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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Award-winning Photos

Up to our necks in flamingos--check out this pink scrum and other beautiful snapshots of birds taken by top photographers.

Claude Brown

Claude Brown--agriculturalist, engineer, community volunteer, outdoorsman, and more--passed away recently. Former CAST EVP John Bonner points out that Brown was on CAST's first Board of Trustees, and he was awarded the CAST President's Award. Linda Chimenti, also a former CAST EVP, notes that Brown helped get California agricultural groups more involved with CAST. "He had many ideas. His energy was amazing and people really liked him." Click here for the obituary about this influential man.

August 24, 2018

Agriculture and Education

Education never stops, and when it comes to learning about agriculture and food, the process should definitely be ongoing. But in many parts of the world--and especially in the United States--this specific time of year signifies a return to the classroom for many students.

CAST information is available to thousands of students, and Friday Notes has a direct link with elementary and secondary schools through the National Association of Agricultural Educators. CAST's Education Program also involves 15 top-ranked universities. The following links reflect some of the many student activities at these schools, and more university research and information is available in various sections of each edition of Friday Notes.

*** University of Florida students spent a week doing research and learning about a diverse range of topics on farms in Kenya.

*** A North Carolina State student visited national parks and forests to better understand the impact that environmental legislation can have on communities.

*** Communicators, farmers, scientists, youth leaders, and agricultural experts are among those who will be participating in the 2018 Cornell Alliance for Science Global Leadership Fellows Program.

News and Views

See page two below for more about universities and the education program.
Join Us at the World Food Prize
During a special morning session on Oct. 17, CAST will present the 2018 Borlaug CAST Communication Award to Dr. Marty Matlock. Watch for details.

Teach Ag Day
The ninth annual National Teach Ag Day celebration will take place on September 20, as the nation recognizes the important role agriculture teachers play in our schools and communities.

Agronomy, Crop, and Soil Sciences Internship
Check here for information about working as an intern at the Washington, D.C., headquarters of the USDA’s National Institute of Food and Agriculture.

Submit an Idea
We welcome suggestions for future CAST publications and projects. Click here to submit ideas.

Catch CAST Online!
Follow us on social media to stay up to date on the latest ag trends and recent CAST news!

Tariffs and Trade Talks: China and the U.S. are back at the trade negotiating table just as more tariffs take effect -- 16 billion dollars on Chinese products and counter-tariffs on U.S. goods.

Lab Meat Deal? Memphis Meats and the North American Meat Institute proposed a plan that might get cell-cultured meat to the market. The groups suggest the USDA and FDA share joint oversight of the new products.

More about WOTUS: A federal court decision to restore the Waters of the United States 2015 rule has led to more discussions. Check here for one overview and here for a look at some of the legalities.

Food Waste and Science: This site looks at ways to reduce food waste and address hunger issues with the use of genetically modified crops. Check the Food Section below for more links about food waste, and watch for details about the September 28 rollout of a CAST Issue Paper about this important topic.

News from the Far Side of the Barn
Peer-reviewed Research Gets Mud in Your Eye (video): These two boys show how scientific inquiry might work when mud and dirt bikes are the subjects.

Motherly Love and a Helping Hand (video): A cow named “Flo” seems sincere and concerned as she seeks help for her new baby calf.

So You Wanna See a Whale! This one provides a big splash and a definite pants-wetting situation.

Welcome Tuskegee
Another highly respected university joins the CAST Education Program
The CAST community welcomes its newest educational program member, Tuskegee University. Ranked among the best, Tuskegee University offers 40 bachelor's degree programs, 17 master's degree programs, a Doctor of Veterinary Medicine, and much more. Located in Alabama, the university has been designated as a Registered National Historic Landmark and a National Historic Site.

With CAST's revamped tiered membership, universities and institutes of all sizes are able to take advantage of CAST's valuable membership services.

The inclusion of these agricultural institutions provides a symbiotic partnership in furthering the goal of improved agricultural and science communication.

Note: Marceline Egnin of Tuskegee University and Melinda Yerka of the University of Nevada-Reno are new members of CAST's Board of Representatives. They are the first such representatives from the Education Program member category.

**Friday Notes News Categories**


**Animal Agriculture and Environmental News**

**It Takes Guts to Chemosense:** Speakers at a recent pig symposium presented evidence that the human and porcine gut has precise methods to sense contents, protect the rest of the body, and regulate nutrients.

**Shocking Discovery:** University of Alabama researchers discovered that the heart of a newborn piglet has the remarkable ability to completely heal itself after experimental heart attacks.

**Reading Personality:** Researchers conducted a study with 56 dairy calves to identify personality traits that may be associated with feeding behavior and performance.

**Youth and Cattle:** This program boasts a cow/calf incentive award, and it helps young people build their knowledge about cattle.

**Pork Pod (podcast):** A National Pork Board expert speaks about emergency responses to diseases—and other issues.

Wildlife officials in Washington plan to take lethal action against wolves that have been killing cattle near the Canadian border.
Mega Milking: Milking cows on an industrial scale is becoming more prevalent in western Minnesota, and farmer reaction is mixed.

Virtual Reality--Chicken Style: The development of a series of 360-degree virtual reality videos shows the various stages of a chicken's life during modern, commercial production.

Food Science and Safety News

Toss It or Keep It? (videos): With food labels carrying dates that include "sell by," "use by," and "best if used by," many are confused. This CAST video explains the differences, and a CNN video notes that 90% of consumers are confused by the labels.

Food Waste on Campus--and Off: A new report looks at why 18- to 24-year-old college students have a higher tendency to waste food and how their residence type--on or off campus--plays a role.

Givin' You the Facts: Kylie explains why your Romaine lettuce is not really shrink-wrapped in plastic.

Future Food Fight (opinion): Jayson Lusk looks into the future and predicts that greater affluence will lead to greater disagreement about which food and food systems are ideal.

A Natural Preservative? Scientists have discovered a plant-based food preservative that is more effective than artificial preservatives at inhibiting bacterial growth and keeping food fresher for longer.

Fresh or Frozen: This UC-Davis study says there were no significant nutritional differences between the quality of frozen fruits and vegetables compared with fresh.

Plant Agriculture and Environmental News
**Wheat Genome and Climate Change:** An international team of scientists identified the location of more than 100,000 wheat genes. They say the map will accelerate the development of new strains to cope with climate change effects.

**Wheat Resource:** Kansas State researchers unveiled a new genetic resource to improve wheat production.

**Update on Corn Breakthrough:** UC-Davis scientists joined other researchers to study corn in Mexico that apparently creates its own fertilizer.

**Soil and Carbon:** This study analyzed three soil sampling methods to better understand quantifying and comparing soil carbon stocks.

**Integrated Agriculture:** This article looks at integrated crop-livestock systems and the benefits they can provide--especially for yields and efficiency.

**A New Type of Fuel?** The National Sorghum Producers organization is fighting for a pathway into the biodiesel market.

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**International News**

**Deadly Floods in India (video):** Rivers known for their beauty are spilling into cities, fields, playgrounds, and much of this state in India.

**Pesticides and Food:** This study about diet and pesticide exposure concludes that Danish consumers are very unlikely to suffer adverse health effects from such chemicals.

**Lightning Laboratory:** Hundreds of reindeer died during lightning strikes in Norway. Their carcasses are a laboratory for scientific research.

**Long Live the Forests:** This first-of-its-kind study counteracts previous assumptions and shows that children in 27 developing countries have better nutrition when they are near forests.

**Extreme Weather and Global Crops:** A summer heatwave has shrunk cereal harvests and shriveled pastures in Europe--and adverse weather has affected crops in Russia, Australia, and other countries.

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**General Interest News**
Deterring Doggie Doo (video): This homeowner devised a way to shame those who do not pick up after their dogs.

Almonds and Bees: Almond growing in California is a $7.6 billion industry that would not be possible without the 30 billion bees--and hundreds of human beekeepers--that keep the trees pollinated.

Laser Scarecrows: Some fruit growers are optimistic about "sweeping green laser beams" that stave off thieving birds.

Hitchin’ a Ride: The Asian longhorned tick appeared last year in New Jersey and since then has done what ticks do--hitch rides to new locations.

Using Science to Fight Skeeters (opinion): This editorial supports using genetically modified mosquitoes to prevent diseases.

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 Colleen Hamilton at 515-292-2125, ext. 224 or chamilton@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
* American Society of Plant Biologists
* American Veterinary Medical Association
* Aquatic Plant Management Society
* BASF Corporation
* Corteva Agriscience, Agriculture Division of DowDuPont
* CropLife America
* Crop Science Society of America
* Entomological Society of America
* Innovation Center for U.S. Dairy
* Land O'Lakes
CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.

Members of CAST’s Education Program

* Cal Poly-San Luis Obispo
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* Kansas State University
* Mississippi State University
* North Carolina State University
* Texas A&M University College of Ag & Life Sciences
* The Ohio State 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 Nebraska Agricultural Research Division
* University of Nevada-Reno College of Agriculture, Biotechnology and Natural Resources
* University of Tuskegee

Note: Land O’Lakes provides sponsorship for the distribution of Friday Notes to the National Association of Agricultural Educators.