



HISTORIC LORE
HOW THE ANGLO-DUTCH WARS LED TO PENNSYLVANIA



PUBLIC ENEMY #5
AUTUMN OLIVE MAY SOUND NICE BUT IT'S NOT



CORN CRIBS
ROCK-A-BYE MY SWEET, SWEET CORN?



FARMING IN BUCKS COUNTY
NATHAN CROOKE

CONSERVATOR

Historic Lore

Bucks County has a rich history that spans several centuries. Founded in 1682 and named Buckinghamshire after the county in England, it is one of the three original counties established by William Penn after he received a large land grant from King Charles II. But why was William Penn given such a large and valuable tract of land in the New World?



[Click to Enlarge](#)

Admiral Sir William Penn

William Penn's father was Admiral Sir William Penn (1621–1670), an English naval officer and commander known for his service during the Commonwealth period and the early years of the Restoration. He began his naval career during the English Civil War (1642–1651), where he served in the navy under Oliver Cromwell and quickly rose through the ranks to become an admiral. He continued his naval service after the

restoration of the monarchy under King Charles II and played a significant role in both the First Anglo-Dutch War (1652–1654) and the Second Anglo-Dutch War (1665–1667), engaging in naval battles against the Dutch Republic.

Admiral Sir William Penn established himself as a prominent figure in the naval forces. His distinguished career and contributions during the Anglo-Dutch Wars would play a role in shaping his family's legacy.

[What was the Pennsylvania Charter?](#)



Admiral Sir William Penn

The Pennsylvania Connection

Although Admiral Sir William Penn passed away in 1670, King Charles II owed him substantial debt for his naval services. To settle this debt, and to further expand the English Empire, the king granted a large tract of land in North America to Sir William Penn's son, William Penn. This land grant, known as the Pennsylvania Charter, became the foundation for the establishment of the Pennsylvania colony.

William Penn would go on to become a prominent figure in the Quaker community and play a significant role in the development of the Pennsylvania colony. The principles of religious freedom, representative government, and fair treatment of Native Americans outlined in the charter and envisioned by William Penn influenced the character and governance of the colony and made it perhaps the most successful of the original colonies.

Seed Swap Success

On January 27th 2024, the Land Trust held its annual Seed Swap at the Plumsteadville Grange in Pipersville. The event was a resounding success and our best attended seed swap ever. Many thanks to those who helped organize the event and to all who attended and brought seeds.



Donna Shaw Retires

In November 2023, Donna Shaw stepped down from the board after fourteen years of incredibly productive service to the Land Trust. She first joined the board in 2009 (when we were known as the Bedminster Land Conservancy) and was immediately a key member of our monitoring team. In those days, we had 87 easements. As we grew to our current 114 easements throughout Central and Upper Bucks County (hence our name change) she served as Treasurer, and in 2021 she became the Board President.

By joining the Board of the Land Trust, Donna—always a person of action—acted on her belief that "You only get one chance to save land. You miss that chance and you can never get the land back."

Before joining the Land Trust, she had a career in HR in New York City and she resides in Bedminster, surrounded by many preserved properties. We thank her for everything she has contributed over the years, and wish her well in her second "retirement."

Public Enemy No. 5

Public enemy #5 in our series on invasive species is Autumn Olive (*Elaeagnus umbellata*). It is a deciduous shrub that belongs to the Elaeagnaceae family and is related to other members of the *Elaeagnus* genus. This family consists of flowering plants that are characterized by silvery scales on leaves and branches. They are known for their ability to fix nitrogen from the atmosphere and form symbiotic relationships with nitrogen-fixing bacteria.

Some related species within the *Elaeagnus* genus include Russian Olive and Silverberry.

Like most invasive plants, several characteristics contribute to their problematic nature.

History in North America

Autumn Olive is native to East Asia. It was introduced to North America in the early 19th century and initially planted for the purpose of erosion control. The plant was valued for its ability to thrive in poor soils and was planted along highways embankments, former mining sites, and on other disturbed sites to help prevent soil erosion.

Autumn Olive has an additional benefit. The plant produces abundant red berries that are high in lycopene and other antioxidants. Not only are the berries suitable for making jams and other food products, but wildlife, particularly birds, are attracted to the fruit.

What is the Problem with Autumn Olive?

Autumn Olive is another great example of good intentions gone wrong.

Although the plant has positive attributes, it was eventually recognized as an invasive species. Its aggressive growth, prolific seed production, and ability to form dense thickets displaces native vegetation and impacts native ecosystems. The plant not only outcompetes native vegetation, it alters soil chemistry by fixing nitrogen and negatively affecting biodiversity. Autumn Olive forms dense stands that can shade out native plants and disrupt natural habitats.

Did you Know?

Click and Learn



[The renowned author Pearl S. Buck lived in Perkasio and her home is a national landmark](#)



[Newtown was settled by Quakers and their Meetinghouse, built in 1712 is still in use today](#)



[There is a trail out there for exploring Bucks' growing craft beer scene](#)

Management

Controlling Autumn Olive can be challenging due to its aggressive growth, dense thickets, and prolific seed production. Effective control often involves mechanical removal, approved herbicide applications, and restoration efforts to promote the recovery of native vegetation. Some strategies



include cutting the plant as close to the ground as possible. For larger plants, use pruning shears or a saw. After cutting, treat the stump with an approved herbicide. Repeated mowing or brush hogging can help control Autumn Olive by preventing seed production and reducing the plant's vigor. In some cases, introducing grazing animals like goats or sheep can help control Autumn Olive.

[Learn more about the Autumn Olive](#)

Please Contact the PA Department of Agriculture for information and advice on safely dealing with Autumn Olive.

The Corn Crib

Many of our preserved farms have deep and storied histories with houses, barns and outbuildings dating to the origin of the farm itself. While a lot has been written on house and barn architecture, the corn crib is a unique farm structure that is often overlooked. Fortunately for us, many still exist today throughout Bucks County.

While we associate modern steel silos and grain bins as iconic modern farm structures built to handle the storage of grain, they all trace their roots back to the basic corn crib; a traditional structure found on farms that was designed for the drying and storage of corn.

They were originally made of logs from knowledge passed on by Native Americans. However in the mid-nineteenth century the design became somewhat standardized resulting in the unique look that we identify today.





Traditional corn cribs were constructed using slatted wood to facilitate air circulation and drying. They were elevated off of the ground and later lined with wire to protect the corn from vermin. They had a gable or shed roof and a door or opening at the top for filling. Most importantly, they featured a slanted shape—usually designed to 23 degrees—to keep the cob corn from settling during the drying process and to shed water.

The name corn crib is derived by the cribbing or slats that can be removed individually to allow for the removal of small amounts of corn at feeding time.



The wood design was abandoned in the early twentieth century with the advent of steel pre-manufactured structures that were also larger to accommodate growing farm sizes. By the 1960s corn cribs had all but passed into memory with the advent of modern combines which stripped the kernels off the cob and forced grain storage and handling into an entirely new direction.

Fortunately, the iconic wooden corn crib is still around if you know what to look for. On some estates, corn cribs have been repurposed for other uses and converted into apartments or studios.

Three examples of existing corn crib designs located in Solebury Township are shown above. The first is a stand alone corn crib with a gabled roof. The second is a drive through structure with cribs on both sides and storage in the middle. The third, a shed design, is an extension off of an existing structure with storage in the center. While corn cribs have been superseded by modern farming practices, their historical and cultural significance remains.

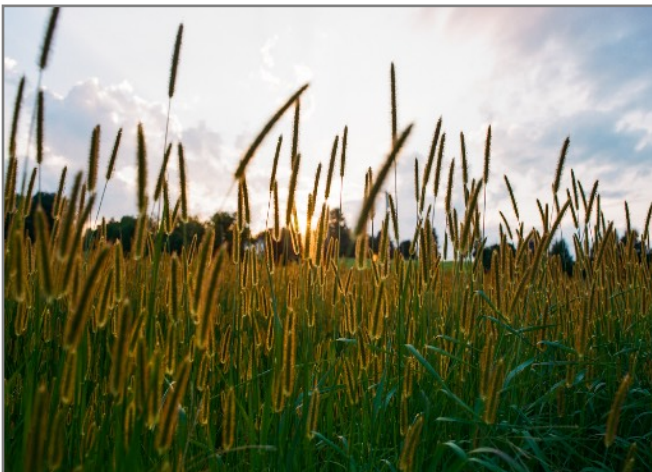
[Find out more
about Corn Cribs](#)

Farming in Bucks Co.

Farmland is more than a defining feature of our rural landscapes. Farmland means agriculture. Agriculture not only contributes to the cultural and historical heritage of our communities, but is a significant contributor to local and regional economies. Protecting our agricultural landscapes also maintains the viability of local food production.



One aspect often overlooked when protecting farmland from development is who will farm it going forward. Farming is a business and it only works if the people who are willing to do it can support their families and hopefully grow the operation. It takes people with a unique skillset to farm. It is safe to say that if farming was a more profitable endeavor, we would not see development at the scale that it is currently taking place in Bucks County.



Farming is a challenging business. There is not only the uncertainty of the weather, but also high capital and labor costs. Add to this a trend towards lower commodity prices and you have a business that struggles to be profitable. There is a reason not many people farm and it boils down to the fact that it is very hard work with little financial reward.

In our series *Farming in Bucks County*, we try to inform our readers by offering the farmers' viewpoint. Through them we gain a broader perspective of what it is like to farm here and the unique challenges faced by those who do it.

Questions arise as to what happens to farmland when the economics of farming necessitate change. Bucks County was once dominated by small family-run dairy farms. Now there are only a handful of dairy farms left in the entire county. The farmers who have stayed in business have switched over to cash crops like hay, grains, and vegetables to remain profitable and that has helped, but what happens when even those commodities become unprofitable.



Enter Mulch Hay

One niche commodity that was profitable until recently is mulch hay. The market for it is unique to South Eastern Pennsylvania where it is grown and trucked to the mushroom growers located in Chester and Berks Counties. We will not delve into why this area of Pennsylvania dominates mushroom production in the United States (it is an interesting history), but the industry consumes a copious amount of compost that is easily made from lower quality hay. The methods used by mushroom growers and the reality of hay farming created a symbiotic relationship where farmers could take lower quality hay and sell it to the mushroom farms. As grain prices dropped, some farmers, particularly those who were set up for hay production and had fixed costs, switched to mulch hay production because it was now profitable to farm large areas of the county that had marginal farmland (i.e., poor soils, large deer populations - see our article on deer control fall 2023) or where landowners restricted the use of fertilizer, pesticides, or the height of crops. Yes, some landowners forbid crops that restrict visibility.

[Weakened
Commodity Prices
Cast a Shadow](#)

Unfortunately the word got out and suddenly our local farmers were competing with truckloads of mulch hay coming in from New York, Maryland, Virginia, and even North Carolina. With a surplus supply of hay for composting and a decrease in the



demand for mushrooms at retail, mushroom growers cut the price they paid for mulch hay. The net drop in income has many mulch hay farmers cutting back the acreage they farm and that has

potential ramifications for many landowners in the county - particularly if their property is under an agricultural conservation easement or Act 319. Pennsylvania Act 319 provides tax relief to landowners who devote their land to agricultural use.

What Farmers are Saying

We recently sat down with Nathan Crooke, owner of Windy Bush Hay Farms LLC, who owns one of the few remaining custom mulch hay operations in Bucks County. He farms a significant amount of land in townships that the Land Trust of Bucks County co-holds easements in including Bedminster and Solebury. In addition to approximately 350 acres of row crops, Nathan farms over 1,200 acres of hay with 800 acres dedicated to mulch hay that is directly marketed to mushroom growers.



Since COVID, Nathan estimates that his fuel and labor costs, the two largest expenses associated with mulch hay production, have risen 30% and equipment costs have increased 25 to 30%. Unfortunately, these increases came at the same time mushroom growers lowered their price per ton on delivered hay by 10%. This means some of the properties he farms do not even cover his costs. To address this, in 2023 he began to let certain land owners know that he will no longer be farming their properties. He anticipates that he will drop more properties in 2024 if they are not suitable for row crop production or the landowner restricts the conversion. Asked if he thinks things will eventually turn around, he said that that at best, the mushroom growers may increase the prices paid by 5% but that will not cover the increases facing farmers due to inflation.

Hay farming in our area is at a crossroads. With a seemingly unlimited supply of hay coming from larger geographic areas and growers unable to set the price they receive for their commodity, Nathan believes the trend will continue and he will need to adapt his operation when and where feasible.

In conversation with other farmers, Nathan finds he is not alone: unless something changes there will be more uncultivated farmland in Bucks County.

A Complicated Situation

For landowners with an agricultural easement the situation could become complicated. The easement may require that the property is farmed. The same goes for a property that has a preferential assessment through PA Act 319. In Bucks County many properties are owned by non-farmers: landowners who rely on outside custom farm operations to do the farming. But what happens if no one will farm the land because doing so is unprofitable?



Act 319

Act 319 (Clean and Green) became effective December 19th, 1974. It allows for counties in Pennsylvania to provide preferential property tax rates based on agricultural land use values. This lowers the tax rate for parcels that are farmed. As of January 2024, approximately 27% of the county's land area (105,711 acres) is under ACT 319 and must meet the definition of agricultural use. That percentage increases to 42% (7,581 acres)

and 56% (11,133 acres) in Solebury and Bedminster Townships respectively as they are both agricultural communities.

It is the responsibility of the Bucks County Board of Assessment to determine if a parcel receiving a preferential assessment meets the provisions of Act 319. If the county conducts a reassessment, something that Bucks County has not done since 1974, there are provisions in the act that allow the county to change the use value on a property. It is recommend that any landowner with property under the provisions of Act 319 familiarize themselves with the act, particularly Sections 2 and 5.

[What is Act 319?](#)

Agricultural Easements

Some conservation easements may stipulate that the property must be actively farmed and provide a definition for such use. While the financial penalties for an easement violation may not be as severe as the potential loss of 319 status, landowners should understand the requirements especially given that these properties are monitored annually as a provision of the easement.



The Takeaway

With income in decline, farmers are tightening their belts and cutting back on acreage they do not own; acreage that is not profitable due to poor soil, deer pressure, or landowners who place too many



restrictions on how it is used. For landowners who need someone else to farm their fields, it is important that they work with farmers to maintain soil fertility, control crop loss, and demonstrate flexibility where possible to allow farmers to follow the market. There are only a few farmers farming large amounts of acreage in Bucks County. If local farming becomes significantly less profitable, it might become hard for some preserved properties to attract tenant farmers.

Another Year - Another Acre

It is only fitting that our first newsletter of the year announces that Bucks County has once again selected us for the next three years to conduct all required annual and biennial inspections on farmlands with agricultural preservation easements within the county. That is another 7,000 acres and 124 properties added to the 5,300 acres and 118 properties we already monitor annually for townships.

2024 Membership Drive

You can become a member of the Land Trust of Bucks County by contributing any amount. When you visit our donate page you will see recommended membership levels, but any amount will allow you to join the organization. Your membership dollars go directly to preserving and protecting the land we love. Please visit our website and give what you can.

Thanks to all who support the work of the Trust.

*Give to the
land you love*

LAND TRUST
of Bucks County

Click Here

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.