

Friday Notes

Council for Agricultural Science and Technology

CAST

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.

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An Amazing Fly-in



Two wingsuit daredevils [fly into the open door of a moving plane](#).

Indoor Farming Seminar

Indoor farming entrepreneurs and experts came to Cornell to discuss the [creation of viable businesses](#) for produce grown indoors.

Soil Health Webinar

Verdesian Life Sciences, the American Society of Agronomy, and the Soil Science Society of America will provide a [soil health management systems webinar](#) on December 13.

Perigee Syzygy



Another [lunar event is coming](#) on

December 1, 2017

Waste Not ...

Dealing with Food Loss

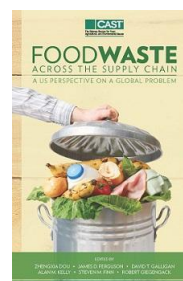


All agree that we will need "a whole lotta food" to keep up with projected global population growth. Science, innovation, and sustainability are keys to a secure food future--but dealing with food waste is also crucial. These three links provide a look at a few of the many articles and projects addressing this problem:

This United Nations newsletter provides articles about [global initiatives regarding food loss and waste reduction](#) in China, Russia, the Philippines, Germany, and other countries.

A report from the National Resources Defense Council and the Rockefeller Foundation revealed that much residential food waste in U.S. cities is edible, while [millions of meals could be donated to people in need](#).

A book from the University of Pennsylvania and CAST looks at [Food Waste Across the Supply Chain: A U.S. Perspective on a Global Problem](#). Topics include food waste in the industry sector and how it is handled, characteristics of food waste in restaurants and in homes, how food waste can be measured, what interventions are most effective, food recovery from the supply chain and how it is diverted and used, and how food marketing affects consumption and waste. [Check here for an impact report](#) about this publication. Note: Watch for a forthcoming publication titled *Food Loss and Waste*, part of CAST's Ag Innovation Series.



News and Views

Crystal Ball for Ag: The USDA provides a preview of [long-term projections regarding agriculture](#) during the next decade.

EPA Biofuel Announcement: The [EPA released 2018 volume obligations](#) for the Renewable Fuels Standard, giving the program a slight increase in biofuels to be blended with the nation's gasoline supply. [This article provides specific amounts](#).

December 3--a perigee syzygy, better known as a supermoon.

Students as "Top Chefs"

University of Kentucky students [created recipes and served them to panelists](#), including some home-state celebrities.

Information Is Key

A panel [presentation at the annual Food Safety Consortium](#) revealed a timeless common denominator--information.

Raingardens and Boars

Mississippi State University was [honored for its EPA-funded raingarden project](#)--and their extension office [informed state hunters about wild boars](#).

Student Research

A North Carolina State University student's dissertation research asks [how consumer health decisions are influenced by different types of nutrition labels](#).



CAST Social Media

Click here for [links to CAST sites](#):
Twitter, Facebook, LinkedIn, Pinterest, videos, and blogs.

Disaster Compensation: Lawmakers wrestle with how to compensate citrus growers and other producers [for hurricane-related losses](#).

Puerto Rico Aftermath: The devastation on Puerto Rico affected many families and businesses--and [agriculture, including seed research](#).

NAFTA View: This Canadian study claims [consumers would be big losers](#) if NAFTA is terminated.

More Than One-fifth: A recent study emphasizes how [the food and agriculture sector feeds Americans](#)--and the U.S. economy.

Robots Down on the Farm: Farm [robotics start-ups](#) are a growing segment of the food and agriculture sectors.

News from the Far Side of the Barn

A Soundtrack for Farm

Work (video): A Peterson Brothers' parody, a Klingenberg folly, and [a list of farm song earworms](#).

Can They Clone My Bank Account, Too? For only \$50,000, this [company will clone your pet](#).

I'll Let You Milk the

Camel: Camel milk is being [introduced into a mainstream UK supermarket](#), and some predict it could be the next big health trend.



Camel dental work looks like fun. To read about camel milk production, see the story at the lower left.

CAST Gives Thanks to Supporters

This year's #GivingTuesday campaign featured a video of appreciation

Thank you to all of our members and member organizations for your many contributions in our efforts to assemble, interpret, and communicate balanced, credible information about science and technology. To show our appreciation of your continuous support, CAST Board, staff, and volunteers would like to share with you what you've been supporting. Please [consider a tax-deductible gift](#) to continue helping make CAST's work and mission a success.



Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 globe pic from nutritionforthehealthofit.com, wingsuit flyer pic from bbc.co.uk, camel pic from telegraph.co.uk.jpg, and moon pic from in5d.com.jpg. Animal Sec. dog pic from timedot.com. Food Sec. ketchup meme from zazzle.jpg. Plant Sec. potato pic from thecoli.jpg. Inter. Sec. reef pic from reefholiday.jpg. Gen. Sec. origami pic from toxel.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

A Day in the Life of a Turkey Farmer (video): Thanksgiving is over, but turkey-eating season is not--this video details the [challenges and joys of raising turkeys](#).

Meet Agnes: This [bovine birthing simulator is used to educate](#) veterinary students and cattle producers about the cattle birthing process.

Hog Disease Research: Porcine reproductive and respiratory syndrome virus incurs huge losses on the pork industry. This Kansas State University [researcher is working to eradicate it](#).

VFD Rules Almost a Year Old: The [Veterinary Feed Directive rules](#) that went into effect this year may be complicated for some, but others think they help producers and veterinarians interact more.

Poultry White Paper: The U.S. Poultry & Egg Association released a white paper titled [Providing Protein, Enriching Lives](#). It highlights the ways the industry benefits employees, communities, and consumers.

Big Cows, Big Steaks (opinion): Jayson Lusk says improved genetics and feeding technologies, along with various economic incentives, have led to much larger cattle. Larger cows mean larger steaks--[and that has mixed effects](#).



Researchers are [monitoring the health of clones](#) from the world's first cloned dog.

Given the Green Light: The USDA has [conditionally given the green light to the first DNA vaccine for poultry](#) in the ongoing battle against avian influenza.

Pot for Pets? (video): The UC-Davis School of Veterinary Medicine is conducting a first-of-its-kind survey to learn more about the [effects of medical cannabis on pets](#).



Food Science and Safety News

The Brain Science of Taste (video): This neuroscientist explains [how our brain distinguishes flavors and how it might be fooled](#) into perceiving sweet or bitter tastes.

Tasty Tofu Brew (video): Researchers have developed [the world's first alcoholic beverage made from tofu](#).

The USDA and School Food Rules: Leaving requirements for fruits and vegetables unchanged, the [USDA is allowing flexibility in school meal rules](#) for milk, whole grain, and sodium.

Another Cup of Coffee Research: Working off data collected from more than 200 meta-analyses, researchers found that [moderate coffee drinking provides many health benefits](#).

Food Safety Tech: As paper documentation systems are replaced by digital platforms, [education and technology investments need to be made to aide food industry workers](#) with better food safety practices.

Cheese Champion: The [world's best cheese has officially been crowned](#)--and it's British.

Organic Oversupply: Organic produce marketers generally agree that [demand typically outpaces supply, but](#) they also note that overproduction does occur on occasion, too.

**I Like
Food with
My
Ketchup**



A [Sweet and Sour Love Story](#): Not everyone has ketchup mania--check out Chicago.



Plant Agriculture and Environmental News

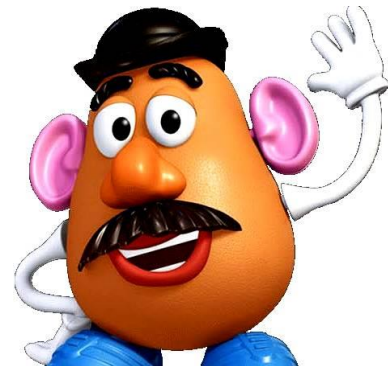
Pickin' Pumpkins (video): This entertaining *Market to Market* segment shows [how pumpkins get harvested](#).

Plant Protection Comes Naturally (videos): This clip looks at how [nature provides pesticides](#), and this video explains [how plants can protect themselves](#).

Grants for Specialty Crops: The USDA awarded [millions of dollars for specialty crop block grants](#)--some say these crops were being ignored while certain "major crops" have been heavily funded.

Soil Study: Ever wonder [what makes soil, soil](#)? Even more, could soil from the Amazon rain forest really be the same as soil from your garden?

Farm-to-flight Fuel: In a recent study, [researchers are engineering sugarcane, the most productive plant in the world, to produce oil](#) that can be turned into bio-jet fuel.



A [potato modified to resist a devastating disease](#) has been successful so far.

Soybean Syndrome: An Iowa State University agronomist is charting mechanisms--gene by gene--that [could lead to soybean varieties resistant to sudden death syndrome](#).



International News

Ethanol Trade: The Japanese government has given the thumbs-up to [allow ethanol imports from the United States](#) for use in its ethanol-blending mandate.

Biggest Threat for Children: According to this report, [pneumonia is the biggest killer of children](#) under the age of five around the world.

Dipstick Disease Diagnosis: This recently discovered technology [enables pathogen detection and rapid diagnosis of human, animal, and plant disease](#) in the most remote location in under 30 seconds.

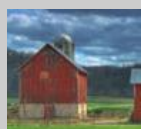
Evolving Biotech: Scientists at the University of the Philippines joined hundreds of high school and college students to [view and discuss Food Evolution](#), the documentary about genetically modified organisms.

Golden Nuggets Indeed: Bresse chickens, a favorite of Michelin chefs and French presidents, might be the [most expensive chickens in the world](#).

Best Restaurant Is off the Grid: To beat a path to the door of the "[Best Restaurant in the World](#)," you first have to find the door.



Scientists say a part of the Great Barrier Reef resists the [deadly crown-of-thorns starfish](#), but the findings do not mean that Great Barrier Reef corals are safe.



General Interest News

CRISPR Close-up (video): For the first time, [scientists can see CRISPR in action](#), thanks to real-time video footage.

All That Glitters... (video): Some scientists say that glitter attaches itself to everything--they believe sticky [decorations are an ecological hazard](#) that needs to be banned across the globe.

Rural Development: University of Nebraska experts worked with school districts and community organizations to better understand issues of [access, affordability, and sustainability in rural communities](#).

Boost for Young Farmers: For only [the second time in the last century](#), the number of farmers under 35 years old



The delicate art of paper folding is playing a crucial role in [designing robotic artificial muscles](#) that are startlingly strong.

is [increasing](#), as more young Americans step into a career of farming.

Science Moms Unite: In an era of fear-based marketing targeted to parents, [one group of moms aims to shift the narrative from fear to facts](#).

Hands-free Technology: This Iowa farmer used a [software system that allows agricultural equipment to operate autonomously](#) during this year's harvest.

Five Tech Trends: The march of technology continues. [Here are some innovations to keep an eye on](#) as you move toward a new year.

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.



If you have a good idea for a CAST publication, contact us by [clicking HERE for the "Proposal Format](#) and Background Information Form."

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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 Society of Agricultural and Biological Engineers
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- * American Society of Animal Science
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- * American Veterinary Medical Association
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- * 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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