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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Animal Agriculture News
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Dynamic Ag Universities

Fourteen universities with successful agriculture departments belong to CAST’s Education Program. AgriMarketing.com published this annual ranking of the “world’s best Agricultural Colleges.” It includes global institutions—a Dutch one is tops—and North American schools—UC-Davis and Cornell head the list.

Cultivating Critical Thinking in Science
Doing your own research on the “research” you are receiving from the internet is extremely important. Check out CAST's latest blog for some helpful tips.

Earth Day Event
Hosted by Cal Poly's College of Architecture and Environmental

March 23, 2018

Biotech Innovation and Regulations
New CAST publication looks at the implications

We live in a hyperbolic age, so when something is called “game changing” or “historic,” we might chalk it up to promotional bluster. But genetic engineering and newer biotech procedures could warrant the “cosmic buzz” they are receiving. As this scientist says, gene editing has the potential to deliver great benefits to humanity—but it must be used wisely, and the process needs to be transparent and clearly explained to the public and decision makers. Another editorial makes the case that current biotech regulations cost researchers and the public. A lively debate focuses on how science, regulators, and the public should proceed.

CAST released its new publication about agricultural biotechnology and regulatory barriers. Scroll down to page two for more about the paper and the Washington, D.C., rollout.

CAST Issue Paper #59, Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities, is a science-based resource designed to inform the public and policymakers about the opportunities and challenges facing agricultural biotechnology today.

News and Views

Funding Issues and More: The omnibus spending bill is set to be approved by Congress, and it contains agricultural issues such as overall funding, rural broadband, rural water infrastructure, U.S. Forest Service budgeting, and more. This Politico report also includes agricultural information about the spending bill—as well as reports about other issues such as the 2018 Farm Bill.

Ag, Tariffs, and Retaliation: The Trump administration plans to impose roughly $50 billion in tariffs on Chinese goods. Reactions vary, and many think it is too soon to tell what the repercussions might be. Earlier in the week, Secretary of Agriculture Sonny Perdue discussed the risks of retaliation from tariffs that could affect agriculture.
Design, a temporary city of unique, student-built shelters will spring up during Earth Day weekend in April.

**Ag Opportunities**
The FFA New Horizons site provides agricultural opportunities for youth.

**Livestock Judging Results**
Congratulations to our member universities—Arkansas, Ohio State, Florida, and Texas A&M—for their accomplishments at this year’s Dixie National Livestock Show judging competition.

**CAST Social Media**
Click here for links to CAST sites: Twitter, Facebook, LinkedIn, Pinterest, videos, and blogs.

**Use The ABC’s to Talk About Ag:** Awareness, bridging, and content serve as a blueprint for successful ag communications when engaging with people of different generations.

**Educating Policymakers:** UC-Davis graduate students visited state lawmakers to "educate" them about the crucial scientific, educational, agricultural, and medical research being done in universities.

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

**Sippin' on Turtle Tears** *(video):* Why do butterflies drink turtle tears? Find out in this short clip.

**Bovine Space Message:** This Kansas farmer does ag parodies, trombone serenades for livestock, and now a message to space with his cattle herd.

**Saving Luna’s Life** *(video):* Auburn University specialists performed heart surgery on their smallest patient in school history.

**Biotech Regs Rollout**
*Events in the nation's capital*

Cohosted by The Association of Public and Land-grant Universities, the Council for Agricultural Science and Technology presented the new publication *Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities*. Dr. Alan McHughen (UC-Riverside) spoke about the highlights of the science-based paper, and the event included a Q&A session.

CAST's publication is also being featured on Friday, March 23, at a Senate presentation in the morning and a House of Representatives' noon lunch seminar—both hosted by NC-FAR.

This publication examines the current U.S. regulatory system for GE crops, compares it with those of major trading partners, and considers the effects it has on agricultural biotechnology. The authors show that despite foundational contributions requiring considerable public resource commitments for GE crop innovation and development, academic institutions and small private entities have been almost entirely excluded from the agricultural biotechnology market. The regulatory system needs to be adjusted, or "public, academic, and small business entities will continue to be frustrated in using these safe tools to deliver useful products." Click here for the entire press release.

The issue paper has already generated comments in various media sources and from companies and universities. Next week's *Friday Notes* will include more about the publication and the rollout events.
Animal Agriculture and Environmental News

Bovine Better Living (opinion): A science, food, and health writer shares insight on why feedlot cows might be happier cows.

Shining a Light (video): This dynamic, energetic young “farmher” explains pork farming and the need for effective communication.

Beef Boost (opinion): A livestock advocate uses three talking points to explain how beef production fits into a sustainable food production system.

Adjusting to Poultry Practices: Disease and emerging pathogens present cage-free egg producers with challenges that may require changes in operational practices.

Animal Celebrities--Fiona, Esther, and More: Special-needs goats in New Jersey, a 650-pound house pig in Ontario, and a preemie hippo in Cincinnati are all stars of social media that are also making their marks in the kiddie lit world.

From Roost to Roast: A chicken's journey from the farm to the dining room table includes many stops along the way.

Biotech Salmon Debate: A look at the background, legalities, research, and possible impact of the GE salmon situation. Also, click here for the CAST Commentary about the regulation of biotech animal products.

Food Science and Safety News

Treatment for Tootle (video): This purebred dachshund found relief and recovery thanks to a stem cell treatment administered by Colorado State University veterinarians.
Solar-power Perfection (video): This solar-powered grill cooks food twice as fast as a normal grill.

Taste Matters Most: An economic report shows that consumers want high-quality meat packed with flavor.

Whole Grains and Nutrition: A study reaffirmed the health benefits of substituting whole-grain foods—like whole-wheat bread, oatmeal, and brown rice—for refined-grain products.

What’s in a Name? (opinion): The rice industry issued a statement calling for cauliflower rice—a chopped-up version of the vegetable—to call itself something else.

GE Beer? Attention all craft beer enthusiasts—a team of scientists figured out how to brew “hoppy-tasting” beer without the use of expensive hop plants.

A Sticker Situation: Those tiny stickers found on your fruits and vegetables are everywhere—but they are actually a significant problem during composting, despite their small size.

Plant Agriculture and Environmental News

Plant-inspired (video): Taking a cue from the structure of leaves, scientists are working on a material that can separate oil and water. This could lead to safer and more efficient methods of cleaning up oil spills.

Conservation in Action: This farmer is known nationally for his no-till fields, cover crops, and soil health expertise—his yields are good, too.

Plants Fighting Malaria: University of Kentucky researchers will grow a malaria-fighting plant as part of a cooperative agreement with a German company.

Corn Stover, Electronic Waste, and Rare Earth Metals: A biochemical leaching process has been developed that uses corn stover as feedstock and recovers valuable rare earth metals from electronic waste.

Autothermal Pyrolysis (related to above): A process developed at Iowa State uses heat in the absence of oxygen to break down corn stalks, wood chips, and other biomass to produce a liquid bio-oil for energy and a bio-char for fertilizer.

Environmental Entomology: A recent study revealed the hidden impacts of natural disasters—such as floods, fires, and hurricanes—on insects, arthropods, and other invertebrates.

International News
Angus Beef on the Move: Along with wagyu-style meat, this California farmer is promoting "U.S. Angus Beef" for export to Japan, China, and other countries.

Got Milk in China? There is a rising demand for dairy in China—a 6% to 7% annual rate may be outpacing the growth of the industry.

Paraguay and Pork: The USDA says Paraguay will now allow the shipment of U.S. pork products into the country—along with some poultry and beef products.

Plastic Not Fantastic: The amount of plastic in the ocean is set to treble in a decade unless litter is curbed. Some hope the problem can be helped by cashing in on the "ocean economy."

Parasitic Fungi Plant: A truly bizarre subterranean plant from the rain forests of Malaysia has been rediscovered after it was presumed extinct for the last 151 years.

General Interest News

AgGrad Live (podcast): Unpaid internships can be a great way to get your foot in the door of a difficult industry, but are they the right decision for your career path?

It's in the Wiggle (video): Researchers at MIT unveiled their robotic fish. With a graceful undulation of the tail, it gives scientists the ability to unobtrusively observe marine wildlife remotely.

Ticks—They Must Be Good for Something! (video): The coming of spring brings the scourge of ticks, and some transmit bacteria that cause Lyme disease—this video becomes truly creepy at about the two-minute mark.

Airbnb for Butterflies: The Monarch Butterfly Habitat Exchange is a market-based solution for restoring and conserving high-quality monarch habitat on America's private working lands.

McEnvironmental: McDonald's announced it will partner with franchisees and suppliers to reduce greenhouse gas emissions related to its restaurants and offices.

What Does a Scientist Look Like? A new study states that when asked to draw a scientist, school-aged kids in the United States are increasingly sketching women.
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.

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* American Seed Trade 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
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* 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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* Cal Poly
* Cornell University
* Iowa State University
* Kansas State University
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