulus plan through the House Agriculture Committee, while Republicans say that a provision providing debt relief for minority farmers was too broad and could face legal challenges.

Pandemic Information: (1) The USDA provides an update on its activities and national strategy for containing the pandemic. (2) This regularly updated map looks at how the COVID-19 vaccination campaign is going in each state. (3) The FDA is planning for vaccine changes in case of virus mutations

## Far Side of the Barn

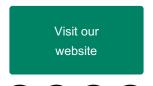
nation's Capital. Applications are due February 18.

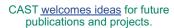
The <u>University of Kentucky</u> is offering a variety of free webinars for those interested in vegetable or landscape gardening.

Cornell University is offering a course that empowers students to address diversity in STEM.

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

#### **CAST Social Media**



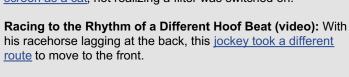


#### Surfing Goats: You may have heard of goat yoga, but this man taught his goats how to surf while also helping kids with special

Cat Got His Tongue (video): A lawyer arguing

needs.

before a judge at a virtual court case via Zoom <u>appeared on screen as a cat</u>, not realizing a filter was switched on.



# **CAST Updates**

#### 2020 Publications



#### **CAST Publications**

In 2020, <u>CAST produced nine papers</u>, plus one Spanish-translated version. For this year, we are gearing up to release another full slate of papers, webinars, and study guides. Last year, our first paper was <u>released in April</u>, <u>Impact of Recruitment and Retention of Food Animal Veterinarians on the U.S. Food Supply</u>. The final paper released was an <u>issue paper</u> in November titled <u>Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges</u>.

#### **Agriculture Stewardship and Climate Change**

Several recent CAST publications have focused on the importance of soil and crop stewardship, including (1) Stewardship Challenges for New <u>Pest Management Technologies</u> in Agriculture and (2) Agriculture and the Microbiome.

Government and organizations are also involved with efforts to curb climate change through the use of smart agriculture methods: (1) President Biden's executive order called "<u>Tackling the Climate Crisis at Home and Abroad</u>" focuses on the role that agriculture can play in combating climate change and reducing greenhouse gas. (2) The U.S. Farmers & Ranchers in Action joined others to analyze the state of soil health technology and identify sources of capital to <u>promote climate-smart agriculture</u>.

# Animal Agriculture and Environmental News

**Confinement Debate (video):** Some lowans cite water pollution problems to oppose <u>large hog confinements</u>, but this farmer explains the hog-grower perspective.

Cows Not All Hot Air (video): These experts-including

Frank Mitloehner (2019 BCCA winner)—explain why many comments about climate and ruminants are inaccurate

**Poultry Resources:** The Poultry Science Association <u>main site</u> includes information about the <u>upcoming webinar about</u> <u>"the whole food safety picture in poultry science"</u> featuring guest speaker Mindy Brashears (Former Under Secretary of Agriculture for Food Safety).

**Pork on the Move:** U.S. pork exports topped the 2019 record by 11%, according to data from the USDA and compiled by the U.S. Meat Export Federation.

**Virtual Fencing for Ranchers:** University of Nevada-Reno experts are <u>researching innovative GPS technology</u> for the state's cattle and range management.

Practical Look at Livestock Biosecurity: This article explains why <u>livestock biosecurity need not be overly elaborate</u>, but it should be deliberate and mindful.

**Livestock Diseases:** Officials look at how prepared the pork and beef industries are when it comes to the <u>threat of foreign</u> animal diseases.



The veterinary school at Texas A&M is doing groundbreaking <u>research</u> on pets contracting COVID-19.

With the help of UC-Davis experts, California dairy farmers are increasingly <u>using biogas from cow</u> manure to power vehicles.

Penn State researchers are helping poultry producers convert from traditional caged housing to noncaged systems while safeguarding animal and employee safety.

# Food Science and Safety News

**Hungry Students (video):** The number of American children facing food insecurity has doubled during the coronavirus pandemic. A Florida guidance counselor shows how <u>some school officials are helping hungry students</u>.

**Tall Grass Food Box**: For several reasons, Black-owned farms have struggled for decades. <u>The Tall Grass Food Box program</u> in North Carolina is trying to help.

**Dairy Aid:** The <u>Cal Poly Creamery will provide staples</u> such as cheese, eggs, and milk to families struggling in the face of the COVID-19 pandemic.

**Food Insecurity and SNAP:** Food banks have been struggling with extra challenges due to the <u>many food</u> insecure who have limited SNAP funds.

**ARS Announces a "Mr. Goodbar":** A micronutrient- and fiber-packed <u>bar that improves metabolic health</u> markers from cholesterol to blood sugar is on the market.

**Smart Packaging:** A hydroponic container company says its <u>innovative packaging design</u> utilizes 30% less plastic and prolongs freshness for the brand's line of salad mixes.



A review of three major studies using analytic tools from the American Heart Association indicates that plain, caffeinated coffee could be associated with reduced risk of heart failure.

This ACSH explains the terms "food intolerance" and "food allergy."

# Plant Agriculture and Environmental News

**Record Corn:** The USDA says net corn export sales for the week ending January 28th were the <u>largest on record</u>.

**EPA and Ethanol:** The new EPA head Michael Regan said the Biden Administration <u>plans a review of recent EPA</u> <u>decisions</u> involving the federal mandate to mix corn ethanol and other biofuels into gasoline.

**Plants Are Life:** The United Nations declared an extension to the *International Year of Plant Health* campaign it launched last year. The organization says plants help attain sustainable development goals and fight hunger.

**Good Roots:** Penn State researchers say a previously unknown root trait allows <u>some cereal plants to grow deeper roots</u>, helping them deal with a changing climate.

How Does Your Garden Grow? These University of Florida scientists are helping with the pandemic-driven increase in gardening by providing production information and by pointing out gardening misinformation in social media.



Carnivorous Venus flytraps lure insects between their blushing leaves with a fragrant nectar, and they generate a measurable magnetic field in doing so.

## **International News**

**Glacial Tragedy (video):** A Himalayan glacier broke loose in northern India, leaving death and destruction in its wake.

**UAE Circling the Red Planet (video):** The United Arab Emirates' <u>space probe entered orbit around Mars</u> little more than a decade after the country launched its first satellite.

Shake It Like a Polaroid Picture (video): Join in with an annual orange tree shake in Spain.

**African Food Security:** This expert says sub-Saharan Africa's dismal food security status will be further exacerbated unless <u>sustainable strategies and agricultural technologies</u> are implemented.

**China:** China's Ministry of Agriculture said it found eight companies and research institutes that <u>illegally produced or carried out research</u> on genetically modified seeds.

**Plastic Use:** Using her ingenuity and engineering skills, this Kenya woman found a way to help the environment by converting plastic waste into building materials



A South Korean farming community reinvented itself by transforming into an attraction made for the Instagram era—a "purple island" with fields of lavender and purple paint transforming the community.

## General Interest News

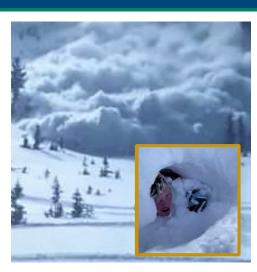
**Drones and Sustainability (video):** This expert says drones are boosting sustainability in agriculture, prompting farmers around the world to adopt them.

**School Gardens:** Nutrition researchers found a new way to get children to eat their vegetables—by using school gardens and <u>lessons on what's growing in them.</u>

Flowers, Chocolate, and Romance: A Mississippi State landmark—the University Florist—is marking more than eight decades of service, as it gears up for <a href="heavy business during the "month of romance.">heavy business during the "month of romance."</a>

Insects Don't Send Valentine's Cards: The Agricultural Research Service says that <u>insects are different from humans</u> when they get "romantic."

**Developing Food Items:** Kansas State University <u>students</u>



joined in a partnership to develop novel foods from sorghum and wheat sources.

Pandemic Demand for Seeds: Home gardeners are <u>driving</u> <u>up demand for seeds</u>, and companies are having trouble keeping up the supply.

Dramatic video captures an avalanche as it buries a group of snowmobilers in eastern Utah. They survived, but nationwide, it was a deadly week in the snow.

#### **Photo Credits**

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- \* 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
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- \* Corteva Agriscience
- \* CropLife America

- \* Crop Science Society of America
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- \* 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, sciencebased information to policymakers, the media, the private sector, and the public.

## **Members of CAST's Education Program**

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- \* 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

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