

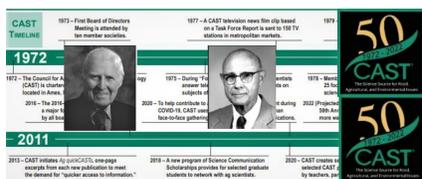


Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. Friday Notes advocates the pursuit of credible, unbiased, science-based information. Material contained 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



CAST Blast from the Past: In February 1983, CAST released *Responding to Media Cheap Shots: Observations on the CAST Experience*, by Theodore Hutchcroft. [Click here to access](#) CAST's 50th anniversary commemorative publication.

The USDA's [2022 Commodity Outlook reports](#) are here.

The National Pork Industry Forum will be [March 9-11 in Louisville](#).

The Alliance for Science will host a session about the future of our food system with a science-based conversation focused on [correcting the groundswell of misinformation](#)—March 15.

CAST College Corner

[University of Nebraska–Lincoln](#) campus leaders testified in favor of legislative proposals that support agriculture and technology innovation.

Three [North Carolina State University](#) professors have been

February 25, 2022

Global Conflict and Agriculture

Agriculture and food production are affected by many economic aspects such as inflation, supply chains, market prices, and international events.



While the USDA expects U.S. agricultural exports and prices to be strong this year, the department acknowledges that Russia's invasion of Ukraine has injected [uncertainty into world markets](#). Although reports from Ukraine change by the hour, some basic information shows why the military engagement is causing immediate concerns:

- 1) Ukraine is considered the "[breadbasket of Europe](#)," and conflict will [influence supplies and markets](#).
- 2) This University of Missouri expert and others look at possible [energy and agricultural disruptions](#).
- 3) University of Illinois experts explain the [agricultural ripple effects](#) of conflict in Ukraine.
- 4) This article looks at price hikes for fertilizer, possible global shortages, and [concern about food costs](#).
- 5) Oil prices jumped and [energy costs are rising](#).
- 6) This analyst says the marketplace is influenced by concerns about [inflation, energy, and cyberattacks](#).

News and Views

HPAI Update: The USDA confirmed the presence of highly pathogenic [avian influenza in Maine](#), in [Delaware](#), and in [Michigan](#). This APHIS site provides [information about poultry health](#), including avian influenza advice.

Climate-smart Ag: At the first Agriculture Innovation Mission for Climate meeting, Agriculture Secretary Tom Vilsack underscored the [importance of joint international action](#) and investment in climate-smart agriculture and food systems innovation.

Ports and Infrastructure: The Transportation Department released \$450 million in [grant funds to strengthen port infrastructure](#) and the supply chain.

BANR: Dr. Marty Matlock (Univ. of Arkansas and [2018 BCCA](#)) was [elected to the Board of Agriculture and Natural Resources](#)

named 2021 Fellows of the American Association for the Advancement of Science.

[North Carolina A&T State University's](#) annual tribute to small-scale agriculture will be held March 21-26.

CAST Social Media

Visit our website

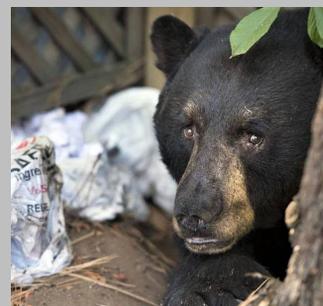


CAST [welcomes ideas](#) for future publications and projects.

([BANR](#)) of the National Academies of Sciences, Engineering, and Medicine. A [list of BANR members](#) is available here.

Far Side of the Barn

He's No Teddy Bear (video): A 500-pound [bear in California named Hank the Tank is raiding homes](#) and wreaking havoc—and [he has accomplices](#).



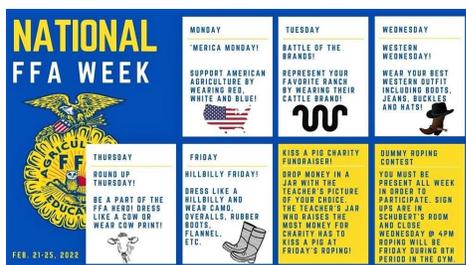
Underwater Photos: A photo of [five whale sharks feeding together](#) at night in the waters of the Maldives won the 2022 Underwater Photographer of the Year contest.

Happy Twosday: This article explains why numbers like 2/22/22 have been too fascinating [for over 2,000 years](#).

CAST Updates

Education: CAST, NAAE, and FFA

CAST is pleased to work with the [National Association of Agricultural Educators](#) (NAAE) to share *Friday Notes* weekly through their *Monday Morning Monitor* newsletter that reaches several thousand classroom agricultural science teachers who also serve as local FFA advisors. CAST's goal is to provide additional timely sources of information that connect agriculture, food, science, and policy as they work to expand students' understanding of our food system and production agriculture. Note: NAAE will revamp its website on March 1.



More than 735,000 FFA members across the country have been [celebrating the organization's role](#) in developing agriculture's future leaders and the importance of agricultural education during [National FFA Week](#).

As part of the observance, Senate leaders announced the [creation of the bipartisan Senate FFA Caucus](#)—a group that will work to support teachers and parents preparing the next generation of leaders through agricultural education.

Animal Agriculture and Environmental News

Sustainable Pork: The National Pork Board has released its first official [pork industry sustainability report](#).

Editing Out Ticks: University of Nevada, Reno researchers developed a method of [gene editing ticks at the embryo stage](#), and it could mitigate this public health concern.

Hive Thefts: Beekeepers are turning to GPS tracking devices, surveillance cameras, and other anti-theft [technology to protect](#) their precious colonies.

Processing Sector: The USDA has announced the availability of up to \$215 million in grants and resources as part of a continued effort to [strengthen the meat and poultry processing sector](#) and create a more resilient food supply chain.



A new food influencer has produced content for [Lamb Lovers Month](#). This website also offers a cooking school, [producers' stories](#), and [recipes](#).

Food Waste Solutions: A Penn State agricultural economist's [study focuses on consumer support](#) of food waste solutions.

Food Preservation Research: Food processing companies looking for innovative ways to [preserve clean-label liquid food without artificial preservatives](#) will soon have options thanks to developments at The Ohio State University.

Edible Insects: A research project on the [safety of edible insects involving](#) Germany and Kenya is entering its final year.

Purple Tomato: This tomato is what happens when scientists [work with genetic engineering](#) to make common foods more nutritious.



Artificial intelligence shows promise for food production, but some say [potential risks must be addressed](#) to avoid unintended consequences.

Plant Agriculture and Environmental News

Maximizing Profits with Limited Water: Researchers from ARS, Texas A&M, and other universities adapted a crop model to [simulate crop water use and corn yield](#) so producers can adjust irrigation strategies.

Biotech and Biodiversity: Numerous scientific studies indicate that the use of [biotechnology in agriculture can help to protect biodiversity](#) and stem its loss.

Warmer Winters Affect Midwest Soil: Warmer Midwest winters mean soils remain unfrozen for longer periods of time and [begin to lose nutrient value](#).

Corn Production and Climate: According to a new, comprehensive study by Penn State researchers, [corn production will be affected](#) by climate change trends.



The secret ultraviolet colors of [sunflowers attract pollinators](#) and preserve water.

International News

Ethanol and Electric Car Batteries? Researchers in Brazil are trying to find a way to [form ethanol into a fuel cell/battery](#) made of biogas.

Oil Supply: Uncertainty over sunflower oil supplies due to the conflict between Russia and Ukraine is spurring demand for rivals palm oil and soyoil, fueling a [red-hot vegetable oil](#) market.

A Weed Goes from Enemy to Friend: Researchers in Senegal say [a shrub once hated is actually nourishing](#) for the soil and crops in the field.

Dairy Project: In cooperation with the country of Qatar, the Philippines is establishing a [\\$500m integrated dairy facility](#).



A doctoral student helped find remains of the [world's largest Jurassic pterosaur—a 170-million-year-old winged reptile](#)—in rocks on the Isle of Skye.

General Interest News

Consuming Meat: A study [shows that eating meat](#) extends human life expectancy worldwide.

Vaccines and Exercise: Iowa State University researchers say [exercise after a shot against COVID-19](#) or influenza might help people's bodies better learn to fight the diseases.

Masks into Batteries: Discarded masks can have an impact on the environment, and these scientists have demonstrated a [novel method for disposing of old masks](#).

Border Patrol: In the future, "robot dogs" may patrol the US-Mexico border—by capturing evidence in remote desert areas and [relaying real-time data back](#).



First solar canal [project is a win](#) for water, energy, air, and climate in California.

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- * 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
- * Association of Equipment Manufacturers
- * Aquatic Plant Management Society
- * BASF Corporation
- * Bayer
- * Corteva Agriscience
- * CropLife America
- * Crop Science Society of America
- * Innovation Center for U.S. Dairy
- * Iowa State University
- * Mississippi State University
- * 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
- * Penn State University
- * Poultry Science Association
- * Rural Sociological Society
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * The Minor Use Foundation
- * 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
- * Zoetis

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

- * Cornell University
- * Iowa State University
- * Kansas State University
- * Mississippi State University
- * University of Arkansas System Division of Agriculture
- * University of California-Davis
- * University of Florida Institute of Food and Agricultural Sciences

* 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 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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The Science Source for Food,
Agricultural, and Environmental Issues

*** With assistance from Colleen Hamilton (Membership Specialist)*

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