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...... Click to Read
More on the BCCA and CAST's Publication Rollout--P. 2
Animal Agriculture News
Food Science and Safety News
Plant and Environment News
International News
General Interest News

Have a Look
From a lizard hitching a ride on an iguana to a newborn cowboy baby, the winning images of the *Smithsonian* magazine photo contest are stunning.

Earth Day--April 22
This year's Earth Day theme focuses on the decline of certain species due to human activity.

Science Talks
National Hog Farmer recently launched "Science Talks," a webinar series featuring veterinarians from Kansas State and Iowa State. The first episode will air April 24.

Pork Scholarships
The Pork Checkoff awarded 20 scholarships to college students around the United States--based

April 19, 2019
CAST Events in D.C.
Presentations, announcements, and meetings promote agriculture and science

During an exciting week for agriculture, CAST announced that Dr. Frank Mitloehner (UC-Davis) is the 2019 Borlaug CAST Communication Award honoree, and the organization also rolled out its newest issue paper--a science-based examination of water quality and the impacts of agricultural nutrients. Both events occurred in the nation's capital, and adding to the buzz, CAST board members gathered for the yearly spring meeting.

The annual BCCA announcement program has become an anticipated event celebrating the need for effective communication in the world of agriculture. See page two below for more about the speech by 2018 BCCA recipient Dr. Marty Matlock (University of Arkansas) and the subsequent announcement of the 2019 BCCA winner.

On April 15, the day before the BCCA announcement, Dr. Heidi Peterson presented highlights of CAST's new issue paper, *Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape*, at three D.C. venues--the Longworth House Office Building, the Russell Senate Office Building, and the Fertilizer Institute. See page two below for more.

News and Views

Trade Issues: A study finds that the new North American trade deal (based on old NAFTA) would provide a very modest boost to the economy, and it could affect U.S. auto sales. Also, the World Trade Organization ruled that China has administered its tariff-rate quotas for wheat, corn, and rice inconsistently with its WTO commitments.
on scholastic merit, leadership activities, and involvement in the pork production industry.

**Programs of Distinction**
The University of Missouri established criteria for its "Programs of Distinction"—research, teaching, and extension programs that are nationally and internationally recognized.

**Microbiomics**
Kansas State University will host a National Academies of Sciences, Engineering, and Medicine event titled "Harnessing Soil and Plant Microbiomics for Agriculture: Hype, Hope and Reality" April 23-24.

**Science Studies**
This University of Kentucky graduate student won a 2019 research award from the U.S. Department of Energy as part of a STEM initiative.

**Send in Ideas**
CAST welcomes suggestions for future publications and projects.

**CAST Social Media**

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**Ag Census Analyses:** Harvest Public Broadcasting looks at the USDA census about agriculture, and the Farm Bureau organization also examines the report.

**Trade Talk Glitch?** The American Soybean Association says it is disappointed with a European Union decision to exclude agriculture from negotiations regarding an EU-U.S. Free Trade Agreement.

**Grain Projections:** The USDA lowered its export projections for corn and wheat in the 2018-2019 harvest season amid slumping grain volumes and Midwest rail operations coping with record flooding.

**News from the Far Side of the Barn**

**Playing With Trash (video):** Plastic pollution in the ocean is a serious issue, but this dolphin made it into a game.

**Pony on Ice:** Russian researchers found liquid blood and urine inside the frozen carcass of a foal that died 42,000 years ago in Siberia.

**Get Lost! (video):** A dugong (sea cow) apparently does not want to be bothered by a couple of irritating fish.

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**A Science-based Research Publication and a Respected Ag-science Communicator**
Reducing the Impacts of Agricultural Nutrients on Water Quality across a Changing Landscape

On April 15 in Washington, D.C., Heidi Peterson gave three presentations to provide an overview of the processes, conservation practices, and programs that influence the impact of agriculture on surface and groundwater quality. Peterson currently serves as the Phosphorus Program Director for the International Plant Nutrition Institute, and she is recognized for her expertise regarding water management and agriculture.

Check here for free access to the full paper and here for the Ag quickCAST one-page summary.

Frank Mitloehner: 2019 BCCA Honoree

This year’s Borlaug CAST Communication Award announcement occurred at the USDA Whitten Patio, and Deputy Under Secretary Scott Hutchins welcomed attendees with insights about the agriculture department and CAST’s role in producing credible information for policymakers and the public. CAST EVP Kent Schescke then introduced the guest speaker, Dr. Marty Matlock—renowned for his research and insights about food production, sustainability, and global trends. Matlock spoke about “The Promise of Prosperity from the Land in the 21st Century” and then answered questions from the audience.

CAST President Dr. Gabe Middleton (American Association of Bovine Practitioners) spoke about the BCCA selection process and then announced this year’s recipient. A professor and specialist at UC-Davis, Frank Mitloehner is well respected for his ability to communicate scientific information about livestock agriculture and the impacts on climate. He believes scientists should share what they know, and along with doing hundreds of presentations and media appearances, Mitloehner maintains an active presence on social media.

The Borlaug CAST Communication Award is sponsored by the CropLife Foundation, and the event concluded with remarks from Kellie Bray (CropLife America Chief of Staff).

Click here to access a video recording of the full BCCA presentation. Dr. Matlock’s speech begins at the 12:45 mark and the BCCA announcement comes at the 40:11 mark.
Animal Agriculture and Environmental News

Consider the Whole Picture (video): Frank Mitloehner--2019 BCCA honoree--says conclusions about animal sustainability should consider the whole chain of events. According to him, animal agriculture is getting slighted with faulty analyses.

An Alternate Picture (see above): This article looks at a different view about animal ag--and $50 burgers. Many livestock experts might disagree with the "picture" this opinion paints.

Promoting Poultry (video): As this website and video demonstrate, the American Association of Avian Pathologists promotes scientific knowledge to enhance the health, well-being, and productivity of poultry to provide safe and abundant food for the world.

Cows and Calves: In this article, veterinarians provide information about handling difficult calving situations.

African Swine Fever in Asia: According to this report, African swine fever has spread to every province in mainland China and will soon affect an estimated 150 to 200 million pigs. Vietnam is also suffering losses.

Searching for Solutions: Members of the sheep and goat department of Texas A&M are using technology to address the diseases and concerns prevalent in the sheep and goat industry today.

Llama Disappearing Act: The llama population in the United States appears to be shrinking, according to the recent USDA Agriculture Census.

Sniffing Out Cancer: Research that supports using the superior snouts of dogs for cancer screening was presented at the annual Experimental Biology 2019 meeting in Florida.

Food Science and Safety News
Got Bugs? (video): If you think the strawberry Yoplait yogurt you’re eating is red from the fruit--think again. The color comes from squashed bugs.

Food Science Insights (video): The new North Carolina State series--“A Day in the Life”--kicks off with food science senior Monica Richmond as she takes us around campus.

Future of Food Research: A National Academies of Sciences, Engineering, and Medicine study looks at five breakthroughs in efforts to advance food and agriculture research.

Fuel for Athletes: This university report suggests new international guidelines for protein intake in track and field athletes.

Fighting Obesity: This Appalachian town was once called “America’s fattest city.” Here’s how it slimmed down. BTW, there’s no quick fix.

Labeling Changes? The USDA’s Food Safety and Inspection Service announced proposals to amend labeling regulations in an effort to remove duplicative net weight and net content requirements for certain meat and poultry packages.

Meat Consumption Benefits? Studies about the health benefits or hazards of meat consumption are numerous. This report found that people who eat meat and dairy products in moderation have increased heart health and longevity.

Meat Consumption Negatives? This research says replacing red meat with healthy plant proteins led to decreased risks for cardiovascular disease. As with all studies, methods, variables, and interpretation are important considerations.

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**Plant Agriculture and Environmental News**

Hey Students--Even Cotton Bales Get Graded (video): Find out about the history of cotton, varied production methods, and the processes used in textile factories.

Covering It Up: The USDA Ag Census indicates cover crop use is increasing approximately 50% nationwide--and the credit is going to a variety of groups.

Clean Energy Jobs Up: The Midwest added more than 28,000 clean energy jobs in 2018, according to a report that looks at employment in various energy sectors.

Flooding Affects Soil: This report says that long after the rains stop, floodwaters continue to impact soil's physical, chemical, and biological properties. Also, get a free download of CAST’s new issue paper regarding the impacts of agricultural nutrients on water quality.

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In the Fight: This expert looks at herbicide-resistant super weeds such as Palmer amaranth—and how control methods include varied chemicals, cover crops, and other techniques.

Microbes to the Rescue? An Iowa State researcher identified microbes that may reduce allergy-like reactions some people have to aged cheese.

International News

Restoring Cuban Farmland: Cuba’s “Agroecology Queen” is building sustainable organic farming practices for Cuba’s people to ensure self-sufficiency. Read the Q&A here.

Biotech Hurdles? According to this commentary, China’s approval process for biotech crops is beset by regulatory hurdles and delays that hinder U.S. companies and farmers.

Biotech Regs (related to above): Check out this CAST Commentary--The Impact of Asynchronous Approvals for Biotech Crops on Agricultural Sustainability, Trade, and Innovation.

Fancy Hog Accommodations: This article takes a detailed look at a modern pig farm in Thailand—and some say it is like a porcine five-star hotel.

Food from a Nuke Zone: The Dairy Reporter provides coverage of Japan’s food strategy regarding the Fukushima radioactive zone—and several other ag-related topics.

Fresh Eggs Make a Big Difference: FAO’s poultry intervention has supplied chickens, feed, and housing in northeastern Nigeria.

General Interest News
From Scarcity to Security (video): This Chicago Council on Global Affairs clip looks at water issues and the potential for severe economic, political, and humanitarian consequences if water management is neglected.

Rangeland Specialist: This researcher-consultant uses the expertise she gained at the University of Nevada Reno as she spends time in the field on horseback, working with ranchers in her position as rangeland consultant.

Reward for Hard Work: Three years of dedication, academic excellence, and ambition earned this University of Arkansas entomology graduate student the $15,000 Scholar Award from the Philanthropic Education Organization.

World Food Prize Youth: Eighteen high school students chosen as Borlaug Scholars were participants in the third annual World Food Prize Mississippi Youth Institute at Mississippi State University.

Freeze Frame: Check out Mark Parker's list of the top 10 topics farmers post as photos on social media--including stuck tractors and goats draped with underwear.

In Case You Debate about the Anthropocene Era This Weekend: Researchers are going to decide whether or not Earth entered the Anthropocene in the year 1950, and that could mean that human activities, not natural processes, are the dominant driver of change on Earth's surface.

CAST Information

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

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 Melissa Sly at 515-292-2125, ext. 232 or msly@cast-science.org, or CLICK HERE for CAST membership information.

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* 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 for Nutrition Nutritional Sciences Council
* American Society of Agricultural and Biological Engineers
* American Society of Agronomy
* American Society of Animal Science
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