

HOW DRY I AM DEP PLACES BUCKS CO. UNDER A DROUGHT WATCH



NEW PRESERVATION HISTORIC PRIMROSE RUN FARM IN SOLEBURY



FARMING IN BUCKS COUNTY CHRIS MOLNAR OF FIRST FRUITS FARM



THE DAY BUCKS CO. SAVED THE UNION PART II OF OUR SERIES

# CONSERVATOR

## **Drought in Bucks County**



On November 1, 2024, Bucks County was placed under a drought watch by the Pennsylvania Department of Environmental Protection (DEP). This declaration was part of a broader drought watch covering 35 counties across the state due to long-term dry conditions, including lower-thannormal precipitation and groundwater levels. Although not mandatory, the state is advising water conservation to help mitigate the situation. The decision was based on a comprehensive assessment of long-term environmental conditions and data from the U.S. Geological Survey and other climate monitoring tools.

#### It's Not Just Pennsylvania

The Northeast is experiencing widespread drought conditions and October is now on record as the all-time driest in many areas including Bucks County, Philadelphia, Newark, and New York City. 93% of the region is now classified as abnormally dry or under moderate to severe drought. With



precipitation deficits ranging from 5 to 12 inches across affected areas, our rivers and streams are well below normal levels and the same is true for our groundwater. Delaware, Massachusetts, New York, and Connecticut have also issued drought watches urging water conservation, and New Jersey



recently upgraded its classification from a watch to a drought warning.

The U.S. Drought Monitor uses five categories to classify drought severity ranging from abnormally dry (Do) to exceptional drought (D4). Each category describes short or long-term environmental and community effects.

Most of the counties in PA are classified as Do (abnormally dry) to D2 (severe drought), but the lower half of Bucks County has been upgraded to D3 (extreme

Cuttalossa Creek

drought). This category is associated with the following long-term problems:

- Major impact on agriculture and our ecosystems
- Water reservoirs will be down to critically low levels
- Widespread water restrictions and fire risk

#### **Drought Defined**

A drought is an extended period of belownormal precipitation for an area resulting in a water shortage that adversely affects ecosystems, agriculture, and human activity. Drought can occur in any region and is caused by a combination of natural



Cuttaloosa Fountain

climatic and environmental factors related to human activity. Climatic factors that contribute to drought include



Cuttaloosa Fountain - November 2024

**Low precipitation:** A lengthy period of below-average rainfall or snowfall that decreases the availability of water.

**High temperatures:** Excessive heat increases evaporation from bodies of water and the soil.

**High-pressure systems:** they bring clear skies and dry weather by preventing the formation of clouds and rainfall. When these systems persist the result is prolonged dryness.

**Geographic Features:** Continental interiors, areas that are far from large bodies of water, receive less precipitation

because air loses moisture as it travels inland. These areas, as well as areas located on the leeward side of a large mountain range, can be naturally arid or semi-arid.

Some regions also have naturally low water-holding capacity due to their soil composition.

**Changes in Atmospheric Circulation:** ocean-atmosphere phenomena such as El Niño can disturb a region's precipitation patterns, and variations in the Jet Stream can prevent storm systems from reaching land. The Gulf Stream plays a key role in the global climate and changes to its poleward ocean current can disrupt rainfall and cause drought.

PA DEP announces drought warning The environmental factors associated with human activity that can contribute to drought are

**Deforestation:** the loss of trees due to agriculture, logging, and urban expansion reduces water retention in soil. Trees also release excess water vapor into the atmosphere contributing to cloud formation through a process called transpiration.

**Excessive Water Consumption:** excessive extraction of groundwater and surface water for agriculture, industry, and domestic use can drain water reserves. **Soil Degradation:** Erosion and poor agricultural practices reduce

Learn more on how PA monitors drought in our state

the soil's ability to retain water. **Urban Development:** The growth and expansion of cities and the impervious surfaces that result can disrupt natural water percolation and storage.



Paunacussing Creek

**Pollution:** Sewage, manufacturing waste, and farm runoff contaminate freshwater supplies, decreasing the availability of clean water during drought periods.

**Climate Change** is defined as the long-term changes in temperatures and weather patterns caused by human activities which increase greenhouse gas emissions. Not all of the factors contributing to drought can be directly described as climate change, but many can exacerbate its effects.

#### **Broader Implications**

The Pennsylvania Department of Environmental Protection (DEP) emphasizes that drought declarations are based on long-term trends. Recovery will depend on steady rainfall to replenish water systems and that may take months or longer depending on the severity of the drought.

The ongoing drought in Bucks County has serious implications beyond its effects on water availability, including an increased risk of wildfires, soil degradation, and damage to ecosystems. Prolonged drought is particularly problematic for an area reliant on rain-fed agriculture and can damage water-intensive crops such as corn and soybeans. Drought impacts pasture growth causing feed shortages for livestock and forcing farmers to buy supplemental feed. All this means higher production costs for the farmer and higher market prices for consumers.

Winter brings reduced water usage which will ease pressure on our water resources. Hopefully the season will bring sufficient precipitation to replenishing our reservoirs and groundwater, but for that to happen we will need consistent and above-average precipitation.

Tips from the DEP on how to conserve water

## **Tucci Joins LTBC**

The Land Trust of Bucks County is pleased to announce the election of Renée Tucci to its Board of Directors.



Our non-profit relies heavily on passionate volunteers who share our deep commitment to protecting and preserving the land we love. Renée is a valued addition to the board, bringing a wealth of experience, diverse expertise, and enthusiasm that will greatly benefit the organization as a whole.

Renée Tucci is a dedicated

advocate for land preservation, deeply rooted in the Bucks County community, where she was born and raised in Furlong. After operating a 100-acre working farm in Chester County, she returned to Bucks County and now resides in New Hope. An avid equestrian, Renee established Murder Hollow Farm, which is one of the world's premier breeding programs for Warmbloods and Knabstrupper horses, a rare Danish breed.

Her commitment to community service is evident through her roles on the Penn State Extension Council and Thomas Jefferson University's Business Advisory Board. Currently, she serves as a board member for Friends of Rittenhouse Square, where she has previously held the positions of president and treasurer. A graduate of Thomas Jefferson University, Renee works in wealth management.

## New Preserved Property

LTBC is pleased to have partnered with Solebury Township and Thomas and Marne Dietterich to conserve the historic Primrose Run Farm on Phillips Mill Road. The conservation easement represents 11.48 of the total 12.98 acre parcel. The property is a mix of agricultural fields and woodland and features a significant historical house with several outbuildings.

Primrose Run Farm is a historically important property that traces its roots back to 1705 when William Penn deeded the original 500 acre tract to Tobias and Sarah Dymock. Bounded by today's School Lane, Phillips Mill Road, Sugan Road and up to the village of

### *Did you Know?* Click and Learn



Trees contribute up to 10% of atmosphereic moisture. Learn about transpiration



Bucks County has so many UFO sightings that it was featured in a documentary



The Delaware State Canal system is a registered National Historic Landmark



Solebury and York Road, the property was sold to a Nathaniel Harding, a basket maker in London, who transferred it to his brother Francis, a Philadelphia merchant. The parcel was subdivided and 220 acres of the southern portion was sold to John Dawson who had immigrated from England to Solebury in 1710. Mr. Dawson is likely responsible for constructing the original log and stone portion of the house that exists today.

Mr. Dawson died in 1759 and the tract was subdivided again and acquired by Thomas Heed who owned land on both sides of Phillips

Mill Road. The Heeds retained their core holdings for many years but sold off surrounding land to member of the Eastburn, Blackfan and Ely families. These families played an important role in shaping the township's development from the 18<sup>th</sup> to the 20<sup>th</sup> century.

Early in the 19<sup>th</sup> century, the Heeds sold 16 acres with the original farmhouse and buildings to Thomas Naylor whose family operated the lime kilns in Aquetong. Around 1850, Thomas Naylor enlarged the house, essentially doubling its size from the original two-room log and stone structure.

In 1941 Primrose Run Farm was acquired by Thomas and Eleanor Rossmassler of Princeton who used it as a summer estate until selling it to John and Marion Moreton (née Beach) of New York in 1950. The Moretons became prominent in the New Hope-Solebury community and were



responsible for making significant improvements to the property, including an addition to the house that doubled its size and the creation of a half-acre pond.

Marion Moreton's father, Chester Beach, was the inventor of a lightweight electrical motor. With L.H. Hamilton he started the Hamilton Beach Company.

Marion and her husband were benefactors of both the Bowman's Hill Wildflower Preserve and the Solebury Episcopal Church. Marion also served as a Girl Scout leader for the area, and many young Girl Scouts in the New Hope community earned their boating merit badges paddling a two-person canoe in the pond just below her house.

During a chance meeting at a luncheon, Marion met Marne Dietterich, and they discovered they were both graduates of the Masters School in Dobbs Ferry, New York—Marion from the class of 1932, and Marne from 1965. After the tragic loss of their daughter in a local car accident and a desire to relocate, Marion found the perfect new owner for their property in Marne Dietterich. The Dietterichs purchased the property in 1986 and raised their family there. We extend our heartfelt thanks to the Dietterich family, particularly Marne, for allowing us to share their story and highlight the significance of the property. We also thank them for their decision to permanently preserve an important piece of our history.

## Farming in Bucks County

Chris and Emily Molnar own and operate a preserved farm in Bedminster Township. We talked to Chris recently about farming in Bucks County.



#### Where is your farm located?

"Our farm is called *First Fruits Farm* which is approximately 96 acres and is located in Bedminster Township on Route 611."

#### What do you farm?

"We primarily focus on pasture-raised chicken, pork, lamb, and beef. Also mixed produce in season, all grown organically. We also grow hay to support our animal production."

#### How long have you been farming?

"I have been farming full time since 2018. Originally our family was from New Jersey and my father was always involved in agriculture which is how I knew I wanted to farm. When I got out of the Marine Corps I enrolled in Delaware Valley University's organic farming certificate program. That is where I met my wife and made the decision to dive full-time in farming."

#### What do you enjoy most about farming in Bucks County?

"Definitely being outside all the time and making my own decisions. I really enjoy that every day is different working with livestock and I have been thankful for all of the support in getting started from the local agricultural community." Find out more about DelVal's Organic Farming Certificate Program

#### What are some of the unique challenges in farming in Bucks County?

"The lack of available land makes it difficult to break in as a first generation farmer, and although we have support from Bedminster Township in getting permits for our operation, I have heard of numerous difficulties for other operations in different townships acquiring permits and approvals to construct facilities to expand operations.

"The lack of USDA certified processors, and the recent difficulties the processors are having, affects our ability to direct market our products. We definitely need that issue to be resolved so that some of the smaller processors can continue to compete for the smaller farm operations."

#### How has preservation affected your farming operation?

"The only way we could be farming today is because we purchased a preserved farm with a location good for direct marketing and we didn't have to compete with private developers with deep pockets."

#### Would you recommend preservation for other farmers or property owners?

"100%"

#### What would you recommend to a young person who wants to farm in Bucks County?

"Network. Network. Network. Join FFA (Future Farmers of America), the Farm Bureau, 4-H and get involved with other farm families. I would work for a couple of different operations to see what kind of farming you like to do and what works and doesn't work for what direction

you want to go. I would also soak up as much information from the oldtimers who know what works. Visit the Future Farmers of America website

"We have been blessed by many family farm operations who have helped us out getting started and sharing equipment to get us going so that we can mitigate our costs. That help is out there for younger people if you get involved and ask."

## Our Place in American History

The following stories, by David Johnson, pick up where we left off in our last newsletter and are part of our ongoing effort to connect the past with the present.

Bucks County is a cornerstone of our country's history. From its contributions to America's founding, its critical role in the Revolution, the Civil War, and its rich cultural and artistic heritage make it an important chapter in the story that is America.

#### "History is who we are and why we are the way we are."

- David McCullough

## The Day Bucks Co. Saved the Union - Pt. II

## "Wars damage the civilian society as much as they damage the enemy. Soldiers never get over it."

- Paul Fussell

#### "War is a racket. It is the only one international in scope. It is the only one in which the profits are reckoned in dollars and the losses in lives."

– Smedley Butler

The two men quoted above spent the rest of their lives grappling with the realities of war after extensive combat experience. Smedley Butler, a Quaker from Chester County, was once the most decorated veteran in the history of the Marine Corps. Paul Fussell, though not originally from Pennsylvania, spent a significant portion of his literary career at the University of Pennsylvania exploring the profound losses of war. Their reflections resonate with all wars but are particularly relevant to our story here in Bucks County.



<u>Visit Smedley</u> Butller's Wikipedia page

Visit Paul Fussell's Wikipedia page

The Battle of Fredericksburg - Carl Röchling

In our last newsletter, we explored the results and impacts of a single day of fighting in the Civil War, highlighting its connections to our area. This time, we'll shift gears to examine the local effects of that day, particularly on the arts—both positive and negative. Our story begins on June 14, 1862, the day Major John Greis succumbed to his wounds, likely from sepsis, two weeks after the Battle of Fair Oaks.

Major Greis had been wounded in the hip and abdomen while following orders from Colonel Davis to retrieve the 104<sup>th</sup> Regiment's battle flags as their position was being overrun. After being removed from the battlefield, he returned to Philadelphia, where he was cared for by a widow he knew in West

Philadelphia. In any war after the Civil War, Major Greis would have likely survived his injuries. Tragically, that day claimed the life of one of Philadelphia's most promising architects.

After hanging his shingle and establishing a practice on 4<sup>th</sup> Street in 1855, John Greis designed several buildings with a strong Gothic influence, two of which still stand today: the Farmers and Merchants Bank at 427 Chestnut Street and the Bank of Pennsylvania (later the Bank of Philadelphia) at 420 Chestnut Street. These were no small commissions. The Farmers and Merchants Bank, the largest banking institution in the city during the late 19<sup>th</sup> century, is now owned by the American Philosophical Society and serves as an auditorium named Benjamin Franklin Hall.

By 1861, John Greis had become one of the 19 original signers of the Pennsylvania Institute of Architects. Shortly afterward, he enlisted as a major in the 104<sup>th</sup> Pennsylvania Infantry Regiment. The full impact of his loss on Philadelphia's streetscape will never be known. The death of a promising architect in a relatively minor



Farmers and Merchants Bank



Colonel William Davis

battle early in the war was soon overshadowed by four more years of horrific suffering.

The loss of his friend John Greis, along with the bravery displayed by Jacob Myers and Hiram Purcell, deeply moved Colonel Davis, who frequently mentioned their actions in his writings. After the war, as he settled into life in Doylestown and commissioned a prominent local artist to recreate the scene in a painting titled *The Rescue of the Colors*. This artwork, which still resides in the local historical society, has a fascinating story of its own.

It is intriguing that, in the late 19<sup>th</sup> century—a time increasingly dominated by photography—the idea of commissioning a painting could still garner significant interest. However, Colonel Davis didn't have to look far for inspiration. For that, we turn back to Philadelphia and the remarkable Charles Henry Tucker "Tucky" Collis. Like John Greis, Tucky Collis was far from an average Civil War soldier. A true Renaissance man, Tucky was already a world-class cricketer when he immigrated from Ireland to Philadelphia with his father in 1853. He passed the bar in 1859, the same year he played against the touring English cricket team, and later became the solicitor for the City of Philadelphia during the construction of the new City Hall.

At the outbreak of the Civil War, he volunteered for the 18<sup>th</sup> Pennsylvania Regiment. By late 1861, using his connections, he raised an entirely new regiment in Philadelphia, which became the 114<sup>th</sup> Pennsylvania Infantry Regiment. True to his flamboyant style, Tucky had his regiment outfitted in the striking and gaudy Zouave uniforms.

By December 1862, the 114<sup>th</sup> Pennsylvania Regiment saw its first combat at the Battle of Fredericksburg, where Tucky led a counterattack to cover a Union retreat. Six months later, at the Battle of Chancellorsville, Tucky was suffering from typhoid fever and faced accusations of cowardice after the regiment sustained heavy losses during Lee's counterattack. Court-martial charges were filed against him, and he left the regiment due to health



Colonel Charles H.T. Collis

issues. Although he was later promoted, Tucky never rejoined the 114<sup>th</sup> and had to fight to clear his name in a court-martial trial.

After the war, Tucky returned to Philadelphia to practice law and promote his own legacy. He commissioned the renowned German artist Carl Röchling to depict his moment of bravery in a famous painting, *The Battle of Fredericksburg*, which now hangs in the Philadelphia Museum of Art. Tucky also used the painting as a political tool to pursue a greater prize: the Congressional Medal of Honor, which he was awarded in 1893–31 years after his actions at Fredericksburg.



William Trego

Was Colonel Davis doing the same? We may never know. However, through local connections with the Trego family, Colonel Davis was able to commission a painting from William Trego, an exceptionally talented up-and-coming artist originally from Yardley.

The Trego family has deep roots in Bucks County, settling in the Wrightstown area as farmers with a land grant from William Penn. William Trego, born to artistic parents, overcame a debilitating paralysis of his hands and feet that left him physically crippled but undeterred in his pursuit of painting.

Largely self-taught, likely with guidance from his father, Trego attended the Philadelphia Academy of Fine Arts, where he encountered challenges, including a reported conflict with Thomas Eakins. This difficulty hindered his later career despite his remarkable talent for military depictions. Retreating to a studio in North Wales, Trego maintained connections in Doylestown, through which Davis commissioned him to recreate the struggle for the flags at Fair Oaks.



Rescue of the Colors - William Trego

Davis collaborated directly with Trego to create sketches that, in his mind, accurately captured the action. The scene depicts Greis, Myers, and Purcell surging forward alongside a slightly wounded Davis, clutching his arm, as they strive to save the flags.

Although the painting received acclaim, Trego and Davis disagreed over its future use—Trego wanted to promote it for future commissions, while Davis preferred to keep it for his own purposes. In the



Self Portrait - Walter Emerson Baum

end, Davis prevailed.

Did Davis, like Tucky Collis, use the painting to lobby for his own Congressional Medal of Honor? We may never know. What we do know is that Hiram Purcell was awarded the medal for his actions in 1894, 33 years after the battle. The painting, which captures the event, remains an iconic image of the Civil War to this day.

Trego struggled to find work, as realistic military artwork was no longer in demand with photography now dominating the genre. He took on students to pay the bills and continued his artistic legacy by

Read about Pennsylvania Impressionism

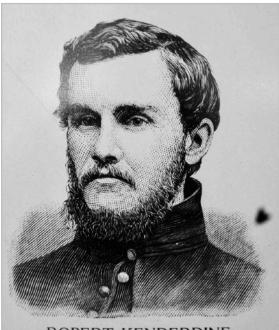
mentoring Walter Emerson Baum, a local artist who would become one of the few successful Pennsylvania Impressionist painters with roots in Bucks County. Sadly, William Trego died a struggling artist in North Wales. It is believed that the Baum family retained all of his remaining work from his studio. Baum went on to have a successful career in both art and teaching, making a significant impact on the art communities of Bucks County and the Lehigh Valley.

With that, our story concludes—tracing a journey through time that began with a preserved farm in Solebury Township, owned by Jacob Kooker, and the many lives it touched throughout our region. This is a reminder that when we preserve places, we are also preserving the history and the lives they have touched.

## Solebury's Sad Connection to the 114<sup>th</sup>

In our previous issue, we explored the origins of the 114<sup>th</sup> Pennsylvania Regiment under Colonel Charles Henry Tucker "Tucky" Collis. The regiment consisted of ten companies formed in Philadelphia. While the majority of its members hailed from the city, young men from surrounding counties also traveled to enlist, as there were no local regiments recruiting at the time. Among these recruits was Robert Kenderdine, the son of a prominent family that owned property and mills along the lower portions of Cuttalossa Creek (see our Summer 2024 newsletter).





ROBERT KENDERDINE. 1841—My Brother—1863. Gave his life for his country at Gettysburg.

At 4:00 p.m. on July 2, 1863, Robert and the 312 remaining members of the regiment stood in a battle line near the house and barns of Robert Sherfy along the Emmitsburg Road, just outside Gettysburg, Pennsylvania. They gazed across half a mile of open fields at continuous battle lines of Confederate troops emerging from the woods to face them.

Unbeknownst to them, the 114<sup>th</sup> would be the first regiment to face William Barksdale's famous charge of four Mississippi regiments—a maneuver that would forever be studied in military history. Its outcome nearly broke the Union Army and threatened to turn the tide of the battle on the second day of fighting.

Robert Kenderdine served in the color guard, carrying one of the regimental flags used to maintain unit cohesion. Initially, the veteran regiment put up a strong fight, holding back the onslaught. However, they were severely undersized due to previous losses, and the Mississippi troops continued to outflank them. Around 4:30 p.m., the regiment broke, and chaos ensued as it became every man for himself.

Tragically, 60 members of the regiment perished when the Confederates burned the Sherfy barn, where many of the wounded had taken refuge. Robert was shot in the yard of the Sherfy house and

left for dead as the unit was overrun. Two days later, he was found and pulled from the house after the Union Army retook the field. Gravely wounded, Robert was eventually taken to the large Union field hospital at Camp Letterman, located along what is now Route 30 outside of Gettysburg.

His family received word of his wounding and, after an arduous journey, arrived in Gettysburg ten days later. Robert was in and out of consciousness, and after briefly recognizing his father, he passed away. The family brought his body back to Solebury, where he now rests in the Friends Cemetery.



One of the Kenderdine businesses in Lumberton

On December 13, 1862, the 114<sup>th</sup> entered the Battle of Fredericksburg with 1,000 men.

They saw heavy action again on May 5<sup>th</sup> at Chancellorsville. By 7:00 p.m. on July 3, 1863, only 157 men were present for duty. In just six months of fighting, the 114<sup>th</sup> was effectively destroyed as a fighting force, including a promising young man from Bucks County named Robert Kenderdine.

## The Spirit of Giving

As a community-based nonprofit, the Land Trust of Bucks County relies almost entirely on the support of its members and volunteers.

If you are a member and have not already done so, please renew your membership. If you are not yet a member, we warmly invite you to join. If the Trust holds a conservation easement on your beautiful property, we encourage you to become a member as well. Your membership supports and underwrites many of the Trust's important activities.

## and Gratitude

As 2024 draws to a close, a heartfelt thanks to everyone who contributes to our mission—our donors, members, staff, board, and community partners. Your time and support inspire us.



The Land Trust of Bucks County, a 501(c)(3) nonprofit organization, was established in 1997 by a small group of local residents to protect and preserve what makes Bucks County special. It's about the land.