

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.

#### In This Issue..... Click to Read

Vibrant University Ag Programs--P.2

**Animal Agriculture News** 

Food Science and Safety News

Plant and Environment News

**International News** 

**General Interest News** 



My Umbrella

Check out samples from the *National Geographic* photo contest.

#### **BCCA Nominations**

Nominations are open for the prestigious <u>2016 Borlaug CAST</u> <u>Communication Award.</u>

## **Exciting Opportunity** for Students

AgDiscovery is a summer camp outreach program located on college campuses designed to help middle through high school-aged students explore careers in animal science, veterinary medicine, agribusiness, plant pathology, aquaculture, and more. The deadline for applications is March 7.

#### **FFA Scholarships**

The February 1 <u>deadline for FFA</u> <u>scholarships</u> is rapidly approaching.

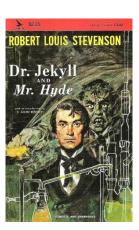
Check here for details.

#### January 15, 2016

# When Bad Things Happen to Good Science

According to the International Food Information Council (IFIC), "Science is about objective analysis, independent questions, and nuanced answers." As we all know, the Dr. Jekyll of credible science can transform into the Mr. Hyde of junk science when it is released to the public. If not properly handled, good research can become, "... a disorderly swarm of bias, groupthink, and black-and-white assumptions."

CAST assembles, interprets, and communicates credible, science-based information, so we appreciate articles that help the public steer clear of Mr. Hyde. Click here to access the IFIC report titled <a href="When Food Facts">When Food Facts</a> Devolve into Science Fiction.



### **News and Views**

- \*\* Unfolding Story--WOTUS: The U.S. House of Representatives passed a disapproval resolution that would eliminate the "waters of the United States" (WOTUS) rule, but it faces a probable veto.
- \*\* An Ag "Call to Action": The organization known as AGree seeks to drive positive change in food and agriculture systems. It has posted a "Call to Action" that



asks presidential candidates to state policies that will improve the health of America's families, economy, farms, and environment.

- \*\*Ag Economy Challenges: For some, the <u>farm boom has fizzled</u>, as U.S. crop surpluses expand and financial strains set in.
- \*\* A Pesticide Cocktail of Articles: The recent USDA Pesticide Data Program Report confirms that pesticide residues are not a food safety concern for the United States. Meanwhile, the EPA says that one type of neonicotinoid is harmful to bees; this article from Bayer Crop Science

## **Student Grant Application**

The U.S. Borlaug Fellows in Global Food Security supports exceptional graduate students interested in creating a component of their research in a developing country.

#### **New Farm Bureau Leader**

For the first time in 16 years, the American Farm Bureau Federation has elected a <u>new president</u>.

Zippy Duvall is a lifelong dairy farmer from Georgia.

#### **Understanding Ag**

The U.S. Farmers and Ranchers Alliance (USFRA) <u>launched a new</u> <u>foundation</u> with a mission of furthering agricultural education.

#### **Ag Education**

This report looks at the <u>ag teacher</u> <u>situation in the United States</u> and ways farmers and ranchers can reach out to young people.



#### CAST Social Media

Check the popular CAST Catch of the Day here and the CAST blog here.

<u>addresses that report</u>. It can all get confusing, so this blogger looks at the hornet's nest created by conflicting <u>bee health reports</u>.

In related news, the EPA entered into a cooperative agreement, the "Pesticide Educational Resource Collaborative," with the University of California-Davis to study the safe use of pesticides. The <u>CAST issue paper</u> titled *The Contributions of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050* adds further information to this topic.

#### **News from the Far Side of the Barn**

**Modern Falconry (video):** This <u>experimental drone can hunt</u> with a net and haul things away.

Water Bears--Cute, Tough, and Microscopic (videos): Biologists have been studying the tardigrade--a fascinating microscopic creature some call water bears.

#### **Automated Sushi Maze**

(video): Have a look at the fascinating scheme used to provide conveyor belt sushi to hungry customers. By the way, as reported a

few months back, <u>sushi cat</u> (pictured at right) would probably take sushi no matter how it's served.



## **Aggie Power**

Universities with agriculture-based programs dot the country, and twelve of the best belong to the <u>CAST education program</u>. Ag-related careers are a hot item now, and these schools produce graduates in many different food, plant, and animal fields of study.

Friday Notes regularly links to articles about programs, people, or happenings that make these schools special. Such stories appear throughout the newsletter, and here are three examples:



Top Crop of Ag Schools: Iowa State, Kansas State, Texas A&M, Ohio State, Arkansas, California-Davis, Florida, Nebraska, Mississippi State, Nevada, Kentucky, and North Carolina State.

\*The University of California-Davis

highlights six students who put on their boots and their hats--or maybe their gloves and their lab goggles--to

explore the working world of agriculture.

\*Texas A&M specialists produced six publications analyzing the <u>water use of the crop and livestock industry</u> in the Southern Ogallala Aquifer region.

\*North Carolina State University's <u>Plant Sciences Initiative</u> hopes to develop greater profits, higher yields, and a brighter future for North Carolina's young people.

## **Friday Notes News Categories**

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P.1 monkey pic from nationalgeographic.com, Jekyll pic from popsugar.com, and cat pic from loghouseplants.jpg. P.2 map from map.jpg. Animal Sec. boar pic from witn.jpg. Food Sec. airline pic from traveldiscountcode.co.uk. Plant Sec. farmer pic from texasfarmbureau.org. Inter. Sec. tiger pic from metro.co.uk. Gen. Sec. background of collage from farming.jpg. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.





## Animal Agriculture and Environmental News

"Ag Gag" Laws in Court: North Carolina becomes the <u>third state taken into federal court</u> where it will have to defend its recently enacted law to protect the privacy of animal agriculture.

**An Egg-opedia Site:** America's <u>egg farmers provide information</u> about where eggs come from and the efforts they make to take care of the poultry process.

**Meat on the Move:** U.S. pork <u>exports continued to gain momentum</u> while beef exports also showed signs of a rebound, according to data from the U.S. Meat Export Federation.

The Real Wild Hogs: A University of Florida study claims that <u>feral swine cost the Florida cattle industry</u> at least \$2 million a year.

**Battling Bird Flu:** Kansas State Univ. researchers <u>helped develop a vaccine</u> that protects poultry from multiple strains of avian influenza found in the United States.

**Cows as Weed Eaters:** This livestock expert says cows can be <u>trained to eat broadleaf weeds</u>; some apparently have a more nutritious leaf-to-stem ratio than grasses.



North Carolina has also dealt with a hog situation.

**Backyard Chickens and Backyard Bugs:** New research indicates that free range chickens are <u>exposed to a different set of parasites</u> than those found in most commercial facilities.

**Fish Farms:** The National Oceanic & Atmospheric Administration implemented the nation's first comprehensive regulatory program for aquaculture in federal waters.

Animal Data: Animals are the earth's sensors--scientists are using GPS to track a massive amount of data.



## Food Science and Safety News

The Seinfeld Syndrome--Dipping Your Chip Twice (video): Another verdict on an old controversy--double dipping a tidbit into a sauce after one has already taken a bite is by no means sanitary.

**Leave the Gun; Take the Olive Oil (video):** The CBS News magazine *Sixty Minutes* aired a segment on mafia involvement in Italian agriculture--including the shady underworld of the olive oil trade.

**Changes in the Lunch Line?** A new study about student eating habits before and after USDA updated school meal standards finds that kids are selecting healthier foods with fewer calories per gram for lunch.

Pass the Threonine, Arginine, and Tyrosine: This article explains why no food is "chemical-free."

**Airline Meals Turn 97:** This story looks at one of the world's largest <u>airline food</u> <u>factories</u>--this one is the Emirates Flight Catering facility in Dubai.

Can I Smell the Wine Cork? Nine mistakes you are probably making while dining out--according to restaurant pros.

**Labeling Standard for Grass-fed Meat:** The USDA <u>rescinded the labeling</u> standard for grass-fed meat.

**Process Labeling (opinion):** This editorial from the American Council on Science and Health looks at the <u>pros and cons of process labeling</u>--citing a CAST issue paper in the process.

**Labeling Insights (related to above):** The well-respected CAST issue paper-Process Labeling of Food: Consumer Behavior, the Agricultural Sector, and Policy Recommendations--contains science-based information about the controversial topic.



Airline food has certainly changed.

**Industrial Strength Guac Dip:** According to this report, <u>278 million Mexican avocados</u> will be shipped to the United States for the Super Bowl.

**Hot Topic:** This article takes another look at the question: could regular eating of <u>spicy foods help you live</u> longer?

**Counting Calories Electronically:** A new gadget promises to reveal the nutritional value of your meal by <u>scanning its chemical makeup</u>.



### Plant Agriculture and Environmental News

**Cover Crop Cocktails (video):** By using many plant varieties in his cover crops, this farmer says he is able to reduce the inputs needed on his farm--including fertilizer, herbicides, and fungicides.

**Biomass as Primary Energy Source? (video):** This Iowa State University agronomy assistant professor says <u>perennial grasses can reduce the carbon pollution</u> that causes climate change.

**Year of the Pulse:** Nutritious pulse crops--such as beans, peas, lentils, and chickpeas in their dry form--are the <u>subjects of an international focus</u>.

**Online Farming Aid:** A University of Nebraska-Lincoln researcher helped develop <u>a computer-based tool</u> that transforms trillions of model realizations into a simple website platform that will aid farmers.

**RFS in Court:** Seven pro-biofuel organizations are challenging the EPA's <u>changes to the renewable fuel standard</u> (RFS) program in court.

**Corporate Backing for Biotech (opinion):** Ocean Spray is a company that advocates for the safe and effective <u>use of agricultural</u> biotechnology to increase the food supply while lowering costs.



Digital tools on the farm.

Pavlovian Plants: Two scientists received funding to study whether or not plants can learn like Pavlov's dog.

**Soybean Researcher of the Year:** Dr. Tom Allen of Mississippi State Univ. performs various types of research, including <u>numerous foliar fungicide trials</u> to determine the efficacy of commercially available fungicides.



#### **International News**

**Tiger Plays with Prey (videos):** In a Russian zoo, an unlikely friendship develops between a tiger and a goat who was supposed to be his dinner.

**Unusual Crop Rotation:** This entrepreneur talks about his award-winning invention--a <u>rotating vertical farming tower--</u> and his vision for Singapore's agriculture sector.

**Egg and Chips:** A new plant that <u>can grow both</u> <u>aubergines (egg plants) and potatoes</u> has been developed and has gone on sale in Britain for the first time.



Whoa--is that a yawn or are you hungry?

**Drought in Africa:** Zimbabwe is feeling the strain of El Niño, as a <u>drought across southern Africa</u> kills crops, disrupts hydropower production, and necessitates stringent water rationing.

**Biotech Crops in Africa (related to above):** Although some countries have banned biotech crops, Africa takes <u>a fresh look at GMO crops</u> as drought blights the continent.

**SMARTfarm--Digital Down Under:** This project <u>connects students with data streaming</u> from the paddocks of high-tech university farms across Australia.

**Farming as Therapy:** A former U.S soldier takes up agriculture on a Philippine island, gives up modern life, and "finds his humanity."



#### General Interest News

**Toy or Tool?** Before spending potentially thousands of dollars on a new drone, most farmers want to know if they are purchasing a valuable piece of new on-farm technology or just an expensive toy.

**Drone Killer System:** Airbus has revealed a product that can automatically monitor an area and <u>disable a</u> drone by jamming its signals.

**It's Virtual Food Time:** The 2016 Consumer Electronics Show in Las Vegas provided virtual reality promoters a chance to show its <u>value in the food and beverage fields</u>.

**Rain, Floods, and Drought:** Egged on by El Niño, <u>rain is falling across</u> <u>California</u>. While it's welcome in most respects, it still isn't enough to bust the drought.

**Uber My Tractor:** Imitating Web-based companies like Airbnb or Uber, a site dedicated to <u>leasing and using farm equipment</u> is making available expensive machinery during the times producers need it most.



Virtual Reality and agriculture.

**Renewable Energy on the Farm:** Some farmers are trying to cut back on the coal and gas they use in an effort to make <u>food systems more energy efficient</u>.

**Winter Reading (opinion):** The Food Tank organization recommends these <u>books about food and alternate farming.</u>

#### **CAST Information**

Check out CAST's page at the <u>YouTube site</u> to view highly regarded agscience 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 <u>clicking HERE for</u> 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 <u>CLICK HERE</u> for CAST membership information.

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- \* American Farm Bureau Federation
- \* American Meat Science Association
- \* American Meteorological Society, Committee on Agricultural and Forest Meteorology
- \* American Society for Nutrition Nutritional Sciences Council
- \* American Society of Agricultural and Biological Engineers
- \* American Society of Animal Science



- \* American Society of Plant Biologists
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- \* University of Florida Institute of Food and Agricultural Sciences
- \* University of Kentucky
- \* University of Nebraska Agricultural Research Division
- \* University of Nevada



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