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*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](#)

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#### Animal Camo



This photo collection shows how [animals use camouflage](#)--including the three frogs above.

#### CAST Ed Program

Another high-quality university has joined the [CAST Education Program](#). Look for details next week about Purdue University.

#### Student Voices

In November, CAST has focused on [students who promote science](#) and communication. Check videos from [Rylie Ellison](#) and [Maci Mueller](#)--and consider [supporting CAST](#) and the future of science communication.

**Nominations Are Open**  
[Nominations](#) are open for the [2019 Borlaug CAST Communication Award](#), an honor that recognizes professionals who promote

November 30, 2018

## A Change in the Air?

*Government climate report produces stark predictions and varied reactions*

A [new federal report](#) finds that climate change is affecting the natural environment, agriculture, energy production, land and water resources, transportation, and human health and welfare across the United States and its territories. Some commentaries point out potential effects for specific regions. This Kansas City publication focuses on potential [dangers for Midwest agriculture](#)--food, soil, temperature, and rural life. Another response says that [effects will vary](#), but major crops are poised to suffer. [Some in the Trump administration disagree](#). Acting EPA Administrator Andrew Wheeler joined others in criticizing the "worst-case scenario" tone of the report.



The full [climate change report](#) is available [here](#).

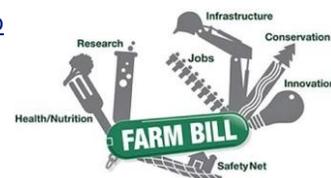
## News and Views

**Brave New World Questions:** A Chinese [scientist defended his claim](#) that he created the world's first gene-edited babies using CRISPR. The tool's [co-inventor, Jennifer Doudna of Cal-Berkeley, shares her opinions](#) about the controversy.



**CRISPR Explained and Applied (related to above):** A North Carolina State graduate explains CRISPR and looks at [ways to advance it safely](#) across a wide range of fields. And in this article, two genetics experts give us 10 [predictions about gene editing for livestock](#).

**Farm Bill Rumbings:** There [appears to be agreement](#) "in principle" when it comes to the Farm Bill--but hurdles still remain. This article [includes potential rulings](#) about hemp and food-aid work requirements.



"It's like a Swiss Army knife."

agricultural science in the public policy arena.



### Water Works

Cornell University expertise is helping [deliver clean, safe water](#) to NYC.

### Send In Ideas

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

### Students and Ag

Texas A&M personnel and dairy farmers [hosted more than 1,000 elementary students](#) who came to learn about agriculture.

### Ag and Tech Expo

The [Farm Journal AgTech Expo](#) will take place December 3-5 in Indianapolis.



### Catch CAST Online!

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

**USDA Nominees:** Three [USDA nominees were questioned](#) on Capitol Hill about climate science, food safety, and civil rights.

**Biodiesel:** A recent tax bill proposal includes a multiyear extension of [the biodiesel tax credit](#).

### Science, Ag, and Food:

The National Academies of Sciences, Engineering, and Medicine issued a [130-page report on the state of U.S. agriculture](#)--examining challenges of production and sustainability.

## News from the Far Side of the Barn

### Clearance, Clarence? (video):

A man's first time hang gliding in Switzerland [turned into a terrifying ordeal](#) after he realized he hadn't been strapped in before takeoff.

**Yukon Tragedy:** A trapper in Canada shot a charging grizzly bear, and then soon discovered that [the bear had attacked his family](#).

### Doggone! A 2,200-mile Trip (video):

Sinatra the husky was [found in Florida 18 months after vanishing](#) in New York, and his return home is emotional.



A dolphin risks a 15-yard penalty by [targeting a paddle boarder](#) with a blindside clip.

## Board of Representative Members, a Society Member, and a New Face in the Nation's Capital

CAST benefits greatly from the input and enthusiasm of its board members. Several experts have joined during the past few months, and we will acknowledge more new members during subsequent *Friday Notes* editions.



Left to right: Lyn Gettys, Rajesh Chintala, Hilary Sandler, Keith Matthews, Mohamed El-Gazzar, Marceline Egnin, and Melinda Yerka

Lyn Gettys of the Aquatic Plant Management Society, Rajesh Chintala from the Innovation Center for U.S. Dairy, Hilary Sandler representing Northeastern Weed Science Society, Keith Matthews of the American Bar Association (Section of Environment, Energy and Resources), Mohamed El-Gazzar from the American

Association of Avian Pathologists, and as mentioned earlier this fall, Marceline Egnin of Tuskegee University and Melinda Yerka of the University of Nevada-Reno are all volunteering their time and expertise.

CAST is pleased to announce that the [Rural Sociological Society](#) (RSS) has become a member organization. Since its founding in 1937, the RSS has traced changes in rural life and livelihoods, demography, community structures and economies, technologies, environmental conditions, and agriculture and food systems. Core activities of the RSS include a peer-reviewed journal called [Rural Sociology](#), an [annual conference](#), and support for communities of scholars concerned with specific rural issues.



The *Agri-Pulse* editorial team in Washington, D.C., announced that [Hannah Pagel will become an associate editor](#), handling writing and broadcast duties. Hannah completed her agriculture education and communication studies at Iowa State, and she was an energetic, talented intern at CAST for nearly two years. Check here to access [one of the many insightful blogs](#) she wrote for CAST.

## Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 camo pic from topixedu.com, climate pic from associationsnow.com, knife pic from usda.com, gene edit pic from news.mit.edu, water tap pic from growlermag.com, and dolphin pic from buzzworthy.com. Animal Sec. steer pic from foxnews.com and dog pic from washingtonpost.com. Food Sec. grocery pic from fortunewallstreet.jpg and sushi pic from loghouseplants.jpg. Plant Sec. robot pic from foodtank.com and soil pic from csrwire.com. Inter. Sec. pork poster from feedstuffs.com and plant pic from pinterest.com. Gen. Sec. scientist photo from nwfailyviews.com and Mars pic from abcnews.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



### *Animal Agriculture and Environmental News*

**Don't Get Your Knickers in a Twist:** Some agriculturalists say folks [should calm down about the "big cow story."](#) It's a steer, not really a cow; it's big, but not a giant; and there are many more important livestock stories (related links at right).



**Knickers, the [now-famous steer from Australia](#), was deemed too big for the slaughterhouse to accept. [Click here for video](#). But also check the related story at left for a broader perspective.**

**Pig Protection:** This farm management expert looks at what farm owners can do to [protect pig farms against disease](#).

**ASF Update (related to above):** African swine fever [continues to spread in China](#) and certain other countries, but not in the United States. [ASF does not infect humans](#), but it can be deadly for pigs.

**Secure Beef Plan:** This article looks at the cattle industry and [the ways it prepares](#) for the spread of devastating diseases.

**Turkey Triumphant:** This short article looks at the long-term [success story of the turkey](#) food industry.

**Building a Legacy:** This blogger says that building a ranch legacy involves family and is actually the culmination of a life-long process--[planning, implementing, and communicating](#).



**Liberating or Stealing?** Six animal rights activists claim they were liberating chickens during a protest in California, but [prosecutors have filed felony charges](#) in the case.

**Dog Pampering Is Big Business:** Along with shows, seminars, and booming businesses, [creative grooming contests](#) elicit varied opinions from dog lovers and the public.

**Poultry Safety:** The USDA has started a [campaign to remind poultry farmers to safeguard](#) their flocks from infectious and fatal diseases.

## Food Science and Safety News

**Tainted Lettuce (video):** The FDA says it found the [source of the E.coli-tainted romaine lettuce](#) that led to a national warning.

**Blocking Food Illnesses:** The blockchain technology that allows for shared databases is becoming more [important in preventing and controlling](#) foodborne outbreaks.

**Noodle Master (video):** This expert turns water and flour into Chinese hand-pulled noodles. Watch how he [performs his noodle magic](#).

**Tech and Food Safety:** U.S. officials estimate that each year one in six Americans gets sick after eating contaminated food. Many are [looking to technology to make food safer](#).

**Milky:** The USDA [extended the comment period by 60 days](#) on the request for information regarding labeling plant-based products with terms that include the names of dairy foods such as "milk," "yogurt," and "cheese."



**Coming to an Aisle Near You:** The next generation of [biotech food is headed for the grocery aisles](#), and first up may be salad dressings or granola bars made with soybean oil genetically tweaked to be good for your heart.

**Lunchables?** This site provides definitions for the [most confusing of meals](#)--lunch.



This biotech group is dedicated to [growing large quantities of bluefin tuna in a lab](#)--with an eye on satisfying sushi lovers.

## Plant Agriculture and Environmental News

**The Diamonds of Gastronomy (video):** Two white truffles that weighed just under two pounds sold for \$85,000. [What's the attraction?](#)

**Green Corn?** Research shows that genetically engineered corn [may help offset some effects](#) of climate change.

**Corn Research (related to above):** Selecting well-adapted and superior corn hybrids is critical for farmers, and Mississippi State goes to great lengths to evaluate, assess, and [analyze corn hybrid performance](#).



The [Soil Health Institute recently released Living Soil](#), a [60-minute documentary](#) about soil health that showcases innovative farmers and soil experts throughout the United States.

**GM Crop Research:** Experts from Iowa State, Nebraska-Lincoln, and DowDuPont produced a science-based paper [looking at the risk assessment process](#) of GM crops--and their potential, especially in developing countries.

**Cutting Emissions:** A new report says that [conserving and restoring American forests, farms, and natural lands](#) could cut a substantial chunk of the country's emissions, helping meet greenhouse gas reduction goals.

**Grain Yields and Quality:** Florida researchers explore ways to [improve grain yield without losing grain quality](#).



**Robots in the Fields:** U.S. agricultural workers are aging--and, in many places, they are in short supply. [Robotic farm labor is on the rise](#).

**Alternative Crops:** According to Kansas State research, farmers are increasingly interested in growing winter [canola and peas as alternatives](#) to more traditional crops such as wheat and corn.

## International News

**From the Air (video):** A huge [drone that can wash buildings and put out fires](#) is being developed in Latvia.

**Plowing in the Fields of Dreams:** No-till farming is gaining popularity, but the World Ploughing (sic) Championship still [drew a big following to this German town](#).

**Termite City Is a "Natural Wonder":** Scientists estimate that [200 million mounds](#) dot this remote Brazilian landscape, as termites have worked for 3,800 years to make a "city" the size of Minnesota.

**On the Horns of a Dilemma:** Swiss voters have spoken, and their constitution will [not grant subsidies](#) for livestock with horns.

**Sudan Ag Gets Turkish Delight?** Turkey and Sudan announce a joint agricultural venture as [Turkish investment in the African country](#) will ramp up in 2019.



**Powered by Dead Fish:** A Norwegian cruise line plans to power a fleet of [ships partly through liquified biogas](#) that is produced as dead fish and other organic waste decompose.

**Très Bon--Turning Streets into Gardens (video):** Paris has little growing space, so residents are [planting gardens on pavements and small areas](#) of public land to make the city greener.



**A U.S. campaign promoting [pork](#) in Japan won accolades from the advertising industry.**

## General Interest News

**More Poo Power:** A joint venture is underway to [convert methane emissions from hog farms](#) into clean renewable energy for residential homes and local businesses.

**Metabolic Health:** The prevalence of metabolic [health in American adults is alarmingly low](#), according to this university research.

**Organic Update:** This article looks at the [successes and challenges](#) of organic farming--including young farmers such as Cal Poly's Savanna Alexandre and farmers who partner with name-brand corporations.

**Beam Me Up, Scotty:** Inspired by Star Trek, scientists have [developed a small, solid-state airplane](#) that runs on batteries, makes no noise, and generates no exhaust.



**Bold Space Venture:** Relieved and excited scientists watched as the [Mars InSight lander touched down](#) on the Red Planet after a six-month voyage through deep space.

**Ag's Economic Influence:** Contributing one in four jobs and \$25 billion in annual cash receipts to the state's economy, [agriculture and biotech--with plenty of input from the University of Nebraska](#)--are major players.



**The Bug Doctor:** University of Florida's Silvana Paula-Moraes (left) is an [entomologist dedicated to research](#) that helps field crops such as cotton, peanuts, and corn.

**Helping Hands:** When farmers in West Texas found out that one of their neighbors had cancer and couldn't harvest his cotton crop, [they turned out to help](#). For a look back at good neighbors, check out this blog: "[Helping Out--It's What Farmers Do](#)."

## 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.



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## Societies, Companies, and Nonprofit Organizations Serving on the CAST Board of Representatives

- \* Agricultural & Applied Economics Association
- \* American Association of Avian Pathologists
- \* 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
- \* 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
- \* Rural Sociological Society
- \* 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.*

## Members of CAST's Education Program

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



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

**Dan Gogerty (Managing Communications Editor)**  
**Kylie Peterson (Communications and Social Media Specialist)**  
The Council for Agricultural Science and Technology  
4420 West Lincoln Way  
Ames, Iowa 50014-3447  
Phone: 515-292-2125, ext. 222 (Dan) and 230 (Kylie)  
E-mail: [dgogerty@cast-science.org](mailto:dgogerty@cast-science.org) and [kpeterson@cast-science.org](mailto:kpeterson@cast-science.org)

\*\* *With assistance from Carol Gostele (Managing Scientific Editor)*



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