SPOTLIGHT ON PENNSYLVANIA:
LOOMING NATIONAL POTATO SHORTAGE AND PENNSYLVANIA’S SNACK FOOD INDUSTRY

By Sakura Ung, Committee Project Manager

French fries. Whether you like them curly, shoestring or wedge-cut, accompanying a burger, steak or dipped in a Wendy’s frosty, this starch is truly a staple and favorite of many.

Last month, Bloomberg first reported a potential shortage of french fries in the U.S. due to a recent potato harvest that was stunted as a result of cold, wet weather experienced in parts of the U.S. and Canada – key regions for potato growing and producing.

The majority of potatoes are harvested during the months of September and October. The month of October was particularly hazardous for potato crops in growing regions because frost began to cover the crops. While some farmers in Idaho and Alberta were able to salvage some of the damaged potato crops, farmers in North Dakota and Manitoba had no choice but to leave some of the potatoes in the fields due to snow and rain conditions. According to the United Potato Growers of Canada, approximately 6.5 percent of potatoes in Alberta were estimated to have been damaged by frost.

The organization also reported that nearly 18 percent of planted area in Manitoba was left unharvested. The USDA reported that in the beginning of November 2019, only 73 percent of total potato crops were harvested in North Dakota.

The leading potato growers in Canada are Prince Edward Island, Manitoba and Alberta. In the U.S., Idaho is the leading state for potato production, growing approximately one-third of all potatoes produced in the nation. Other states that produce large amounts of potatoes include Washington and Wisconsin. In 2007, the U.S. was ranked as the fifth biggest potato producer in the world. According to Penn State Extension, the U.S. produces over 420 million cwt of potatoes each year, which yields an estimated value between $3.5-4 billion.

Damaged potato crops have the potential of adversely impacting both the availability and price of french fries. In a phone interview with Bloomberg, Travis Blacker, industry-relations director for

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State Government Update

Environmental Memoranda, Bills, Votes and Acts

Access the provided hyperlinks to see more information from the Pennsylvania General Assembly official webpage.

CoSponsorship Memoranda

Representative Pam Snyder - December 3
Abandoned and Blighted Property Tax Sale Agreement
Requires any person purchasing an abandoned or blighted property in a tax sale to enter into a redevelopment agreement with the municipality or a redevelopment authority. The purchaser would agree to remediate the property.

Representative Anthony DeLuca - December 9
Hunting Licensing and Animal Cruelty
Provides that hunting licenses will be revoked or denied in the event that the individual displays unethical or unsportsman-like conduct towards Pennsylvania’s wildlife.

Senator Camera Bartolotta - December 11
DEP’s Erosion and Sediment Control Permits
Takes DEP’s current E&S control permit requirements and policies and makes them into statute, as well as establishes reporting requirements to the General Assembly.

Representative David M. Delloso - December 12
Household Hazardous Waste Collection Programs
Increases the limit on matching funds provided to counties from $100 thousand to $200 thousand per year for household hazardous waste programs.

Representative Joshua D. Kail - December 17
Municipal and Advance Recycling and Recovery Technology Partnership
Allows municipal waste management systems to partner with manufacturers utilizing advanced recycling and recovery technology to convert post-use plastics into raw materials. The manufacturers will be able to source the plastic from the municipal systems. This provides an alternative to burning or burying plastic in landfills.

Legislation

Representative Gary Day
House Bill 1971 - Adds “bulk hauling of water to establishments that bottle water” and “a water source used to produce bottled water... regardless of the size of the container” to the definition of a public water system under the Safe Drinking Water Act of 1984.
Laid on the table in the House - December 18

Representative Gary Day
House Bill 1972 - Requires that food establishments which bottle water for human consumption comply with the water safety standards and regulations laid out in the Safe Drinking Water Act
Laid on the table in the House - December 18

Representative Michael Zabel
House Bill 2091 - Prohibits the use of the pesticide chlorpyrifos.
Referred to the Agriculture and Rural Affairs Committee - December 2

Representative Wendy Ullman
House Bill 2128 - Directs the Environmental Quality Board to set maximum levels for carcinogens in public drinking water.
Referred to Environmental Resources and Energy - December 16
Representative Steven R. Malagari
House Bill 2131 - Allows farmers to use agricultural easements for non-motorized recreational trails.
Referred to the House Agriculture and Rural Affairs Committee - December 16

Representative Melissa Shusterman
House Bill 2137 - Prohibits lodging establishments from providing personal care items in small plastic bottles.
Referred to the House Commerce Committee - December 17

Representative Martin T. Causer
House Bill 2148 - Creates forest conservation easements and requirements when a purchase of such easement involves public funding.
Referred to House Agriculture and Rural Affairs Committee - December 18

Representative Martin T. Causer
House Bill 2149 - Amends the Hardwood Development Council Act to include a logger and a forester to the council.
Referred to House Agriculture and Rural Affairs Committee - December 18

Representative Pam Snyder
House Bill 2185 - Requires any person purchasing an abandoned or blighted property in a tax sale to enter into a redevelopment agreement with the municipality or a redevelopment authority where the purchaser would agree to remediate the property.
Filed in the House.

Senator Bob Mensch
Senate Bill 596 - Creates the Pennsylvania Clean Transportation Infrastructure Act, which establishes electrification goals and requirements for metropolitan areas, electric utilities, the Governors office and the state as a whole.
Referred to the Consumer Affairs Committee - December 2

Senator Kim Ward
Senate Bill 742 - Creates the New Vehicle Emissions Modeling Act, which directs the Department of Transportation, in consultation with the Department of Environmental Protection, to determine an emissions inspection exemption period for new vehicles.
Re-referred to the House Appropriations Committee - December 18

Senator Gene Yaw
Senate Bill 915 - Sets standards for turf and lawn fertilizer application and creates labeling standards and funding. Also creates certification requirements for professional fertilizer applicators for lawn and turf in order to reduce the amount of excess nitrogen and phosphorus runoff in Pennsylvania waterways.
Referred to Senate Agriculture and Rural Affairs Committee - December 18
Poll Shows Desire for CAFO Oversight
Tony Guerrieri, Executive Director

Poll shows voter support of CAFO oversight to combat air and water pollution.

A survey released by the Johns Hopkins Center for a Livable Future found that the majority of registered voters support greater oversight of confined poultry, swine, dairy, and beef cattle operations.

CAFOs are defined as animal feeding operations that have over 1,000 animals but also includes smaller operations that discharge directly into surface waters. The animals are packed into structures where their movements are restricted and they are typically not allowed outside. CAFOs produce large amounts of hazardous waste that pollutes water and air.

The survey found that 55 percent of respondents support greater oversight of CAFOs. In addition, 43 percent of those surveyed say they favor a national ban on the creation of new CAFOs. More than 80 percent expressed concern about air and water pollution, worker safety risks and health problems from CAFOs.

When informed of the widespread use of antibiotics on CAFOs, 85 percent were either very or somewhat concerned. A majority of respondents (54 percent) think the government should do more to solve these problems.

The poll includes state-specific results for North Carolina and Iowa, two states with high concentrations of CAFO facilities.

View the full results from the poll at: https://clf.jhsp.edu/sites/default/files/2019-12/CAFO-moratorium-survey-results.pdf.

Protecting Unwanted Farmland
Coleen Engvall, Research Analyst

Unproductive farmland could be an easy and inexpensive way to restore and conserve land.

Environmental degradation from irresponsible farming practices, changes in demand and the change of the world’s demographics have led to millions of hectares of farmland to sit abandoned and unproductive across the globe.

Researchers from the University of Queensland compiled data on these areas around the world, creating the first database of its kind. They explore the implications and their data in their article, Conservation Opportunities on Uncontested Lands.

As the title suggests, the main benefit of these spaces are their unattractive qualities. Conservation efforts often have to compete with developers, farmers and resource prospectors when trying to protect land with vulnerable species or with environmental importance. Acquiring high-quality lands can require large investments of money as well as lengthy legal proceedings.

While Associate Professor Even McDonald-Madden, one of the study’s authors, emphasizes that those battles are still critical, she suggests adding these uncontested lands to current targets.

As well as avoiding competition from other buyers, this method will have little negative impact on nearby community’s economies or food security while also providing the social and health benefits of clean, restored green areas.

Environmental protection and conservation of valuable land is often at odds with local businesses which provide needed jobs and tax revenue. Using unwanted land could avoid the political blowback from companies and communities that is often associated with the creation of conservation areas.

One downside the authors mention is the cost to restore land that has been overworked or polluted.

The UQ study provides empirical data on the size and location of abandoned agricultural land for conservation organizations to use when deciding where to allocate resources.

To view the article, go to: https://www.nature.com/articles/s41893-019-0433-9.
New Threat to Christmas Trees
Coleen Engvall, Research Analyst

Researchers have discovered a new disease that targets Fraser firs, an important Christmas tree species.

According to a study in the journal Plant Disease, a new disease has been discovered impacting Fraser firs, a prominent Christmas tree species. The fungus-like organism, which belongs to the genus Phytophthora, leads to root rot and eventually death of the trees it infects.

Three Phytophthora species have been documented in Pennsylvania: P. cactorum, P. cryptogea and P. drechsleri.

The researchers named the new species P. abietivora, which means “ones that eat conifers.” In their experiment, it led to the deaths of all 60 test firs within three years of the saplings being planted.

While this disease has great destructive potential, it is currently under-reported and needs more research on its properties, propagation and prevention. Understanding this as well as other undiscovered species of Phytophthora will help prevent the spread of disease from farm to farm and to forests.

At this time, it has only been documented in Connecticut, though more impacted areas are likely to be discovered.

Infected trees, according to the researchers, will have reddish-brown foliage, downward turned shoots and red cambium and cortical layers in the root crown.

Read the full study at: https://apsjournals.apsnet.org/doi/10.1094/PDIS-03-19-0583-RE.

GAO Report Examines Superfund Management
Tony Guerrieri, Executive Director

Sixty of the most contaminated sites in Pennsylvania are vulnerable to the floods or wildfires projected under climate change.

Wildfires and flooding threaten to unleash contaminants from superfund sites according to a report by the U.S. Government Accountability Office.

The EPA’s Superfund program is the key federal program responsible for attending to sites with hazardous substances. The GAO looked at 1,571 active and deleted sites on the EPA’s National Priorities List, as well as federal data on extreme weather events from the EPA, FEMA, NOAA and the U.S. Forest Service.

The GAO plotted these 945 climate-vulnerable locations on an interactive map color coded to show whether each site is threatened by wildfires or flooding. Nationwide, about 945, or 60 percent, of those sites are located in places that might be affected by climate change.

In addition, the GAO identified 84 Superfund sites that are located in areas that may already be inundated by high tides. If sea levels rise by just 1 foot, as the Fourth National Climate Assessment forecasts will likely occur in coming decades, 97 Superfund sites would be inundated by sea water.

In Pennsylvania, 60 of the 119 active and deleted sites surveyed and analyzed by the GAO are in areas deemed vulnerable to sea level rise, storm surge or flooding.

The GAO also found that wildfires are already impacting Superfund sites. In all, the agency identified 234 sites that are located in areas that have high or very high wildfire potential based on U.S. Forest Service modeling.

The GAO made four recommendations to the EPA on how it can better manage the risks posed to Superfund sites by extreme weather. According to the report, the EPA has only agreed to follow one of those recommendations: it will clarify the boundaries of toxic sites on its NPL. The GAO report says that the agency lacks “quality information” on superfund boundaries which makes it more difficult for the public and officials to understand the possible spread of contaminants.

The GAO report and the agency’s interactive map may be found at: https://www.gao.gov/products/GAO-20-73.

The information or opinions expressed in the Research Brief articles do not necessarily represent the opinions or positions of the Joint Legislative Air and Water Pollution Control and Conservation Committee, nor those of the Pennsylvania General Assembly.
Spotlight on Pennsylvania

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the Idaho Potato Commission, stated the following, “French fry demand has just been outstanding lately, and so supplies can’t meet the demand.” Because there is an increase in demand of french fries, but a shortage of viable potatoes – specifically longer potatoes which french fry processors desire, the price of potatoes is projected to increase. Another contributing factor to the rise in demand for french fries is an increase in the fry-processing capacity in Canada.

In order to ensure that french fries are still served at restaurants and sold in stores, potato processors have been buying supplies and shipping them across the country. Processors have also relied on foreign producers to help with the situation.

Significant economic losses as a result of the reduction in crop yield is also a concern for potato growers who face the possibility of being unable to carry out the terms in their contracts with processing companies.

This past November, the USDA projected that domestic output of potatoes would decrease 6.1 percent in 2019 – the lowest it has reached since 2010. Idaho was projected to drop 5.5 percent. Approximately 308,000 acres were harvested in Idaho in 2019, which is a decrease of about 7,000 acres from the previous year.

Despite the reduction in crop yield in 2019, potato industry leaders are reassuring consumers that there is no need to begin stockpiling french fries. CEO and president of the Idaho Potato Commission, Frank Muir, told CNN the following, “Even though the weather took a bit of a top off our crop, we are still harvesting probably in the neighborhood of 13 billion pounds of potatoes.”

Kevin MacIsaac, general manager of the United Potato Growers of Canada, stated that the situation can be controlled and that, “Potatoes are going to have to move from one channel to another that they sometimes don’t move in a normal year.”

In Pennsylvania, the Commonwealth is currently ranked in the top 15 for potato producing states in the country. Potatoes have been grown across Pennsylvania since 1910. Pennsylvania’s potato supply is used primarily for processing potato chips – making it the leading state in potato chip and snack food production in the nation.

According to various local media outlets, Pennsylvania potato growers and potato chip producers do not believe that the potato crop shortage experienced nationwide will have a significant impact on the state’s potato industry. Herr’s, a family-owned and operated snack food company located in Chester County, said the following remarks:

“While this may mean small adjustments to where we get our potatoes short term, there will be no interruption to our output or ability to produce the finest quality potato chips for our customers.”

In addition, according to Dave Masser, president of Sterman Masser Inc., an eighth generation potato farm located in Schuylkill County, “The country is not in jeopardy of running out of frozen french fries.”

Given the weather conditions experienced by potato growing regions this past fall, it is educational and eye-opening to learn more about the impact that weather has on our agriculture industry from both an economic and environmental standpoint.

32 Years Ago

In 1988, the largest inland oil spill in the history of the United States occurred on Pittsburgh’s waterways. On January 2, a dime-sized piece of weak steel ruptured, leading to the collapse of a 3.9 million gallon aboveground storage tank filled with diesel fuel in West Elizabeth, which is about 10 miles south of Pittsburgh. About 750,000 gallons spread across the Monongahela leaving a slick as deep as 4 inches along 23 miles of the river and 40 miles of the Ohio.

Residents along the river all the way to Huntingdon, West Virginia were forced to manage without water or with severely limited amounts for days as the mess progressed downstream. In Pennsylvania alone the spill left 15,000 without tap water, resulted in 1,100 layoffs and canceled class for 20,000 students.

The tank was made of 40-year old steel, built without the appropriate permits and unsatisfactorily tested. It had originally stood at an Ashland terminal in Ohio and was rebuilt in West Elizabeth without written permits, only verbal authorization. Ashland paid $4 million to settle claims and fines.

Certification is now required under the Storage Tank and Spill Prevention Act of 1989. It applies to both underground storage tanks and above-ground storage tanks. The act also creates the Storage Tank Fund, a special non-lapsing fund to be used by DEP for the operation of various storage tank programs.
Pennsylvania is one of the East Coast leaders in wind energy in the U.S. due to its consistent wind resource and incentives provided by the state government. The Electricity Generation Customer Choice and Competition Act, as the name suggests, allowed residents to choose their supplier, lowering energy costs and opening the door for many alternative power sources.

In 1999, in the western part of the state, Exelon Power began a new project that called for six steel wind turbines, each weighing 89 tons, to be built in Somerset County, just off the Pennsylvania Turnpike. The site was considered ideal for producing renewable energy because of its dependable sustaining winds.

The windmills are sited on reclaimed strip mine land that was used for farming and require about ¼ acre of land each. On October 24, 2001, with the blades rotating at 19 revolutions per minute, the windmills began producing electricity and have become an iconic feature of the area. They represent a source of environmentally friendly energy in Pennsylvania.

The average wind speed at the Somerset Wind Farm ranges between 15 to 20 mph measured 160 feet above the ground. During a typically breezy day, the wind farm would produce enough electricity to meet the electric consumption of 3,500 Pennsylvanian homes.

In April 2002, members of the Joint Legislative Conservation Committee were given a guided tour of the facility at the invitation of Community Energy, Inc. While on site, Committee members were able to observe the wind turbine blades, turbine generator and gearbox, and a look inside the base of an active turbine. In addition to the exclusive tour, members heard from representatives of Community Energy. They noted that wind energy:

- Saves almost 16,000 tons of carbon dioxide emitted per year.
- Saves 110 tons of sulfur dioxide from being emitted per year.
- Saves 40 tons of nitrous oxides from being emitted per year.

There are currently over 1,300 megawatts of wind power generation installed in Pennsylvania on 27 wind farms, according to DEP. These wind farms provide enough electricity, on average, to power nearly 350,000 Pennsylvania homes. Whether the state’s wind industry continues to grow might depend on government policy. A federal tax break for developers expires in 2020, but the state could boost the percentage of renewables in the Alternative Energy Portfolio Standard or set a requirement that wind power come from within Pennsylvania’s borders.