



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 will roll out its new Commentary—*The Role of Agricultural Science and Technology in Climate 21 Project Implementation*—June 28 with a [webinar presentation June 29](#). See page two below for more.

Next week, *Friday Notes* will arrive on Thursday, July 1. The shortened, holiday edition will focus on headlines, high-interest links, and coverage of the CAST Climate paper rollout/webinar.

Dr. Alison Van Eenennaam—UC Davis and [2014 BCCA](#)—received the [Beef Improvement Federation's Pioneer Award](#).

NAMA is excited to welcome exhibiting companies to Kansas City July 20-22 for the [2021 Agri-Marketing Conference](#).

The July 12 [Agri-Pulse Food and Ag Policy Summit](#) in Sacramento will focus on the topic "How Can California Agriculture Remain Competitive?"

## CAST College Corner

Colleges want students to get a

## June 25, 2021

### Other Species Join Honey Bees in the Buzz of Pollinator Week

The USDA designated the week of June 21–27 as [National Pollinator Week](#). The department explained how birds, bats, bees, and other insects play an important role in producing more than 100 crops grown in the United States. For example, honey bee pollination alone adds more than \$18 billion in value to agricultural crops annually.



While the vast array of pollinators is important, USDA and ARS researchers recently pointed out several discoveries about honey bees: (1) Nutritional compounds in four different flowers [enhance the gut health](#) of honey bees, boosting their immune system and increasing lifespan. (2) Pollens [collected during specific seasons](#) contribute to the health of a honey bee colony. (3) A component in almond nectar and pollen can reduce [honey bee viruses and gut parasites](#). Check out the [CAST Commentary Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It](#).

## News and Views

**Possible Bipartisan Actions:** The White House says a deal was reached on an [infrastructure spending plan](#), while the Senate overwhelmingly passed a bill to help [shore up private agriculture and forestry carbon markets](#).

**Animal Ag Proposal in Court:** Colorado's [Initiative 16 received a devastating legal blow](#). Many farmers and ranchers called it an anti-animal-agriculture proposal.

**Heat and Drought:** An extreme [drought is causing water shortage woes](#) throughout the West, and agriculture is taking a hit. See related items in the Plant Section below.

**Broadband Updates:** (1) The National Telecommunications and Information Administration released a [new broadband digital map](#). (2) Iowa State University and government agencies will research [initiatives aiming to improve rural broadband](#) (3) North Carolina State University's *Farms, Food, and You* podcast looks

[coronavirus vaccine before fall semester](#), but they are split on whether or not to make the shots mandatory.

[North Carolina A&T State, Iowa State, and Penn State](#) hosted the Convergence Accelerator and Precision Agriculture workshop, sponsored by the National Science Foundation.

[Tuskegee University](#) received a grant to expand pathways and opportunities for increased diverse representation in the STEM industry.

Ten students from [The Ohio State University](#) received Fulbright U.S. Student Program awards for the 2021-2022 academic year.

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.

at [why farmers need good internet](#).

**Gene Editing and Medical Miracles:** This video looks at how mRNA technology is [helping with vaccine development](#). Also, the Cornell Alliance for Science says mRNA techniques are being [applied to many needs](#), such as the fight against malaria.

## Far Side of the Barn (Surf's Up Edition)



### Hanging Ten with Web Feet, Hooves, Paws, and Dorsal Fins

A Hawaiian's pet [pig rode surfboards](#), made videos, and even took his feline friend for a ride.

An Australian woman's pet duck became a [beach celebrity for its surfing](#).

Sharks never stop swimming, but marine biologists say [they "surf" ocean currents](#) in a conveyor belt configuration, allowing them to take turns resting.

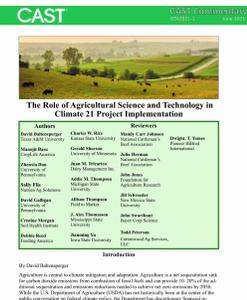
## CAST Updates

### CAST presents a free webinar on *The Role of Agricultural Science and Technology in Climate 21 Project Implementation*

This report will summarize the key recommendations and priorities where current agricultural science and technology for plant and animal production can be applied and where new investments will be critical to meeting the goals of the administration.

This webinar is part of a series on climate change cohosted by the National Coalition for Food and Agricultural Research (NC-FAR).

It will take place on Tuesday, June 29, Noon Central; you can [register for the free webinar here](#). A free download of this CAST Commentary will be available June 28 from the CAST website.



## Webinar Panelists

The panelists for the first webinar of the year include David Baltensperger, Chair, Texas A&M University; Zhengxia Dou, University of Pennsylvania; Marty Matlock, University of Arkansas; Debbie Reed, Ecosystem Services Market Consortium; Juan M. Tricarico, Dairy Management Inc.; and Alex Thomasson,



**David Baltensperger**  
Soil and Crop Sciences,  
Texas A&M University



**Zhengxia Dou**  
School of Veterinary Medicine,  
University of Pennsylvania



**Marty Matlock**  
Biological & Agricultural Engineering,  
University of Arkansas



**Debbie Reed**  
Ecosystem Services  
Market Consortium



**Alex Thomasson**  
Agricultural & Biological Engineering,  
Mississippi State University



**Juan Tricarico**  
Innovation Center  
for U.S. Dairy

## Animal Agriculture and Environmental News

**MPIRG Program:** The USDA announced \$55.2 million in competitive grant funding available through the new [Meat and Poultry Inspection Readiness Grant](#) program.

**Examining a Policy:** The USDA plans to reconsider the prior administration's actions on the [Organic Livestock and Poultry Practices final rule](#).

**Swine Feed:** A University of Missouri swine specialist looks at high prices and ways to [maximize feed efficiency](#).

**Garlic Breath for Fly Control:** Some beef producers use [garlic powder in cattle feed](#) because the animals then emit an odor through their skin and breath that can deter flies.

**Keeping Cattle Cool:** Cattle do not [handle heat stress](#) well; University of Nebraska specialists provide tips for producers in what appears to be a very warm summer.

**Rattlecam:** Cal Poly researchers joined a science project that seeks to [understand rattlesnake behavior](#) by using cameras to view the snakes in their natural habitat.



**U.S. cattle ranchers and investors are [supporting new beef plants](#) due to concerns about pandemic closures, aggressive cyberattacks, and the controversial emphasis on large processor consolidation.**

## Food Science and Safety News

**Consumption Patterns:** Jayson Lusk (Purdue and [2017 BCCA](#)) looks at the remarkable change in [meat consumption patterns](#) now and during the past 50 years.

**School Meals:** The USDA is joining a global coalition focused on improving the nutrition, health, and education of [vulnerable children and adolescents](#) worldwide.

**Meat Sources and Actual Sales:** An article from the Pork Checkoff admits that consumers are open to the idea of trying plant-based meat, but the [overall sales percentages](#) still heavily favor traditional meat sources.

**More Meat Options:** This [CAST Commentary](#) looks at *Producing Food Products from Cultured Animal Tissues*

**Reading Food Labels:** A report from the International Food Information Council found that Americans are [paying more attention to ingredient lists](#) than five years ago.

**Process Labeling:** Check out the [CAST Issue Paper](#) *Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations*.



**Can't Eat Just One:** North Carolina State University researchers say evolution might explain the [development of pleasing tastes like salty](#), umami, and sweet. An older study explained it as the "[science of crunchy foods](#)."

**A UC Davis study indicates that the [secret to healthier skin and joints](#) may reside in gut microorganisms.**

**Beer Buzz:** Long-forgotten [yeast strains are being sought out](#) from shipwrecks, abandoned breweries, and other locations in the hope they could be put to good use.

## Plant Agriculture and Environmental News

**Glyphosate Research:** The Assessment Group on Glyphosate finished its analysis and pronounced that “the herbicide [glyphosate cannot be classified as carcinogenic](#)”

**Glyphosate and Tillage:** This research considers weed management in the face of herbicide resistance by looking at the impact of glyphosate-resistant weeds on the [adoption rates of conservation tillage practices](#) in soybeans.

**Ethanol and Carbon Capture:** Opinions vary on the [environmental impact of ethanol production](#), but an Iowa State University professor thinks carbon capture could be key to changing perceptions about the industry.

**Plant Health:** Researchers at Texas A&M can predict [whether metallic nanoparticles in soil are likely to be absorbed by plants](#)—a condition that could cause toxicity.

**Flowers Battle Pests:** Containing certain natural chemical compounds, some [flowers have their own pest control](#).

**Apples and Nutrients:** A specialist looks at how [sustainable orchard practices](#) improve the availability of nutrients.



**Drought conditions affect water use, agriculture practices, and many other conditions including (1) [wildfire preparation](#), (2) [record fires now occurring](#), and (3) a [grasshopper invasion](#) of cropland.**

## International News

**Bees in the City:** Bee friendly [urban wildflower meadows](#) are a hit with German city dwellers.

**Gene-editing for African Ag:** Breeding programs using genome editing are scarce in African, but public research institutions are [leading the effort to utilize the technology](#) to curb persistent agricultural production challenges.

**Traffic Stopper (video):** This founder of Save Vietnam's Wildlife stops illegal traffickers, educates the public, and [saves endangered animals such as the pangolin](#)

**Green Farming in the Emerald Isle:** Science Foundation Ireland is funding a farming project that [aims to achieve net-zero emissions](#).

**Deadly Plastic:** An award-winning environmentalist in Kenya helped get a [ban on single-use, thin plastics](#). The plastic food wrappers were killing goats, cows, and fish that ingested them.



**The United Nations and Australia are involved in a [dispute over the status of the Great Barrier Reef](#). The iconic site is suffering from environmental damage.**

## General Interest News

**Crash Test Dummies on Tractors (photo story):** The Iowa State Patrol used a well-known speedway to [study farm implement crashes](#).

**Ag Job Dangers:** Penn State researchers looked at emergency room admissions and concluded that the

[agriculture industry is even more dangerous](#) than previously believed.

**DIY Farmer:** Using his own tech savvy, a South Dakota [farmer built a bin aeration control system](#) for \$100 rather than the stated cost of \$80,000.

**Farm Labor Woes:** While a [labor shortage in agriculture](#) is getting worse, [farmworkers are especially vulnerable](#) as dangerous heat waves hit parts of the United States.

**Tobacco Study:** A University of Kentucky study will examine how policies that restrict the sale of [flavored tobacco products](#) including menthol cigarettes impact health disparities among vulnerable populations.

**Exercising Your Microbiome:** This study reviews the [links between exercise and the gut microbiome](#)—and the implications for human health.



Many aquatic life specialists—including an associate professor at the University of Florida—worry that the state's [manatees are dying from starvation](#) because of declining habitats.

This educational comic strip contends that adopted [dogs helped many get through the pandemic](#)—and now the animals need help.

## Photo Credits

P. 1 pollinator pic and surfing photo from facebook.com. Animal Sec. processing plant collage from depositphotos.com. Food Sec. chips pic from menshealth.com. Plant Sec. drought pic from nationaleographic.org. Inter. Sec. reef pic from theday.co.uk and arvholiday.in. Gen. Sec. manatee pic from npr.org. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.

# *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



The Science Source for Food,  
Agricultural, and Environmental Issues

*\*\* With assistance from Megan Wickham (Scientific Editor) and Colleen Hamilton (Membership Specialist)*

*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](mailto:chamilton@cast-science.org), or [CLICK HERE](#) for CAST membership information.*

Council for Agricultural Science and Technology  
[www.cast-science.org](http://www.cast-science.org)

