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| |  | | --- | | https://files.constantcontact.com/91f661aa001/891d91fb-b83a-4bd3-8855-cc369db0269f.jpg  *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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Click to Read** | | [CAST Publications through the Years--P. 2](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK5) | | [Animal Agriculture News](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK7) | | [Food Science and Safety News](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK8) | | [Plant and Environment News](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK9) | | [International News](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK21) | | [General Interest News](http://campaign.r20.constantcontact.com/render?preview=true&m=1102365224729&ca=4bf44ed8-c72c-4aa8-b5d4-0e68466b20bd&id=preview#LETTER.BLOCK11) |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **A Giant Leap 50 Years Agohttps://files.constantcontact.com/91f661aa001/11f63a7e-a3ab-478a-bc9e-89eefaae5e44.jpg**  NASA will celebrate the [50th anniversary of the Apollo 11 moon mission](https://www.nasa.gov/press-release/nasa-celebrates-50th-anniversary-of-historic-moon-landing-with-live-tv-broadcast) and look to the future of space exploration with a live, two-hour television broadcast July 19--and other nationwide events.    **Space, Science, and Universities**  Many universities that are CAST [Education Program](http://www.cast-science.org/education/cast_education_program/) members help develop the country's space achievements. This article explains how Texas A&M is [contributing research and talent to support NASA's missions](https://today.tamu.edu/2019/07/01/reaching-for-the-stars-grounded-in-tradition/) to the moon, Mars, and beyond.    **Farm Aid 2019**  https://files.constantcontact.com/91f661aa001/63fe333e-cb3d-4f5d-a365-b4051b410460.pngMany musicians will join Willie Nelson, John Mellencamp, Neil Young, and Dave Matthews to raise money and awareness during [Farm Aid 2019](https://www.wacotrib.com/news/ap_nation/headlines/willie-nelson-brings-farm-aid-to-wisconsin-s-dairy-land/article_9490e662-d61a-5bdb-be26-cf241f8527dd.html).  The annual music and food festival visits Wisconsin's struggling dairy country in September.    **A&T College of Agriculture**  This North Carolina A&T State University site provides information about [extension programs, research, and publications](https://www.ncat.edu/caes/newsmedia/index.html).    **Economic Summit**  Sponsored by Tuskegee University, the [Booker T. Washington Economic Development Summit](https://www.tuskegee.edu/programs-courses/colleges-schools/caens/conferences-workshops/btwsummit) will be held this September.    **Better Communicators**  The University of Nevada-Reno  is offering its journalism  students a course focused on how  to [accurately communicate science in the media](https://www.unr.edu/nevada-today/news/2019/translating-science-for-media).    **Send in Ideas**  CAST [welcomes suggestions](http://www.cast-science.org/submit-an-idea) for future publications and projects.    **CAST Social Media**   |  |  |  | | --- | --- | --- | | [Facebook](http://www.facebook.com/pages/Council-for-Agricultural-Science-and-Technology-CAST/134721559955982) | [Twitter](http://twitter.com/castagscience) | [LinkedIn](https://www.linkedin.com/company/1225116?trk=tyah&trkInfo=clickedVertical%3Acompany%2CclickedEntityId%3A1225116%2Cidx%3A2-1-4%2CtarId%3A1453473535514%2Ctas%3ACouncil%20for%20Agric) | | [Pinterest](https://www.pinterest.com/castagscience/) | [YouTube](http://www.youtube.com/user/CASTagScience) | [Cast_blog](http://www.cast-science.blogspot.com/) | | |  | |  | | --- | | ***July 12, 2019*** | | **You Make Us Better**  ***This July, CAST Is Celebrating Its Members***    https://files.constantcontact.com/91f661aa001/7c167729-f713-4b21-adbe-b65b79b9bb6b.pngCAST thrives when our members believe in our mission: to assemble, interpret, and communicate credible science-based information. Our supporters recognize the power of credible science in the field of agriculture, and they know our local, national, and global communities will be better because of the advancements made through research and its application in agricultural industries.  Our members are making a difference in policy, in the media, on social media, and in their own daily lives. CAST is grateful for your support throughout the nearly five decades we have been established.  While we are thankful year-round for those who actively support our mission, we want to take time to highlight some of our members this month. We also want to focus on our communication accomplishments that could not be met without membership support.  [**Help us communicate better by answering two questions.**](https://forms.gle/JNw53TC4LG9bRY2a9)  This month, take the time to follow us on social media, visit [our blog](http://cast-science.blogspot.com/), and follow along with *Friday Notes* as we say "thank you" to you, our members, for providing a means to distribute credible, objective, and science-based information on agricultural issues.    **News and Views**    **Waters of the U.S.:**  Two respected agriculture experts look at the [challenging, complicated, but workable](https://www.agri-pulse.com/articles/12401-how-to-make-the-new-waters-of-the-us-definition-last) "Waters of the U.S." issue.    **Backing the USMCA:**  The National Cattlemen's Beef Association sent a letter signed by 39 of its state affiliates to U.S. Senate and House leaders [urging them to support the swift ratification](https://www.ncba.org/newsreleases.aspx?newsid=6968&utm_source=Angus+Journal+Daily&utm_campaign=d452f2ae80-Daily_Digest_07_9_2019&utm_medium=email&utm_term=0_794b9db58f-d452f2ae80-235249553) of the U.S.-Mexico-Canada Agreement.    https://files.constantcontact.com/91f661aa001/be82293f-dd18-49d8-83fb-cf33b9144774.jpg**Food Safety:**  This [interview with USDA's](https://www.feedstuffs.com/commentary/few-minutes-usdas-dr-mindy-brashears-most-important-woman-food-safety)  [Dr. Mindy Brashears](https://www.feedstuffs.com/commentary/few-minutes-usdas-dr-mindy-brashears-most-important-woman-food-safety) draws on her expertise  as a respected food safety professional.  Note: Brashears was a [task force author for](http://www.cast-science.org/publications/?animal_feed_vs_human_food_challenges_and_opportunities_in_sustaining_animal_agriculture_toward_2050&show=product&productID=278268)  [the CAST publication](http://www.cast-science.org/publications/?animal_feed_vs_human_food_challenges_and_opportunities_in_sustaining_animal_agriculture_toward_2050&show=product&productID=278268) *Animal Feed vs. Human Food: Challenges and Opportunities in Sustaining Animal Agriculture Toward 2050*.    **EPA Announcement Brings Criticism:** The president of the Renewable Fuels Association is not pleased with the EPA's recent [announcement regarding ethanol and biodiesel](https://brownfieldagnews.com/news/epas-proposed-rfs-rule/) industries.    **Acreage Report Deadline:**  The USDA [extended the acreage reporting deadline](https://brownfieldagnews.com/news/usda-extends-acreage-reporting-deadline-in-12-states/) to July 22 for spring-planted crops in twelve states.    **News from the Far Side of the Barn**     |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | https://files.constantcontact.com/91f661aa001/d3a82a79-8b70-439b-bb84-50fc6bb47d78.jpg | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **Maurice goes to court (story at upper left).** |   ***Sacré Bleu* (video):**  A French rooster named Maurice (photo at right) is on trial for ["disruptive" crowing in the morning](https://www.cnn.com/2019/07/04/europe/france-cockerel-trial-scli-intl/index.html).    **Why I Am Not a Farmer (related to above):**  This blog considers farming, [patience, pitchforks, and one ugly rooster](http://cast-science.blogspot.com/2012/12/why-i-am-not-farmer-patience-pitchforks.html).  **Moves Like Jagger? (video):** Sticking with the flamboyant-bird theme, a scientific study says that cockatoos are the only nonhuman species to [show creativity while dancing](https://www.washingtonpost.com/science/2019/07/08/snowball-cockatoo-taught-himself-dance-moves-scientists-say/?noredirect=on&utm_term=.d4b8d080a5cb&wpisrc=nl_rainbow&wpmm=1)--we're talking cool moves and serious headbanging here. | | |
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| |  | | --- | | **CAST Publications through the Years**  ***Four decades of ag-science communication* CAST-publication-covers**  Since 1972, we've published more than 400 publications--that equals out to about 8.5 publications a year for 47 years. Considering each paper goes through a peer-review process, we think that's pretty good! From one-pagers to reports numbering more than 200 pages, we've always kept the same goal in mind: communicate credible, science-based information.  [**Infographic: Take a look at different types of publications through the years**](http://cast-science.blogspot.com/2019/07/infographic-cast-publications-through.html)**.**    Because CAST relies on members like you to keep our work moving forward, you influence how we present agricultural issues to the public. **Let us know how you think we should share content from our CAST publications by answering two simple questions:** [**https://forms.gle/iyTamXzE2tRF7iTZA**](https://forms.gle/iyTamXzE2tRF7iTZA)**.** Your responses are anonymous. |      |  | | --- | |  | | Globe (TopLatestNews)**Friday Notes News Categories**  Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 confetti thanks pic modified from Ylanite Koppens/Pexels, earth pic from earthcycle.jpg, Farm Aid symbol from farmaid.org, Brashears photo from texasfarmbureau.com, and rooster pic from gettyimages.com. Animal Sec. Mitloehner photo from ucdavis.edu and horses pic from msn.com. Food Sec. milk pic from kxrb.com and pistonclasico.com, and bananas pic from boingboing.net. Plant Sec. hemp poster from pbs.twimg.com and algae pic from abcnews.go.com. Inter. Sec. desert pic from eco.business.com and frog pic from cnn.com. Gen. Sec. wasp nest pic from sciencealert.com and Chernobyl pic from livescience.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service or CAST. |      |  | | --- | | ***Animal Agriculture and Environmental News*** | | |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | https://files.constantcontact.com/91f661aa001/69089252-31de-4f31-bb32-0a099d7e53af.jpg | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **Dr. Frank Mitloehner (**[**2019 BCCA winner**](http://www.cast-science.org/borlaug_cast_communication_award/current/)**) is one of several UC-Davis researchers investigating economical ways to make** [**livestock production more environmentally sustainable**](https://www.ucdavis.edu/food/news/making-cattle-more-sustainable)**.** |   **Pork Production:**  This site provides a [variety of stories related to pork production](https://www.porkbusiness.com/news)--including relevant crop reports, swine fever vaccines, welfare issues, and more.    **Here's the Beef:** Texas is America's [top beef cow state](https://www.drovers.com/article/americas-top-25-beef-cow-counties), but Nebraska is home to the nation's top three beef counties.    **Some Things Fishy:**  (1) This article looks at how market forces, self-regulation, and GMO crops are [making fish farming more sustainable](https://geneticliteracyproject.org/2019/07/11/how-market-forces-self-regulation-and-gmo-crops-are-making-fish-farming-more-sustainable/?fbclid=IwAR2AZUesFXDLdsuNONeoccad-KgiI_4PdFvD_LmibIYP7P10-jg1W5AKK-M). (2) Researchers from Reed College and UC-Davis analyzed a [database of freshwater fish die-offs](https://www.ucdavis.edu/news/fish-die-offs-linked-hotter-summers) in Wisconsin combined with lake temperature data and simulations.    **That's No Bull:**  Research from various sources--including Kansas State University and the University of Nebraska-Lincoln--will soon yield a [web-based tool to help commercial bull buyers](http://www.oklahomafarmreport.com/wire/beefbuzz/2019/07/04201_BeefBuzzNewSireTool07082019_115356.php#.XSXm-PZFz5p).    **Clearing the Air:**  The Egg Industry Center at Iowa State University released a challenge grant to encourage research teams to work collaboratively to solve air quality [challenges created by cage-free laying hen housing](https://www.cals.iastate.edu/news/releases/egg-industry-center-iowa-state-university-launches-challenge-grant-encouraging).  wild horses circulate_ msn.com  **Wild Horses "Spiral" (video):**  This drone footage shows hundreds of [wild horses spiraling together](http://digg.com/video/drone-footage-horses-china) on the plains of Inner Mongolia.    **Disease Awareness:**  The Nebraska Department of Agriculture wants horse and cattle owners to be aware of a [disease that currently has no cure](https://www.3newsnow.com/news/community/vista-semanal/local/nebraska-department-of-agriculture-warns-of-viral-animal-disease?utm_source=Agri-Pulse+Daily+Harvest+2018&utm_campaign=930556224d-EMAIL_CAMPAIGN_2019_07_08_09_53&utm_medium=email&utm_term=0_6978e27d37-930556224d-48780645)--VS is a viral disease that can affect horses and other animals. |      |  | | --- | | ***Food Science and Safety News*** | | |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | milk and hot pepper_ kxrb.com and pistonclasico.com | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **Researchers say that** [**milk is the best drink to reduce the burn**](https://phys.org/news/2019-06-chili-peppers.html) **from chili peppers.** |   **Meat--and "Meat"--Mania**  Media outlets are filled with articles, ads, and editorials about meat, cell-based meat, and vegetable-based alternatives. These recent links might be of interest:  (1) This video [examines plant-based alternatives and cell-based meats](https://www.cbsnews.com/news/wheres-the-beef-hamburger-patties-made-from-plants-2019-07-07/?ftag=CNM-00-10aab8c&linkId=70155363), but some general statements run counter to the findings of beef experts--see the Mitloehner link in the Animal Section above. (2) This article looks at why alternative meat is [not always healthier](https://www.youtube.com/watch?time_continue=4&v=5ckjFvxfNow) than the real thing. (3) Scientists are trying to mass produce meat directly from animal cells--[will consumers accept it](https://www.sciencedaily.com/releases/2019/07/190703121356.htm)? (4) This [startup is making cell-based meat](https://www.apnews.com/9fb57e95ec49466e96c7bba3ac4b5d60?utm_source=Agri-Pulse+Daily+Harvest+2018&utm_campaign=9c8cedbbb5-EMAIL_CAMPAIGN_2019_07_09_09_57&utm_medium=email&utm_term=0_6978e27d37-9c8cedbbb5-48780645), including beef and duck, while other scientists are [working on steaks and chicken cutlets](https://theconversation.com/so-far-cultured-meat-has-been-burgers-the-next-big-challenge-is-animal-free-steaks-117727?utm_source=twitter&utm_medium=twitterbutton).    **Students and Food Insecurity:** These researchers say that [food insecurity affects many college students](https://news.utk.edu/2019/05/24/study-high-rates-of-food-insecurity-found-at-southern-appalachia-colleges/)--especially in certain regions of the country.    **Biofortification and Micronutrient Deficiency:**  Scientists are creating a "super potato"--fortified with iron and zinc--in a [bid to tackle malnutrition](https://www.telegraph.co.uk/news/2019/06/17/scientists-develop-super-spud-bid-prevent-stunting/) in developing countries.  bananas_ apeel_ boingboing.com  **Stop the Rot? (video):** A startup founded in 2012 is reportedly [keeping fruit fresher in a bid to tackle food waste](https://www.cnbc.com/2018/06/19/apeel-which-makes-coating-to-preserve-produce-signs-costco-deal.html). Now a major grocery chain is buying into the technology.    **Insights about the Food Waste Problem:** Click here for a [free download of the CAST Issue Paper](http://www.cast-science.org/download.cfm?PublicationID=284997&File=8DF95BA2F070DEFBC08C498D61EFAE29.cfusion) *Food Loss and Waste*. And this article looks at food waste and [how some manufacturers are responding](https://www.wastedive.com/news/food-waste-is-piling-up-how-are-manufacturers-responding/558111/). |      |  | | --- | | ***Plant Agriculture and Environmental News*** | | |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | https://files.constantcontact.com/91f661aa001/adc91411-330a-4e48-b721-d2bd4a1a53f1.jpg | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **Looking at the** [**challenges and opportunities**](https://www.harvestpublicmedia.org/post/hemp-and-challenges-farming-s-frontier) **facing hemp farmers.** |   **Johnny Appleseed Would Agree (video):**  This study indicates that the best way to help the global environment is to [start planting trees](https://www.livescience.com/65880-planting-trees-fights-climate-change.html) like there's no tomorrow.    **Very Hungry Caterpillar:**  The thistle caterpillar brings color to gardens when it becomes a painted lady butterfly, but the pest can damage soybean fields. [Iowa State University](https://www.harvestpublicmedia.org/post/thistle-caterpillar-adds-one-more-item-soybean-farmers-2019-list-woes) and the [University of Nebraska-Lincoln](https://cropwatch.unl.edu/2019/thistle-caterpillars-soybean) provide solid information and research about the problem.    **Stronger Wheat:**  Wheat plants engineered to have fewer microscopic pores--called stomata--on their leaves are [better able to survive drought conditions](https://phys.org/news/2019-06-scientists-climate-ready-wheat-survive-drought.html) associated with climate breakdown.    **Hemp in the Sunshine State (related link in caption at right):**  The University of Florida's industrial hemp pilot project has been working to understand [the potential of growing hemp throughout the state](http://blogs.ifas.ufl.edu/news/2019/06/20/industrial-hemp-growing-in-florida-for-first-time-in-decades-university-of-florida-pilot-project-plants-seeds-for-new-florida-crop/).    **Seeing the Light:**  Dr. Kevin Folta ([2016 BCCA winner](http://www.cast-science.org/borlaug_cast_communication_award/award_recipients/award_recipients/kevin_folta.cfm)) reports that his lab has shown ways to potentially cut energy costs of indoor agriculture by [delivering light in short pulses](https://www.biorxiv.org/content/10.1101/674432v1).    **CRISPR Techniques:**  This article looks at how Kansas State University researchers are [using CRISPR for various techniques](https://www.k-state.edu/seek/spring-2019/crispr-connections/index.html)--from developing new wheat varieties to fighting animal diseases.  https://files.constantcontact.com/91f661aa001/d48bf0dd-ab80-4bcc-8ba0-92391381520f.jpg  **Algae Beach Bummer (video):**  Beaches along Mississippi's Gulf Coast have been closed for swimming, as the shoreline has been under a [water warning tied to a blue-green algae bloom](https://www.cbsnews.com/news/toxic-algae-bloom-closes-mississippi-beaches-announced-today-2019-07-07/?utm_source=Agri-Pulse+Daily+Harvest+2018&utm_campaign=930556224d-EMAIL_CAMPAIGN_2019_07_08_09_53&utm_medium=email&utm_term=0_6978e27d37-930556224d-48780645).    **Great Atlantic *Sargassum* Belt:**  The level of *Sargassum* seaweed in the Atlantic can be seen from space, and when it washes up on shore, it stinks. Researchers look at the [causes and the ill effects](https://www.vice.com/en_uk/article/evy99w/the-largest-algae-bloom-in-world-history-is-now-off-the-florida-coast). |      |  | | --- | | ***International News*** | | |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | china desert_ eco-business.com | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **China is trying to reverse the** [**negative impact creeping sands are having**](https://www.bbc.com/news/av/world-asia-48561430/how-china-is-trying-to-stop-its-deserts-spreading) **on the environment.** |   **Moby Dick's Legacy:** (1) Video--Japan has resumed a limited amount of [whale hunting](https://www.irishtimes.com/news/world/asia-pacific/japan-begins-first-commercial-whale-hunt-in-more-than-30-years-1.3943074). (2) [Watching whales](https://www.voanews.com/economy-business/japan-business-watching-whales-far-larger-hunting-them) is a much bigger business than hunting them. (3) Norway and Iceland are also involved in [commercially hunting whales](https://www.msn.com/en-us/news/world/besides-japan-other-countries-continue-to-hunt-whales/ar-AADUGoD?ocid=spartanntp).    **Pigs in the United Kingdom:**  This [British report details pig farming health and welfare achievements](https://www.farminguk.com/news/report-shows-uk-pig-sector-s-health-and-welfare-advances_53416.html) from the past two years and highlights priorities for the coming year.    **Grain from South America:**  Big corn crops and competitive prices from South America are expected to mean [more export competition](https://brownfieldagnews.com/news/south-america-set-for-big-corn-crops/) for the United States.    **Wheat-like Grain Brings Regional Cooperation:**  Northwest Africa is a region of many clashes, but [couscous is a symbol of harmony](https://www.npr.org/sections/thesalt/2019/06/27/735429939/couscous-a-symbol-of-harmony-in-northwest-africa-a-region-of-clashes).  rare tree frog_ cnn.com  **"Extinct" Animals Spotted:**  A team of [scientists photographed several rare animals](https://www.cnn.com/travel/article/extinct-creatures-lost-city-honduras/index.html) at an archaeological site in a Honduras rain forest--including a red-eyed tree frog.    **The Notorious Smell of Success:**  We have mentioned the nasty aroma of durian before, but the taste is apparently appealing. This story explains how a "thief" became Malaysia's [royalty of the famous fruit](https://www.latimes.com/world/asia/la-fg-col1-malaysia-durians-china-20190704-htmlstory.html?utm_source=pocket-newtab). |      |  | | --- | | ***General Interest News*** | | |  |  | | --- | --- | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | https://files.constantcontact.com/91f661aa001/fc7ee9c6-2bdd-443e-ba2b-8cec793a914f.jpg | | https://imgssl.constantcontact.com/letters/images/sys/S.gif | **When Wasps Decide to Move In:  This appears to be a** [**good year for wasps making "super nests" in Alabama**](https://www.sciencealert.com/massive-wasp-super-nests-are-starting-to-appear-in-alabama-scientist-warns)**.** |   **Fox on the Move (video):**  Scientists tracked an [arctic fox as it traveled 3,500 kilometers in 76 days](https://www.youtube.com/watch?v=Su6bhoeHWXY) over sea ice and glaciers from Norway to Canada. Check here for [more background information](https://www.bbc.com/news/blogs-news-from-elsewhere-48824181) about the journey.    **Artificial Intelligence:**  Agriculture is a $5 trillion industry, and [artificial intelligence is becoming a big part](https://www.forbes.com/sites/cognitiveworld/2019/07/05/how-ai-is-transforming-agriculture/?utm_source=Agri-Pulse%2BDaily%2BHarvest%2B2018&utm_campaign=930556224d-EMAIL_CAMPAIGN_2019_07_08_09_53&utm_medium=email&utm_term=0_6978e27d37-930556224d-48780645#658817ba4ad1) in the efforts to yield healthier crops, control pests, monitor soil, organize data, and improve a wide range of ag-related tasks.    **There's a Vegebot in My Garden:**  Robots are being designed with features that mimic the handling skills of humans, including [one that can harvest lettuce](https://www.cnbc.com/2019/07/08/researchers-develop-robot-that-can-identify-and-pick-lettuce.html?utm_source=Agri-Pulse+Daily+Harvest+2018&utm_campaign=9c8cedbbb5-EMAIL_CAMPAIGN_2019_07_09_09_57&utm_medium=email&utm_term=0_6978e27d37-9c8cedbbb5-48780645).    **Water Purity:**  A breakthrough imaging technique developed by Cornell researchers [shows promise in decontaminating water](http://news.cornell.edu/stories/2019/07/new-imaging-method-aids-water-decontamination) by yielding important information about catalyst particles.    **New Environmentally Friendly Products:**  USDA/ARS researchers are using several methods to create a starch-vegetable-oil-based [complex with a variety of useful properties](https://content.govdelivery.com/accounts/USDAARS/bulletins/2501b25).  chernobyl_ livescience.com  **Chernobyl Revisited:**  With a hit TV production focusing attention on the 1980s nuclear disaster, this article looks at [five myths about Chernobyl](https://www.washingtonpost.com/outlook/five-myths/five-myths-about-chernobyl/2019/07/05/34eb2506-9214-11e9-aadb-74e6b2b46f6a_story.html?noredirect=on&utm_term=.d920dc6a869a&wpisrc=nl_rainbow&wpmm=1).    **Conservation and Habitat:** As reported by the University of Arkansas, the tall-grass prairies of the state were home to [a variety of reptile and amphibian species](https://researchfrontiers.uark.edu/creatures-of-arkansas-tallgrass-prairies/)--but many have declined due to habitat loss. |      |  | | --- | | **CAST Information** | | YouTube**Check out CAST's page at the** [**YouTube site**](https://www.youtube.com/user/CASTagScience) **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/membership/index.cfm?show=form) ***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                                       world supported by plants and animals**  **\* 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.*** | |
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