



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



CAST Blast from the Past
In April 1997, Richard E. Stuckey, then-CAST EVP, spoke at the U.S. Embassy in Vienna, Austria, on the subject of genetically modified organisms.

The [2022 Animal Agriculture Alliance Stakeholders Summit](#)—May 11 and 12—offers a chance to meet and collaborate with stakeholders throughout the food chain and across commodities.

CAST College Corner

The [Texas A&M University](#) AgriLife team aims to improve the sustainability index of the pork industry.

[Mississippi State University](#) "campus cowboys" perform research and take care of 500 head of cattle that make up the MSU Beef Unit.

[University of Arkansas](#) research on animal vaccines for economically important pathogens such as salmonella and avian influenza has led to some beneficial breakthroughs.

[North Carolina State University](#)

March 25, 2022

Importance of Agriculture

This year's [National Agriculture Day](#) was held on March 22 in Washington D.C., locations around the country, and virtually.



Nearly 18% of the nation's economy and 30% of American jobs are either directly or indirectly linked to the food and agriculture sectors, according to a new report, [Feeding the Economy](#), released by [30 agricultural groups in conjunction](#) with National Ag Day.

This report is a historic farm-to-fork economic analysis revealing how these sectors influence the [local and broader United States economies](#). Two years into the COVID-19 pandemic, this year's study highlights how the industries remained resilient to provide Americans with jobs, economic opportunity, and safe food. "American agriculture is really the foundation of our lives and our economy," said American Farm Bureau Federation Chief Economist Roger Cryan (who serves on the [CAST Board of Representatives](#)). "This study reveals the numbers, and maybe some of the spirit, of this one indispensable sector."

***For more National Ag Day information, please see the [CAST Updates](#) section. Also see the [General Interest](#) section for information on [Dr. Chavonda Jacobs-Young's statue on display March 22 at the Smithsonian Castle on the National Mall](#) in D.C.*

News and Views

Ukraine Disruptions: As the crisis in Ukraine continues, some [economists expect the disruptions](#) to last several months, even if the war ended today.

HPAI Update: The confirmation of HPAI at another [Iowa egg-laying farm](#) will force the killing of more than 5 million chickens, and the disease has been found in a [backyard flock in New Hampshire](#).

Far Side of the Barn

pre-vet students received recognition at the National Symposium.

CAST Social Media

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

A Real Fish Story (video): A 10-foot, [500-pound sturgeon was caught, tagged, and released](#) by a Canadian fishing guide who said the fish could be more than 100 years old.



Twisting in the Wind (video): This truck was [tossed and turned in tornadic winds](#)—but the [driver survived](#) and was able to continue down the road.

Futuristic Machines Now (video): From huge machines to agile drones, [agricultural equipment for planting](#), harvesting, and tilling has become high tech and innovative.

CAST Updates

National Ag Week

This week, March 20-26, is National Agriculture week. Check out this CAST blog from last year that offers [facts about agriculture and food](#).

The future of agriculture is strong—and this is evident in many student-led agriculture organizations. This week, student leaders from FFA, 4-H, Agriculture Future of America, and Minorities in Agriculture, Natural Resources and Related Sciences will share information on the [critical role agriculture plays](#) in our culture and economy. This year, FFA students will be able to attend the event in-person in Washington, D.C., for the first time in two years. [Click here](#) to view their activities for the week.



Animal Agriculture and Environmental News

Champion Steer: The 90th anniversary of the Houston Livestock Show and Rodeo will be remembered for the [\\$1 million sale of the event's Grand Champion Junior Market steer](#).

Eradicating Diseases: The USDA NIFA announced an investment of over \$13 million in research that explores [novel therapies and prevention strategies](#) for animal diseases.

Beef as a 4-Letter Word: Frank Mitloehner (UC Davis and [2019 BCCA](#)) says some news outlets are having a cow over America's dinner plate, but [beef is actually becoming](#) more efficient.

Fertility Rates: Iowa State University [research on swine sire fertility](#) has implications for cattle and humans.



A company has [developed a fully autonomous cattle feeder](#), aimed to help with higher input costs and decreased labor availability. Watch a [video here](#).

Food Science and Safety News

The Term "Foodie" Is on the Menu: Jayson Lusk (Purdue and [2017 BCCA](#)) uses surveys and insights to [analyze the term "foodie."](#)

Egg Prices: U.S. egg prices rise as highly pathogenic avian

influenza continues to spread and [strike ahead of Easter](#).

Going Green: The [world of salad greens](#) can be surprisingly confusing, so here's a breakdown of some of the more common types—and how to best pick and store them.

Salmonella: Salmonella accounted for nearly [80% of pathogen violations](#) in U.S. food imports from 2002 to 2019.



An eight-member university team is studying the [science behind champagne bubbles](#).

Plant Agriculture and Environmental News

Phosphorus Loss: Iowa State University soil scientists provide [insights about phosphorus loss from farmland](#), with evidence proving phosphorus runoff is often underestimated.

Drought Concerns: States gearing up for planting in the Corn Belt still have a [need for rainfall](#), and as it enters a third year, [California's drought](#) is hurting the farming industry.

Clean Water Act Anniversary: Most say water quality has improved under the Clean Water Act, but some experts say many streams and rivers are too polluted to fish or swim in—and [agriculture is a key factor](#).

Smoky Wine? A study led by university scientists provides valuable data and [guidelines for using analytical chemistry](#) to identify grapes and wines affected by smoke from wildfires.

Cold Grow: A University of Nebraska–Lincoln biochemist is studying how a perennial grass is able to [thrive at low temperatures](#). Could corn and sugarcane do the same?



A UC-Davis survey showed that people who turned to gardening during the pandemic did so to [relieve stress, connect with others, and grow their own food in hopes of avoiding the virus](#).

International News

Milking Camels: The U.S. Foreign Agricultural Service Administrator traveled to Dubai to kick off the first USDA-sponsored in-person trade mission since 2019. They stopped at the world's [first and largest camel milking farm](#).

Ukraine Connections: For decades, Penn State University has had a close [relationship with agriculture and universities in Ukraine](#)—especially in the areas of bioenergy, forestry, horticulture, agribusiness, and food science.

Sweet and "Sour": These researchers in Canada say [excessive sugar consumption is costly and unhealthy](#)—and related to 16 chronic diseases.

Pumpkin Diversity: International researchers are driving throughout Egypt, asking farmers for a [handful of their pumpkin seeds](#) in order to save pumpkin varieties.



Orphaned or abandoned baby elephants in Kenya needed milk, and [goats came to the rescue](#).

General Interest News

Regenerative Ag: At the World Agri-Tech Innovation Summit, regenerative agriculture was a hot topic. In this

article, [a farmer](#), [agribusiness executives](#), and a food company representative discuss the topic.

Tractor Technology: This tractor can run on [farm-raised methane](#) or compressed natural gas.

Never Asleep at the Wheel (related to above): This fall, [14-ton driverless tractors](#) that can work day or night with no one in the cab will come off the assembly line.

Fire Prevention: To reduce the danger of wildfires, Sacramento is using an unusual, four-legged tool: they're putting [sheep and goats to work eating their way](#) through the grasses of the 212-acre Natomas Regional Park.

Fabric Ears: Researchers are working on an "acoustic fabric" that [converts sound into mechanical vibrations](#)--enabling wearers to communicate and monitor health.

Pigs vs. Bear (video): Two courageous pot-bellied pigs [fought off a bear](#) when it jumped into their pen.



Agriculture Secretary Tom Vilsack and Deputy Agriculture Secretary Dr. Jewel Bronaugh visit the statues at the [Smithsonian Castle on the National Mall in Washington, D.C.](#), on March 22, 2022. The secretary was accompanied by Dr. Chavonda Jacobs-Young (standing beside her own statue).

The Smithsonian is celebrating Women's Futures Month, a forward-looking [celebration of the power of women and girls in STEM](#) to shape a better world.

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- * American Meat Science Association
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- * Mississippi State University
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- * 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
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- * Western Society of Weed Science
- * Zoetis

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The Science Source for Food,
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