

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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Lively Exchange of Ideas at the Annual BCCA Event--P. 2

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Wildlife Photo Awards



From the image of a puma hunting to an eerie shot of deep-sea garden eels (above), here are the best wildlife photos of the year from the Natural History Museum.

2019 CAST Scholarship

Ten graduate students from the University of Arkansas have been selected to receive this year's scholarship awards. View the list of winners here.

Publication Events in Nation's Capital



On October 21, CAST will <u>present</u> its new issue paper, *Interpreting*Pesticide Residues in Food, at three venues in Washington, D.C.

World Food Prize

October 18, 2019

Science Communication in Focus

BCCA Recipient Dr. Mitloehner Joins a Panel of Experts to Discuss "Filtering Fiction from Fact"

On Wednesday, October 16, CAST celebrated the 10th anniversary of its annual Borlaug CAST Communication Award by honoring this year's prize winner, Frank Mitloehner of the University of California-Davis. Dr. Mitloehner, an expert on air emissions and animal agriculture, uses presentations, media appearances, research, and teaching to promote clear, factual information about food production. He has also become a social media influencer, enlightening the



Frank Mitloehner (right) receiving BCCA sculpture from Kent Schescke.

public and policymakers alike about the realities of modern-day agriculture.



Kenneth Quinn

CAST Executive Vice President Kent Schescke welcomed the 160 participants at the World Food Prize morning event, Julie Borlaug spoke on behalf of this year's sponsor CropLife Foundation, and Schescke honored the president of the World Food Prize, Kenneth Quinn, with a special "Norman Borlaug Plaque." Ambassador Quinn spoke about "climate volatility" and the important role ag/science communicators play in spreading factual information. At year's end, Quinn is retiring from the World Food

Prize presidency after two decades of inspired, passionate leadership.

The remainder of the program featured experts--including Mitloehner and previous BCCA winners--speaking about crucial food production issues and ways to enlighten the public and policymakers about science-based agricultural issues. See page 2 below for more.

News and Views

Biotech and Asynchronicity: The United States and China are working on a trade deal that addresses biotechnology restrictions and other key agricultural issues. According to this report, <u>China operates an</u> asynchronous approval process for biotech traits. Check out the CAST

Simon N. Groot of the Netherlands received the 2019 World Food Prize for his transformative role in empowering millions of smallholder farmers in more than 60 countries to earn greater incomes through enhanced vegetable production.

Grazing Conference

The University of Kentucky will host the <u>Heart of America Grazing</u> Conference October 29-30.

Send in Ideas

CAST <u>welcomes suggestions</u> for future publications and projects.

CAST Social Media













Commentary <u>The Impact of Asynchronous Approvals</u> for Biotech Crops on Agricultural Sustainability, Trade, and Innovation.

Questioning the EPA: Ag and ethanol groups are <u>accusing the EPA of reneging</u> on the biofuels deal announced earlier this month.

College Aggies Online: College students from around the United States work with social media experts and agriculture representatives to improve communication skills.

News from the Far Side of the Barn

Could a Fish Be Roadkill? (video): An invasive fish species that can "breathe air and survive on land" has been found in Georgia.

The Quick and the Dead (video): See if you can spot the hiding leopard. The unfortunate impala didn't.

Octopus Dreams (video): Does a sleeping octopus change colors to match an experience it had while awake?



"Next time I'm going by plane!"--This energetic penguin <u>swam from New</u> <u>Zealand to Australia.</u>

Science and Ag Communication at BCCA Event

Mitloehner Presentation, Panel Discussion, and Insightful Q&A Session

Frank Mitloehner, the 2019 BCCA winner, used a 30-minute presentation (*Feeding the World Without Wasting It*) to show how facts, logic, and clear messages can help explain information in ways that the public understands. Participants saw "communication in action," as he pointed out how misleading media reports cause confusion. For example, he showed that beef production is not a leading contributor to greenhouse gas emissions, that ruminant livestock production is valuable, and that fossil fuels contribute much more to climate change than agriculture.

Mitloehner also emphasized that we "need to do more with less." This refers especially to the use of efficient agricultural production methods, including thoughtful



uses of technology, to boost food production. He also thinks we need to do more with what we already have. "The world is losing 40% of food to waste and loss. Scientists, journalists, and policymakers need to know these facts."



Left to right: Julie Borlaug, Catherine Bertini, Carl Winter, Frank Mitloehner, Channapatna Prakash, and Marty Matlock

During a subsequent panel discussion, Mitloehner was joined by four previous BCCA winners. Julie Borlaug of INARI Agriculture moderated the spirited discussion about communication. Catherine Bertini (2011 BCCA winner and 2003 World Food Laureate) spoke about "best practices to earn the public's trust." Carl Winter (2012 BCCA recipient) pointed out that we need to "educate scientists" so they can communicate efficiently. Channapatna Prakash (2015 BCCA winner) said communicators need to be succinct and use lively language, and he used the misinformation about genetically modified crops as an example. Marty Matlock (2018 BCCA recipient) emphasized problems that come through the media, such as false equivalency and amplified conflict.

Julie Borlaug hosted questions for the panelists, and after many insightful responses from the group, Mitloehner finished the panel discussion with a positive observation.

"Young people are interested in where their food comes from." He explained that we need to tap into that enthusiasm.

You can watch the panel discussion here.

Participants could leave the event hopeful that today's colleagues and tomorrow's agriculturalists will keep striving for clear, factual information about the diverse and passionate efforts to continue Norman Borlaug's legacy to feed the world.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 garden worms pic from digg.com, veggie pic from veggies.jpg, bcca photos from Dwight Tomes, and penguin pic from helsinkitimes.com. P. 2 photos from Dwight Tomes. Animal Sec. sheep pic from sunvalley.com and vulture pic from drovers.com. Food Sec. taco pic from eggnutritioncenter.org and animation from ncba.com. Plant Sec. collage from agronomy.org and forest pic from time.com. Inter. Sec. koala pic from allthatsinteresting.com and sprout pic from bigthink.com. Gen. Sec. fire collage from consumer reports.com and sierraclub.org, and tractor pic from kearneyhub.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.

Animal Agriculture and Environmental News

The Trailing of the Sheep (video): A sheep parade and festival in Ketchum, Idaho, showcase the yearly migration from the high country to lower elevation before winter hits.

Poultry Welfare (opinion): This egg industry expert hopes that veterinarians are making the decisions of when and how to treat flocks. He does not want to see marketing claims interfere with proper stewardship of the animals.

Integrated Dairy System Management: The goal of whole-farm system modeling is to help develop sustainable dairy production systems.



A woolly traffic jam at the Trailing of the Sheep Festival in Idaho is a good thing. See the link at upper left to find out why it is so popular.

Spreading Swine Fever: This Pork Checkoff report--including an intricate map--provides updated information about the global spread of African swine fever. And this article provides an update about the U.S. pork industry's preparation for a possible disease emergency.

Veterinary Technicians: Experts from the AABP, North Carolina State University, and private practices say veterinary technicians can be a solution to underserved rural areas when dealing with food animal practices.

A Vulture Problem: Some Missouri farmers say they are losing calves and mother cows to black vultures. Others defend the birds, and all admit that a certain number are needed to scavenge and help control diseases.

Seafood Farming Trends: Florida State University researchers studied trends in mariculture (seafood farming) by looking at data ranging from 1950 to 2016 from 100 countries.

Food Science and Safety News

Olive Wagyu Steak (video): The cattle are raised on a diet of olives, and some call this steak "the rarest in the world." This cook prepares it "to perfection."

Food and Health Survey: The International Food Information Council and the American Institute for Cancer Research released a survey examining food and health attitudes of 40-to-55-year-olds.

It Ain't Easy Being Green: This writer found out how hard it is to combat the problem of food waste in our own homes.

Food Waste Research: Click here for the CAST paper Food

Waste Across the Supply Chain: A U.S. Perspective on a Global Problem.



This article provides ideas and recipes for using eggs--a way of getting a boost of nutrients.



Beef Animated (videos): Several natural processes have been found to be essential in the development of beef quality, tenderness, color, and shelf life. These animations demonstrate the science behind beef quality.

Soured on the Sweet: Americans spent \$1.4 billion on children's fruit drinks and flavored waters last year. Many have been deemed unhealthy by researchers.

Plant Agriculture and Environmental News

Pox Be Gone: USDA Under Secretary for Marketing and Regulatory Programs Greg Ibach declared the <u>United States free of plum pox virus</u>,

a disease impacting plums, almonds, and peaches.

Hyperaccumulators Show Potential: The <u>use</u> of green plants to repair unhealthy soil has long sparked the curiosity of scientists and plant lovers.

Grapes in the Desert: University of Nevada-Reno experts are <u>using a grant and a partnership</u> to find the best grapes for Nevada's deserts.

Cotton Mouth: U.S. regulators approved genetically modified cotton for human consumption. Texas A&M researchers think the

edible cottonseed could be a "protein-packed new food source."



In a four-year study, researchers experimented with five different rates of potassium fertilizer on alfalfa fields.



Crop and Livestock Integration: This <u>literature review of integrating crops and livestock</u> in an organic system was compiled by researchers from Rodale Institute, Iowa State University, and the University of Minnesota.

Ghost Forests (video): Ghost forests are swaths of dead, white trees created when salty water moves into forested areas.

Tomato-fungus Alert: Florida <u>authorities issued a red alert</u> after tomato brown rugose fruit virus was recently detected by local plant inspectors.

International News

Ready to Work, 24-7 (video): The <u>latest in farming robotics</u> has sensors that can tell when asparagus is ripe for harvest and pincers ready to do the harvesting.

How Many Mycotoxins? An international team of researchers <u>looked at FAO statistics</u> about the percentage of crops contaminated with mycotoxins.

Palm Oil Issues: Purdue economists say <u>palm oil</u> "<u>solutions</u>" may have unintended consequences--especially for the economies of Malaysia and Indonesia.



Hoping for a substitute mom, a lost baby koala latches onto a pet dog.

Pigs for China: One of China's top pig farming companies imported breeding pigs from Denmark.

Drought and Food Insecurity: Millions of people in <u>13 southern African countries could suffer food insecurity</u> between now and March 2020 due to low rainfall in the 2018/2019 growing season.



Lunar Sprouts: A Chinese effort to grow plants on the moon had a sliver of success with a cotton plant on the lunar surface.

General Interest News

Cornfield Drama (video): A 6-year-old boy missing in Minnesota was found safe after a search by hundreds of volunteers and the use of a drone with a thermal camera that helped locate the child in a dark cornfield.

"Neighbor" Is a Verb (related to above): In an older, equally tense episode, neighbors help out when a child is lost in a hot, jungle-like cornfield.

Gene Editing Updates: Next-generation gene editing using CRISPR promises to be more precise, faster, and cheaper. This podcast features several experts, including Jennifer Kuzma of North Carolina State University.

Genome Editing Research (see above): Click here to access CAST IP60, <u>Genome Editing in Agriculture:</u> <u>Methods, Applications, and Governance</u>. Adam Bogdanove of Cornell University was the task force

chair, and Jennifer Kuzma was one of the contributors.



Security Blanket? (video): Tests are positive indicating that wrapping wooden structures like houses in huge fire blankets can protect them from fast-moving wildfires.

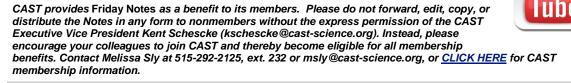


Harvest-time Fires: The University of Nebraska-Lincoln provides <u>advice about equipment fires</u> during harvest season.

Fields of Danger: A recent CAST blog looked at various <u>aspects of farm safety</u>, and this older blog includes a story at the bottom about "<u>fire in the fields</u>."

CAST Information

Check out CAST's page at the <u>YouTube site</u> to view highly regarded agscience videos about probiotics, food safety, and water issues--or the latest video dealing with proposed mandatory labeling of GMO food items.



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