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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 the CAST organization.

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[Check here to share ideas](#) you have about CAST publications.

#### Feeding Global Prosperity

The Alliance to End Hunger, the United Nations' FAO, the House Hunger Caucus, and a panel of experts will discuss [how food security programming provides benefits](#) beyond targeted countries to help promote a safe, prosperous, and more stable world.

#### Farm Safety

National Farm [Safety and Health Week](#)--September 17-23.

#### Biotech Conference

The [Genetic Editing in Agricultural Biotechnology Roundtable](#) will be hosted by the American Bar Association and the American Agricultural Law Association--in conjunction with CAST--on October 24 at the North Carolina

*September 8, 2017*

## Hunger--A Constant Issue

*Latest report about food insecurity*

Millions of children are still [going hungry or are not eating properly](#) in the United States, even though the overall number of people suffering what the USDA calls food insecurity continues to creep lower--about 12.3% of U.S. households had trouble getting good food or didn't get enough to eat at some point last year.



One of many ways to fight hunger.

Many work hard to alleviate hunger--in the United States and around the world. Smart and efficient agriculture is a key to feeding the world, and this newsletter is filled every week with articles about such efforts.

The following two examples represent the many projects that feature a personal, hands-on approach: (1) Meals from the Heartland's motto is "[Ending hunger starts with one grain of hope.](#)" Volunteers have packaged millions of meals. (2) The [Iowa Hunger Summit](#) gathers leaders from across Iowa representing community organizations, business and industry, state and local government, social agencies, churches and religious communities, schools and universities, and other groups that organize projects to confront hunger. It is held each year during the [World Food Prize week of events](#).



## News and Views

**USDA Nominations:** Bill Northey, Greg Ibach, and Stephen Vaden have been [nominated for key positions](#) at the USDA.

**Hurricanes and Agriculture:** Florida--and its varied agricultural interests--[brace for Hurricane Irma](#). Hurricane Harvey left many [farmers overwhelmed and worried](#)--from cotton and rice to cattle and food processing.

Biotechnology Center in the  
Research Triangle Park.

### College Aggies Online

A [scholarship program](#) that teaches effective communication skills to students from across the country with a passion for animal agriculture kicks off its 2017 program September 10th.

### SPACE 2017

The 30th anniversary of [The International Exhibition for Animal Productions](#) takes place September 12-15th in Rennes, France.



### Film about Wendell Berry

The University of Kentucky will host a [screening of the documentary](#) "Look and See: A Portrait of Wendell Berry" on September 13.

### CAST Social Media

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

**Fire Affecting Nine States:** Wildfires [raging in the western United States](#) have forced the evacuations of communities, highway closures, and the rescue of cattle.

**Farm Bill Considerations:** Jayson Lusk--the 2017 BCCA winner--[looks at the Farm Bill debate](#), and he explains why the so-called food movement should not be ignored. He contends that the population dynamics have changed, giving more power to the food consumer.

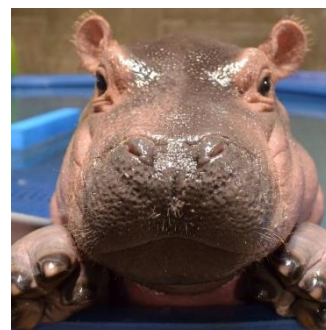
**A.I. and Sustainable Agriculture:** Some think artificial intelligence (A.I.) will help agriculture achieve a type of "[tech revolution](#)" in the effort to feed the world.

## News from the Far Side of the Barn

**Un-bee-lievable:** This Ohio beekeeper picked the perfect maternity photo shoot theme that was sure to [start a buzz](#) on social media.

### The Fiona Show

**(video):** A [premature baby hippo's](#) birth led to her becoming an international phenomenon.



**Top Ten Exercise Moves:** A farmer's scheme to stay in shape might include [mad cows](#), [enraged hornets](#), and [hay baler yoga](#).

**Hungry, hungry hippo--Fiona now weighs 475 pounds!**

## Ag Issues Unfold at a Cyber Pace

*CAST publications offer solid resources*

New information comes out about various agricultural issues at "Twitter-feed speed," so it is helpful to have credible, peer-reviewed research to access. CAST publications offer science-based resources, and the three evolving topics below have recent CAST papers that provide useful, factual information.

### Bee Health Is Complicated

This editorial points out that even though there are problems with bee health that must be addressed, statistics show an [uptick in honeybee colonies](#), and it contends that most authorities say the parasitic varroa mite and disease are the primary causes affecting bee health. [Nutrition is also important for bees](#) in many ways. "You are what you eat" might be particularly true for female honey bees, as their diet seems to determine whether they will be workers or queens.

A recent CAST Commentary examines the scientific issues, current research, and recommendations related to bee health: [Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It](#).

### Weeds and Crop Viruses

This Iowa State University program warns that [Palmer amaranth could aggressively invade](#) corn, soybeans, and other cash crops. The site provides access to relevant videos and publications. [Wheat growers also face hefty yield losses](#) next year from a virus that cost it nearly 6% of production in 2017.

The authors of this CAST Issue Paper examine the current plant protection revolution that is driven by the biological realities of pesticide resistance, various market forces, and real or perceived side effects of pesticides: [Crop Protection Contributions toward Agricultural Productivity](#).



Crop protection is moving in various directions--but this blog goes retro to look at old-school "[Weed Walker Days](#)."

## Food Labeling--Helpful or Absurd?

Some think the [labeling craze has become absurd](#)--apparently, you can buy "premium water that is free of GMOs and gluten while also being certified kosher and organic."

This CAST Issue Paper looks at [Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations](#). Another science-based CAST research paper examines [The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#).

## Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 meal packaging pic from mealsfromtheheartland.org, hippo pic from facebook.com, and space pic from interexhibitionforanimalproductions.com. P. 2 field pic from realagriculture.jpg. Animal Sec. surfing pic from sunlive.co.nz. Food Sec. infographic from slideshare.com. Plant Sec. flower pic from univoftsukuba.com. Inter. Sec. pic of two men from wageningenuniv.com. General Sec. pic from billboard.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



## Animal Agriculture and Environmental News

**Superbugs (videos and opinions):** This PBS series provides a [look at bacterial resistance to antibiotics](#) and the consequences--the segments include controversial views about agriculture's involvement.

**Antibiotics FAQs (related to above):** Antimicrobial use and resistance are hot issues in the news--several organizations try to counter the confusion and misinformation. This [American Veterinary Medical Association site provides some answers](#).



**Saving Cattle (video):** The USDA says about 1.2 million beef cows are farmed in the 58 counties in Texas that have been declared disaster areas. This is how one family [worked around the clock to save 2,000 cattle](#).

**Not all pigs have been on summer vacation.** This site wraps up some key [hog production news from August](#).

**A Meaty Issue (opinion):** Dan Murphy gives his take on a Cornell University debate regarding [the morality of meat](#).

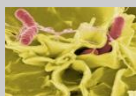
**Chicken Production:** This site gives three main reasons [why farmers raise chickens inside](#): protection from extreme weather, predators, and disease.

**Animal Ag Research:** This state-of-the art [facility for ongoing research](#) is aimed at helping food animal producers and consumers across the globe.

**Crocodile Sex Change:** After [studying nearly 500 crocodiles](#), scientists have found research that shows something is changing the sex of Costa Rican crocodiles.

**Flamingos in the Men's Room:** As Hurricane Irma approaches Florida with full force, zoo personnel across the coast [build disaster plans and prepare](#) for the destruction ahead.

**Pain Relief Heading to the States:** The approval of a trans-dermal [pain relief product for use in the livestock industry](#) is bringing forth big changes for swine and beef producers.



## Food Science and Safety News

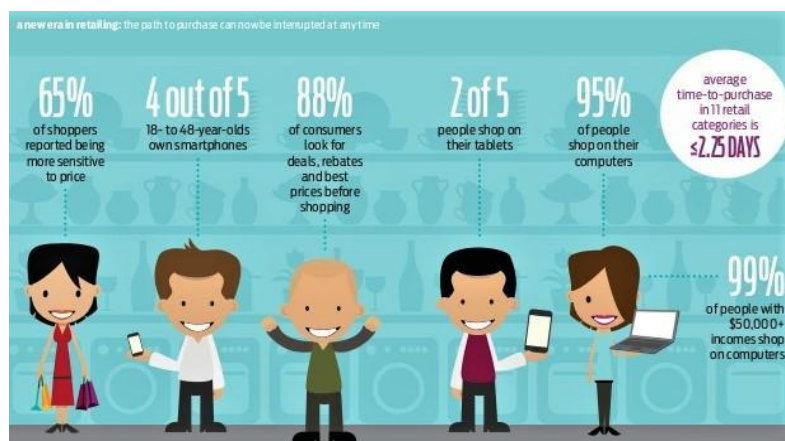
**Perfect Pizza:** It doesn't matter how many slices of pizza you've eaten in your lifetime--if you haven't had [this pizza perfection](#), then you "haven't lived." While you're at it, forget about the instructions and [cook your frozen pizza this way](#).

### This Ain't Ma and Pop's Grocery

**Anytime:** Omnichannel is the practice of companies [utilizing multiple sales channels](#)--mobile apps, online shopping carts, and physical store fronts--for purchases.

**Nutrition "Facts" We Used to Believe (opinion):** This writer looks at five current ideas [about fat, fructose, and calories](#).

**OK for Consumers, But for Farmers?** A number of foods--most notably, beef, eggs, and dairy--[saw price drops](#) during the course of 2016 and into 2017.



The changing world of shopping.

**Food Safety Tips:** The USDA Food Safety and Inspection Service issued food safety recommendations for those who may be [impacted by Hurricane Irma](#).

**High-tech Vertical Farming:** These almost unbelievable farms promise to supply fruits and vegetables with ["Whole Foods quality and Walmart prices."](#)





## *Plant Agriculture and Environmental News*

**Coloring with CRISPR:** In a world first, Japanese scientists have used the revolutionary [genome-editing tool to change the flower color](#) of a traditional garden plant.

**Conservation Practices for the Environment and the Pocket Book:** This report looks at the [economic advantages of cover crops](#) and no-till soil health practices.

**Beans and Trade (opinion):** The president of the American Soybean Association says the organization does not want out of the [U.S./South Korean free trade agreement](#).

**Biotech and Nitrogen Fixing:** This report points out that [nitrogen fixing for cereals](#) that don't already do so could be a game changer for farmers in developing nations.

**Digging into Soil Information:** This publication highlights the [presentations and discussions](#) at a recent workshop--*Soils: The Foundation of Life*.

**Plant-based Sensors:** According to researchers, the [discovery of leaf sensors](#) can tell farmers when crops need to be watered--preventing water waste and parched plants.



CRISPR is at it again--altering the flower color in this traditional Japanese morning glory.



## *International News*

**Jiminy Crickets (video):** Western Australia's [first edible cricket farm](#) has been given the green light to sell products for human consumption.

**Bio Plastics:** University of Nebraska researchers confirm that a [new technique to create biodegradable plastics](#) has come out of China.

**Not Just Tulips:** The Dutch are working hard to secure their position as the world's [number two exporter of food by value](#), and part of this success comes from potatoes and other high-value fruits and vegetables.

**Ag's Importance:** The Farming First website shows Africa's agriculture potential--saying much of [GDP growth and poverty reduction are due to agriculture](#).

**Common Ground? (opinion):** This Danish editorial advocates for [finding common ground for working together](#) when it comes to the agriculture industry and animal welfare organizations.



Journalist Hidde Boersma (left) receives a [prestigious award for his documentary--Well Fed](#)--from a Wageningen University official.

**Corn to the Middle East:** The U.S. Grains Council says Saudi Arabia has nearly [doubled purchases of U.S. corn](#) this marketing year.



## General Interest News

**Dairy Farm Goes Green (video):** This organic [dairy farm made history](#) for being the owner of the first feed truck in the United States that is powered by electricity.

### Pumpkin Spice, Hayrides, and Corn

**Mazes:** [Agritourism has become a part of the farming scene](#), giving farmers another way to earn money and supplement the income they get from their crops and other products.

**Looking at Farmer Success:** From people management to asset management, a recent study shows what [farmers believe are the keys](#) to their success.

**Magic School Bus:** This popular children's television series [filled with entertainment and education](#) has made its way to Netflix.

**Robotic Kelp Farming:** By using [robotics to grow kelp in ocean waters](#), researchers think they can grow enough seaweed to make a dent in the fuel market.



This 2015 corn maze showed some farmers are using pop themes for agritourism. Speaking of pop, here's a look back at the [sheep version](#) of "I Knew You Were Trouble."

## 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 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
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- \* 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
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