

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 the CAST organization.

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August Will Be Membership Appreciation Month--P. 2

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Plant and Environment News

International News

General Interest News



This National Academies of Sciences, Engineering, and Medicine site provides information about Science Breakthroughs 2030: A Strategy for Food and Agricultural Research. A related town hall meeting will be held on Aug. 8 in Washington, D.C.

August--Celebrate CAST Members Month

Scroll down to page two for information about the many members and volunteers who make CAST successful.

Food Evolution

This UC-Berkeley <u>professor reviews</u> the film *Food Evolution*, describing it as "accurate and insightful." The National Academies of Sciences, Engineering, and Medicine will host a <u>free screening on Aug. 7 in</u> Washington, D.C. Check this site for

July 28, 2017

Summer Ag Films Slant and opinion, not fun fluff



Years ago, summertime meant drive-in movies--a social event that involved cars, kids, and occasional chaos. For various

reasons, the movie was not always the main attraction. Now films grab our attention on digital screens--from jumbo sets to hand-held devices. Cable, the internet, and other digital offerings have joined traditional theaters as viewers focus on entertainment--and messages.

For better and worse, agriculture is often in the movie spotlight. This summer several films are stirring debate, so we'll provide some links (among the many) to pull back the curtain on three of them.

We have covered *Food Evolution* before, and more information can be found in the column at left. Most scientists--and even <u>Rotten Tomatoes</u>--give it a thumbs-up, although a few critics have spoken out.

A Netflix film called <u>What the Health</u> has generated a lot of conversation. The agriculture community has been <u>taking issue</u> with many of its contentions. This critical review addresses--and debunks--37 of its claims.

Okja is an imaginative fantasy about a young girl and a huge, biotech pig--with themes about animal activism, corporate greed,



Click here to access CAST videos about food and here to view CAST's YouTube channel.

and science ethics. Several ag organizations criticized the film, saying it completely misrepresents farmers and food producers.

More ag-related films are available, but many say summertime's most rewarding viewing comes with the outdoors--from fireflies to sunsets and from a solar eclipse to meteor showers, the best shows are free.

News and Views

more <u>viewing locations and other</u> information.



Hunger Summit

The 2017 Iowa Hunger Summit will take place on October 16, 2017.

It kicks off the Borlaug Dialogue events related to the World Food Prize.

Food and Health

Dr. Tamika Sims of the International Food Information Council shares key findings from their recent Food and Health Survey.

Future Farming

The <u>Future Farm Expo</u> will be held in Oregon on August 15-17.

Dairy Science Students

Cal Poly dairy science students were among the top contenders at the recent Western Spring National Collegiate Dairy Judging Contest.



Research Leads to Inventions: U.S. Secretary of Agriculture Sonny Perdue announced that USDA <u>research generated 244 new inventions</u> and 109 patent <u>applications</u> in the 2016 fiscal year--from an anti-cancer drug to tools that detect meat contamination.

Working Out the Farm Bill: The latest Senate Ag Committee hearing took a closer look at the <u>importance of risk management tools</u> for the 2018 Farm Bill. Also, Senate appropriators agreed to provide new <u>funding to cotton and dairy producers</u>, potentially addressing a major challenge facing lawmakers as they consider writing a new farm bill.

The Missing Link: This food expert looks at two recent reports about global food production, and he explores options for a U.S. <u>strategy to</u> ease famine situations--especially in Africa.

Potash Rebound: The <u>global potash market</u> is rebounding from a decade of weakness as cheap prices for the crop nutrient help to drive sales in India and China.

News from the Far Side of the Barn

Why Is the Very Hungry Caterpillar So Hungry? (video): It's hoarding protein--not just for itself, but <u>for the butterfly it will become</u>.

Hungry, Hungry Caterpillars Go Cannibalistic (video): It's a <u>bug-eat-bug world</u> when the plants taste bad and a smaller caterpillar is nearby.



I'm going to hang upside down and start my "new me" diet. Ahhh, I'm molting!

Caterpillar with a Snake Alter Ego (video): This caterpillar <u>disguises</u> <u>itself to look like a bizarre snake</u> "with two heads."

August Is "Celebrate CAST Members Month" Success Comes from an Engaged, Diverse Base

When CAST began in 1972, the organization used rotary dial phones, clunky typewriters, and snail-mail newsletters. The digital age changed the methods, but the basic premise remains the same--CAST fulfills its mission of communicating credible, science-based information, and it succeeds because of the consistent support of its members.

Seven scientific societies signed on as the first official members of CAST, and dedicated individuals began donating time and expertise. Charles A. Black served CAST in some manner--including president-from 1972 to 1988, and he became known as the organization's "moving spirit."

Norman Borlaug was a charter CAST supporter, and throughout the decades, hundreds of scientists, educators, and agriculturalists have contributed in various ways. Without the financial support of members, the commitment of those on the boards, and the expert input of

Who Makes CAST Successful?

The help of many volunteer contributors:

- 50 Board Members representing scientific societies, companies, nonprofits, and universities
- 110+ active task force members working on CAST reports yet to be released
- Volunteer scientific experts as authors and reviewers—more than 525 volunteers since 2007

65% academia 15% government 15% private companies 5% nonprofits

task force volunteers, CAST could not have succeeded as a respected agricultural resource.

In recognition of the many who have contributed, the CAST staff and boards declare August 2017 as "Celebrate CAST Members Month." Through *Friday Notes*, social media, and the website, the organization will be sharing historical information, highlighting founding members, and featuring examples of the many who have joined in this effort to promote ag and science--from long-time individual participants to CAST's newest, and youngest, student member.

CAST Executive Vice President Kent Schescke recognizes the importance of active, diverse membership: "We have been working with the board to strengthen our membership base--from teenagers to retirees, from nonprofit to corporate, from agriculturalists to consumers, and from educational institutions large and small. We know that all our membership categories help CAST achieve its mission."

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 movie pic from electroniksigaraankara.info and the caterpillar drawing from ayeartothinkitover.com. Animal Sec. fish pic from nytimes.jpg. Food Sec. diagram LaurieNygren. Plant Sec. Hawaii pic from koloalandingresort.com. Inter. Sec. flower pic from app.qz.com. Gen. Sec. fruit infograph from geneticliteracyproject.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.





Animal Agriculture and Environmental News

Unspoken Connection (video): This 9-year-old boy with transverse myelitis and his 1,556 pound steer are <u>creating a ripple effect of inspiration throughout the nation.</u>

Animals During an Eclipse (video): Zoo officials say <u>little is known about how animals behave during</u> eclipses--a study on the behavior of 12 types of birds and animals before, during, and after the eclipse will

take place during next month's solar eclipse.

Biotech Salmon: A senator from Alaska introduced legislation mandating that genetically engineered salmon be so labeled--and she used the loaded word "Frankenfish" to register heropinion of the animal (related information at right in photo caption).

Alternatives to Antibiotics: Corporate mandates and consumer demands have farmers <u>running to their spice racks</u>. Like anything new or different, <u>antibiotic-free production comes with its own challenges</u>.



The CAST Commentary The Science and Regulation of Food from Genetically Engineered Animals includes research about biotech salmon.

BSE Info from the Experts (slideshow): The Veterinary Directive Feed News provides answers to the most frequently asked guestions regarding bovine spongiform encephalopathy (BSE).

Poultry Production (opinion): As shown in this report, Perdue Farms has endorsed a major <u>shift in the way it treats its chickens</u>. Poultry production methods are still being discussed and debated.

Securing Your Pork Plan: According to this group, a secure pork supply plan would allow for a quicker response to a foreign animal disease and a resumption of business as usual.

Rustlers in the Wild West: Cow-nabbing is alive and well in Texas, and as one of 30 special rangers, this former police detective spends days tracking down the bad guys.



Food Science and Safety News

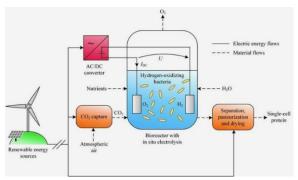
What's Really in a Chicken McNugget? (video): The Tyson Corporation provides a behind-the-scenes look at one of McDonald's most controversial meals.

Food Prescription: Participants <u>meet one-on-one</u> <u>with a registered dietitian</u> and are given recipes and hands-on instruction about preparing healthy meals.

Fat Chance: According to this UC-Davis researcher, not all <u>polyunsaturated fats--the so-called good fats</u>--are created equal.

"A Picture's Worth...": Researchers have developed a neural network that can, in theory, "look" at an image and find the recipe for the food that's depicted.

Cancer Prevention: A recent mouse discovery builds on previous evidence that <u>a diet rich in tomatoes could alter a person's risk for skin cancer.</u>



Shocking? These scientists use electricity, water, carbon dioxide, and microbes to make "food from electricity."

Food Choices Helping You Age: According to this report, <u>smart food choices</u> could help you add years to your life--and life to your years.

Farmers and Consumers--The Disconnect: A <u>consumer preferences survey has sparked awareness</u> among producers regarding the need to share information about how they raise their food. The issue has gained importance as nutrition science appears to be in crisis--with a public reluctance to trust nutritional insights.



Plant Agriculture and Environmental News

New Rule, Enormous Impact (audio): The <u>Minnesota Department of Agriculture proposed a new rule</u> to limit the use of nitrogen, minimizing nitrate contamination to Minnesota's water sources.

Confessions of a Weedaholic (video): A <u>self-confessed</u> weeding addict reveals his obsession and explains why he is "pulling back" on it.

Wonderful Watermelon: Florida scientists have found a way to starve off potential diseases while <u>retaining the</u> refreshing juicy flavor of your favorite summer snack.

Resistance Research: North Carolina State University researchers have found a specific gene in corn that appears to be associated with two, possibly three, different plant leaf diseases.

Beating the Weeds: Biotech research shows how to get rid of weeds by crossing them with GM crops.

Domesticating weeds in order to destroy them could influence future crop yields.

Drone's Eye View: A <u>drone aided with the</u> <u>discovery</u> of a rare plant on a steep cliff on the Hawaiian island of Kaua'i.

Saving Seeds for Future Generations: With 60,000 to 100,000 species of plants currently threatened with extinction, <u>revitalizing the practice of seed saving is vital for the world's food security.</u>



International News

Meet SwagBot (video): The University of Sydney has <u>developed a robot cowboy that can herd and manage</u> cattle--the opportunities are endless for Australian farmers.

Farmer Voices in Africa: These farmers spent five days <u>carving this important message</u> to the rest of the world--in the soil.

Urban Food Policy (opinion): This study looks at <u>ways to feed the world</u>, considering the many issues that affect this goal.

Saving the Bears: Officials in Vietnam agreed to work together to <u>rescue and relocate the 1,000 bears</u> believed to be living on notorious bear farms across the country. For more about this topic, <u>check out the blog Unbearable</u>.



Biotech Baby's Breath: Your bridal bouquet might soon include a biotech flower from Kenya.

Protein Power from Insects: Processed <u>proteins derived</u> <u>from insects</u> are now authorized in feed for farmed fish in the European Union.

Insect Protein for Humans: In parts of Nigeria, <u>deep-fried grasshoppers</u>--spiced with powdered chili--are a local favorite.



General Interest News

Trusting in the Future (video): Launching a career in commercial agriculture can be a struggle for many, but this farmer's far-sighted plan is <u>helping beginning farmers succeed</u>.

Wild Buzz: Wild bees are important pollinators for many crops-sometimes even more efficient than honeybees. This study says their numbers can be increased by using simple means.

Mind-blowing Discovery: In this first-of-its-kind study, cows play a mooraculous role in creating a cure for HIV infections.

Mosquito Overload: Scientists in California <u>are releasing 20 million mosquitoes</u> in an effort to shrink the population responsible for carrying and spreading Zika.

Game-changing Technology: CRISPR--there is a great deal of uncertainty surrounding this groundbreaking technology and <u>its potential to fundamentally change the entire food industry</u>.

Redefining Ag Yields (opinion): "From tons, to people nourished per hectare"---should we redefine agricultural yields to focus on people fed instead of tons produced?

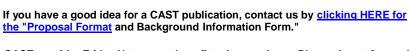


Why does bee health matter?
Check out the recent CAST
Commentary.

Myths about Agriculture: We all eat, but only a few produce food products. This article lists <u>10 modern</u> myths about the most ancient occupation.

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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Contact Colleen Hamilton at 515-292-2125, ext. 224 or chamilton@cast-science.org, or <u>CLICK HERE</u> 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
- * Croplife America
- * Crop Science Society of America
- * DuPont
- * Elanco Animal Health
- * 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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- * University of Arkansas System Division of Agriculture
- * University of California-Davis
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- * University of Kentucky
- * University of Nebraska Agricultural Research Division
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