USMCA Passes Crucial Hurdle

Stakeholders are responding favorably to the United States-Mexico-Canada Agreement (USMCA), and even though political maneuvers might slow down the official signing, most sides are optimistic. A USDA press release calls it a big win for the economy, while both Democrats and Republicans claim the agreement as a political victory.

Canada and Mexico are the top two export markets for U.S. food and agricultural products, and the USMCA intends to provide more stability in the relationships. The overall agreement has many aspects, and a few of the most notable ag-related items include increased access to Canada’s dairy markets for U.S. producers, and more detailed rules for agricultural biotechnology and labeling requirements. This Farm Bureau statement is an example of the sentiment felt by many agriculture groups as they hope for swift approval of the agreement.

News and Views

WASDE: The USDA released its latest World Agricultural Supply and Demand Estimates with information about crop and livestock production.

Climate, Agriculture, and Youth: David Nabarro--2019 World Food Prize laureate--looks at the changing climate and food systems, while Greg Henderson of Drovers considers the significance for agriculture in regards to Greta Thunberg’s new title as “Time’s Person of the Year.”

Ag Voices: Hosted by the U.S. Farmers and Ranchers Alliance, agricultural leaders, prominent groups, and farmers gathered recently to talk about agriculture and climate change.

Urban Ag Report: Cornell University’s Small Farm Program and the USDA’s Agricultural Marketing Service researched factors affecting the commercial viability of urban agriculture. Access the full report here.
A new curriculum designed at Iowa State University helps educators explain how agriculture is involved in every day life.

Helping Wildlife
A University of Nevada-Reno associate professor was one of only 10 in the country to receive the Wildlife Society Fellows Award.

Send in Ideas
CAST welcomes suggestions for future publications and projects.

News from the Far Side of the Barn

Honey Badger "Don't Share" (video):
Jackals help a honey badger escape a python's death grip—but the badger isn’t about to share the snake dinner that results from the fray.

On the Harvest Crazy Train (video): The Peterson Brothers use Ozzy’s music and their own insights about farming to show the ups and downs of harvest time. Their popular parody videos entertain and inform viewers about the importance of agriculture.

Some say honey badgers don’t “give a hoot,” and the link at left shows that they definitely don’t play well with others.

University Programs Promote Science, Agriculture, and Communication

Penn State University recently joined many other prestigious science/ag-based schools in the CAST Education Program. Faculty, staff, and students have access to Friday Notes, current publications, and reference materials.

The member universities receive recognition and the option to participate on the CAST Board of Representatives. The program also provides a way for them to promote research, programs, and student activities through Friday Notes and social media.

Agricultural production, food safety, medical advances, and many other benefits to society are advanced at these prestigious schools. Part of CAST’s mission is to communicate the exciting work being done at publicly funded universities.

Supporting the Scholarship Fund
CAST is grateful for the contributions that came in during Giving Tuesday, and the organization is close to meeting its goal for the scholarship fund. Donations are always welcome. It is a great way to invest in the future of science communication.
Animal Agriculture and Environmental News

Pipping, Peeping, and More (video): These three videos offer "360-degree virtual tours" of chicken hatcheries.

Legal Challenge to Pork Law: The National Pork Producers Council and the American Farm Bureau Federation filed a legal challenge to California’s Proposition 12, a law that imposes animal housing standards outside the state’s borders.

Poultry and Data Management: The use of data is changing management approaches, decision making, and operational methods. This article looks at how the poultry industry might take advantage of feed data.

FARM Workforce Development: The dairy industry’s on-farm quality assurance program released a proposed evaluation tool for input from industry stakeholders.

Broiler-chicken Research: University researchers discovered that lipoprotein lipase, an enzyme crucial for fat metabolism, may be contributing to wooden breast syndrome in broiler chickens.

Beehive Partnership Brings National Recognition: A Texas FFA chapter’s work with beehives led to national TV recognition--and educational scholarships.

Bee Health--A CAST Commentary: Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It?

Food Science and Safety News
A Meaty Issue: In an effort to clarify how meat products are labeled, a senator introduced the Real MEAT Act. This corresponds with the "Real Marketing Edible Artificially Truthfully (MEAT) Act" in the House of Representatives proposed in October.

Strawberry Longevity: USDA/ARS scientists released a new strawberry cultivar—one developed with an improved shelf life.

On the Menu: Research indicates that consumers are confident when it comes to cooking ground beef but less so about steaks and roasts. Check here for various cooking methods and recipes.

From Buttered Popcorn to Thai Curry: This article goes global to look at "50 of the most delicious foods ever created."

Big on Canola Oil: A Kansas State University expert explains the health benefits of canola oil.

Football and Dairy: A program created 10 years ago by the Dairy Checkoff and the NFL—Fuel Up to Play 60—is designed to improve health and wellness in schools.

Say Cheese: Penn State extension services offer tools to small-scale cheesemakers to help them develop a food safety system.

This article focuses on the Cosmic Crisp apple—including a taste test involving several other popular varieties.

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**Plant Agriculture and Environmental News**

Better Seed, Better Life (video): This award-winning video from an Iowa State student looks at the importance of the university's seed vault.

No-till Experts: The University of Kentucky celebrated its 50th anniversary of ongoing research about no-till soil management.

Cover Crops and Fertilizer: These Ohio State University specialists look at the benefits of utilizing cover crops and the pros and cons of fertilizing them.

Working on Water Quality: A possible solution for one type of nitrate pollution in water is taking form at the University of Nebraska-Lincoln.

Willy Wonka Would Be Pleased: Penn State researchers found a novel way to ID disease-resistance genes in chocolate-producing trees.

Which Tree? More than 25 million Christmas trees are sold annually in the United States, and a Texas A&M site provides guidance about selecting the right one.

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**International News**
Deadly Eruption (videos): At least 16 people have been killed, dozens injured, and two still missing after a volcano erupted on a small New Zealand island. Rescue operations continue under dangerous conditions.

Unbearable (video): A village in Russia's far north has been overrun by more than 50 polar bears--community activities have been affected and schools are being guarded.

Land Restoration (video): People in northern Ethiopia are battling the effects of climate change by restoring woodlands to capture CO2 and boost food production.

Carbon-neutral Fuel Possibilities? Researchers in Israel created a strain of the bacterium Escherichia coli that grows by consuming carbon dioxide instead of sugars or other organic molecules.

Cricket-based Food: A Scandinavian insect food company launched a protein powder that is dairy, gluten, and soy free.

Entomophagy: This blogger looks at what's buggin' him about the trend to use insects for food.

General Interest News

Speedy Science Session (podcast): This CAST scholarship winner from the University of Arkansas explains the concept of sensory science.

Ever Heard a Computer Laugh? Mark Parker submits his top ten comments you don't want to hear from your tractor mechanic.

Helping Dogs Help Farmers: A Virginia farmer has been training a variety of working dogs for more than 40 years.

Ruff Choice (related to above): As this blog points out, it can be hard to decide which breed of dog is best on the farm.

Species--Coming and Going: Scientists discovered 71 new species this year. On the other hand, 467 species have been declared extinct in the past decade.

Genetic Breakthroughs (video): This 60 Minutes story profiles a Harvard professor who is working to make humans immune to viruses, eliminate genetic diseases, and reverse the aging process.

Plants, Genetics, and Food: Plant Breeding and Genetics is a paper in the CAST series on The Need for Agricultural Innovation to Sustainably Feed the World by 2050.
CAST Information

Check out CAST’s page at the [YouTube site](https://www.youtube.com) 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). 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, or [CLICK HERE](http://www.cast-science.org) for CAST membership information.

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- Bayer
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- 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
- U.S. Poultry and Egg Association
- 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.
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Dan Gogerty (Communications and Friday Notes 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 (Scientific Editor) and Colleen Hamilton (Membership Specialist)