

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, sciencebased 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

Don't miss the Sustainable Agriculture Summit in Charlotte, NC, on Dec. 6-7, 2022. Join stakeholders across the food and agriculture value chain to develop a shared vision for a sustainable and resilient U.S. food system. Register now!

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CAST welcomes ideas for future publications and projects.

October 27, 2023

Bats Unmasked: Debunking Myths and Celebrating Their Vital Role in Nature

As Halloween approaches, bats often take center stage in the spooky decorations that adorn our homes and neighborhoods. These winged creatures, commonly associated with horror movies and



folklore, have an enduring and complex relationship with people. Yet, their populations face significant challenges, making it crucial to understand their true importance in nature and dispel some common misconceptions.

Bats are essential partners in preserving the delicate balance of nature. They serve as nature's pest controllers by feeding on insects, with nearly 70% of bat species primarily consuming insects. Most bats have a varied diet, including pollen, nectar, and fruit, and play a crucial role in pollinating flowers and dispersing seeds, contributing to the growth of new plants and trees.

However, it's essential to separate fact from fiction. Contrary to popular belief, bats do not have an affinity for flying into human hair. Your hair is not a magnet for these creatures. Moreover, bats won't bite you on the neck like vampires of lore. Vampire bats that feed on animal blood are found primarily in Central and South America, not North America.

But the future of bats in the United States is under threat, with issues like white-nose syndrome and habitat loss taking a heavy toll. White-nose syndrome is a deadly fungal disease that has claimed the lives of an estimated 5.7 million bats in the country, particularly impacting species that



hibernate in caves.

Some species, like the Brazilian free-tailed bats, have adapted to human development by residing in roofing tiles and attics. However, conflicts can arise when bats take shelter in bridges and buildings.

For those dealing with bat problems, exclusion by trained experts using excluder devices is a humane and legal option, as long as it's done outside the bat maternity season. Adding to that, bat houses can provide alternative habitats for these creatures, although their success is not guaranteed. When installing bat houses, placing them in natural areas is essential to prevent colonies from spreading into homes and other buildings.

This Halloween, as you celebrate the spooky and mysterious, take a moment to appreciate the crucial role that bats play in our ecosystems and help protect these misunderstood creatures.

News and Views

USDA: The USDA (1) is <u>providing \$2.3 billion to help American producers</u> maintain and develop markets for their commodities and use U.S. commodities to bolster international food aid; (2) releases a general assessment of the role of <u>agriculture and forestry</u> in the U.S. carbon markets; (3) and publishes a chart showing household <u>food insecurity</u> spiking in 2022.

Far Side of the Barn

Sweet corn: A 4-yearold has grown a <u>cornfield</u> <u>in the front yard</u> of their home in West Omaha.



CAST Updates



Successful 2023 BCCA Event Celebrates Alison Bentley



In a resounding success, the 2023 Borlaug CAST Communication Award (BCCA) event celebrated the exceptional achievements of Alison Bentley. The award ceremony, held at the lowa Events Center in Des Moines on October 25, was attended by a distinguished audience, including state and local officials, outstanding scientists and researchers, previous award winners, university faculty and administrators, executives and leaders from

major agriculture and food companies, and current and former CAST board members, officers, and administrators.

Bentley's presentation connected food security, gender equality, and agricultural science. She highlighted the significance of global food security, gender equality in agricultural communities, and the intersection of science and gender issues throughout history. Dr. Bentley showcased the progress and opportunities ahead in pursuing gender equality within agriculture and science.

Bentley expressed her deep gratitude, saying, "It's a great honor to be receiving this award this year. The Borlaug CAST Communication Award brings together a great cohort of previous winners who are all very inspiring scientists and science communicators. It's a real honor to join that group of people and to have the chance to present here today."

Sarah Evanega, the 2021 BCCA recipient, praised the event's theme and its role in science communication efforts, saying, "The Borlaug CAST Communication Award creates that enabling environment for all of us to stand up and bring forward voices and science so that we can all advocate for agricultural science."

Chris Boomsma, CAST CEO, underscored the award's significance in the agricultural community, stating, "The Borlaug CAST Communication Award is hugely important not only to the CAST organization but also to the agricultural

community in general. Science communication is as important now as ever, and anything we can do to elevate the work of the great individuals working in this space will have a major impact on the agricultural community now and in the future."

Watch our video showcasing the event highlights:



Animal Agriculture and Environmental News

HPAI: The Highly Pathogenic Avian Influenza (HPAI) was confirmed in <u>Buena Vista County</u>, lowa

Cattle: The USDA reports that 2.206 million head of cattle were placed into U.S. feedlots in September 2023, which is 6% higher than the previous year and surpassed expectations.

Livestock: The USDA publishes new standards for <u>organic livestock and poultry production</u> to promote fairer markets and greater transparency for consumers.



Chickens: New research finds that roosters can recognize themselves in the mirror, pointing to signs of intelligence.

Food Science and Safety News

Food Safety: Researchers are exploring ways to prevent future contamination of <u>low-moisture</u> <u>foods</u>, such as infant formulas, during the manufacturing process.

Dyes: Textile, food, and pharmaceutical dyes are harming humans, animals, plants, and the environment worldwide, according to a recent study.

Shrimp: Researchers have found that the <u>labels</u> on <u>shrimp</u> may not match the type and weight of the product being sold.



Sunflower: Sunflower extract can effectively <u>combat fungus</u> <u>growth</u> on blueberries.

Plant Agriculture and Environmental News

Corn: The National Corn Growers Association

(NCGA), along with 62 other agricultural groups, cautions the US Commerce Secretary about duties on phosphate fertilizer imported from Morocco.

Tar Spots: Scientists from the Agricultural Research Service (ARS) have identified a variety of fungi and bacteria that can <u>prevent tar spots</u> from forming on corn.

Irrigation: The Massachusetts Institute of Technology uses drones, robots, and artificial intelligence to get more "drops per crop."
*check CAST's paper "Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges."



Soybean: U.S. soybean meal exports hit a record 13.2M tons worth \$7B, driven by increased soybean crush for U.S. biomass-based diesel production.

International News

Europe: The University of Copenhagen finds that European consumers <u>value animal welfare over</u> <u>climate impacts</u>.

Singapore: Scientists are using fermentation to create <u>palatable</u> and <u>gut-friendly okara biscuits</u>.

Israel: As conflict escalates, Israel's <u>food and</u> <u>agriculture industry</u> prioritizes business continuity amidst staffing challenges.



Canada: Livestock producers in Alberta will receive \$165 million in aid after suffering a season-long drought.

General Interest

Forecast: Commodity prices and crop production expenses are <u>predicted to fall in 2024</u>.

Logistics: An economist advises that having sufficient storage capacity close to productive regions may help offload harvest if downstream transportation options are too expensive or unavailable.

Fertilizers: Rabobank's recent report suggests a positive outlook for the global fertilizer market, with usage expected to increase by 3% in 2023 after a 7% drop in 2022.



Watermelons: Heirloom watermelons are making a comeback.

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Agricultural and Forest Meteorology

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- * Iowa State University

- * National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- * National Corn Growers Association/lowa Corn Promotion Board
- * National Milk Producers Federation
- * National Pork Board
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The Science Source for Food, Agricultural, and Environmental Issues

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