

# Friday Notes

Council for Agricultural Science and Technology

The Science Source for Food, Agricultural, and Environmental Issues

ICAST

*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

[Big Science, Small Science, and Ag Research--P. 2](#)

[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)

## Photo Ark Project



This video profiles an acclaimed photographer who is trying to [capture every species on film](#)--including these pangolins.

## Bird of Prey

The Cornell Lab of Ornithology's [award-winning documentary](#), *Bird of Prey*, is now available.



## Borlaug Blogs

Building on the legacy of Dr. Norman Borlaug, the World Food Prize shares expertise, research, and personal stories on [The Borlaug Blog](#). In one essay, the 2019 World Food Prize winner, [Dr. Simon Groot, explains his relationship with Borlaug](#) while using concrete and figurative references to seeds and global food programs. In another selection, we see how Borlaug influenced agriculture on the organizational level--specifically, [his connections with CAST](#).

June 21, 2019

## Early Fireworks

*Trade, tariffs, policies, and departmental moves*

For many in the world of agriculture, Independence Day fireworks have arrived early. Trade agreements are on the table, tariffs are in the air, and the EPA announced a policy shift. At the same time, the USDA moved ahead with its plan to relocate certain research offices.



These transitions quite predictably bring mixed doses of optimism and concern. Debates ensue from the halls of Congress to the local feed store in Missouri. The following links provide some background information as well as varied viewpoints.

## News and Views

**Concerned But Hopeful:** A dairy economist says geopolitical interests have shifted and [trade issues are entering a chaotic period](#). Agriculture is caught in the middle, but he has reasons for optimism.

**Mexico First to Sanction USMCA:** The [Mexican Senate ratified the new trade deal](#) with Canada and the United States. It is the first country to approve the USMCA, the replacement for the 1994 NAFTA agreement.

**Energy Policy Shift:** EPA chief Andrew Wheeler signed a [replacement rule for the Obama-era effort to reduce coal-fired power plants](#). The controversial move gives states leeway in deciding whether or not to require efficiency upgrades at existing coal plants.

**Research Moves and Differences of Opinion:** The USDA plans to [move the headquarters of two large research agencies](#) from Washington, D.C., to the Kansas City area. Some former agency heads and environmentalists [criticize the decision](#). Ag department officials point out the [positive changes occurring](#), but some groups believe the move [will not be cost effective or beneficial](#) to ag research.



# Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 pangolin pic from cbsnews.com, fireworks collage from nationalgeographic.com and startribune.com, and snake pic from gettyimages.com. P. 2 Brouder photo from purdue.edu. Animal Sec. cow pic from npr.com and Grandin photo from d.unr.edu. Food Sec. cafeteria pic from adventuresofgrandmahoney.com. Plant Sec. bee pic from ars.com. Inter. Sec. Greenland pic from pressfrom.info. Gen. Sec. farmer photo from ChrisBennett.agweb.com and fire pic from mydaytondailynews.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST.



## Animal Agriculture and Environmental News

**Productive Bulls:** There are millions of milk-producing Holstein cows in the United States, and these Penn State researchers [claim 99% of them can be traced back to two bulls](#), both born in the 1960s.

**Gene Pools (related to above):** CAST's issue paper titled [Protecting Food Animal Gene Pools for Future Generations](#) will be published this fall.

**Battling Feral Swine:** The USDA announced \$75 million in funding for the eradication and control of feral swine through the [Feral Swine Eradication and Control Pilot Program](#).

**Fighting Poultry Disease:** Scientists identified genes that may help farmers breed chickens that can [resist a global threat for poultry](#)--Newcastle disease.

**More Research for the Birds (related to above):** These scientists are trying to use [gene-editing techniques to stop the bird flu virus](#) in hopes they can produce chickens resistant to the disease.

**Sheep Stress Study:** These scientists [analyzed sheep DNA](#) to study how the animals react to stress.



**Cattle Care:** Nolan Ryan Beef is the first adopter of the new [Temple Grandin Responsible Cattle Care Program](#), a certification system developed under the guidance of the renowned animal care expert.

**Fair Oaks Follow-up (video):** A well-known veterinarian [weighs in on one of the undercover videos](#) animal activists recorded at Fair Oaks Farms.



Six-year-old Poncho Via lives in Alabama--not the Lone Star State--but he set the [record for possessing the longest set of horns](#) on any Texas Longhorn ever.

## Food Science and Safety News



**Magic, Science, Conversation--and Food (video):** This restaurant is a [weird experience as well as a good place to eat](#), according to this reviewer.

**Hormones and Weight:** New [research offers insights into leptin](#), a hormone that plays a key role in appetite, overeating, and obesity.

**Chocolate and Labor:** Nearly 20 years after [pledging to eradicate child labor](#), [chocolate companies](#) still cannot identify the farms where all their cocoa comes from, let alone whether child labor was used in producing it.

**Goodbye Chocolate? (related to above):** This study predicts that Ghana's [environment will no longer be conducive to growing cocoa](#) by 2080 if current climate change trends continue.

**Protein Products:** Tyson Foods Inc. introduced its first plant-based and blended products, making it the largest U.S. meat producer to [enter the growing alternative protein segment](#).

**Meat Shortages?** Rabobank predicts [meat shortages because of African swine fever](#) outbreaks in China and other Southeast Asia countries.



**Gettin' Milk:** The [School Milk Nutrition Act](#) is designed to expand milk options for individual school districts.

**Gettin' More Than Just Milk:** Check out the school cafeteria of yesteryear in the archived blog [Lunchroom Milk, Wedgies, and Humble Pie](#).



In part 2 of our "Label Talk" blog series, communications specialist Kim Nelson talks about the [good and bad of process labeling](#).

## Plant Agriculture and Environmental News

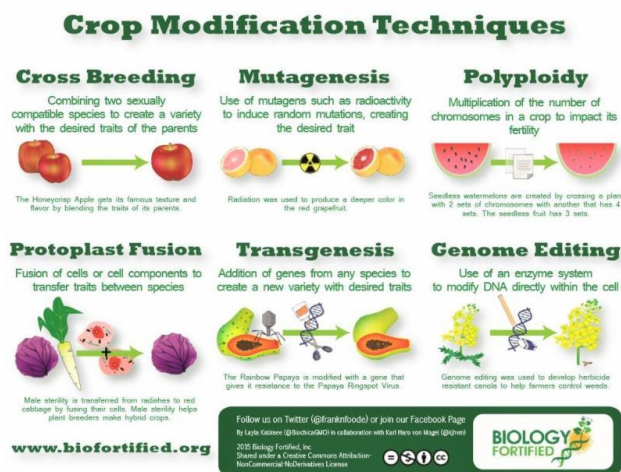
**Aid and No Aid (video):** Heavy rain this spring prevented many Midwest farmers from planting their crops. Federal government programs help commodity crop producers, but [those who grow specialty crops are largely on their own](#).

**Chemical Research:** Bayer AG plans to expand its research and development budget in a [search for alternatives to its herbicide glyphosate](#).

**Some Facts about Pesticides:** This article [introduces a research paper](#) titled *Assessing the Safety of Pesticides in Food: How Current Regulations Protect Human Health*. Access the [full publication here](#).

**Preserving Biodiversity:** Species and entire ecosystems are under threat, but everyday people are [helping scientists fight back](#).

**Seed Blending:** Iowa State University researchers demonstrate that [planting prairie strips on Midwest farms can save soil, water, wildlife, and money](#).



Biology Fortified created an infographic about six different [crop modification techniques](#), with examples of crops generated with each method.



**Bees and Blueberries:** Getting an excellent rabbiteye [blueberry harvest requires helpful pollinators](#), and some growers bring in managed honey bees to do the job.

**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*.

## *International News*

**U.S. Corn and Brazilian Ag:** Brazilian sugar mills are watching the 2019 U.S. corn crop for reduced harvests--a factor that [could boost prices and affect ethanol production](#) in Brazil.

**Alternative Methods in the Outback?** According to this editorial, regenerative agriculture is [opening up opportunities](#) in rural Australia.

**Small Dairy Gets Big Award:** A small family-run dairy farm in Ayrshire (on lands once worked by poet Robert Burns) won a BBC "[Future Food Award](#)" for its innovative approaches.

**Food Initiatives in Urban Conditions:** This article looks at the importance of creating partnerships in Tokyo to [establish effective government food initiatives](#).



Ice is melting in unprecedented ways as summer approaches in the Arctic, with a [record-challenging melt event occurring](#) over the Greenland ice sheet.



**Protesting for Biotech (podcast):** Tuskegee professor [C.S. Prakash was interviewed by Kevin Folta](#) regarding biotech crops and recent civil disobedience by farmers in India. Note: [Dr. Prakash was the 2015 BCCA winner](#), and [Dr. Folta was the 2016 recipient](#).

**Seed Satyagraha (related to above):** The civil disobedience campaign is continuing to snowball in India as [farmers hold rallies](#) to sow genetically modified seeds in defiance of restrictive laws.

## *General Interest News*

**Aquaculture and Climate (videos):** This clip looks at how [restorative ocean farming could play a vital role](#) in helping coastal communities, oceans, and the climate. Note: Related link in the caption at lower right.

### Technology, Resources, and

**Training:** The 4-H organization and Google are [expanding computer science education for rural youth](#).

**Holy Longevity, Batman!** Scientists have identified genes that may give long-lived [bat species their extraordinary lifespans and cancer resistance](#) compared to other animals.



**Feeding Time for 70,000 Shrimp:** This Illinois farmer uses a precise, low-tech method to build a [successful shrimp production in the Heartland](#).

**Deceptively Simple:** A study by scientists from North Carolina State University and other institutions

sheds light on one of the simplest animals on Earth--an [organism that lives in symbiosis with two types of bacteria](#).



**"Learn by Doing" Program (video):** Cal Poly [students participated in a series of fire drills](#) as part of their course work.

**Bracing for Fire Season (video):** Federal officials warn the upcoming wildfire season [could be even worse than last year](#) due to heavy winter and spring precipitation.

## 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](mailto: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](mailto:msly@cast-science.org), or [CLICK HERE](#) for CAST membership information.*

## 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
- \* Cal Poly State University
- \* 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
- \* Bayer

- \* National Cattlemen's Beef Association, a Contractor to the Beef Checkoff
- \* 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
- \* Tuskegee University
- \* Tyson Foods
- \* United Soybean Board
- \* University of Nevada-Reno
- \* Weed Science Society of America
- \* Western Society of Weed Science

*CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, science-based information to 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 Agricultural and Technical 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



**Dan Gogerty (Managing Communications Editor)**  
**Kimberly Nelson (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 (Kimberly)**  
**E-mail: dgogerty@cast-science.org and knelson@cast-science.org**



**\*\* With assistance from Megan Wickham (Managing Scientific Editor)**

