

Friday Notes

Council for Agricultural Science and Technology



The Science Source for Food, Agricultural, and Environmental Issues

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

[California Dreaming as CAST Board Meets on UC-Davis Campus--P. 2](#)

[Animal Agriculture News](#)

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[International News](#)

[General Interest News](#)

Lavender Power



Some think lavender has healing powers to [reduce stress and anxiety](#)--others just enjoy its beauty.

National FFA Convention

We hope you have been following the [happenings at the 91st National FFA Convention](#).

Campus Buzz

University of Florida students are [helping with relief programs](#) after Hurricane Michael; University of Kentucky officials are working to [ensure food and housing security](#) for all students; and a new Cornell University online tool provides useful [data and trends regarding climate change](#).

WFP Teaching Award



The World Food Prize presented the

October 26, 2018

Collaboration and Integration

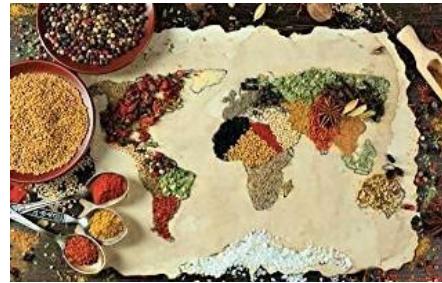
Working together to build nutrition and food security

The 2018 World Food Prize laureates--[Lawrence Haddad and David](#)

[Nabarro](#)--spoke often about global cooperation in the fight against malnutrition; [BCCA winner Marty Matlock](#)

[Matlock](#) stated clearly that "everything is connected"; and many of the [enlightening sessions](#)

[during WFP week](#) focused on the connections we need to make in the effort to nourish the world. The challenges are daunting, but behind the headlines many are working hard to improve global food security--from farmers to scientists, from organic growers to giant corporations, from community organizers to United Nations officials.



The following links are a few of the hundreds referring to innovative methods and diverse techniques that work to develop sustainable, productive agriculture:

(1) Chris Clayton featured Marty Matlock's [ideas about addressing climate change, population growth, and sustainability](#). (2) The USAID congratulated Haddad and Nabarro, "whose efforts over the last several decades helped put [nutrition at the top of the global development agenda](#)." (3) This molecular biologist claims to appreciate the awesome potential of [both genetic engineering technologies and organic farming](#) goals. (4) A beef producer tests out innovative tools but also appreciates "[grandpa's methods](#)." (5) This agronomist looks at the future for [smallholder farmers in the era of big agriculture](#).

News and Views

Movin' Out: The USDA plans to send hundreds of its [employees out of Washington, D.C.](#), and towns in at least 35 states have expressed interest in hosting such facilities.



inaugural "[Inspiring the Next Generation](#)" award to Iowa State University Associate Dean David Acker--pictured above with Jeanie Borlaug Laube.

Send In Ideas
CAST [welcomes suggestions](#) for future publications and projects.

International Symposium
Two Mississippi State graduate students were selected for a [leadership program focused on global food security](#) last summer. This qualified them to attend the Borlaug International Symposium at the World Food Prize.

Malaria Study
A \$3 million grant will help Kansas State University researchers understand [how malaria mosquitoes fend off infections](#).



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

Child Hunger: Some members of the "Hunger, Conflict, and Peace" panel at the World Food Prize Borlaug Dialogue said the [severity of hunger on a global level will greatly affect children](#) if improvements are not made by the end of the year.

Dairy Request: The National Milk Producers Federation asked the USDA to increase [payments to dairy farmers for losses](#) due to tariffs.

Roundup in Court: The atrazine/cancer court appeal ended with [mixed results](#), and [another appeal](#) is expected.

Mind the GAP: The [annual GAP report](#) lays out five agricultural productivity goals that "policymakers and industry need to pursue."

Tiny Drone Weightlifters (video): A remarkable video released by Stanford University shows tiny flying robots that have been modified to [move loads up to 40 times their weight](#).

News from the Far Side of the Barn

The Classic 8-arm Escape Maneuver (video): This octopus shows that it has [more brains than the jovial fishermen](#) running the boat.



Headless Chicken Monster (video): The bizarre creature swimming in the Antarctic Ocean does indeed look like it is missing a head, but it is [actually a sea cucumber](#).

Meaty and scary Halloween recipes include these monster tacos.

Caterpillar in Snake's Clothing (video): The [snake-mimic caterpillar](#) lives up to its name by camouflaging as a mean-looking serpent when necessary.

Meetings, Tours, and Ideas

CAST board members and staff gather on the UC-Davis Campus

Surrounded by the beauty of the UC-Davis campus, CAST board members convened for the organization's



[Alison Van Eenennaam](#)--animal biotech and genomics specialist and 2014 BCCA winner--is

annual meeting on October 23, and for three days they met in work groups, toured various facilities, and discussed ways that CAST



[Carl Winter](#)--scientist, professor, and 2012 BCCA winner--has a way with words (and [song and parody](#)).
Advisory Board.

in her element as she explains animal science.

Check out [her recent essay about cattle production](#) and lab meat.

could be most effective in performing its mission. Although attendees came from scattered locations and varied fields of expertise, they exchanged ideas about how best to communicate credible science and agricultural information to policymakers and the public.

Attendees toured several locations including the university campus, the Robert Mondavi Institute, and a Syngenta R&D center. They held official meetings at the California Farm Bureau Federation building. Borlaug CAST Communication Award laureates Carl Winter and Alison Van Eenennaam addressed the gathering on Tuesday, and 2017 BCCA winner [Jayson Lusk](#) spoke to the group via webcasting. Lusk, a Distinguished Professor at Purdue, [was recently appointed](#) to the National Agricultural Research, Extension, Education, and Economics

Proceedings and Presidents

CAST President [Nancy Reichert](#) presided over the proceedings--including work group meetings and panel discussions. President-Elect Gabe Middleton led a special focus on the CAST Strategic Plan--and after Reichert passed the gavel on to him, Middleton presented his "new president's mission statement."

Nancy Reichert's final "president's letter" outlined CAST's accomplishments, but it also demonstrates why she has been such a positive, effective leader for the organization. A few excerpts from her letter ([full version here](#)):

"What quickly became apparent to me is how all our efforts in CAST are truly inter-connected, just as depicted in the Strategic Plan circular flow chart. Because of this group effort, we have been incredibly prolific, publication-wise. Six reports, along with accompanying Ag quickCASTs, were published and rolled out in 2018, to date, with an additional report scheduled for release later this year."

Reichert goes on to point out the crucial input CAST receives from companies, organizations, societies, and universities--and the support that came from many individuals including CAST board members, CAST EVP Kent Schescke, and his staff members. As she said, "This experience was a highlight of my professional career. It took a village called CAST to enable me to serve as President." Her final presidential duty came at the end of the annual meeting: "One last thing to say--Gabe, get ready to take the baton!"



It may look like a gavel, but Gabe Middleton "takes the baton" from Nancy Reichert.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 lavender pic from nytimes.com, graphic map from amazon.com, Acker photo from wfp.com, and taco pic from pinterest.com. P. 2 photos from Kylie Peterson. Animal Sec. cattle pic from drovers.com and Capper photo from twitter.com. Food Sec. drone pic from grubstreet.com. Plant Sec. sisal pic from corporate-digest.com. Inter. Sec. woman and eagle photo from cbsnews.com. Gen. Sec. skyscraper pic from whotv.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Farming Uncertainty: This pork producer worries that his business has become [collateral damage in the trade wars](#).

Super Litters: Modern genetics have created hyperprolific sows (22 pigs a litter!), but this can lead to feeding problems and relatively high mortality figures. This [solution might help overcome that](#).

Poultry Pause: Oklahoma has [suspended permitting of poultry farms](#) in the state until a board of state and tribal officials can analyze the industry's growth.

Beef Production in Sync (opinion): This expert believes the beef industry's [environmental stewardship and sustainability](#) keep it in sync with nature and land management.



Livestock Expert Honored: The winners of the 2018 British Farming Awards included [Jude Capper](#), a leading livestock consultant. Several years ago, Dr. Capper chaired a well-received [CAST publication about livestock sustainability](#).

Swine Fever and Table Scraps: China's agriculture ministry [will ban the feeding of kitchen waste to pigs](#) after linking the practice to some early cases of African swine fever. This disease does NOT affect humans.

Veterinarian Aid: The dearth of rural veterinarians is a growing concern in Colorado and elsewhere. A Colorado State University [program is trying to help](#).

Vampire Ticks? Scientists found that 70% of moose calves in New Hampshire's woodlands have died in a recent three-year period--with the cause attributed to the dramatic [rise in winter ticks that feast on their blood](#).



Lab Meat Meeting: The USDA and FDA are holding a joint public meeting on the [regulation of lab-produced, cell-cultured meat](#).

Blockchain in Use: According to reports, this blockchain system [substantiates food product claims](#) with reliable, real-time data.

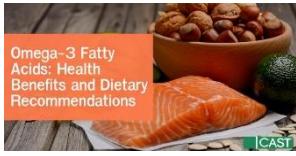
What Would Willy Wonka Choose? This list of "25 [most influential candy bars in American history](#)" includes a variety of types--from Whatchamacallit to Hersey's Cookies "N" Crème.

The Transformation of Meat: From the moment of slaughter, irreversible [chemical changes take place in an animal](#) to create the meals we know.

Food in Flight: This archived blog, [Amazon Left a Pig on my Doorstep](#), looks at the first moves toward drone delivery (related link in caption).



As this video shows, some think that Uber will move into the [drone delivery service for food](#). Check related link at left.



Possible Omega-3 Benefit: According to this research led by a University of Nebraska expert, Omega-3 fatty acids [may suppress the growth and spread of breast cancer cells--at least in mice.](#)

Omega-3 Research: This CAST Special Publication looks at [Omega-3 health effects, dietary sources, recommended intakes, and federal regulations](#) regarding health and nutrient claims



Plant Agriculture and Environmental News

Ethanol Debate: Supporters of the EPA's upcoming proposal to allow year-round use of [gasoline blended with 15% ethanol](#) made their case--saying the blend is safe, is dependable, and cuts down on smog-forming tailpipe emissions.

A Market Watch (video): This agweb.com interview of three economists at Purdue focuses on [five key factors to watch](#) in the upcoming agriculture markets.

The Importance of Auxin: A North Carolina State study sheds light on the importance of [when and where the plant hormone auxin is produced](#).

Some Call Them "Green Manure": This site is [a cover crop primer](#)--plants that can help with erosion, water quality, nutrient recycling, and soil health.

Soybean Stare Down: With trade battles occurring, China might face a [potential shortage of soybeans](#).

Soybean Uses (podcast available): As reported by the University of Nebraska-Lincoln, current [market conditions for raw, whole soybeans](#) are making them competitive with other protein sources.

Corn in Your Tank--and Other Uses: This article provides a look at the [ethanol process and the rulings governing it](#).



Researchers in Africa are [using sun-dried sisal wastes](#)--instead of maize bran--as a source of energy in supplementary diets regarding the growth performance of beef cattle.



International News



Fly Like an Eagle (video): The Eagle Huntress is a [documentary about a remarkable Mongolian girl](#), but some debate the veracity of the story (related to link in caption at right).

An Oklahoma [woman learned to fly like an eagle](#) in Mongolia--she joined hunters who partner with the beautiful birds (related link upper left).

Cattle Health in the United Kingdom: A state-of-the-nation review of [cattle health and welfare highlights](#) progress in the fights against bovine viral diarrhea, Johne's disease, and mastitis.

Living Off the Land in the Arctic Circle (related to below): In Lapland, chefs and residents [hunt and gather to make dishes](#) such as bear soup, lingonberry syrup, and reindeer meat.

Seaweed in the Arctic Circle (video): Farming seaweed in northern Russia is a [dangerous but lucrative job](#).

Entrepreneurs Lend Glamor to African Agriculture: Successful young farmers are [working to jazz up agriculture's image](#) on the continent.

China, Tech, and Ag: According to this report, China is [transforming its traditional agriculture sector](#), using science and technology to drive rural revitalization and modernization.

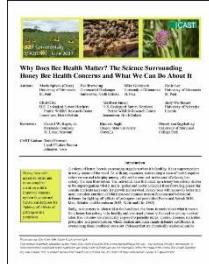


He Has a Beef with These Bears: A rancher in Alaska says that [bears have killed at least 30 cattle](#) this year.

Is There a Vaccination for Misinformation? (opinion): This expert warns that a century after the world's worst flu epidemic, the rapid spread of misinformation is [undermining trust in vaccines](#) crucial to public health.

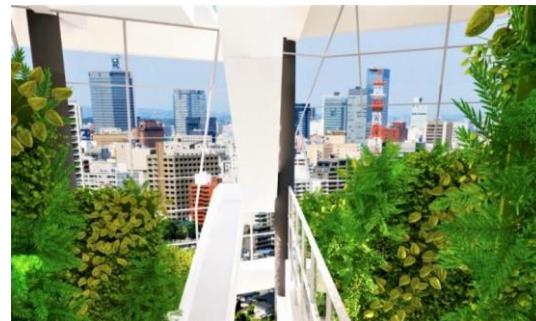
Ag Damage in Paradise: Big Island Hawaii farmers suffered nearly \$28 million in damages [because of the months-long eruption](#) earlier this year of the Kilauea volcano--from flowers to papayas to nuts.

Leak in the Gulf: An oil spill that has been quietly [leaking millions of barrels into the Gulf of Mexico](#) has gone unplugged for so long that it now verges on becoming one of the worst offshore disasters in U.S. history.



Seeds for Bees: This program [encourages the use of cover crops](#) to increase the density, diversity, and duration of bee forage in California orchards, farms, and vineyards--while also improving soil health.

Bee Health (related to above): [Click here to access the CAST Commentary Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It.](#)



A new type of vertical farming involves giant [skyscraper greenhouses](#) that produce food in a controlled environment--alongside offices and retail outlets.

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 Dairy Science Association
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- * 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
- * Monsanto
- * National Corn Growers Association/Iowa Corn Promotion Board

- * National Milk Producers Federation
- * National Pork Board
- * North Carolina Biotechnology Center
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Poultry Science Association
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tyson Foods
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science

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.

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- * Kansas State University
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