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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.

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[General Interest News](#)

Farm Girl in Space



Peggy

Whitson shows us the [view from space](#)--and what determination it took to [become a record-setting astronaut](#). Check out a related link about the Space Shuttle at the bottom of the Plant Section below.

You Make the Difference

CAST communicates credible, science-based information because of you. Watch for the video that allows us to thank you "in person" on Giving Tuesday. [Click here to show your support now.](#)

An Existential



Threat

Noted ag scientist Sonny Ramaswamy [calls for more agriculture research](#) and warns of an existential threat.

November 17, 2017

Talking Turkey

Costs, products, traditions

From Canada to India, [many countries give thanks](#) at the end of harvest time, and the United States is famous for its Thanksgiving Day traditions. These links might give you a bit to chew on as you prepare to celebrate:

** The American Farm Bureau Federation's annual price survey of classic items found on the Thanksgiving Day dinner table indicates the [average cost of this year's feast is down](#).

**Some folks are willing to spend more for a certified "heritage" turkey, but [fake ones are causing a problem](#).

**Get in the Wayback Machine to visit the Thanksgiving meal [when traditions were low tech, no frills, and all analog](#).

The next edition of *Friday Notes* will be published on Friday, December 1. Have a wonderful holiday week.



The USDA wants you to have a [food-safe holiday season](#).

News and Views

U.S. Ag Exports: This past year U.S. ag exports reached the [third-highest level on record](#) at \$140.5 billion (in fiscal year 2017).

Student Leadership

These Cornell CALS students showcased their [agricultural leadership skills](#) at the Agriculture Future of America conference recently in Kansas City.

Ag Student Increase

The Iowa State College of Agriculture and Life Sciences has seen a 90% [increase in student enrollment](#) since 2006.

Satellites and the Climate

This University of Nevada-Reno associate professor [specializes in remote sensing through satellite aircraft](#) and ground-based sensor technologies--focusing on the impacts of climate change on vegetated ecosystems.



CAST Social Media

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

Disagreement about Antibiotic Guidelines: The World Health Organization released recommendations regarding the use of antibiotics in agriculture. The USDA Acting Chief Scientist said, "The [WHO guidelines are not in alignment with U.S. policy](#) and are not supported by sound science."

Regs and Biotech: The Department of Agriculture is starting anew on a [modernization of its regulation of biotech plants](#).

A Taxing Situation: This is one view of many about the proposed tax reform and [how it might affect agriculture](#). Note: The House tax reform plan passed on a mostly party-line vote--with [praise from some farm sectors and concern from others](#).

Hard to Swallow? The FDA approved a so-called [digital pill that contains a sensor](#) to let doctors know when it has been taken.

News from the Far Side of the Barn

Don't Mess with This Crab

(video): There's a horror film idea here somewhere--three-foot-long crabs that [climb trees and eat large birds](#). Nevermind the Amelia Earhart rumors.

Love Means Never Having to Say You're Sorry

(video): Intimate social interaction takes on a [different flavor in the praying mantis world](#).

Stop Buggin' Me: This entomologist hates to break it to you, but [your home belongs to the bugs](#)--they've turned your kitchen cabinets into complex ecosystems.



It's not two-faced--it's [a chimera cat](#).

Making an Impact

CAST publications spreading science-based information

In the past, present, and future, CAST publications add to the foundation of science-based information about many agriculture topics.

A CAST Issue Paper from several years ago--[Animal Feed vs. Human Food: Challenges and Opportunities in Sustaining Animal Agriculture Toward 2050](#)--still provides a resource about the issue of beef production

sustainability. Two current articles blend in with the information provided by Jude Capper and her task force: (1) A pair of respected researchers simulated the impact on the American diet and changes in greenhouse gas emissions [if animal food products were completely eliminated](#) from production, consumption, and sale in the United States. (2) Beef production is [sustainable, necessary, and increasingly eco-friendly](#).

In another current issue, California animal welfare laws have led to higher egg prices. Jayson Lusk writes about some of the [effects in terms of production and cost](#) for producers and consumers. A CAST task force is working on a [forthcoming publication--Scientific, Ethical, and Economic Aspects of Farm Animal Welfare](#).

CAST also posted updated impact reports for two recent publications: (1) [Crop Protection Contributions toward Agricultural Productivity](#) and (2) [Plant Breeding and Genetics](#).



Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 photo of Whitson from collectspace.com, photo of Ramaswamy from dmregister.com, turkey infographic from usda.com, and cat pic from gata.quimera.instagram. Animal Sec. truck pic from dairyfoods.jpg. Food Sec. cartoon from pinterest.com. Plant Sec. map from agprofessional.com. Inter. Sec. reef pic from reef_theday.co.uk, and Gen. Sec. turkey pic from imgur.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

The Beef Community (video): According to this article, the [Integrity Beef Sustainability Pilot Project](#) provides the first collective effort to trace the footprint of beef across the supply chain.

Something in the Air: Large livestock farms may have to [report high levels of two types of air emissions](#), despite the EPA's last-minute effort to further delay a federal rule it has been trying to modify for years.

Protecting Pigs: Kansas State researchers have found that feeding medium chain fatty acids helps to [protect pigs from a devastating virus](#), as well as promote feed efficiency and growth.

The Future of Poultry: This article looks at many possibilities for the [future of the poultry industry through technology](#)--drones, robots, sensors, 3-D printing, and more.

Pig Information Online: The latest edition of the [Pig Progress online magazine](#) includes stories about lung health, genetics, and more.



This [story of milk, antibiotics, and testing](#) shows the modern procedures involved with safe food.

Climate-changing Chickens: This Dutch poultry farm has proclaimed that [it has produced the world's first carbon-neutral egg](#).

Animal Welfare (opinion): This ag expert says that [animal welfare is not the same as animal rights](#)--and he discussed various topics at the recent Pig Welfare Symposium.



Food Science and Safety News

Honeybaked Ham Ice Cream (video): A New York City ice cream store [does not shy away from weird flavors](#).

Tomato Tech (video): This machine uses [optical sorting technology to separate green tomatoes from red tomatoes](#) with 98% accuracy.

Meet Your Beef (opinion): [Shopping for beef can be a little intimidating without some experience](#)--these five tips might make your next trip to the grocery store much easier.

Food in Florida (opinion): This University of Florida ag specialist says the future of Florida agriculture will be inextricably tied to the development of Mexican agriculture--and [NAFTA negotiations are important](#).

Potato Power: According to Ohio State researchers, an [experimental "golden" potato](#) could help prevent disease and death in developing countries where residents rely on the starchy food for sustenance.

"Eating Clean" Movement: Research from Iowa State shows that [consumers are unaware of the costs related to producing "clean" labeled foods](#).

Waiter, There's a Fly in My Food (video): That pesky fly at the dinner table--what do you do if it lands on your hot dog or seems to take a sip from your glass of wine? [Eat, drink, or toss?](#)



Waiter!... Excuse me waiter, but there's no fly in my soup.

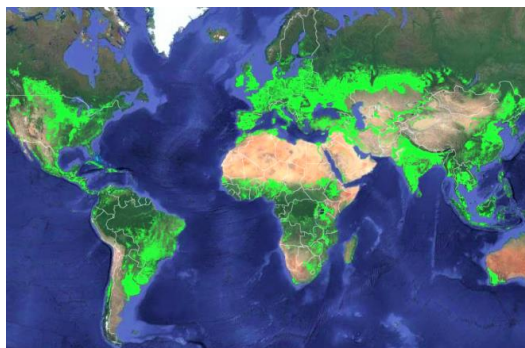


Plant Agriculture and Environmental News

Precision Herbicide "Blasting" (video): A new weed technology uses a combination of infrared, sensors, and nozzles to [detect plants and aim a blast of herbicide](#) at a spot the size of a nickel.

Glyphosate Not Linked to Cancer: A long-term study on the use of glyphosate in the United States has found [no firm link between exposure to the pesticide and cancer](#).

Herbicide Lawsuit (related to above): Monsanto and some farm groups [sued California to stop the state from requiring cancer warnings](#) on products containing the widely used weed killer glyphosate.



The U.S. Geological Survey released a worldwide map that [details croplands in high resolution](#)--to monitor land and water use.

Soil Rejuvenation: By using no-till practices--including growing biotech crops and using crop protection products to control weeds--some [depleted soil is regaining its fertility](#).

Integrated Pest Management: A University of California statewide program defines and [examines integrated pest management](#).

Space Salad (video): [Can your garden grow in space?](#) Crew members harvested their sixth batch of leafy greens growing in the veggie plant growth chamber aboard the International Space Station.



International News

Mexican Maize (video): This designer has turned leaves from locally grown Mexican [corn into material that can be used for walls](#) and furniture.

Avian Flu: Bulgaria and South Africa reported outbreaks of [highly pathogenic strains of avian flu](#), and the USDA has conditionally approved the first DNA avian flu vaccine for chickens.

Thirst Quenchers: Scientists in the Netherlands say they are close to a breakthrough that will allow [crops to be grown in deserts](#), and they are especially focused on helping situations in Africa's drylands.

Ending Poverty? The leader of China has [a plan that aims to help](#) the more than 43 million people who still live under the poverty line in the world's most populous nation.

Iowa in the Heart of China (video): Iowa State Fair officials have been [invited to help teach China how to produce an authentically American celebration](#) of agriculture, rural life, and fried food.



The [Great Barrier Reef creates new life](#) with its annual coral spawning--crucial in the wake of devastating bleaching events.



General Interest News

Conservation and Food Production (video): The film *Rancher, Farmer, Fisherman* tells the inspiring story of heartland [conservation heroes who are feeding the world](#) while stewarding the land and water.

Gene Editing and Medicine: Doctors hope a treatment that involves [editing genes inside a body](#) will change this man's DNA and cure his metabolic disease.

Migrant Ag Workers: This Ohio State University report says the state's agricultural industry [depends on an ever-shrinking number of migrant workers](#) from Mexico and Central America, many of them undocumented.



"Let the turkey chill in the sink for an hour." Maybe this cook misinterpreted the instructions?

Sensor Efficiency: As these University of Nebraska experts point out, drones can include [sensors that improve efficiency](#) for moisture, nutrients, and pest control.

To Be Precise (related to above): [Drone-fueled precision agriculture](#) is a big part of how growers are planning to cope in a competitive global market, according to this North Carolina State article.

Robot Farmers? [Miniature robot farmers](#) may be the answer to concerns about excess chemical use, food waste, and labor shortages.

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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- * American Seed Trade Association
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- * American Society of Animal Science
- * American Society of Plant Biologists
- * American Veterinary Medical Association
- * Aquatic Plant Management Society
- * BASF Corporation
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- * Crop Science Society of America
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- * 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

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